

# 2024 Annual Compliance Report

### **STATE OF ALASKA**

Drinking Water Program Division of Environmental Health Department of Environmental Conservation



Glossary of Terms (page 22)

## Definition of a Public Water System

#### Public Water System (PWS)

A PWS is a system for the provision of water for human consumption through pipes or other constructed conveyances, if such system has at least 15 service connections or serves at least 25 individuals for at least 60 days per year.



#### Non-Community Water System

Non-Community Water Systems are public water systems that do not serve a permanent residential population. This category is further divided into two types (specified below):

#### Community Water System (CWS)

CWS are public water systems that have at least 15 service connections used by year-round residents or regularly serve at least 25 year-round residents, such as a municipal water system serving a town or village, or a mobile home park.

#### Non-Transient Non-Community Water System (NTNC)

NTNC are public water systems that serve at least 25 of the same people daily at least 6 months of the year, such as churches, schools, and office buildings.

#### Transient Non-Community Water System (TNC)

TNC are public water systems that serve an average of at least 25 people at least 60 days per year, such as campgrounds, hotels, and restaurants.

## 2 Overview of the National Public Drinking Water Program

The EPA established the Public Water System Supervision (PWSS) Program through the 1974 Safe Drinking Water Act (SDWA), with major amendments in 1986 and 1996. The SDWA, associated amendments, and federal drinking water regulations were developed by EPA to help ensure the public receives safe drinking water. Some key provisions of the SDWA are highlighted below:

- Sets national maximum contaminant level goals (MCLG) as well as limits on allowable contaminant levels in drinking water provided by PWSs. These limits are called maximum contaminant level (MCL) and maximum residual disinfectant level (MRDL).
- Establishes treatment techniques or action levels in lieu of MCLs to control unacceptable levels of specific contaminants, such as turbidity or lead, in drinking water from PWSs.
- Requires PWSs to monitor for regulated drinking water contaminants and requires the results to be reported to the state.
- Requires PWSs to notify their customers when violations of the SDWA occur.
- Requires a certification program for PWS operators and for environmental laboratories where drinking water samples collected from a PWS are analyzed.
- The PWSS Program is designed to supervise the implementation of the SDWA requirements for PWSs. The SDWA allows states, territories, and tribes to seek primacy, which is approval from EPA to administer and enforce the PWSS Program within their state, territory, or tribe. States must meet specific requirements set forth in the SDWA regulations, including the development or adoption of drinking water regulations that are at least as stringent as the federal regulations, and must demonstrate that the state can enforce the program requirements. Currently all states and territories have been delegated authority for Primacy for the PWSS Program with exception of Wyoming and the District of Columbia (neither of which has sought delegation).

## 3 Alaska Drinking Water Program Components

The Alaska Department of Environmental Conservation's (DEC) Drinking Water Program is comprised of 60 staff positions that operate out of 4 offices located around the state, including Anchorage, Fairbanks, Soldotna, and Wasilla. Collectively, the offices are responsible for regulating 1,319 PWSs serving the visitors and residents of the State of Alaska (see **Figure 1** for distribution of water systems across Alaska). Funding for the Drinking Water (DW) Program is a mix of federal and state grant-match funds, general funds, and program receipts.

The SDWA Amendments authorized use of the Federal Drinking Water State Revolving Fund (DWSRF) through set-asides for state drinking water program activities, which include Drinking Water Protection Programs (Wellhead Protection and Source Water Assessment and Protection), Technical Assistance, and Program Management. The DEC, as the Primacy Agency for the state, establishes minimum standards for drinking water quality (typically by adopting federal standards) and establishes minimum engineering standards for water system facility infrastructure (construction) and system operation. The DW Program regulates PWSs by enforcing state and federal regulations.

The State of Alaska is a "direct implementation" state, meaning the state's DW Program staff work directly with the PWS owners and operators. In Alaska, there are no county or borough governments that support implementation and enforcement of the drinking water regulations at the local level. This report will focus on the compliance assistance and enforcement activities of the DW Program, which are listed in the major program components (next page) and are described in further detail beginning on page 10. However, compliance and enforcement activities are just two of the many activities of a comprehensive state drinking water program.



Figure 1: Distribution of Alaska Public Water Systems

# Major Components and Activities of Alaska's DW Program

#### **Drinking Water Protection**

- Complete source water delineations, contaminant source inventory assessments, and susceptibility determinations for PWSs.
- Review and either approve or deny Synthetic Organic Chemicals (SOCs) Monitoring Waiver applications for PWSs.
- Partner with other agencies to review and comment on permitted activities within Drinking Water Protection areas.
- Encourage responsible drinking water source protection and drinking water protection planning efforts for PWSs.



#### Compliance Assistance & Enforcement Provide PWS owners and operators with information

- Provide PWS owners and operators with information and educational materials regarding sampling and reporting requirements.
- Enter and review water system data in the state DW Program database, the Safe Drinking Water Information System (SDWIS/State).
- Determine PWS compliance with the SDWA requirements, rules, and federal and state drinking water regulations; issue violations when requirements are not met.
- Issue informal and formal enforcement actions to PWSs that are in violation of the SDWA or state drinking water regulations, as appropriate.

#### **Technical & On-Site Inspections**

- Complete sanitary survey inspections at PWSs every 3 or 5 years.
- Complete Revised Total Coliform Rule Assessments as triggered and/or requested.
- Complete annual Filtration Avoidance Inspections for PWSs avoiding filtration as required under the Surface Water Treatment Rule.
- Respond to complaints about drinking water quality and quantity.
- Provide technical assistance to PWSs.

#### **Engineered Plans**

- Review engineered plans for new and modified PWSs, and issue construction approvals to systems that meet minimum requirements.
- Review engineered plans after construction and issue operational approvals to systems that meet minimum requirements.
- Review requests for waivers of required separation distances involving PWSs.
- Assist consulting engineers with questions regarding engineered plan review requirements and regulations, including alternative treatment technologies and separation distance waivers.

#### **General Program Activities**

- Adopt federal regulations, when required, and draft state regulations, as necessary.
- Fund the Environmental Health Laboratory's Drinking Water Laboratory Certification Program, consisting of both chemical and microbiological certification activities.
- Provide administration for the SDWIS/State database, the Compliance Monitoring Data Portal (CMDP), the Electronic Sanitary Survey (ESS), the Drinking Water Protection database, and the Engineering Submittal Tracking database.
- Implement the Sanitary Survey Inspector training and approval program for DW Program staff and third-party Sanitary Survey Inspectors.
- Provide public outreach, including presentations at conferences or by webinar and other training opportunities, for water system owners and operators, as appropriate.

## Alaska's Public Water Systems

#### Figure 2: Number of Public Water Systems



During CY2024, there were 1,319 active PWSs in Alaska: 407 CWS; 224 NTNC systems; and 688 TNC systems (see **Figure 2**).

These 1,319 PWSs served a combined population of 848,658 people in a residential or commercial capacity. While there are a greater number of systems classified as TNC systems, the majority of the population in Alaska is served from CWSs.

