

# COLORADO SAFE DRINKING WATER PROGRAM CALENDAR YEAR 2011 ANNUAL COMPLIANCE REPORT

JULY 1, 2012

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Colorado Department  
of Public Health  
and Environment

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# Introduction

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The United States Environmental Protection Agency (EPA) established the Public Water System Supervision (PWSS) Program under the authority of the 1974 Safe Drinking Water Act (SDWA). Under the SDWA and the 1986 Amendments, EPA 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). For some regulations EPA establishes treatment techniques (TTs) in lieu of MCLs. Standards were also set on how often public water systems (PWSs) monitor their water for contaminants and report the sample results. Generally, the larger the population served by a water system, the more frequent the monitoring and reporting (M&R) requirements. In addition, EPA requires select PWSs to monitor for unregulated contaminants to provide data for future regulatory development. The 1996 Amendments to the SDWA require public notification to include a clear and understandable explanation of the nature of each 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 Colorado Department of Public Health and Environment's (CDPHE) Safe Drinking Water Program (SDWP) implements the SDWA, with amendments, pursuant to the Colorado Primary Drinking Water Regulations (CPDWR) for the State of Colorado.

The Annual Compliance Report (ACR) is intended to provide a total annual representation of the numbers of violations during the calendar year of 2011. Violations fall into 1 of 4 categories:

- Health-Based
  1. Maximum Contaminant Level (MCL)
  2. Treatment Technique (TT)
- Non-Health-Based
  3. Monitoring and/or Reporting (M&R)
  4. Public Notice (PN)

This report was prepared by CDPHE's SDWP to meet the EPA's reporting requirements and is updated on a yearly basis. This report is available to the public upon request.

# Definitions

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- Public Water System (PWS): 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 3 types of PWSs:
  - Community (e.g. cities, or towns)
  - Non-Transient, Non-Community (e.g. schools, or factories)
  - Transient, Non-Community systems (e.g. restaurants, rest stops, or parks)
  
- Health-Based: Potential short-term or long-term health risks.
  - Maximum Contaminant Level (MCL): The highest level of a contaminant allowed in drinking water. Note: Under the Lead and Copper Rule, MCLs were not established. For this rule, “action levels” rather than MCLs define the levels at which a public water system must take action to reduce the concentration of lead and/or copper.
  - Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant (added for the treatment of water) allowed in drinking water. MRDLs are enforceable in the same manner as MCLs.
  - Treatment Techniques (TT): Unacceptable levels, in lieu of a MCL, for selected water characteristics or a failure to correct an identified issue. Turbidity, for example, which measures the cloudiness of water.
  
- Non-Health-Based: No health risks or health risks are unknown.
  - Monitoring and Reporting (M&R): To monitor, test, and report for water characteristics (e.g. contaminants) present in drinking water. All minor and major violations are included.
  - Public Notice (PN): A requirement for the PWS to notify their customers of any and all violations. PN requirements take into account the seriousness of the violation (or situation) and any potential adverse health effects that may be involved.
  
- Variance: A departure from a primary drinking water regulation if the characteristics of the raw water sources available to the PWS do not allow the system to meet the MCL.
  
- Exemption: Temporarily relieves a PWS of its obligation to comply with an MCL, TT, or both, due to compelling factors (which may include economic factors).

# National Primary Drinking Water Regulations

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The Safe Drinking Water Act, promulgated in 1974, is the federal law that regulates the quality of drinking water. The SDWA sets standards for drinking water quality and stipulates the monitoring requirements for PWSs. The following regulations have been promulgated under the SDWA:

- Chemical Phase Rule: Provide public health protection through the reduction of chronic risk (e.g. cancer, organ damage, etc.) from the exposure of:
  - Inorganic Chemicals (IOCs)
  - Nitrate and Nitrite (NITs)
  - Synthetic Organic Chemicals (SOCs)
  - Volatile Organic Chemicals (VOCs)
  - Radionuclides (RADs)
- Consumer Confidence Report (CCR): An annual drinking water quality report distributed by PWSs to their customers by July 1<sup>st</sup>. The report contains information regarding sources used (i.e. rivers, lakes, reservoirs, etc.), detected contaminants, violations, and educational information.
- Microbial, Disinfectants, and Disinfection Byproducts (MICRO, DIS, and DBPs): In many cases, drinking water must be disinfected to inactivate microbial pathogens (e.g. *E. coli*, salmonella, etc.). To protect against potential microbial contamination, PWSs add disinfectants such as chlorine. However, disinfectants can react with naturally occurring material in the source water and form byproducts, which may pose adverse health risks. PWSs must carefully maintain a balance between addressing potential microbial contamination and byproduct formation. The following rules address this issue:
  - Groundwater Rule (GWR): The purpose of the GWR is to provide increased protection against microbial pathogens in PWSs that utilize groundwater sources.
  - Stage 1 and Stage 2 Disinfectant and Disinfection Byproduct Rules (DBPs): The purpose of these rules is to reduce exposure to disinfection byproducts for customers of PWSs that add a disinfectant to the drinking water during any part of the treatment process.
  - Surface Water Treatment Rules (SWTRs): The purpose of the SWTRs is to prevent waterborne diseases caused by viruses, *Giardia*, and *Cryptosporidium*. The rules require surface water systems to filter and disinfect their water to reduce the occurrence of microbial contamination.
  - Total Coliform Rule (TCR): Provide public health protection by maintaining the integrity of the distribution system and requiring public water systems to monitor for the presence of microbial contamination.
- Lead and Copper Rule (LCR): Protect public health by minimizing the public's exposure to lead and copper.
- Public Notice Rule (PN): Require PWSs to notify their customers of any drinking water violations or situations that may pose an adverse health risk.

