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for CY 2019

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Public Water System Compliance Report

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Message from the Drinking Water Program Manager



The Drinking Water (DW) Program of the Alaska Department of Environmental Conservation (DEC) has a mission to protect the health of the people of Alaska by establishing, maintaining, and enforcing standards for safe and reliable drinking water. This report provides information on how well public water systems (PWS) in Alaska are meeting the standards for providing safe drinking water. It also provides information on the DW Program's roles and responsibilities as well as information about significant projects for the 2019 calendar year (CY).

Each state is required to produce and submit a similar annual report to the Environmental Protection Agency (EPA). The reports are made available to the public, and the data is included in a national report summarizing the performance of the nation's PWSs. This report fulfills that requirement.

During 2019, the main focus of the DW Program was to continue to provide a high level of technical and compliance assistance to the owners and operators of PWSs in Alaska. We believe that providing this assistance leads to improved public health outcomes. This year, staff provided over 10,600 compliance assistance, technical assistance, and informal enforcement actions, which had a direct impact on the number of water systems in compliance with all drinking water regulations. One of the major assistance efforts was providing each PWS with a comprehensive Monitoring Summary early in the calendar year. The Monitoring Summary is a helpful tool for PWSs to schedule required testing and to budget the necessary funds to remain in compliance.

In 2019, funding for the DW Program remained stagnant at both the state and federal levels. Since 2014, the DW Program has lost 14 permanent staff members. This has impacted our ability to continue offering services at previous levels. In order to compensate for the staff and budget losses, the DW Program has had to examine the way we do business. This examination has led to several initiatives within the DW Program which we anticipate will allow us to streamline some major processes, while maintaining a high level of public health protection. As part of this initiative, in 2019 we continued with the process of developing a new Excel-based electronic sanitary survey (ESS). The Excel-based ESS was beta tested during the 2019 sanitary survey field season by DW Program staff. We gained valuable information from the Beta test and determined the Excel-based sanitary survey would not work effectively for the program. After the field season, the Sanitary Survey work group reconvened and decided to explore an open source tool for mobile data collection to develop the new ESS. DW Program staff will test this platform during the 2020 field season.

During 2019, the DW Program continued to work closely with EPA Region 10 to address community water systems with Health Based Violations (HBV). The Alaska Drinking Water Program Strategy was approved by EPA and we initiated several projects to address systems on the HBV List. The DW Program Data Quality Management Section staff were able to work with EPA Region 10 to obtain individual violation information to allow us to identify data discrepancies and resolve old violations that had previously been returned to compliance. DW Program Compliance and Enforcement Section staff could then focus on addressing the remaining unaddressed (open) violations.

Priority was given to public water systems with Maximum Contaminant Level (MCL) violations. Each system with an MCL violation has a formal plan in place to address the condition causing the MCL violation. DW Program staff have been working closely with inter and intra- agency partners to resolve lead exceedances in the remaining systems on the Lead Exceedance List. All remaining systems have a formal plan in place to address the issue through either faucet replacement or by installing corrosion control treatment. Staff will continue this important work in CY 2020.

Finally, during 2019, the DW Program continued to partner with the DEC Contaminated Sites Program (CS Program) and the state Department of Health and Social Services (HSS) to respond to discoveries of Per-and polyfluoralkyl substances (PFAS) in drinking water sources in multiple communities in Alaska. We are currently responding to occurrences in public water systems over the EPA Lifetime Health Advisory (LHA) level in Fairbanks, Moose Creek, Barrow, King Salmon, Dillingham, Gustavus, Yakutat and North Pole. The response effort has required a significant amount of staff time to provide source water reviews, technical assistance, review engineering plans for treatment of PFAS in public water systems and attend public meetings to inform the public of the risks associated with PFAS in drinking water. The state is in the process of sampling public and private wells in the areas around state-owned airports where PFAS containing firefighting foams have been used. We anticipate that more DW Program staff time will be devoted to response efforts in 2020 as we continue to discover more affected sites throughout the state. For more information about the PFAS in Alaska, please visit the webpage located at http://dec.alaska.gov/spar/csp/pfas/.

Cindy Christian

Drinking Water Program Manager Alaska Department of Environmental Conservation

Definition of a Public Water System







Public Water System

A **Public Water System (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. A public water system is further classified as either a community water system or a non-community water system.

Community Water System

Non-Community Water System

Community Water Systems (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. Examples of CWSs include a municipal water system serving a town or village, or a mobile home park.

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):

Non-Transient Non-Community Water System Transient Non-Community Water System

Non-Transient Non-Community Water Systems (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 Systems (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.

Overview of the National Public Drinking Water Program



Section 03

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 developed by EPA help to 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).

Alaska Drinking Water Program Components

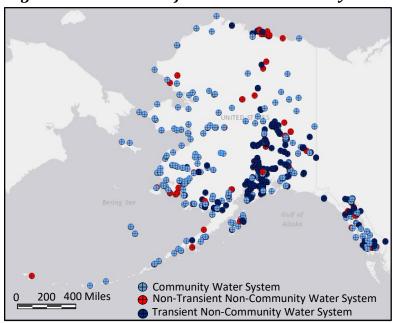


Section 04

The Alaska DW Program is comprised of 45 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 1,378 PWSs serving the visitors and residents of the State of Alaska (see **Figure 1** for distribution of water systems across Alaska). Funding for the 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 PWSS 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.