Most of the PWSs in Alaska utilize groundwater as their source; however, a greater percentage of the population is served by systems using a surface water source (see **Figure 3**). This is primarily because several of the systems serving the largest populations in the state utilize a surface water source.



## 5 Analysis of Compliance for Alaska Public Water Systems

## PWS Compliance with Sampling and Reporting Requirements

In order to protect public health through safe drinking water, PWSs are required to test for a variety of microbiological and chemical contaminants throughout the year. Currently, more than 90 different chemical and microbiological contaminants are regulated under the SDWA. PWSs are also subject to many state and federal regulations that cover all aspects of a water system, from design and construction standards to daily operation and maintenance requirements. When a PWS fails to complete monitoring and reporting requirements, exceeds an established MCL, or operates outside of treatment standards, a violation is issued to the water system.

During CY2024, a total of 4,132 federal violations were issued to 530 PWSs (or 40%) in Alaska, leaving 789 PWSs (or 60%) violation-free (see **Figure 4**). Monitoring violations continue to be the most common violations, making up 85% of all violations issued to PWSs in Alaska during 2024 (see **Figure 5**). The 4,132 total violations issued to PWSs across the state in CY2024 is a decrease in the number of violations compared to CY2023, when 4,451 violations were issued. This can be primarily attributed to a decrease in Volatile Organic Compounds (VOC) and Disinfection By Product Rules (DBP) monitoring violations when compared to last year. For further details on the violations see **Table 1** on following page.

## Figure 4: PWSs by Violation Status in CY2024 PWS with one or PWSs with no more violations violations 40% 60% Figure 5: Violations by Type in CY2024 MCL Other 69 130 TT 405 MON 3.528

MON - Monitoring & Reporting MCL- Maximum Contaminant Level TT- Treatment Technique Other - Other **Table 1 (**below) provides detailed information on the types of violations issued to Alaska PWSs during CY2024: For a detailed list of PWS that received MCL and/or Treatment Technique (TT) violations during CY2024 see **Section 9** (*page 16*).

	MCL		Treatment Technique		Monitoring		Other Violation					
Kule Name		Resolved Violations	Systems in violation	Violations	Resolved Violations	Systems in violation	Violations	Resolved Violations	Systems in violation	Violations	Resolved Violations	Systems in violation
Revised Total Coliform Rule (Violation Codes: MCL 1A; Treatment Technique 2A, 2B, 2C, 2D; Monitoring 3A, 3B; Other 5A, 28)	2	0	2	40	23	25	875	615	303	16	6	16
Surface Water Treatment Rules (Violation Codes: Treatment Technique 33, 37, 40, 41, 42, 43, 44, 45 47; Monitoring 29, 31, 32, 36, 38)				88	51	40	719	384	112			
<b>Ground Water Rule</b> (Violation Codes: Treatment Technique 41, 42, 45, 48; Monitoring 19, 31, 34: Other: 20)				201	84	81	32	9	16	27	15	27
Disinfection Byproducts Rules (Violation Codes: MCL 02, 11, 13; Treatment Technique 12, 46; Monitoring 27, 30, 35)	46	10	14	10	4	4	615	325	126			
Inorganic Contaminants (IOCs) (Violation Codes: MCL 01, 02; Monitoring 03, 04)	21	7	6				98	5	81			
Volatile Organic Contaminants (VOCs) (Violation Codes: MCL 01, 02; Monitoring 03, 04)	0	0	0				773	231	28			
Synthetic Organic Contaminants (SOCs) (Violation Codes: MCL 01, 02; Monitoring 03, 04)	0	0	0				0	0	0			
Radionuclides (Violation Codes: MCL 01, 02; Monitoring 03, 04)	0	0	0				29	9	5			
Lead and Copper Rules (Violation Codes: Treatment Technique 2E, 57, 58, 59, 63, 64, 65; Monitoring 51, 52, 56, 66; Reporting 4G)				66	8	64	387	174	183			
<b>Consumer Confidence Report Rule</b> (Violation Codes: Reporting 71)										34	19	31
Public Notification Rule (Violation Codes: Reporting 75)										53	43	25
Total Number of Federally Regulated PWSs in Alaska CY 2024:						1,319	9					
Total Number of PWSs with 1 or more Violations, <u>40% of PWSs</u> (all rules, all violation types as noted above):						530						
				Тс	otal Nur	nber of	Violatio	ns in CY	2024:	4,132	2*	
			Tota	al Numb	per of V	iolation	s resolve	ed in CY	2024:	2,022	2	

\*includes violations that have been resolved or returned to compliance

#### DEFINITIONS

Maximum Contaminant Level (MCL) - Under the Safe Drinking Water Act (SDWA), the EPA sets national limits on regulated contaminant levels in drinking water to ensure that the water is safe for human consumption. These limits are known as MCLs.

Treatment Techniques (TT) - For some regulations, the EPA establishes treatment techniques in lieu of MCLs to control unacceptable levels of certain contaminants. For example, treatment techniques have been established for viruses, bacteria, and turbidity.

Significant Monitoring Violations - For this report, significant monitoring violations are generally defined as any major monitoring violation that occur during the calendar year of the report. A significant monitoring violation, with rare exceptions, occurs when no samples are taken or no results are reported during a compliance period.

#### NOTES:

1) This report includes only the federal violations specified by EPA guidance. It does not include state violations.

2) This report includes violations that have returned to compliance (RTCd) or were resolved in 2024 as outlined in the report instructions.

#### **Enforcement Targeting Tool**

Alaska's DW Program utilizes the EPA's quarterly Enforcement Targeting Tool (ETT) to focus attention on PWSs that, based on the severity and frequency of their violations, are defined as significantly out of compliance with the SDWA requirements.

Throughout CY2024, 168 PWSs appeared on the quarterly list at one time or another, leaving 1,151 or 87%, of Alaska's PWSs not classified as significantly out of compliance (see **Figure 6**). During CY2024, 133 PWSs listed on the ETT took the appropriate steps (such as collecting samples) to return to compliance and were no longer listed on EPA's ETT.

In reviewing the previous 5 years of ETT List data, this year's count was slightly below the average of 177 PWSs on the ETT list (**Figure 7**).

To view a copy of the current quarterly ETT List, a web map detailing the location of PWSs on the current list, resources including guidance on how to read the ETT, how the list is generated, and past ETT lists, see the DW Program's ETT webpage at <a href="https://dec.alaska.gov/eh/dw/ett/">https://dec.alaska.gov/eh/dw/ett/</a>.



#### **PWS Compliance with Sanitary Survey Inspection Requirements**

A Sanitary Survey is an on-site inspection of the water system required for PWSs every 3 or 5 years, depending on the system classification. If deficiencies of the water source(s), facilities, equipment, operation, maintenance, or monitoring requirements are found, they are documented during the inspection. In Alaska, these inspections are completed by DEC-Approved Sanitary Survey Inspectors, which includes both DW Program staff and third-party Sanitary Survey Inspectors who are approved by the state but not employed by the State of Alaska.