# Violations During the Calendar Year 2011

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## Calendar Year 2011 Overview

The number of PWSs in the state changes on a day by day basis. This is due to seasonal operations, new PWSs opening, existing PWSs closing, and changes to the population being served. Table 1 displays a typical number of systems, on any one day, by population and system type.

*Table 1. Number of PWSs by System Type and Population*

Population	Public Water System Type			Total
	Community	Non-Transient, Non-Community	Transient, Non-Community	
25-500	507	145	907	1559
501-3,300	207	26	79	312
3,301-10,000	78	4	8	90
10,001-100,000	72	0	0	72
>100,000	9	0	0	9
<b>Total</b>	873	175	994	2042

Violations are based on data compiled in June 2012 from Colorado’s production SDWIS/State database. If a violation: (1) was unresolved as of January 1, 2011, or (2) occurred in calendar year 2011 it was included. M&R violations for PWSs that sample less frequently than annually will be reported in the third, sixth, or ninth year of a compliance cycle. Calendar year 2011 was the first year in a compliance cycle. Table 2 summarizes the number of violations and the number of systems by each drinking water rule and violation type and tables 3 – 14 provide further details for each of the drinking water rules.

Appendix A identifies the public water systems that were in violation of maximum contaminant levels and/or treatment technique requirements in calendar year 2011. The final column indicates if the violation was resolved by the end of 2011.

## Summary of All Violations

- 116 systems in violation of at least one of the MCLs
- 25 systems in violation of at least one of the TTs
- 429 systems failed to monitor for at least one of the rules
- 3 were issued violations for failing to notify their customers

*Table 2. Summary by Rule and Violation Type*

Rule	Maximum Contaminant Level Violations		Monitoring & Reporting Violations		Public/State Notification Violations		Treatment Technique Violations	
	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations
<b>Consumer Confidence (CCR) Totals:</b>	-	-	82	79	-	-	-	-
<b>Disinfectants (DIS) &amp; Disinfection Byproducts (DBPs) Totals:</b>	122	23	94	74	-	-	6	2
<b>Ground Water (GW) Totals:</b>	-	-	21	18	-	-	5	5
<b>Inorganics (IOCs) Totals:</b>	64	11	223	20	-	-	-	-
<b>Lead and Copper (LCR) Totals:</b>	-	-	75	63	-	-	-	-
<b>Microorganisms (MICRO) Totals:</b>	51	45	314	224	-	-	-	-
<b>Nitrogen (NITs) Totals:</b>	65	12	115	88	-	-	-	-
<b>Public Notice (PN) Totals:</b>	-	-	-	-	3	3	-	-
<b>Radionuclides (RADs) Totals:</b>	280	32	39	10	-	-	-	-
<b>Surface Water (SW) Totals:</b>	-	-	37	24	-	-	35	18
<b>Synthetic Organics (SOCs) Totals:</b>	-	-	393	22	-	-	-	-
<b>Volatile Organics (VOCs) Totals:</b>	-	-	650	26	-	-	-	-
<b>Total:</b>	582	116	2043	429	3	3	46	25

## Inorganic Chemical Violations (not including Nitrogen Compounds and Radionuclides)

- Community and Non-Transient, Non-Community PWSs are required to comply
- 11 systems in violation of at least one of the MCLs
- 20 systems failed to monitor for at least one of the contaminants

Table 3. Summary of Inorganic Chemicals

Inorganics (IOCs)				
Contaminant	Maximum Contaminant Level Violations		Monitoring & Reporting Violations	
Name	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations
ANTIMONY, TOTAL	-	-	18	13
ARSENIC	19	3	21	15
BARIUM	-	-	18	13
BERYLLIUM, TOTAL	-	-	18	13
CADMIUM	-	-	18	13
CHROMIUM	-	-	18	13
FLUORIDE	39	6	22	15
MERCURY	-	-	18	13
NICKEL	-	-	18	13
SELENIUM	6	2	18	13
SODIUM	-	-	18	13
THALLIUM, TOTAL	-	-	18	13
<b>Inorganics (IOCs) Totals:</b>	<b>64</b>	<b>11</b>	<b>223</b>	<b>20</b>