Figure 1: Distribution of Alaska Public Water Systems



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 (below) and are described in further detail beginning on <u>page 11</u>. However, compliance and enforcement activities are just two of the many activities of a comprehensive state drinking water program.

The major components and activities of Alaska's DW Program are listed below:

Compliance Assistance & Enforcement

- 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 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 from the public.
- Provide technical assistance to PWSs during disaster events.

Engineered Plans

- Review engineered plans for new and modified PWSs, and issue construction approvals to systems that meet minimum requirements.
- Review engineered plans for constructed PWSs 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.

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.

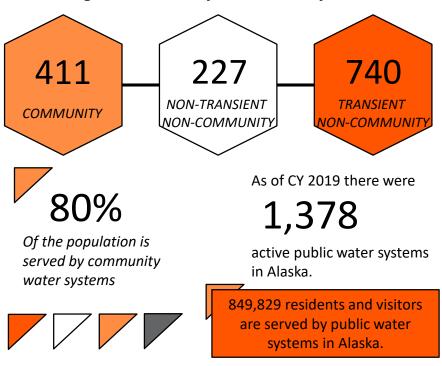
General Program Activities

- 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), Drinking Water Watch, 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 CY 2019, there were 1,378 active PWSs in Alaska: 411 CWS; 227 NTNC systems; and 740 TNC systems (see **Figure 2**).

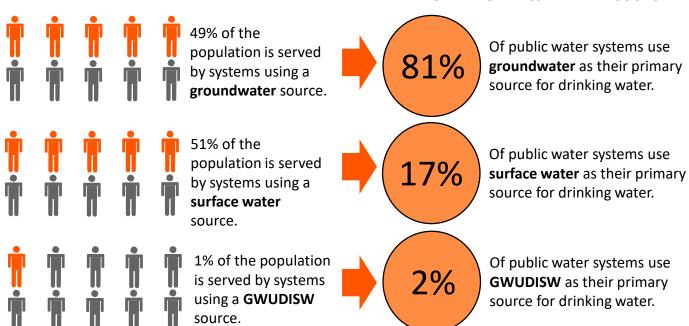
These 1,378 PWSs served a combined population of 849,829 residents of and visitors to the State of Alaska. While there are a greater number of systems classified as TNC systems, the majority of the population in Alaska is served from CWSs.

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.

Figure 3: Percentage of Population Served by Water Source & Number of PWSs by Water Source

PERCENTAGE OF POPULATION SERVED BY WATER SOURCE

NUMBER OF PWSs BY WATER SOURCE



Analysis of Compliance for Alaska Public Water Systems in 2019



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 CY 2019, no waterborne diseases were reported from Alaska PWSs; however, a number of violations were issued. A total of 4,559 federal violations were issued to 531 PWSs (or 39%) in Alaska, leaving 847 PWSs (or 61%) violation-free (see **Figure 4**). Monitoring violations continue to be the most common violations, making up 90% of all violations issued to PWSs in Alaska during CY 2019 (see **Figure 5**). The 4,559 total violations issued to PWSs across the state in CY 2019 is a increase in the number of violations compared to CY 2018, when

Figure 4: PWSs by Violation Status in CY 2019

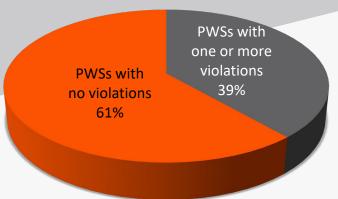
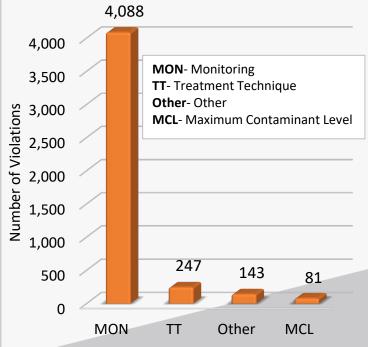


Figure 5: Violations by Type in CY 2019



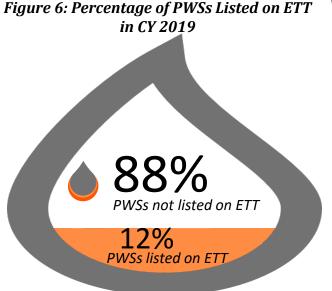
3,067 violations were issued. This increase can be attributed primarily to violations for Inorganic Contaminants (IOCs) and Synthetic Organic Contaminants (SOCs) which coincides with the 3 year (2017-2019) and 9 year (2011-2019), monitoring periods ending in December 2019. Typically, at the end of each monitoring period, there is a spike in violations for those systems that did not monitor as required or apply for/receive a SOC monitoring wavier.

In CY 2019 20% of all monitoring violations were for a lack of monitoring for SOCs. The 812 SOC violations were issued to only 7 PWSs. SOCs are the only contaminant groups for which a PWS can apply to the state to obtain a waiver from collecting samples. The waiver application is reviewed, and if it is determined the PWS has a low probability of SOC contamination, the monitoring requirement can be waived for the 3-year monitoring period.

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

Throughout CY 2019, 165 PWSs appeared on this quarterly list at one time or another, leaving 1,213, or 88%, of Alaska's PWSs not classified as significantly out of compliance (see **Figure 6**).