During CY2024, the DW Program staff completed 52 sanitary surveys while third-party Sanitary Survey Inspectors completed 207 surveys. In 2024, 271 of the 1,319 PWSs in the state were overdue for their sanitary survey, leaving 1,048 systems, or 79% of Alaska's PWSs, in compliance with their Sanitary Survey requirements.

In CY2024, the DW Program held the Basic Sanitary Survey Inspector course in May 204 which resulted in 13 new Sanitary Survey Inspectors.



Figure 6: Percentage of PWSs

Listed on ETT in CY2024

13%

PWSs listed on ETT

87%

PWSs not

listed on ETT

Students attending Sanitary Survey Inspector course (field portion).

**Boil Water Notices (BWNs)** 



Figure 8: Alaska DEC Drinking Water Boil Water Notices Web map

In some circumstances, such as the confirmed detection of *E. coli*, inadequate system pressure, or emergency situations like flooding, immediate action is taken by the water system owner or operator due to the pressing threat to public health. For such situations, a Boil Water Notice (BWN) may be required and PWS must notify customers within 24 hours to boil water before use. BWNs remain in effect until the problem has been corrected, and the water is determined by the DW Program to be safe to consume (see **Figure 8** for an example of the BWN web map showing distribution of active BWNs). The Alaska DEC Drinking Water Boil Water Notices map is publicly available at the following link: https://dec.alaska.gov/das/gis/apps/.

In 2024, the DW Program required 131 water systems to post these notices a total of 198 times (196 BWNs / 2 Do Not Drink orders); some water systems were placed on a BWN more than once during the year. This is an increase from last year where 118 systems were placed on BWNs 206 times.

### 6 Drinking Water Program Compliance and Enforcement Activities

In CY2024, DW Program staff continued to take a proactive approach to requiring compliance with drinking water regulations. These activities included phone and email contacts, on-site inspections, meetings with PWS owners and operators, and providing technical assistance as needed. Staff assisted operators with reminder notices of upcoming sampling deadlines to prevent violations before they occurred. DW Program staff routinely provided PWS owners and operators with the necessary forms and information to provide effective and timely notification to their customers regarding the system's drinking water regulation violations.

This continued proactive focus on technical and compliance assistance led to 8,486 compliance assistance actions provided by DW Program staff to Alaska PWSs during 2024, which is a decrease from last year's (CY2023) total of 8,947 compliance assistance actions. In reviewing the previous 5 years of compliance assistance data, this year is above the average of 7,946 compliance actions per year (**Figure 9**).

Once violations have been generated for a particular water system, DW Program staff work diligently to provide the system with straightforward guidelines on how to return to compliance (RTC). While returning to compliance ultimately rests with water system owners and operators, DW Program staff use their knowledge and expertise to provide technical and regulatory assistance to those systems with violations. Once a system takes the necessary steps to address a particular violation or series of violations, DW Program staff document the RTC action. In CY2024, a total of 1,549 RTC actions were entered for 464 systems.





If a PWS does not RTC in a timely manner, the DW Program uses a progressive enforcement response policy to achieve compliance, beginning with a series of enforcement letters as the first steps towards more formal enforcement. In 2024, 2,761 informal enforcement actions were taken by the DW Program. If compliance is not achieved promptly, more formal enforcement tools are utilized. An enforcement action is considered formal when the enforcement document is legally binding and includes the ability to impose a monetary fine (i.e., administrative penalty) if compliance is not achieved within the timelines specified by or negotiated with the state.

The most used DW Program formal enforcement action is the Notice of Violation (NOV). For systems which require a longer-term solution to address violations and achieve compliance, the system can enter into a written agreement detailing a timeline of specific actions the system intends to take. This agreement takes the form of a Compliance Order by Consent (COBC).

If the requirements of the NOV or COBC are not met, administrative penalties can be assessed. In CY2024, the DW Program took seven (7) formal enforcement action see **Figure 10** below for a summary of compliance and enforcement actions taken in CY2024. This chart includes currently inactive/non-public systems that were active/public during the reporting period.



Figure 10: Summary of Compliance and Enforcement Actions Taken by DW Program Staff in CY2024

## 7 Drinking Water Program Activities

The DW Program includes several major components beyond the Compliance and Enforcement activities described in the previous section. These components support PWS compliance through engineering plan reviews, drinking water protection efforts, collaboration with other drinking water professionals, and updating online services for easy access to drinking water information.

#### Lead Service Line Inventories

In 2024, DW Program staff in the Statewide Technical Services section implemented the Lead Service Line Inventory (LSLI) requirements under the Lead and Copper Rule Revisions (LCRR). This rule requires CWS and NTNC systems to compile an inventory to identify the materials used for each water service line, with an initial deadline of October 16, 2024. DW staff worked with water systems to submit 549 inventories in 2024 leaving around 53 inventories to be submitted (see **Figure 11**). For more detailed information the types of service lines being identified in Alaska please visit the Lead Safe Alaska Portal at: <u>https://ak-lsliadec.hub.arcgis.com/</u> *Figure 11: LSLI status in CY2024* 



549 LSLI submitted

#### **Engineering Activities**

DW Program engineering staff review submitted engineered plans to determine whether construction approval for building new PWSs or for modifying existing PWSs can be granted. Once construction is completed, additional engineered plans are submitted to the DW Program and reviewed by staff to determine whether interim approval and/or final approval to operate can be issued for a PWS. In CY2024, 116 plans received Approval to Construct, 93 plans received Interim Approval to Operate and 131 plans received Final Approval to Operate (see **Figure 12**).

#### **Drinking Water Source Protection Activities**

The source of drinking water is a vitally important component of a PWS. DW Protection staff work with the public and other government agencies to provide accurate locational data for wells, intakes, and the respective drinking water source protection areas. This information is used to review and comment on proposed projects occurring throughout Alaska. In addition, DW Protection staff work with communities to promote voluntary protection of their drinking water source.

For further information about DW Protection efforts, please see the DW Program's Drinking Water Protection webpage at <u>https://dec.alaska.gov/eh/dw/dwp/</u>.

In CY2024, DW Protection staff verified or updated 27 source locations (see **Figure 13**), and 11 protection areas were delineated.



**53 LSLI** 

not submitted

#### **GIS Mapping Tools**

The first step to protect drinking water from contamination is for the public and government agencies to identify drinking water sources. The DW Protection staff continues to maintain a Geographic Information System (GIS) database of drinking water protection areas for identified PWS sources and provides this data as a web map. In CY2024, two main web maps continued to be maintained, one for the public and one for internal use at the DEC. The internal web map



Thumbnails of some of the DW Program publicly-available web maps.

includes data layers that are not currently available outside the DEC firewall. DW Protection staff consistently utilize a monthly ArcGIS ModelBuilder script for delineating provisional protection areas (with a 1,000-foot buffer) for new sources or updated locations. These provisional areas serve as a temporary means to identify protection zones until a formal delineation, based on site-specific information, can be carried out. Additionally, the staff uses a similar ArcGIS ModelBuilder script every month to identify misaligned protection areas caused by updates in source locations. Consequently, affected delineations are promptly adjusted or re-delineated.