## Nitrogen Compound Violations

- All PWSs are required to comply
- 12 systems in violation of the Nitrate MCL
- 88 systems failed to monitor for either Nitrate or Nitrite

Table 4. Summary of Nitrogen Compounds

Nitrogen (NITs)				
Contaminant	Maximum Contaminant Level Violations		Monitoring & Reporting Violations	
Name	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations
NITRATE	65	12	100	85
NITRITE	-	-	15	12
<b>Nitrogen (NITs) Totals:</b>	<b>65</b>	<b>12</b>	<b>115</b>	<b>88</b>



## Radionuclide Violations

- Community PWSs are required to comply
- 32 systems in violation of at least one of the MCLs
- 10 systems failed to monitor for at least one of the contaminants

*Table 5. Summary of Radionuclides*

Radionuclides (RADs)				
Contaminant	Maximum Contaminant Level Violations		Monitoring & Reporting Violations	
Name	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations
COMBINED RADIUM (-226 & -228)	145	22	14	9
COMBINED URANIUM	80	10	13	8
GROSS ALPHA, EXCL. RADON & U	55	11	12	7
<b>Radionuclides (RADs) Totals:</b>	<b>280</b>	<b>32</b>	<b>39</b>	<b>10</b>

## Volatile Organic Chemical Violations

- Community and Non-Transient, Non-Community PWSs are required to comply
- 0 systems in violation of at least one of the MCLs
- 26 systems failed to monitor for at least one of the contaminants

*Table 6. Summary of Volatile Organic Chemicals*

Volatile Organics (VOCs)				
Contaminant	Maximum Contaminant Level Violations		Monitoring & Reporting Violations	
Name	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations
1,1,1-TRICHLOROETHANE	-	-	31	25
1,1,2-TRICHLOROETHANE	-	-	31	25
1,1-DICHLOROETHYLENE	-	-	31	25
1,2,4-TRICHLOROBENZENE	-	-	31	25
1,2-DICHLOROETHANE	-	-	31	25
1,2-DICHLOROPROPANE	-	-	31	25
BENZENE	-	-	31	25
CARBON TETRACHLORIDE	-	-	31	25
CHLOROBENZENE	-	-	31	25
CIS-1,2-DICHLOROETHYLENE	-	-	31	25
DICHLROMETHANE	-	-	31	25
ETHYLBENZENE	-	-	31	25
O-DICHLOROBENZENE	-	-	31	25
P-DICHLOROBENZENE	-	-	31	25
STYRENE	-	-	31	25
TETRACHLOROETHYLENE	-	-	31	25
TOLUENE	-	-	30	24
TRANS-1,2-DICHLOROETHYLENE	-	-	31	25
TRICHLOROETHYLENE	-	-	31	25
VINYL CHLORIDE	-	-	31	25
XYLENES, TOTAL	-	-	31	25
<b>Volatile Organics (VOCs) Totals:</b>	<b>-</b>	<b>-</b>	<b>650</b>	<b>26</b>

## Synthetic Organic Chemical Violations

- Community and Non-Transient, Non-Community PWSs are required to comply
- 0 systems in violation of at least one of the MCLs
- 22 systems failed to monitor for at least one of the contaminants

*Table 7. Summary of Synthetic Organic Chemicals*

Synthetic Organics (SOCs)				
Contaminant	Maximum Contaminant Level Violations		Monitoring & Reporting Violations	
Name	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations
1,2-DIBROMO-3-CHLOROPROPANE	-	-	12	7
2,4,5-TP	-	-	12	7
2,4-D	-	-	13	8
ALDICARB	-	-	12	7
ALDICARB SULFONE	-	-	12	7
ALDICARB SULFOXIDE	-	-	12	7
ATRAZINE	-	-	13	8
BENZO(A)PYRENE	-	-	13	8
BHC-GAMMA	-	-	12	7
CARBOFURAN	-	-	12	7
CHLORDANE	-	-	12	7
DALAPON	-	-	13	8
DI(2-ETHYLHEXYL) ADIPATE	-	-	14	8
DI(2-ETHYLHEXYL) PHTHALATE	-	-	21	13
DINOSEB	-	-	12	7
DIQUAT	-	-	12	7
ENDOTHALL	-	-	13	8
ENDRIN	-	-	12	7
ETHYLENE DIBROMIDE	-	-	14	9
HEPTACHLOR	-	-	12	7
HEPTACHLOR EPOXIDE	-	-	12	7
HEXACHLOROBENZENE	-	-	12	7
HEXACHLOROCYCLOPENTADIENE	-	-	13	8
LASSO	-	-	12	7
METHOXYCHLOR	-	-	12	7
OXAMYL	-	-	12	7
PENTACHLOROPHENOL	-	-	14	9
PICLORAM	-	-	12	7
SIMAZINE	-	-	12	7
TOTAL POLYCHLORINATED BIPHENYLS (PCB)	-	-	12	7
TOXAPHENE	-	-	12	7
<b>Synthetic Organics (SOCs) Totals:</b>	-	-	393	22