During CY 2019, 114 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.



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 http://dec.alaska.gov/eh/dw/ett/.

Further details on violations issued to Alaska PWSs during CY 2019 are specified on Attachments 1 and 2 of this report; the attachments are described in detail below:

- **Attachment #1** is a one-page summary showing the types of violations, organized by federal rule, that were issued to Alaska PWSs in CY 2019 (see <u>page 21</u>).
- Attachment #2 is the list of PWSs that received MCL and/or Treatment Technique (TT) violations during CY 2019 (see <u>page 22</u>).

Sanitary Survey Compliance

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 CY 2019, DW Program staff completed 73 sanitary surveys while third-party Sanitary Survey Inspectors completed 228 surveys. In 2019, only 105 of the 1,378 PWSs in the state were overdue for their sanitary survey, leaving 1,273 systems, or 92% of Alaska's PWSs, in compliance with their Sanitary Survey requirements.

During CY 2019, the DW Program also developed, organized and presented the material for the Sanitary Survey Inspector courses held in May and October 2019 resulting in 21 new sanitary survey inspectors.

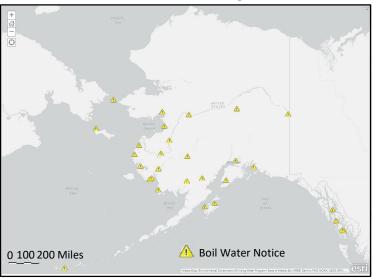


Drinking Water Program Compliance & Enforcement Activities



In CY 2019, 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 in an attempt to prevent violations before they occurred. DW Program staff routinely provided PWS owners and operators with the necessary forms and information to effectively notify their customers about violations of the drinking water regulations by their system in a timely manner. The method of public notification varied by the violation and system type, and

Figure 7: Alaska DEC Drinking Water Boil Water Notices Web map



the water system owners were required to report to the DW Program on how the public notice was performed. Some circumstances, such as the confirmed detection of *E. coli*, inadequate system pressure, or emergency situations like flooding, warranted immediate action by the water system owner or operator due to the pressing threat to public health. For such acute violations, the DW Program requires systems to notify customers within 24 hours to boil water before use. Boil Water Notices (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 7** for an example of the BWN web map showing distribution of active BWNs). In CY 2019, the DW Program required 79 water systems to post these notices a total of 126 times; some water systems were placed on a BWN more than once during the year. This is a decrease from last year where 123 systems were placed on BWNs 176 times.

This continued proactive focus on technical and compliance assistance led to 7,697 total compliance assistance actions provided by DW Program staff to Alaska PWSs during CY 2019, which is consistent with last year's (CY 2018) total of 7,705 compliance assistance actions. However, in reviewing the past 5 years of compliance assistance data, this year is higher to the average of 7,264 compliance actions per year.

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 generate and document a record of the RTC action. In CY 2019, a total of 1,381 RTC actions were entered for 545 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. During CY 2019, 2,879 informal enforcement actions were taken by the DW Program. If compliance is not achieved in a timely manner, 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 commonly 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 CY 2019, the DW Program took 3 formal enforcement actions against PWSs in the State of Alaska (see **Figure 8** below for a summary of compliance and enforcement actions taken in CY 2019).

Figure 8: Summary of Compliance and Enforcement Actions Taken by DW Program Staff in CY 2019 Enforcement Formal 1 Compliance Order by Consent (COBC) 12 Notice of Violation (NOV) 25 Onsite Enforcement Visit 27 **Enforcement Meeting** Informal Enforcement 114 RTCR Assessment Follow Up Letter 126 **Boil Water Notice** 281 **Enforcement Phone Call** 345 Written Communication 435 Public Notice Issued, Received, or Requested 1,526 Return to Compliance 12 **Onsite Compliance Visit** 18 **Compliance Meeting** Compliance 346 PWS Data Summary (Data Dump) 426 **Engineering Letter** 1,021 Compliance Phone Call 1.352 **Monitoring Summary** 4,542 Written Communication 0 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500

Number of Compliance and Enforcement Actions

129

Final Approval

Drinking Water Program Activities in 2019



Along with Compliance and Enforcement activities, as described in Section 7, the DW Program is comprised of a number of other major components as described in this section. The activities support PWS compliance through engineering plan reviews, drinking water protection efforts, collaborating with other drinking water professionals, and updating online services so drinking water information is easily accessible.

140

20

0

Approval

to

Construct

Engineering Activities

One of the major components of the DW Program pertains to engineered plan reviews. DW Program 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 2019, 110 plans received Approval to Construct, 89 plans received Interim Approval to Operate and 129 plans received Final Approval to Operate (see **Figure 9**).

Health Based Violations Project

In 2019, EPA's National Compliance Initiative brought a new focus to CWSs. Of the approximately 50,000 nationwide regulated

Number of Engineering Plans Approved 110 120 89 100 80 60 40

Interim

Approval

to Operate to Operate

Figure 9: Status of Engineered Plans in CY 2019

CWSs, 40% violated at least one drinking water standard. In fact, 7% of CWSs nationwide violated health based standards. In an effort to address this issue, the National Compliance Initiative "calls for a 25 percent reduction by the end of FY 2022 in the number of CWSs that are out of compliance with health-based standards." (National Compliance Initiative webpage).