DW Protection staff continually encourage permitting authorities in other DEC Programs and other agencies to use the web maps for identifying proposed activities near PWS sources. The link to the publicly available web maps is <u>https://dec.alaska.gov/das/gis/apps/</u>.

The annual site visits to the public web map displaying drinking water protection areas slightly decreased from 9,599 last year (CY2023) to 9,536 in 2024, totaling 95,721 cumulative visits (see **Figure 14**). The average daily visits remained near 27.

The DEC web service for Drinking Water Protection Areas continues to be used directly by other agencies including the service in their own specialized web map. For example, the Alaska Department of Natural Resources (DNR) includes this web service in its own web maps when reviewing applications for temporary water usage authorization and water rights. Other agencies utilizing Drinking Water Source Protection Area GIS layers include the State of Alaska Division of Forestry, the Division of Community and Regional Affairs (DCRA), and the United States Forest Service.

The annual site visits to the internal web map displaying drinking water protection areas and well/intake locations slightly decreased from 2,190 last year (CY2023) to 1,926 in 2024, totaling 25,939 cumulative visits (see **Figure 15**). The average daily visits decreased from 6/day to slightly over 5/day. In 2024, DW Protection staff continued to maintain an inventory of all the Endorsed Drinking Water Source Protection Plans and their status. A GIS layer created for this purpose continues to be maintained for this inventory and is included in the Drinking Water Protection public and internal public web maps. The slight decrease in use is likely due to an error in tracking due to the recent switch to ArcGIS Portal and staffing turnover.

# Figure 14: Count of visits to public web map Public Web Age of the set of t

web map



Internal Web Map visits



ADEC Drinking Water Internal ... Displays authoritative locations of active registered public water system (PWS) sources (e.g., wells, intakes

# 8 Other Programs Related to Public Water Systems

The DW Program is not the only program within the DEC that works with PWSs; many partners assist in achieving the goal of safe drinking water for the residents of and visitors to the State of Alaska. The two programs highlighted on the following pages work closely with the DW Program; however, this is not an all-inclusive list of our partners.

#### DEC Environmental Health Laboratory – Water Laboratory Certification Program

The mission of the DEC Environmental Health (EH) Laboratory is to provide analytical and technical information in support of state and national environmental health programs. The laboratory is responsible for certifying commercial and municipal drinking water laboratories for chemical and microbiological testing. The certification process is intended to ensure that laboratories meet the requirements of applicable federal regulations and standards and satisfy the needs of their clients.

#### Environmental Health Laboratory in 2024

During CY2024, the EH Laboratory certified 41 unique laboratories for drinking water analysis. 25 certifications for microbiological analysis (including 2 for Cryptosporidium) and 16 certifications for chemical analysis. The EH Laboratory performed a variety of analytical and technical assistance actions. These actions ranged from sending technical assistance emails to full reviews of laboratory Standard Operating Procedures and Quality Assurance Manuals (see **Figure 16**). For more information about the DEC EH Laboratory, please visit the webpage located at <u>https://dec.alaska.gov/eh/lab/</u>.





#### DEC Division of Water – Operator Certification Program

PWSs are required to be operated by properly trained and certified operators. An operator must be certified by the department at the same classification level (or higher) as the water system they are operating. The Operator Certification Program is the lead entity within the State of Alaska for certifying both water and wastewater operators as well as classifying water systems based on the system components. This program is charged with developing training programs, administering examinations, and tracking certified operators. The primary services are as follows:

- Develop training curricula, correspondence courses, certification standards, and examination materials for certified drinking water and wastewater system operators.
- Coordinate with PWS owners and notify operators of training opportunities.
- Work with the Alaska Water and Wastewater Advisory Board to establish standards for certifying operators and to adjudicate certification actions.
- Maintain a lending library of reference and training materials for water and wastewater operators.
- Administer certification exams for water and wastewater operators.

For more information about the Operator Certification Program, please visit the webpage at <u>https://dec.alaska.gov/water/operator-certification/</u>.

#### **Operator Certification in 2024**

In the State of Alaska, there are several certification levels for operators, see **Figure 17** for a breakdown by certification level. In CY2024, there were 1,859 active certifications held by 1,372 operators statewide. Many operators hold multiple levels of certification, with Level 4 being the highest and requiring the most education and training.

PWSs also have corresponding classification levels determined by the complexity of the system components, see **Figure 18** (below) for a breakdown of the number of water systems by classification level. Most of the classified systems in Alaska are either small untreated or small treated systems due to the large number of housing subdivisions, trailer courts, and schools having their own water systems.



However, there are also several complex systems requiring operators with advanced levels of certification. To maintain certification, operators are required to complete a minimum number of continuing education hours on an annual basis. Therefore, providing training opportunities is a priority for the Operator Certification Program. In CY2024, 56 courses were approved by the Operator Certification Program, through which operators taking the courses may receive credit for completing the course. Having an appropriately trained and certified operator greatly increases the water system's ability to consistently comply with the SDWA requirements, resulting in fewer violations and safer drinking water.



#### Figure 18: PWSs by Classification Level in CY2024

MCL and TT Violations List for CY2024

#### Attachment 1: Public Water Systems with Maximum Contaminant Level and/or Treatment Technique Violations for CY2024

Bolded system names indicate multiple violations issued for rule during CY2024 PWS in grey highlight have fully resolved or RTCd the violation(s) in 2024

\*\* Italicized name indicate this system is no longer active or is no longer a public water system

Chemical/Radionuclide Rules Maximum Contaminant Level Exceedance Violation (Violation Code 01, 02)				
		System	Population	
PWSID	Water System Name	Туре	Served	Contaminant
AK2340141	DIOMEDE JOINT UTILITIES	CWS	184	Arsenic & Nitrate
AK2243658	KB SUB. WATER SERVICE ASSOC.	CWS	170	Arsenic
AK2226055	PALMER LIFEWAYS DAYCARE	NTNCWS	56	Arsenic
AK2241012	RIVER TERRACE TC**	CWS	23	Arsenic
AK2220483	SET FREE ALASKA SNODGRASS	NTNCWS	47	Arsenic
AK2224337	SHEENA MAY ESTATES	CWS	74	Arsenic