## Consumer Confidence Report (CCR) Rule Violations

- Community PWSs are required to comply
- 79 PWSs in violation for failing to report to their customers

**Table 8. Summary of the Consumer Confidence Report Rule**

Consumer Confidence (CCR)									
Violation		Maximum Contaminant Level Violations		Monitoring & Reporting Violations		Public/State Notification Violations		Treatment Technique Violations	
Type	Name	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations
71 - CCR REPORT	CONSUMER CONFIDENCE RULE	-	-	82	79	-	-	-	-
<b>Consumer Confidence (CCR) Totals:</b>		-	-	82	79	-	-	-	-

## Disinfectants & Disinfection Byproducts Rule Violations

- Community and Non-Transient, Non-Community PWSs are required to comply
- 23 systems in violation of at least one of the MCLs
- 2 systems in violation with a TT for inadequate Total Organic Carbon removal
- 74 systems failed to monitor for at least one of the contaminants

**Table 9. Summary of Disinfectants and Disinfection Byproducts**

Disinfectants (DIS) & Disinfection Byproducts (DBPs)									
Violation		Maximum Contaminant Level Violations		Monitoring & Reporting Violations		Public/State Notification Violations		Treatment Technique Violations	
Type	Name	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations
02 - MCL, AVERAGE	TOTAL HALOACETIC ACIDS (HAA5)	52	11	-	-	-	-	-	-
	TTHM	69	17	-	-	-	-	-	-
13 - MRDL, ACUTE (CHL.DIOXIDE)	CHLORINE DIOXIDE	1	1	-	-	-	-	-	-
46 - INADEQUATE DBP PRECURSOR REMOVAL	CARBON, TOTAL	-	-	-	-	-	-	6	2
27 - MONITORING, (DBP) (CHL. DIOXIDE)	CHLORINE DIOXIDE	-	-	2	1	-	-	-	-
27 - MONITORING, ROUTINE (DBP), MAJOR	CARBON, TOTAL	-	-	9	7	-	-	-	-
	CHLORINE	-	-	65	59	-	-	-	-
	TOTAL HALOACETIC ACIDS (HAA5)	-	-	6	6	-	-	-	-
	TTHM	-	-	6	6	-	-	-	-
27 - MONITORING, ROUTINE (DBP), MINOR	CHLORINE	-	-	1	1	-	-	-	-
	CHLORITE	-	-	2	1	-	-	-	-
35 - FAILURE SUBMIT IDSE/SUBPT V PLAN (DBP2)	DBP STAGE 2	-	-	3	3	-	-	-	-
<b>Disinfectants (DIS) &amp; Disinfection Byproducts (DBPs) Totals:</b>		122	23	94	74	-	-	6	2

## Groundwater Rule Violations

- PWSs with a groundwater source not treated to surface water standards are required to comply
- 5 systems in violation for failing to address one or more field discovered significant deficiency
- 18 systems failed to monitor their source water for *E. Coli*

Table 10. Summary of the Groundwater Rule

Ground Water (GW)									
Violation		Maximum Contaminant Level Violations		Monitoring & Reporting Violations		Public/State Notification Violations		Treatment Technique Violations	
Type	Name	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations
45 - FAILURE ADDRESS DEFICIENCY (GWR)	GROUNDWATER RULE	-	-	-	-	-	-	5	5
34 - MONITORING, SOURCE (GWR), MAJOR	E. COLI	-	-	21	18	-	-	-	-
<b>Ground Water (GW) Totals:</b>		-	-	21	18	-	-	5	5

## Lead and Copper Rule Violations

- Community and Non-Transient, Non-Community PWSs are required to comply
- 63 systems failed to monitor

Table 11. Summary of Lead and Copper

Lead and Copper (LCR)							
Violation		Monitoring & Reporting Violations		Public/State Notification Violations		Treatment Technique Violations	
Type	Name	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations
51 - INITIAL TAP SAMPLING (LCR)	LEAD & COPPER RULE	3	2	-	-	-	-
52 - FOLLOW-UP OR ROUTINE TAP M/R (LCR)	LEAD & COPPER RULE	67	61	-	-	-	-
53 - WATER QUALITY PARAMETER M/R (LCR)	LEAD & COPPER RULE	1	1	-	-	-	-
57 - OCCT/SOWT RECOMMENDATION/STUDY (LCR)	LEAD & COPPER RULE	4	4	-	-	-	-
<b>Lead and Copper (LCR) Totals:</b>		75	63	-	-	-	-