Based on data through December 2019, Alaska had 97 CWSs appear on EPA's Health Based violations list. However, after reviewing the violations, an additional 36 systems had fully resolved their violations bringing the current total to 61 CWSs (or 15% of all CWSs) remaining on the list. Alaska will continue to address health based violations as outlined in our strategy by focusing on systems that are also on the ETT List and systems with unresolved significant deficiencies that were identified during a Sanitary Survey inspection.

For further information on EPA's National Compliance Initiative, please visit the webpage at https://www.epa.gov/enforcement/national-compliance-initiative-reducing-noncompliancedrinking-water-standards-community.

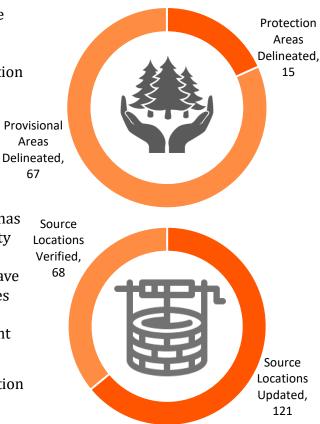
Drinking Water Source Protection Activities

The source of drinking water is a vitally important component of a PWS. DW Program staff work with the public and 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 staff work with communities to promote voluntary protection efforts of their drinking water source.

In CY2019, a total of 82 provisional and protection areas were delineated and 189 source locations were verified or updated (see **Figure 10**). Increased effort has been put towards developing incentives for community water systems to voluntarily develop Drinking Water Protection Plans and recognizing communities that have current Drinking Water Protection Plans. Communities applying for Drinking Water State Revolving Fund (DWSRF) loans now receive points for having a current Drinking Water Protection Plan.

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

Figure 10: Number of Delineations and Location Updates



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 Program 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 CY2019, two main web maps continued to be maintained, one for the public and one for internal use at the DEC. The internal web map includes data layers that are not currently available outside the DEC firewall.

Efforts are continually being made to 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 http://dec.alaska.gov/das/gis/apps.htm.

In CY2019, the public web map displaying drinking water protection areas and well and intake locations received approximately **52,773** cumulative viewer hits, an **increase of 6,476** over last year. The average number of daily visits is **18/day**.

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, 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.

In CY2019, the internal web map displaying drinking water protection areas and well and intake locations received a total of **15,616** cumulative viewer hits since the map was created in 2012, an increase of **1,616** viewers over the last year. The average number of daily visits over the CY2019 is **4.5/day**.

Thumbnails of Drinking Water Program publiclyavailable web maps.



Alaska DEC Drinking Water & Wildfires

Alaska DEC Drinking Water

Alaska DEC Drinking Water & Floods









Information Requests and Agency Reviews

In CY 2019 the Drinking Water Source Protection group responded to **735** proposed permits and/or projects throughout Alaska. Most responses were for the Alaska Department of Natural Resources (ADNR) agency review circulation, but also included internal permit reviews, the Kenai Peninsula Borough conditional land use permit reviews, Alaska Department of Transportation & Public Facilities (ADOT&PF), US Corps of Engineers Draft EIS documents, education research, and various private consulting firms.

Other Programs Related to Public Water Systems



Section 09

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 2019

During CY 2019, the EH Laboratory certified 34 laboratories for drinking water analysis (27 certifications for microbiological analysis including 2 for Cryptosporidium, and 17 certifications for chemical analysis. Labs certified for both microbiological and chemical analysis were counted once) and 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 11). For more information about the DEC EH Laboratory, please visit the webpage located at http://dec.alaska.gov/eh/lab/i ndex.htm.

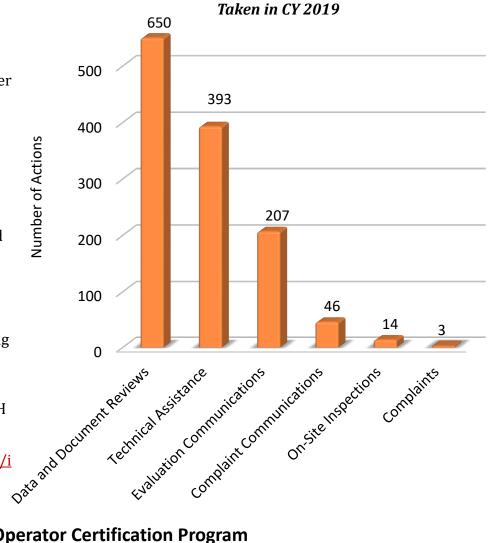


Figure 11: DW EH Laboratory Certification Actions

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:

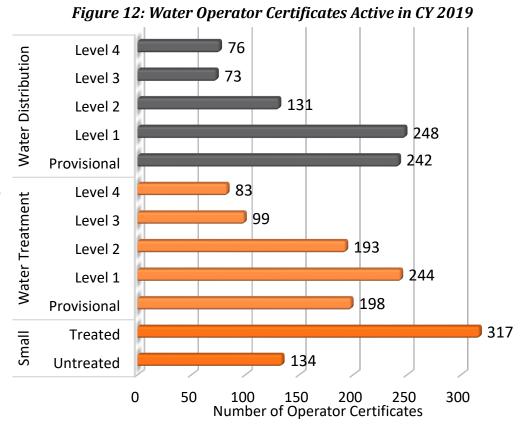
- Develop training curricula, correspondence courses, certification standards, and examination materials for certified drinking water and wastewater system operators.
- Coordinate with PWS owners and notify operators of training opportunities.
- Work with the Alaska Water and Wastewater Advisory Board 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 https://dec.alaska.gov/water/operator-certification.aspx.