<b>Disinfection Byproducts Rule Maximum Contaminant Level Exceedance Violation</b> (Violation Code 02, 11, 13)				
		System	Population	
PWSID	Water System Name	Туре	Served	Contaminant
AK2270362	ALAKANUK WATER SYSTEM	CWS	570	TTHM
AK2300183	CHALKYITSIK VILLAGE WATER	CWS	76	TTHM & HAA5
AK2120436	COFFMAN COVE	CWS	199	HAA5
AK2340222	DEERING UTILITY SYSTEM	CWS	160	TTHM & HAA5
AK2340214	GOLOVIN COMMUNITY WATER SYSTEM	CWS	150	HAA5
AK2380214	GULKANA VILLAGE	CWS	90	TTHM
AK2119205	HECLA GREENS CREEK 920 LEVEL	NTNCWS	175	HAA5
AK2130083	KAKE MUNICIPAL WATER	CWS	415	HAA5
AK2120169	KLAWOCK	CWS	904	HAA5
AK2340060	KOTZEBUE MUN. WATER SYSTEM	CWS	3234	TTHM & HAA5
AK2272017	KWETHLUK NEW PIPED WATER SYSTEM	CWS	760	HAA5
AK2291130	TATITLEK WATER SYSTEM	CWS	95	HAA5
AK2120012	VALLENAR VIEW MOBILE HOME PARK	CWS	225	HAA5
AK2300206	YKSD - ALLAKAKET SCHOOL	NTNCWS	52	TTHM

Revised Total Coliform Rule Maximum Contaminant Level Exceedance Violation (Violation Code 1A)				
		System	Population	
PWSID	Water System Name	Туре	Served	Contaminant
AK2120575	CLOVER PASS COMMUNITY CHURCH **	TNCWS	0	RTCR
AK2121123	PORT PROTECTION	CWS	60	RTCR

<b>Disinfection Byproducts Rule Treatment Technique Violation</b> (Violation Code 12, 46)				
		System	Population	
PWSID	Water System Name	Туре	Served	Contaminant
AK2272004	KOTLIK WATER SYSTEM	CWS	617	<b>Total Organic Carbon</b>
AK2272017	KWETHLUK NEW PIPED WATER SYSTEM	CWS	760	<b>Total Organic Carbon</b>
AK2280155	MCGRATH WATER SYSTEM	CWS	341	<b>Total Organic Carbon</b>
AK2270207	NUNAM IQUA WATER SYSTEM	CWS	213	Total Organic Carbon

Ground Water Rule Treatment Technique Violation (Violation Code 41, 42, 45, 48)				
		System	Population	
PWSID	Water System Name	Туре	Served	Contaminant
AK2391786	49TH STATE BREWING COMPANY HEALY	TNCWS	524	Groundwater Rule
AK2370120	AK DIV PARKS - DELTA SRS	TNCWS	53	Groundwater Rule
AK2249042	ALASKA CHRISTIAN COLLEGE	NTNCWS	70	Groundwater Rule
AK2261240	ALASKA GENERAL SEAFOODS NAKNEK - CANNERY	TNCWS	600	Groundwater Rule
AK2298608	ALDERWOOD**	CWS	0	Groundwater Rule
AK2300816	ALLAKAKET PUBLIC WATER SYSTEM	CWS	135	Groundwater Rule
AK2300214	AMBLER COMMUNITY WATER SYSTEM	CWS	261	Groundwater Rule
AK2280171	ANVIK WATER SYSTEM	CWS	96	Groundwater Rule
AK2213904	ASD RAVENWOOD SCHOOL	NTNCWS	472	Groundwater Rule
AK2249028	ASHTON PARK	CWS	75	Groundwater Rule
AK2271033	ATMAUTLUAK WATER SYSTEM	CWS	311	Groundwater Rule
AK2270346	BETHEL HEIGHTS WATER SYSTEM	CWS	2220	Groundwater Rule
AK2270401	BETHEL LONGHOUSE HOTEL	TNCWS	90	Groundwater Rule
AK2223624	BLUFF VIEW ACRES WATER SYSTEM	CWS	100	Groundwater Rule
AK2223828	BOBS MINI MARKET	TNCWS	29	Groundwater Rule
AK2340418	BREVIG MISSION WATER SYSTEM	CWS	395	Groundwater Rule
AK2261630	BRISTOL BAY LODGE	TNCWS	46	Groundwater Rule
AK2270338	CHEFORNAK WATER SYSTEM	CWS	454	Groundwater Rule
AK2270320	CHEVAK WATER SYSTEM	CWS	938	Groundwater Rule
AK2261444	CHIGNIK LAGOON WATER SYSTEM	CWS	273	Groundwater Rule
AK2261096	CHIGNIK LAKE WATER SYSTEM	CWS	200	Groundwater Rule
AK2272012	CHUATHBALUK WATER SYSTEM	CWS	123	Groundwater Rule
AK2270312	CITY OF HOOPER BAY	CWS	1200	Groundwater Rule
AK2260202	CLARKS POINT WATER SYSTEM	CWS	128	Groundwater Rule
AK2280302	CROOKED CREEK WATERING POINT	CWS	147	Groundwater Rule
AK2390641	DENALI - SAVAGE RIVER CMPGRND.	TNCWS	72	Groundwater Rule
AK2260197	DILLINGHAM WATER SYSTEM	CWS	2419	Groundwater Rule
AK2242393	DIRTY SKILLET AND BEAR CREEK CABINS	TNCWS	54	Groundwater Rule
AK2262238	EGEGIK	CWS	485	Groundwater Rule
AK2261208	EKUK FISHERIES	TNCWS	150	Groundwater Rule
AK2210794	FOREST PARK TC	CWS	175	Groundwater Rule
AK2223527	FORKS ROADHOUSE REBORN	TNCWS	130	Groundwater Rule