## Microorganisms (Total Coliform & *E. coli*) Violations

- All PWSs are required to comply
- 45 systems in violation with at least one of the MCLs. 4 systems were potential immediate health risks and public notification was required within 24 hours of the problem being identified. This may have included a boil or bottled water order with increased monitoring.
- 224 systems failed to monitor for total coliform

Table 12. Summary of Microorganisms

Microorganisms (MICRO)									
Violation		Maximum Contaminant Level Violations		Monitoring & Reporting Violations		Public/State Notification Violations		Treatment Technique Violations	
Type	Name	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations
21 - MCL (TCR), ACUTE	COLIFORM (TCR)	4	4	-	-	-	-	-	-
22 - MCL (TCR), MONTHLY	COLIFORM (TCR)	47	42	-	-	-	-	-	-
23 - MONITORING (TCR), ROUTINE MAJOR	COLIFORM (TCR)	-	-	262	186	-	-	-	-
24 - MONITORING (TCR), ROUTINE MINOR	COLIFORM (TCR)	-	-	35	31	-	-	-	-
25 - MONITORING (TCR), REPEAT MAJOR	COLIFORM (TCR)	-	-	15	13	-	-	-	-
26 - MONITORING (TCR), REPEAT MINOR	COLIFORM (TCR)	-	-	2	2	-	-	-	-
<b>Microorganisms (MICRO) Totals:</b>		51	45	314	224	-	-	-	-

## Public Notice Rule Violations

- All PWSs that incurred a violation or posed an adverse health risk are required to comply
- 3 systems were issued a violation for failing to provide public notice to their customers

Table 13. Summary of the Public Notice Rule

Public Notice (PN)									
Violation		Maximum Contaminant Level Violations		Monitoring & Reporting Violations		Public/State Notification Violations		Treatment Technique Violations	
Type	Name	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations
75 - PUBLIC NOTICE RULE LINKED TO VIOLATION	PUBLIC NOTICE	-	-	-	-	2	2	-	-
76 - PUBLIC NOTICE RULE NOT LINKED VIOLATION	PUBLIC NOTICE	-	-	-	-	1	1	-	-
<b>Public Notice (PN) Totals:</b>		-	-	-	-	3	3	-	-

## Surface Water Treatment Rule Violations

- Surface Water and Groundwater–Under–the–Direct–Influence–of–Surface–Water PWSs are required to comply
- 18 systems in violation for either inadequate filtration resulting in high turbidity (cloudiness) of the water, inadequate disinfection, or failure to filter.
- 24 systems failed to monitor for either turbidity or chlorine disinfectant residual.

*Table 14. Summary of the Surface Water Treatment Rule*

Surface Water (SW)									
Violation		Maximum Contaminant Level Violations		Monitoring & Reporting Violations		Public/State Notification Violations		Treatment Technique Violations	
Type	Name	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations
41 - RES DISINFECT CONCENTRATION (SWTR)	CHLORINE	-	-	-	-	-	-	5	3
42 - FAILURE TO FILTER (SWTR)	SWTR	-	-	-	-	-	-	6	6
43 - SINGLE COMB FLTR EFFLUENT (IESWTR/LT1)	TURBIDITY	-	-	-	-	-	-	6	6
44 - MONTHLY COMB FLTR EFFLUENT (IESWTR/LT1)	TURBIDITY	-	-	-	-	-	-	18	6
36 - MONITORING, RTN/RPT MAJOR (SWTR-FILTER)	CHLORINE	-	-	25	19	-	-	-	-
36 - MONITORING, RTN/RPT MINOR (SWTR-FILTER)	CHLORINE	-	-	3	3	-	-	-	-
38 - MONITORING, ROUTINE (IESWTR/LT1), MAJOR	TURBIDITY	-	-	6	4	-	-	-	-
38 - MONITORING, ROUTINE (IESWTR/LT1), MINOR	TURBIDITY	-	-	3	3	-	-	-	-
<b>Surface Water (SW) Totals:</b>		-	-	37	24	-	-	35	18

## Variations and Exemptions

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For the calendar year 2011, Colorado's Safe Drinking Water Program did not issue any variations or exemptions to any public water system.

## Report Availability and Contact Information

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The 2011 summary report may be obtained by writing to:

Colorado Department of Public Health and Environment  
Water Quality Control Division  
ATTN: Annual Compliance Report  
CADM-B2  
4300 Cherry Creek Drive South  
Denver, CO 80246

In addition, this summary report has been posted on the Water Quality Control Division's Website at <http://www.cdphe.state.co.us/wq/drinkingwater>.

For further information concerning this report, or with specific violations associated with public water systems, you may contact Sharon I. Williams with the Safe Drinking Water Compliance Assurance Unit at (303) 692-3635 or by email at [Sharon.I.Williams@state.co.us](mailto:Sharon.I.Williams@state.co.us).