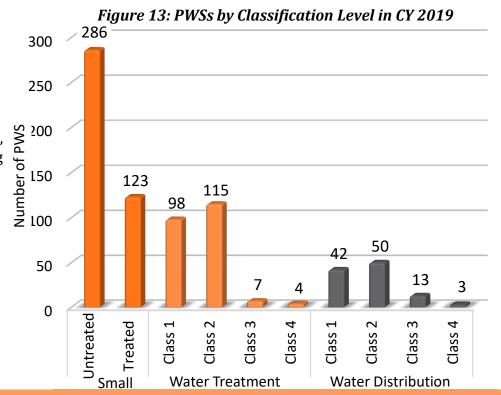
Operator Certification in 2019

In the State of Alaska, there are several different certification levels for operators, see **Figure 12** for a breakdown by certification level. In CY 2019, there were 2,038 active certifications held by 1,445 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 13 for a breakdown of the number of water systems by classification level. A majority 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 a number of 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 CY 2019, 64 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 for the community.





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 it will 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 an exemption for one chemical contaminant (arsenic) and a variance for total coliform, that extends the sample hold time from 30 hours to 48 hours under specific circumstances (remote locations).

Obtaining a Copy of the 2019 Alaska Public Water System Compliance Report



As required by the SDWA Amendments of 1996, the State of Alaska DW Program has made the Alaska PWS Annual Compliance Report for 2019 available to the public. Interested individuals can obtain a copy of the Alaska PWS Annual Compliance Report for 2019 by accessing the DW Program webpage, or by contacting Jeanine Vance, Rachel Westbrook or Kenna Billups.

Drinking Water Program webpage: http://dec.alaska.gov/eh/dw.aspx

Direct Link to Annual Compliance Report: http://dec.alaska.gov/eh/dw/annual-compliance/

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Attachment #1

State of Alaska Public Water System Violations for CY 2019

Rule Name	MCL		Treatment Technique		Monitoring		Other Violation	
rule Name	Violations	Systems in violation	Violations	Systems in violation	Violations	Systems in violation	Violations	Systems in violation
Total Coliform Rule + Revised Total Coliform Rule (Violation Codes: MCL 1A; Treatment Technique 2A, 2B, 2C, 2D; Monitoring 3A, 3B, 23; Other 5A, 28)	1	1	28	21	314	163	103	102
Surface Water Treatment Rules (Violation Codes: Treatment Technique 33, 37, 40, 41, 42, 43, 44, 45 47; Monitoring 29, 31, 32, 36, 38)			60	21	609	92		
Ground Water Rule (Violation Codes: Treatment Technique 41, 42, 45, 48; Monitoring 19, 31, 34)			152	76	14	12		
Disinfection Byproducts Rules (Violation Codes: MCL 02, 11, 13; Treatment Technique 12, 46; Monitoring 27, 30, 35)	54	18	1	1	240	99		
Inorganic Contaminants (IOCs) (Violation Codes: MCL 01, 02; Monitoring 03, 04)	26	10			636	178		
Volatile Organic Contaminants (VOCs) (Violation Codes: MCL 01, 02; Monitoring 03, 04)	0	0			1,323	50		
Synthetic Organic Contaminants (SOCs) (Violation Codes: MCL 01, 02; Monitoring 03, 04)	0	0			812	7		
Radionuclides (Violation Codes: MCL 01, 02; Monitoring 03, 04)	0	0			25	6		
Lead and Copper Rule (Violation Codes: Treatment Technique 57, 58, 59, 63, 64, 65; Monitoring 51, 52, 56, 66)			6	5	115	56		
Consumer Confidence Report Rule (Violation Codes: Reporting 71)							35	29
Public Notification Rule (Violation Codes: Reporting 75)							5	4
Total Number of Federally Regulated PWSs in Alaska CY 2019: 1,378								
Total Number of PWSs with 1 or more violations, 39% of PWSs (all rules, all violation types as noted above):				531				
Total Number of violations in CY 2019:				4,559				

Alaska has one (1) Variance from EPA for TCR. This allows a coliform sample holding time extension from 30 to 48 hours under specific circumstances.

DEFINITIONS

Maximum Contaminant Level (MCL) Violations - 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) Violations - 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.

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

Other Violations - For this report, violations defined as "other" refer to a reporting violation, RTCR Sample Siting Plan violation, or a violation for not completing a Sanitary Survey inspection on time during the calendar year of the report.