Ground Water Rule Treatment Technique Violation (Violation Code 41, 42, 45, 48)				
		System	Population	
PWSID	Water System Name	Туре	Served	Contaminant
AK2360272	GALENA WTP1 - CITY	CWS	490	Groundwater Rule
AK2215566	HOMER DRIVE APTS.	CWS	50	Groundwater Rule
AK2211897	KATHY O ESTATES	CWS	242	Groundwater Rule
AK2340230	KIANA WATER SYSTEM	CWS	455	Groundwater Rule
AK2260244	KING COVE	CWS	972	Groundwater Rule
AK2340565	KOBUK WATER SYSTEM	CWS	93	Groundwater Rule
AK2260040	KOLIGANEK WATER SYSTEM	CWS	170	Groundwater Rule
AK2272751	KSD UPPER KALSKAG PRIMARY SCHOOL	NTNCWS	50	Groundwater Rule
AK2261575	L&PSD PORT ALSWORTH SCHOOL	NTNCWS	80	Groundwater Rule
AK2370879	LARRYS APARTMENTS	CWS	44	Groundwater Rule
AK2271017	LKSD TUNTUTULIAK ANGAPAK SC	NTNCWS	101	Groundwater Rule
AK2270697	LOWER KALSKAG WATER SYSTEM	CWS	302	Groundwater Rule
AK2262246	MANOKOTAK HEIGHTS W/S	CWS	215	Groundwater Rule
AK2270273	MARSHALL WATER SYSTEM	CWS	308	Groundwater Rule
AK2210401	MEADOW RIDGE ESTATES	CWS	350	Groundwater Rule
AK2300159	MINTO COMMUNITY WATER SYSTEM	CWS	205	Groundwater Rule
AK2225988	MOUNTAIN ASH BUSINESS PARK	TNCWS	95	Groundwater Rule
AK2270150	MOUNTAIN VILLAGE WATER SYSTEM	CWS	850	Groundwater Rule
AK2381016	NAABIA NIIGN NORTHWAY	TNCWS	25	Groundwater Rule
AK2260139	NAPASKIAK WEST WATER SYSTEM	CWS	200	Groundwater Rule
AK2260367	NEW STUYAHOK WATER SYSTEM	CWS	566	Groundwater Rule
AK2271721	NIGHTMUTE NEW WATERING POINT	CWS	243	Groundwater Rule
AK2263010	NINA NICHOLSON SUBDIVISION	CWS	31	Groundwater Rule
AK2340638	NOME BELTZ HIGH SCHOOL **	NTNCWS	435	Groundwater Rule
AK2272752	OLD KASIGLUK - AKIUK	CWS	240	Groundwater Rule
AK22114/3	PETERS CREEK TERRACE	CWS	/0	Groundwater Rule
AK2360816		CWS	88	Groundwater Rule
AK2210451		CWS	430	Groundwater Rule
AK2260074		CWS	60 500	Groundwater Rule
AK2263069	SILVER BAY SEAFOODS NAKNEK	CWR	000	Groundwater Rule
AK2210091		TNOWS	20	Groundwater Rule
AK2300307		CMB	69	Groundwater Rule
AK2260333		TNOWS	100	Groundwater Rule
AK2249223		CWS	22	Groundwater Rule
AK2249099		TNCWS	64	Groundwater Rule
AK2220107		CWS	25	Groundwater Rule
AK2370471	TROPHYLODGE	TNCWS	57	Groundwater Rule
ΔK2271114	TUNDBA WOMENS COALITION	TNCWS	48	Groundwater Rule
ΔK2271211	TUNTUTUI JAK WASHETERIA AND WATERING PT	CWS	350	Groundwater Rule
AK2310780	TURTIECIUB	TNCWS	204	Groundwater Rule
AK2271790	UNITED PENTECOSTAL CHURCH	TNCWS	121	Groundwater Rule
AK2260553	USNPS KATMAI BROOKS CAMP	TNCWS	350	Groundwater Rule
AK2220404	VALLEY COUNTRY STORE #2	TNCWS	365	Groundwater Rule
AK2390536	VITUS - HEALY STORE	TNCWS	52	Groundwater Rule
AK2340191	WALES WATER SYSTEM	CWS	173	Groundwater Rule
AK2218824	WENDY'S OLD SEWARD	TNCWS	415	Groundwater Rule
AK2310853	WILDWOOD HOMES LLC	CWS	114	Groundwater Rule

#### Lead and Copper Rules Treatment Technique Violation (Violation Code 2E, 57, 58, 59, 63, 64, 65)

		System	Population	
PWSID	Water System Name	Type	Served	Contaminant
AK2270362	ALAKANUK WATER SYSTEM	CWS	570	LCRR
AK2222848	ALASKA H2O INC	CWS	75	LCRR
AK2300214	AMBLER COMMUNITY WATER SYSTEM	CWS	261	LCRR
AK2130017	ANGOON PUBLIC WATER	CWS	450	LCRR
AK2260058	АТКА	CWS	50	LCRR
AK2241101	BAY VIEW TRAILER COURT	CWS	51	LCRR
AK2271148	BETHEL TRAILER COURT	CWS	500	LCRR
AK2272011	BETHEL TROOPER HOUSING	NTNCWS	60	LCRR
AK2310837	BIRCHVIEW RENTAL PROPERTIES, LLC	CWS	31	LCRR
AK2227220	CAMWELL ON THE GREEN (MHP)	CWS	33	LCRR
AK2270320	CHEVAK WATER SYSTEM	CWS	938	LCRR
AK2110562	CHILKAT INDIAN VILLAGE	CWS	113	LCRR
AK2270312	CITY OF HOOPER BAY	CWS	1200	LCRR
AK2260202	CLARKS POINT WATER SYSTEM	CWS	128	LCRR
AK2243103	COLLEGE PARK HOME OWNERS ASSOC	CWS	85	LCRR
AK2370625	EIELSON - AIR FORCE BASE	CWS	9760	LCRR
AK2340345	ELIM WATER SUPPLY	CWS	320	LCRR
AK2224036	ELSINORE ESTATES SUBDIVISION	CWS	120	LCRR
AK2270299	EMMONAK WATER SYSTEM	CWS	820	LCRR
AK2262199	FALSE PASS TREATMENT PLANT	CWS	393	LCRR
AK2210794	FOREST PARK TC	CWS	175	LCRR
AK2280066	GRAYLING WATER SYSTEM	CWS	195	LCRR
AK2111566	HAINES BOROUGH	CWS	1748	LCRR
AK2280074	HOLY CROSS WATER SYSTEM	CWS	182	LCRR
AK2210354	INLET VIEW MHP CHUGIAK	CWS	47	LCRR
AK2360141	KALTAG PUBLIC WATER SYSTEM	CWS	214	LCRR
AK2212819	KINGSBERRY HOMEOWNERS ASSOC.	CWS	50	LCRR
AK2340167	KOYUK PUBLIC WATER SYSTEM	CWS	277	LCRR
AK2250134	LARSEN BAY WATER SYSTEM	CWS	271	LCRR
AK2270697	LOWER KALSKAG WATER SYSTEM	CWS	302	LCRR
AK2262246	MANOKOTAK HEIGHTS W/S	CWS	215	LCRR
AK2260090	MANOKOTAK WATER SYSTEM	CWS	293	LCRR
AK2300159	MINTO COMMUNITY WATER SYSTEM	CWS	205	LCRR
AK2241648	NIKOLAEVSK COMMUNITY WATER SYSTEM	CWS	360	LCRR
AK2340638	NOME BELTZ HIGH SCHOOL **	NTNCWS	435	LCRR
AK2340109	NOORVIK WATER SYSTEM	CWS	735	LCRR
AK2310942	NORTHSTAR CENTER	NTNCWS	99	LCRR
AK2360785	NULATO RIVER WELL	CWS	470	LCRR
AK2225995	OMEGA BUILDING	NTNCWS	137	Lead/Copper Rule
AK2211473	PETERS CREEK TERRACE	CWS	70	LCRR
AK2272750	PITKA'S POINT PIPED WATER SYSTEM	CWS	109	LCRR
AK2250045	PORTLIONS	CWS	175	LCRR
AK2244719	S & S CENTER	NTNCWS	54	LCRR
AK2260286	SAINT PAUL WATER SYSTEM	CWS	380	LCRR
AK2241062	SALMON CREEK TRAILER COURT	CWS	125	LCRR
AK2340379	SELAWIK SAFEWATER FACILITY	CWS	846	LCRR