## Appendix A: PWSs with Health-Based Violations

PWS ID	Water System Name	Violation Type	Contaminant Name	Resolved as of 12/31/2011?
CO0120001	Agate Wa	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0160050	Alpine Village Llc	Maximum Contaminant Level	COMBINED RADIUM (-226 & -228)	No
CO0208116	American Adventure Expeditions	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0126117	Antelope Hills Assoc	Maximum Contaminant Level	COMBINED RADIUM (-226 & -228)	No
CO0123123	Asgard Subdivision Wa	Maximum Contaminant Level	SELENIUM	Yes
CO0103005	Aurora City Of	Maximum Contaminant Level	COLIFORM (TCR)	Yes
CO0132001	Bethune Town Of	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0335143	Big Bend Cg	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0135143	Big Elk Meadows Wa	Maximum Contaminant Level	TOTAL HALOACETIC ACIDS (HAA5)	No
			TTHM	No
CO0136300	Branson Town Of	Maximum Contaminant Level	COLIFORM (TCR)	Yes
CO0101030	Brighton Mhp	Maximum Contaminant Level	NITRATE	No
CO0121080	Camelot Property Owners Assoc	Maximum Contaminant Level	COMBINED RADIUM (-226 & -228)	No
CO0247018	Camp Alexander Boy Scouts	Treatment Technique	TURBIDITY	No
CO0210009	Cdot Eisenhower Johnson Tunnel	Treatment Technique	CHLORINE	No
CO0162122	Central Weld Cnty Wd	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0145090	Cheraw Town Of	Maximum Contaminant Level	COMBINED RADIUM (-226 & -228)	No
CO0225116	Climax Molybdenum Co Henderson Mill	Maximum Contaminant Level	CHLORINE DIOXIDE	No
CO0233300	Climax-Climax Mine	Treatment Technique	TURBIDITY	Yes
CO0262466	Club La Maravilla	Maximum Contaminant Level	NITRATE	No
CO0130184	Conifer Md	Maximum Contaminant Level	TTHM	Yes
CO0347125	Cove Cg	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0230192	Creative Child	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0314148	Davenport Cg No 2	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0262211	Djr Well Service Inc	Treatment Technique	GROUNDWATER RULE	No
CO0235221	Dripping Springs Bed And Breakfast Inn	Treatment Technique	SWTR	No



PWS ID	Water System Name	Violation Type	Contaminant Name	Resolved as of 12/31/2011?
CO0234480	Durango La Plata Airport	Maximum Contaminant Level	TTHM	No
CO0145120	East End Wa	Maximum Contaminant Level	COMBINED RADIUM (-226 & -228)	No
CO0135237	Eden Valley Institute	Maximum Contaminant Level	FLUORIDE	Yes
CO0107246	Eldorado Artesian Spring Inc	Treatment Technique	GROUNDWATER RULE	No
CO0235257	Estes Park Cg At East Portal	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0145150	Eureka Wc	Maximum Contaminant Level	GROSS ALPHA, EXCL. RADON & U	No
			COMBINED RADIUM (-226 & -228)	No
CO0145180	Fayette Wc	Maximum Contaminant Level	COMBINED RADIUM (-226 & -228)	No
CO0121300	Fountain Valley Authority	Treatment Technique	TURBIDITY	No
CO0145210	Fowler Town Of	Maximum Contaminant Level	NITRATE	Yes
			SELENIUM	Yes
CO0115288	Fruitland Domestic Wc	Treatment Technique	TURBIDITY	No
CO0112500	Ft Garland Wsd	Maximum Contaminant Level	COLIFORM (TCR)	Yes
CO0128300	Gardner Water And Sanitation Dist	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0139220	Gateway Canyons Ws	Maximum Contaminant Level	TTHM	No
CO0263299	Gaytan Ws	Maximum Contaminant Level	ARSENIC	No
			NITRATE	No
CO0130035	Genesee Wsd	Treatment Technique	CARBON, TOTAL	Yes
		Maximum Contaminant Level	TTHM	Yes
CO0137005	Genoa Town Of	Treatment Technique	SWTR	Yes
CO0135315	Glacier View Meadows Wsa	Maximum Contaminant Level	GROSS ALPHA, EXCL. RADON & U	No
			COMBINED URANIUM	No
CO0207318	Gold Hill Elem School	Maximum Contaminant Level	TOTAL HALOACETIC ACIDS (HAA5)	Yes
CO0126709	Golden Eagle Wc	Treatment Technique	CARBON, TOTAL	No
CO0119329	Gypsum Town Of	Treatment Technique	TURBIDITY	Yes
CO0322305	Hayden Creek Cg	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0101070	Hazeltine Heights Water	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0130045	Hidden Valley Mutual Wc	Maximum Contaminant Level	GROSS ALPHA, EXCL. RADON & U	No
			COMBINED URANIUM	No
			COMBINED RADIUM (-226 & -228)	No