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

Attachment #2

Public Water Systems with Maximum Contaminant Level and/or Treatment Technique Violations for CY 2019 Bolded system names indicate multiple violations issued for rule during CY 2019

	Chemical/Radionuclide Rules Maximum Co (Violation Cod		Exceedance Vi	olation
PWSID	Water System Name	System Type	Population Served	Contaminant
AK2223624	BLUFFVIEW ACRES WATER SYSTEM	CWS	100	Arsenic
AK2220473	CAMERON ACRES	CWS	35	Arsenic
AK2340141	DIOMEDE JOINT UTILITIES	CWS	184	Arsenic
AK2210320	FOUR SEASONS TC	CWS	365	Arsenic
AK2226049	HEALTH QUEST THERAPY INC	NTNCWS	165	Arsenic
AK2243658	KB SUB. WATER SERVICE ASSOC.	CWS	170	Arsenic
AK2224476	QUIET CIRCLE APARTMENTS	CWS	90	Arsenic
AK2241012	RIVER TERRACE TC	CWS	132	Arsenic
AK2224337	SHEENA MAY ESTATES	CWS	74	Arsenic
AK2223315	SNOWSHOE WATER SYSTEM	CWS	180	Arsenic
	Revised Total Coliform Rule Maximum Cor		xceedance Vi	olation
	(Violation Co	ode IA)		
			Population	
PWSID	Water System Name	System Type	Served	Contaminant
AK2240464	NANWALEK	CWS	281	E.coli
	Disinfection Byproducts Rule Maximum Co (Violation Code		Exceedance Vi	olation
			Population	
PWSID	Water System Name	System Type	Served	Contaminant
AK2340248	BERING ST SD - TELLER SC/WASH	CWS	295	TTHM & HAA5
AK2340222	DEERING UTILITY SYSTEM	CWS	160	TTHM
AK2270299	EMMONAK WATER SYSTEM	CWS	820	TTHM
AK2360272	GALENA WTP1 – CITY	CWS	470	TTHM & HAA5
AK2120541	HOLLIS SCHOOL	NTNCWS	42	HAA5
AK2120224	HYDABURG	CWS	415	TTHM & HAA5
AK2130083	KAKE MUNICIPAL WATER	CWS	415	HAA5
AK2120606	KASAAN	CWS	46	HAA5
AK2120169	KLAWOCK	CWS	904	HAA5
AK2340060	KOTZEBUE MUN. WATER SYSTEM	CWS	3,234	TTHM & HAA5
AK2272017	KWETHLUK NEW PIPED WATER SYSTEM	CWS	760	TTHM
AK2280155	MCGRATH WATER SYSTEM	CWS	341	TTHM & HAA5
AK2340442	SHAKTOOLIK WATER SYSTEM	CWS	270	TTHM
AK2291130	TATITLEK WATER SYSTEM	CWS	95	HAA5
AK2120216	THORNE BAY, CITY OF	CWS	470	TTHM & HAA5
AK2262351	TRIDENT SEAFOODS INC. SAND PT	NTNCWS	400	TTHM & HAA5
AK2260511	USAF EARECKSON	NTNCWS	100	TTHM
AK2120012	VALLENAR VIEW MOBILE HOME PARK	CWS	225	TTHM & HAA5
111220012	Revised Total Coliform Rule Trea	atment Technique		
	(Violation Code	2A, 2C, 2D)	Population	
PWSID	Water System Name	System Type	Served	Contaminant
AK2330066	AFC / NANUQ HERC / WOLVERINE CAMP	TNCWS	52	RTCR
AK2330052	ARCTIC WOLF CAMP	TNCWS	62	RTCR
AK2271148	BETHEL TRAILER COURT	CWS	500	RTCR
AK2392033	BLM - BRUSHKANA CREEK CAMPGROUND	TNCWS	50	RTCR
AK2261630	BRISTOL BAY LODGE	TNCWS	46	RTCR

Public Water Systems with Maximum Contaminant Level and/or Treatment Technique Violations for CY 2019