Lead and Copper Rules Treatment Technique Violation (Violation Code 2E, 57, 58, 59, 63, 64, 65)				
		System	Population	
PWSID	Water System Name	Туре	Served	Contaminant
AK2223179	SETTLERS BAY CONDOS	CWS	80	LCRR
AK2240757	SEWARD	CWS	3324	LCRR
AK2244159	SEWARD MARINE INDUSTRIAL CENT	CWS	545	LCRR
AK2220070	SILVER CREEK SPRINGS SD	CWS	239	LCRR
AK2210891	SNOWCREST VIEW SOUTH	CWS	25	LCRR
AK2220465	SNOWSHOE ACRES LLC	CWS	32	LCRR
AK2340337	ST. MICHAEL WATER SYSTEM	CWS	495	LCRR
AK2249099	STERLING MOOSE RIVER MANOR	CWS	33	LCRR
AK2310895	TOWN & COUNTRY TRAILER COURT	CWS	156	LCRR
AK2271211	TUNTUTULIAK WASHETERIA AND WATERING PT	CWS	350	Lead/Copper Rule
AK2310683	UNIVERSITY OF ALASKA - FAIRBANKS	CWS	6200	LCRR
AK2310926	VALLEY WATER COMPANY	CWS	1575	LCR & LCRR
AK2310803	VILLAGE MOBILE HOME PARK	CWS	<mark>65</mark>	LCRR
AK2226428	VIOLET CIRCLE WATER COMPANY	CWS	35	Lead/Copper Rule
AK2220163	WASILLA LAKE CHURCH OF THE NAZARENE	NTNCWS	188	LCRR
AK2313233	WHITE BIRCH APARTMENTS	CWS	72	LCRR
AK2310853	WILDWOOD HOMES LLC	CWS	114	LCRR
AK2249434	WILLOWBROOK NORTH	CWS	150	LCRR
AK2120143	WRANGELL	CWS	2300	LCRR

Revised Total Coliform Rule Treatment Technique Violation (Violation Code 2A, 2B, 2C, 2D)				
		System	Population	
PWSID	Water System Name	Туре	Served	Contaminant
AK2330066	AFC / NANUQ HERC / WOLVERINE CAMP**	TNCWS	52	RTCR
AK2261240	ALASKA GENERAL SEAFOODS NAKNEK - CANNERY	TNCWS	600	RTCR
AK2262705	ALASKA GENERAL SEAFOODS NAKNEK-FREEZING	TNCWS	120	RTCR
AK2224159	ALEUTIAN ESTATES #1	CWS	63	RTCR
AK2244808	ALPINE INN	TNCWS	30	RTCR
AK2111568	BEAR TRAP CAFE	TNCWS	433	RTCR
AK2120575	CLOVER PASS COMMUNITY CHURCH **	TNCWS	0	RTCR
AK2262660	D & D RESTAURANT	TNCWS	35	RTCR
AK2270299	EMMONAK WATER SYSTEM	CWS	820	RTCR
AK2121474	GEORGE INLET LODGE	TNCWS	49	RTCR
AK2280066	GRAYLING WATER SYSTEM	CWS	195	RTCR
AK2248925	KENAI FJORDS TOURS	TNCWS	306	RTCR
AK2299036	KING FOR A DAY	TNCWS	53	RTCR
AK2270833	KSD GEORGE MORGAN HIGH SCHOOL	NTNCWS	50	RTCR
AK2245090	LIGHTHOUSE COMMUNITY CHURCH	TNCWS	59	RTCR
AK2291108	MCCARTHY LODGE	TNCWS	215	RTCR
AK2271721	NIGHTMUTE NEW WATERING POINT	CWS	243	RTCR
AK2240901	PACIFIC STAR SEAFOODS K2	TNCWS	64	RTCR
AK2272750	PITKA'S POINT PIPED WATER SYSTEM	CWS	109	RTCR
AK2121123	PORT PROTECTION	CWS	60	RTCR
AK2249256	RW BIG EDDY RESORT	TNCWS	70	RTCR
AK2280040	SHAGELUK WATER SYSTEM	CWS	60	RTCR
AK2225907	SICILYS PIZZA	TNCWS	31	RTCR
AK2250427	SOUTHEAST ALASKA LOGGING	NTNCWS	45	RTCR
AK2271211	TUNTUTULIAK WASHETERIA AND WATERING PT	CWS	350	RTCR

Surface Water Treatment Rules Treatment Technique Violation				
	(Violation Code 33, 37, 40, 41, 4	12, 43, 44, 45,	47)	
		System	Population	
PWSID	Water System Name	Туре	Served	Contaminant
AK2260595	ADAK UTILITIES	CWS	325	SWTR
AK2260252	AKUTAN	CWS	95	SWTR
AK2293164	ALYESKA VMT EAST	NTNCWS	200	SWTR
AK2291944	ALYESKA VMT WEST	NTNCWS	150	SWTR
AK2320078	BARROW UTILITIES & ELEC. COOP., INC. (BU	CWS	4900	SWTR
AK2340248	BERING ST SD - TELLER SC/WASH	CWS	295	SWTR
AK2291952	CHENEGA	CWS	50	SWTR
AK2120020	CLOVER PASS RESORT	TNCWS	133	SWTR
AK2340345	ELIM WATER SUPPLY	CWS	320	SWTR
AK2280066	GRAYLING WATER SYSTEM	CWS	195	SWTR
AK2110855	HAINES FERRY TERMINAL	TNCWS	104	SWTR
AK2300272	HUGHES PUBLIC WATER SUPPLY	CWS	107	SWTR
AK2220692	ISLANDER BAR & RESTAURANT	TNCWS	38	SWTR
AK2360141	KALTAG PUBLIC WATER SYSTEM	CWS	214	SWTR
AK2250087	KARLUK WATER SYSTEM	CWS	60	SWTR
AK2340117	KIVALINA WATER SYSTEM	CWS	452	SWTR
AK2263006	KOKHANOK WATER & WW SYSTEM	CWS	160	SWTR
AK2271025	KONGIGANAK WATER SYSTEM	CWS	547	SWTR
AK2272004	KOTLIK WATER SYSTEM	CWS	617	SWTR
AK2340167	KOYUK PUBLIC WATER SYSTEM	CWS	277	SWTR
AK2272017	KWETHLUK NEW PIPED WATER SYSTEM	CWS	760	SWTR
AK2271700	KWIGILLINGOK WASHETERIA	CWS	400	SWTR
AK2270613	LKSD TUNUNAK PAUL ALBERT HS	CWS	385	SWTR
AK2271562	MEKORYUK WASHETERIA RESERVOIR	CWS	198	SWTR
AK2333364	MILNE POINT UNIT - HILCORP	NTNCWS	300	SWTR
AK2260804	NELSON LAGOON WATER SYSTEM	CWS	60	SWTR
AK2260260	NONDALTON	CWS	205	SWTR
AK2250061	OLD HARBOR	CWS	246	SWTR
AK2250053	OUZINKIE WATER SYSTEM	CWS	144	SWTR
AK2261216	PETER PAN SEAFOODS PORT MOLLER	TNCWS	140	SWTR
AK2271059	PLATINUM CITY WATER SYSTEM	CWS	51	SWTR
AK2121123	PORT PROTECTION	CWS	60	SWTR
AK2271041	QUINHAGAK WATER SYSTEM	CWS	724	SWTR
AK2260294	SAND POINT WATER SYSTEM	CWS	830	SWTR
AK2270184	SCAMMON BAY WATER SYSTEM	CWS	637	SWTR
AK2340379	SELAWIK SAFEWATER FACILITY	CWS	846	SWTR
AK2263076	SILVER BAY SEAFOODS FALSE PASS	TNCWS	300	SWTR
AK2270176	ST. MARYS WATER SYSTEM	CWS	548	SWTR
AK2291130	TATITLEK WATER SYSTEM	CWS	95	SWTR
AK2360109	TOO'GHA INC - IN TANANA	CWS	271	SWTR
AK2340387	UNALAKLEET CITY WATER SUPPLY	CWS	757	SWTR
AK2120012	VALLENAR VIEW MOBILE HOME PARK	CWS	225	SWTR