PWS ID	Water System Name	Violation Type	Contaminant Name	Resolved as of 12/31/2011?
CO0145270	Hillside Tp	Maximum Contaminant Level	GROSS ALPHA, EXCL. RADON & U	Yes
			COMBINED RADIUM (-226 & -228)	Yes
CO0145330	Holbrook Center Soft Wa	Maximum Contaminant Level	COMBINED RADIUM (-226 & -228)	No
CO0115352	Hotchkiss Town Of	Maximum Contaminant Level	TOTAL HALOACETIC ACIDS (HAA5)	No
			TTHM	No
CO0162359	Hudson Town Of	Maximum Contaminant Level	TTHM	No
CO0325165	Idlewild Cg	Treatment Technique	GROUNDWATER RULE	No
CO0235386	Inn Of Glen Haven	Treatment Technique	GROUNDWATER RULE	No
CO0335401	Jacks Gulch Cg	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0230420	Jeffco White Ranch Sawmill Cg	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0247400	Jefferson Depot Hungry Moose Caboose	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0139434	Kannah Creek	Maximum Contaminant Level	TOTAL HALOACETIC ACIDS (HAA5)	Yes
CO0210014	Kermits Roadhouse Inc	Treatment Technique	TURBIDITY	No
			CHLORINE	No
CO0138738	Kidz Ark Inc	Maximum Contaminant Level	FLUORIDE	No
CO0109011	Kit Carson Town Of	Maximum Contaminant Level	COMBINED URANIUM	No
CO0134530	Lake Durango Wa	Treatment Technique	TURBIDITY	Yes
CO0251466	Lake Pueblo State Park	Maximum Contaminant Level	COLIFORM (TCR)	Yes
CO0253540	Masonic Park Association	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0150800	May Valley Wa	Maximum Contaminant Level	GROSS ALPHA, EXCL. RADON & U	No
			COMBINED RADIUM (-226 & -228)	No
CO0207504	Meadow Mtn Ws	Treatment Technique	TURBIDITY	Yes
CO0138025	Merino Town Of	Maximum Contaminant Level	COMBINED URANIUM	No
CO0151350	Mountain Shadows Mobile Estates	Maximum Contaminant Level	COMBINED RADIUM (-226 & -228)	No
CO0130100	Mountain Wsd	Maximum Contaminant Level	GROSS ALPHA, EXCL. RADON & U	No
			COMBINED URANIUM	No
CO0233524	Mt Massive Golf Course	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0108501	Mt Princeton Hoa	Maximum Contaminant Level	FLUORIDE	Yes
CO0104533	Navajo River Ranch Poa	Maximum Contaminant Level	TOTAL HALOACETIC ACIDS (HAA5)	Yes

PWS ID	Water System Name	Violation Type	Contaminant Name	Resolved as of 12/31/2011?
CO0135538	Newell Warnock Wa	Maximum Contaminant Level	TOTAL HALOACETIC ACIDS (HAA5)	No
			TTHM	No
CO0145630	North Holbrook Wc	Maximum Contaminant Level	COLIFORM (TCR)	No
			COMBINED RADIUM (-226 & -228)	No
CO0157500	Norwood Water Commission	Maximum Contaminant Level	TTHM	Yes
CO0154566	Oak Creek Town Of	Maximum Contaminant Level	TOTAL HALOACETIC ACIDS (HAA5)	Yes
			TTHM	Yes
CO0104300	Pagosa Area Wsd	Treatment Technique	TURBIDITY	Yes
CO0121550	Palmer Lake Mobile Home Ranch	Maximum Contaminant Level	COMBINED RADIUM (-226 & -228)	Yes
CO0123601	Panoramic Mesa Subd	Maximum Contaminant Level	TTHM	No
CO0128601	Paradise Acres	Maximum Contaminant Level	COLIFORM (TCR)	Yes
CO0130115	Park Wc Wonderview	Maximum Contaminant Level	GROSS ALPHA, EXCL. RADON & U	No
CO0145540	Patterson Valley Wc	Maximum Contaminant Level	GROSS ALPHA, EXCL. RADON & U	No
			COMBINED RADIUM (-226 & -228)	No
CO0138030	Peetz Town Of	Treatment Technique	GROUNDWATER RULE	No
CO0254605	Perry Mansfield Camp	Treatment Technique	TURBIDITY	No
CO0154609	Phippsburg Town Of	Treatment Technique	CHLORINE	No
CO0239613	Plateau Valley Assembly	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0235476	Poudre School Dist Livermore Elem	Treatment Technique	SWTR	Yes
CO0202666	Rakhra Mushroom Farm	Maximum Contaminant Level	ARSENIC	No
CO0238425	Ramada Inn Logan Inn	Maximum Contaminant Level	NITRATE	No
CO0118665	Ravenna Md	Maximum Contaminant Level	TOTAL HALOACETIC ACIDS (HAA5)	No
			TTHM	No
CO0238500	Reata Petroleum Corp The	Maximum Contaminant Level	NITRATE	Yes
CO0240600	Rio Grande Haciendas	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0101675	Riverdale Peaks Ii Md	Maximum Contaminant Level	TTHM	No
CO0223678	Riverside Cottages	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0219687	Rock Bottom Ranch	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0260680	Rocky Mountain Mennonite Camp	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0160450	Rosewood Hills Property Hoa	Maximum Contaminant Level	FLUORIDE	No