	Revised Total Coliform Rule To	· · · · · · · · · · · · · · · · · · ·	e Violation		
	(Violation Coo	le 2A, 2C, 2D)	Population		
PWSID	Water System Name	System Type	Served	Contaminant	
AK2211326	CAMP GORSUCH BOY SCOUT CAMP	TNCWS	201	RTCR	
AK2291952	CHENEGA	CWS	50	RTCR	
AK2261444	CHIGNIK LAGOON WATER SYSTEM	CWS	350	RTCR	
AK2262282	COPPER RIVER SEAFOODS NAKNEK	TNCWS	120	RTCR	
AK2270299	EMMONAK WATER SYSTEM	CWS	820	RTCR	
AK2121501	GEORGE INLET CANNERY	TNCWS	129	RTCR	
AK2120224	HYDABURG	CWS	415	RTCR	
AK2262107	KATMAI FISHING LODGE	TNCWS	112	RTCR	
AK2121522	MCKENZIE INLET LOGGING CAMP	NTNCWS	45	RTCR	
AK2250315	OCEAN BEAUTY SEAFOOD ALITAK	TNCWS	197	RTCR	
AK2261216	PETER PAN SEAFOOD PORT MOLLER	TNCWS	140	RTCR	
AK2261606	RAINBOW KING LODGE	TNCWS	55	RTCR	
AK2280040	SHAGELUK WATER SYSTEM	CWS	60	RTCR	
AK2260553	USNPS KATMAI BROOKS CAMP	TNCWS	350	RTCR	
AK2133333	WHALERS COVE LODGE	TNCWS	65	RTCR	
AK2130423	YAKUTAT LODGE	TNCWS	30	RTCR	
	Disinfection Byproducts Rule T	· · · · · · · · · · · · · · · · · · ·	e Violation		
	(Violation C	oae 12, 46)	D1 ::		
DIAKCID	Water Contain Name	Ct T	Population	D. J.	
PWSID	Water System Name	System Type	Served	Rule	
AK2225773	NORTH FORK PROFESSIONAL BLDG** *This violation was resolved years ago but the RT	NTNCWS	400	DBP Stage 1	
	Surface Water Treatment Rules	Treatment Techniq	ue Violation		
	(Violation Code 33, 37, 40, 41, 42, 43, 44, 45, 47) Population				
PWSID	Water System Name	System Type	Served	Rule	
AK2260595	_			Nuic	
71112200333	ADAK UTILITIES	CWS	325	SWTRs	
AK2260058	ATKA		325 97		
		CWS	-	SWTRs	
AK2260058	ATKA	CWS CWS	97	SWTRs SWTRs	
AK2260058 AK2260228	ATKA CHIGNIK BAY WATER SYSTEM	CWS CWS CWS	97 302	SWTRs SWTRs SWTRs	
AK2260058 AK2260228 AK2120020	ATKA CHIGNIK BAY WATER SYSTEM CLOVER PASS RESORT	CWS CWS CWS TNCWS	97 302 133	SWTRs SWTRs SWTRs SWTRs	
AK2260058 AK2260228 AK2120020 AK2120193	ATKA CHIGNIK BAY WATER SYSTEM CLOVER PASS RESORT CRAIG PUBLIC WORKS	CWS CWS TNCWS CWS	97 302 133 1,475	SWTRS SWTRS SWTRS SWTRS SWTRS	
AK2260058 AK2260228 AK2120020 AK2120193 AK2121474	ATKA CHIGNIK BAY WATER SYSTEM CLOVER PASS RESORT CRAIG PUBLIC WORKS GEORGE INLET LODGE	CWS CWS CWS TNCWS CWS TNCWS	97 302 133 1,475 49	SWTRs SWTRs SWTRs SWTRs SWTRs SWTRs	
AK2260058 AK2260228 AK2120020 AK2120193 AK2121474 AK2280066 AK2110855 AK2120541	ATKA CHIGNIK BAY WATER SYSTEM CLOVER PASS RESORT CRAIG PUBLIC WORKS GEORGE INLET LODGE GRAYLING WATER SYSTEM HAINES FERRY TERMINAL HOLLIS SCHOOL	CWS CWS TNCWS CWS TNCWS CWS TNCWS CWS	97 302 133 1,475 49 195	SWTRs SWTRs SWTRs SWTRs SWTRs SWTRs SWTRs SWTRs	
AK2260058 AK2260228 AK2120020 AK2120193 AK2121474 AK2280066 AK2110855	ATKA CHIGNIK BAY WATER SYSTEM CLOVER PASS RESORT CRAIG PUBLIC WORKS GEORGE INLET LODGE GRAYLING WATER SYSTEM HAINES FERRY TERMINAL	CWS CWS TNCWS CWS TNCWS TNCWS CWS TNCWS TNCWS TNCWS TNCWS TNCWS	97 302 133 1,475 49 195 200 42 74	SWTRS SWTRS SWTRS SWTRS SWTRS SWTRS SWTRS SWTRS SWTRS	
AK2260058 AK2260228 AK2120020 AK2120193 AK2121474 AK2280066 AK2110855 AK2120541 AK2220692 AK2250087	ATKA CHIGNIK BAY WATER SYSTEM CLOVER PASS RESORT CRAIG PUBLIC WORKS GEORGE INLET LODGE GRAYLING WATER SYSTEM HAINES FERRY TERMINAL HOLLIS SCHOOL	CWS CWS CWS TNCWS CWS TNCWS CWS TNCWS CWS TNCWS CWS TNCWS NTNCWS CWS	97 302 133 1,475 49 195 200 42 74 52	SWTRS	
AK2260058 AK2260228 AK2120020 AK2120193 AK2121474 AK2280066 AK2110855 AK2120541 AK2220692 AK2250087 AK2271025	ATKA CHIGNIK BAY WATER SYSTEM CLOVER PASS RESORT CRAIG PUBLIC WORKS GEORGE INLET LODGE GRAYLING WATER SYSTEM HAINES FERRY TERMINAL HOLLIS SCHOOL ISLANDER BAR & RESTAURANT	CWS CWS TNCWS CWS TNCWS TNCWS CWS TNCWS TNCWS TNCWS TNCWS TNCWS	97 302 133 1,475 49 195 200 42 74	SWTRS	
AK2260058 AK2260228 AK2120020 AK2120193 AK2121474 AK2280066 AK2110855 AK2120541 AK2220692 AK2250087	ATKA CHIGNIK BAY WATER SYSTEM CLOVER PASS RESORT CRAIG PUBLIC WORKS GEORGE INLET LODGE GRAYLING WATER SYSTEM HAINES FERRY TERMINAL HOLLIS SCHOOL ISLANDER BAR & RESTAURANT KARLUK WATER SYSTEM	CWS CWS CWS TNCWS CWS TNCWS CWS TNCWS CWS TNCWS CWS TNCWS NTNCWS CWS	97 302 133 1,475 49 195 200 42 74 52	SWTRS	
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AK2260058 AK2260228 AK2120020 AK2120193 AK2121474 AK2280066 AK2110855 AK2120541 AK2220692 AK2250087 AK2271025 AK2121522 AK2271874 AK2261216 AK2271059	ATKA CHIGNIK BAY WATER SYSTEM CLOVER PASS RESORT CRAIG PUBLIC WORKS GEORGE INLET LODGE GRAYLING WATER SYSTEM HAINES FERRY TERMINAL HOLLIS SCHOOL ISLANDER BAR & RESTAURANT KARLUK WATER SYSTEM KONGIGANAK WATER SYSTEM MCKENZIE INLET LOGGING CAMP NATIVE VILLAGE OF SLEETMUTE PETER PAN SEAFOOD PORT MOLLER PLATINUM CITY WATER SYSTEM	CWS CWS CWS TNCWS CWS TNCWS CWS TNCWS TNCWS NTNCWS CWS TNCWS CWS CWS CWS CWS CWS CWS CWS CWS CWS	97 302 133 1,475 49 195 200 42 74 52 539 45 82 140 51	SWTRS	
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AK2260058 AK2120020 AK2120193 AK2121474 AK2280066 AK2110855 AK2120541 AK2220692 AK2271025 AK2271025 AK2271874 AK2261193 AK2261193 AK2262351	ATKA CHIGNIK BAY WATER SYSTEM CLOVER PASS RESORT CRAIG PUBLIC WORKS GEORGE INLET LODGE GRAYLING WATER SYSTEM HAINES FERRY TERMINAL HOLLIS SCHOOL ISLANDER BAR & RESTAURANT KARLUK WATER SYSTEM KONGIGANAK WATER SYSTEM MCKENZIE INLET LOGGING CAMP NATIVE VILLAGE OF SLEETMUTE PETER PAN SEAFOOD PORT MOLLER PLATINUM CITY WATER SYSTEM SCAMMON BAY WATER SYSTEM TIKCHIK NARROWS LODGE TRIDENT SEAFOODS INC. SAND PT USCG STATION KODIAK Ground Water Rule Treati	CWS CWS CWS TNCWS CWS TNCWS CWS TNCWS TNCWS NTNCWS CWS CWS CWS CWS CWS TNCWS CWS NTNCWS CWS TNCWS CWS TNCWS CWS TNCWS CWS TNCWS CWS TNCWS CWS CWS TNCWS CWS	97 302 133 1,475 49 195 200 42 74 52 539 45 82 140 51 484 56 1,400 400 3,092	SWTRS	
AK2260058 AK2120020 AK2120193 AK2121474 AK2280066 AK2110855 AK2120541 AK2220692 AK2271025 AK2271025 AK2271874 AK2261193 AK2261193 AK2262351	ATKA CHIGNIK BAY WATER SYSTEM CLOVER PASS RESORT CRAIG PUBLIC WORKS GEORGE INLET LODGE GRAYLING WATER SYSTEM HAINES FERRY TERMINAL HOLLIS SCHOOL ISLANDER BAR & RESTAURANT KARLUK WATER SYSTEM KONGIGANAK WATER SYSTEM MCKENZIE INLET LOGGING CAMP NATIVE VILLAGE OF SLEETMUTE PETER PAN SEAFOOD PORT MOLLER PLATINUM CITY WATER SYSTEM SCAMMON BAY WATER SYSTEM TIKCHIK NARROWS LODGE TRIDENT SEAFOODS INC. SAND PT USCG STATION KODIAK	CWS CWS CWS TNCWS CWS TNCWS CWS TNCWS TNCWS NTNCWS CWS CWS CWS CWS CWS TNCWS CWS NTNCWS CWS TNCWS CWS TNCWS CWS TNCWS CWS TNCWS CWS TNCWS CWS CWS TNCWS CWS	97 302 133 1,475 49 195 200 42 74 52 539 45 82 140 51 484 56 1,400 400 3,092	SWTRS	