## Glossary of Terms

#### **Annual Compliance Report**

The Annual Compliance Report is an annual report of violations of the primary drinking water standards that the states provide to EPA. The ACR is required by Section 1414(c)(3) of the Safe Drinking Water Act Amendments of 1996. The basis of this report comes from data primarily retrieved from the Safe Drinking Water Information System (SDWIS/FED), an automated database maintained by EPA. SDWIS/FED is populated by data submitted by primacy states each quarter. The data submitted includes, but is not limited to, PWS inventory information; violations of the Maximum Contaminant Level (MCL), Maximum Residual Disinfectant Level (MRDL), monitoring requirements, and Treatment Technique (TT) requirements; and information on enforcement activity related to these violations. The ACR also provides the numbers of violations in each of six categories: MCL, MRDL, TT, variances and exemptions, significant monitoring violations, and significant consumer notification violations.

#### **Consumer Notification (Consumer Confidence Reports - CCR)**

For purposes of this report, consumer notification means the requirement for every Community Water System to deliver to its customers a brief annual water quality report, called the Consumer Confidence Report (CCR). The CCR is to include some educational material, and to provide information on the source water, the levels of any detected regulated contaminants, and compliance with drinking water regulations for that public water system.

#### Groundwater (GW) Source

Groundwater source means water, used by a public water system for providing water to its customers, that is obtained from beneath the surface of the ground (in an aquifer) and is protected—by depth, geological stratification, or other factors—from contamination by pollutants and microorganisms that originate on the surface. These systems are subject to the Ground Water Rule.

#### Groundwater Under the Direct Influence of Surface Water (GWUDISW) Source

GWUDISW source refers to water, used by a public water system for providing water to its customers, obtained from beneath the surface of the ground but not protected from contamination originating on the surface. A GWUDISW source may have a significant occurrence of microorganisms, algae, or other pathogens such as *Giardia lamblia* or *Cryptosporidium parvum*, or may experience significant shifts in water characteristics that closely resemble surface water conditions. These systems are subject to each of the surface water treatment rules.

#### **Maximum Contaminant Level (MCL)**

MCL means the maximum permissible level of a contaminant in water that is delivered to any user of a public water system. This level is a national limit set by the EPA, as required under the Safe Drinking Water Act (SDWA), to ensure that the water is safe for human consumption.

#### Maximum Residual Disinfectant Level (MRDL)

MRDL means the maximum level of disinfectant in drinking water that may not be exceeded without an unacceptable possibility of adverse health effects. The EPA sets national limits on residual disinfectant levels in drinking water to reduce the risk of exposure to disinfectants and disinfection byproducts that are formed when PWSs add chemical disinfectants for either primary or residual treatment.

#### Monitoring

Monitoring means doing a status check of the system's water quality at regular intervals, usually through collecting a water sample and having a laboratory analyze the sample for a given contaminant. A PWS is required to monitor and verify that the levels of contaminants present in the water do not exceed the corresponding MCL. If a PWS fails to have its water tested as required or fails to report test results correctly to the primacy agency (EPA, state, territory, or tribe), a monitoring violation occurs.

#### Primacy

Primacy means the delegating of primary enforcement authority of the Safe Drinking Water Act requirements and federal rules by the EPA to states, territories, and Indian tribes for public water systems in their state jurisdiction if they meet certain requirements.

#### Public Water System (PWS)

A PWS is a system that provides water for human consumption, using piping or other constructed conveyances, to at least 15 service connections or that serves an average of at least 25 people for at least 60 days each year. There are three types of PWSs: Community (such as a municipal water utility or at a residential subdivision), Non-Transient Non-Community (such as at schools or factories), and Transient Non-Community (such as at restaurants, lodges, and seasonal state and federal parks). In this report, the acronym "PWS" means systems of all three types unless specified in greater detail.

#### Sanitary Survey

A sanitary survey is a regulatory on-site inspection of the water sources, facilities, equipment, operation and maintenance, and monitoring compliance of a public water system for the purpose of evaluating the adequacy of the components for producing and distributing safe drinking water. Sanitary surveys are required every 3 years for Community Water Systems and every 5 years for Non-Community Water Systems. Each primacy agency (EPA, state, territory, or tribe) is responsible for implementing a Sanitary Survey Program. The State of Alaska has a training and approval program that allows non-State employees to become Approved Sanitary Survey Inspectors. This is unique to the Alaska Drinking Water Program, as most primacy agencies (states) in general have sanitary surveys completed by state or local government employees or paid government contractors.

#### **Significant Consumer Notification Violations**

For purposes of this report, a significant consumer notification violation is the failure of a Community Water System to provide its customers with the required annual water quality report (CCR), which results in a significant violation of public notification requirements.

#### **Surface Water Source**

Surface water source refers to water, used by a public water system for providing water to its customers, open to the atmosphere and subject to surface runoff. Surface water sources include rivers, lakes, and streams. These systems are subject to each of the surface water treatment rules.

#### **Treatment Technique (TT)**

Treatment technique is a method for either inactivating or removing a contaminant to reduce the level of that contaminant sufficiently to satisfy an MCL. For some regulations, the EPA has established treatment technique requirements in lieu of MCLs to control unacceptable levels of certain contaminants, such as viruses, bacteria, and turbidity.

#### Variances and Exemptions

Variances and exemptions are exceptions to certain elements of a National Primary Drinking Water Regulation, agreed upon by the primacy agency and the public water system, that allow a system that cannot meet the MCL or treatment technique requirement of a regulation to continue operation without receiving a violation of that requirement while working towards full compliance. There are specific circumstances and procedures set out in SDWA §1415 and §1416. Currently, the State of Alaska grants a variance for total coliform, that extends the sample hold time from 30 hours to 48 hours under specific circumstances (remote locations).