PWS ID	Water System Name	Violation Type	Contaminant Name	Resolved as of 12/31/2011?
CO0138042	Sage Pointe Wsd	Maximum Contaminant Level	COLIFORM (TCR)	Yes
CO0107702	San Souci Mhp	Treatment Technique	SWTR	No
CO0260700	Sanborn Western Camps	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0253750	Sargent Elem And New High School Re33	Maximum Contaminant Level	NITRATE	Yes
CO0118060	Sedalia Wsd	Treatment Technique	SWTR	Yes
CO0263705	Seedorf Ws	Maximum Contaminant Level	ARSENIC	Yes
CO0107709	Shady Acres Mhp	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0131800	Sheridan Lake Wc	Maximum Contaminant Level	COMBINED URANIUM	No
CO0123710	Silt Town Of	Maximum Contaminant Level	TTHM	Yes
CO0253870	South Fork Ute Bluff Lodge Inc	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0145690	South Swink Wc	Maximum Contaminant Level	GROSS ALPHA, EXCL. RADON & U	No
			COMBINED RADIUM (-226 & -228)	No
CO0314480	Southside Cg 3020	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0207695	St Malos Retreat	Maximum Contaminant Level	COLIFORM (TCR)	Yes
CO0254718	Stagecoach State Park	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0254716	Steamboat Christian Center	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0138045	Sterling City Of	Maximum Contaminant Level	TTHM	No
			COMBINED URANIUM	No
CO0115726	Stucker Mesa Domestic Wc	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0123500	Sun Meadow Estates	Maximum Contaminant Level	COMBINED URANIUM	No
CO0207725	Sundance Cafe And Lodge	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0239725	Sunset Lake Summer Home Owners	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0145720	Swink Town Of	Maximum Contaminant Level	COMBINED RADIUM (-226 & -228)	No
CO0123742	Three Mile Tp	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0154743	Timbers Wsd	Maximum Contaminant Level	TOTAL HALOACETIC ACIDS (HAA5)	Yes
CO0154755	Tree Haus Md	Treatment Technique	SWTR	Yes
CO0121841	Turkey Canon Ranch Wd	Maximum Contaminant Level	GROSS ALPHA, EXCL. RADON & U	No
			COMBINED URANIUM	No
CO0208759	Twisted Cork Cafe	Maximum Contaminant Level	COLIFORM (TCR)	Yes

PWS ID	Water System Name	Violation Type	Contaminant Name	Resolved as of 12/31/2011?
CO0105700	Two Buttes Town Of	Maximum Contaminant Level	COMBINED RADIUM (-226 & -228)	No
CO0108925	Ute Heights Community Ws	Maximum Contaminant Level	FLUORIDE	No
CO0223800	Valley Investment Properties	Maximum Contaminant Level	NITRATE	No
CO0145750	Valley Wc	Maximum Contaminant Level	GROSS ALPHA, EXCL. RADON & U	No
			COMBINED RADIUM (-226 & -228)	No
CO0112810	Viejo San Acacio	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0105800	Vilas Town Of	Maximum Contaminant Level	COMBINED RADIUM (-226 & -228)	No
CO0255680	Villa Grove Trade	Maximum Contaminant Level	COLIFORM (TCR)	No
CO0145780	Vroman Wc	Maximum Contaminant Level	COMBINED RADIUM (-226 & -228)	No
CO0258003	Wagon Wheel Conoco Cafe	Maximum Contaminant Level	NITRATE	No
			COLIFORM (TCR)	No
CO0162833	Wattenburg Improvement Assoc	Maximum Contaminant Level	NITRATE	No
CO0144032	Wayward Wind Mhp Llc	Maximum Contaminant Level	NITRATE	No
			COMBINED URANIUM	No
CO0145810	West Grand Valley Wa	Maximum Contaminant Level	COLIFORM (TCR)	No
			COMBINED RADIUM (-226 & -228)	Yes
CO0118085	Westcreek Lakes Wd	Maximum Contaminant Level	FLUORIDE	Yes
CO0144035	Wiggins Town Of	Maximum Contaminant Level	NITRATE	No
CO0254185	Xcel Energy Hayden Station	Maximum Contaminant Level	TOTAL HALOACETIC ACIDS (HAA5)	Yes
			TTHM	Yes
CO0152105	Xto Energy	Maximum Contaminant Level	TTHM	Yes
CO0135883	Ymca Rockies Wind River	Maximum Contaminant Level	TOTAL HALOACETIC ACIDS (HAA5)	Yes