Public Water Systems with Maximum Contaminant Level and/or Treatment Technique Violations for CY 2019

Ground Water Rule Treatment Technique Violation				
(Violation Code 41, 42, 45, 48)				
PWSID	Water System Name	System Type	Population Served	Contaminant
AK2262705	ALASKA GENERAL SEAFOODS NAKNEK-FREEZING	TNCWS	120	Ground Water Rule
AK2272747	AKIACHAK WATER SYSTEM	CWS	627	Ground Water Rule
AK2262705	ALASKA GENERAL SEAFOODS NAKNEK-FREEZING	TNCWS	120	Ground Water Rule
AK2298608	ALEUTIAN VILLAGE TC	CWS	175	Ground Water Rule
AK2227701	AMERICAN LEGION POST 15	TNCWS	27	Ground Water Rule
AK2247490	ANCHOR POINT SAFE WATER CORPORATION	cws	348	Ground Water Rule
AK2211059	ASD HUFFMAN ELEMENTARY SCHOOL	NTNCWS	506	Ground Water Rule
AK2271033	ATMAUTLUAK WATER SYSTEM	CWS	311	Ground Water Rule
AK2315146	BADGER ROAD BAPTIST CHURCH	TNCWS	40	Ground Water Rule
AK2260464	BBBSD NAKNEK	NTNCWS	130	Ground Water Rule
AK2270401	BETHEL LONGHOUSE HOTEL	TNCWS	90	Ground Water Rule
AK2212974	BIRCHWOOD SALOON	TNCWS	159	Ground Water Rule
AK2391956	BLACK DIAMOND GOLF EMPLOYEE HOUSING	TNCWS	65	Ground Water Rule
AK2211708	BOREALIS ALPHA WATER SYSTEM	CWS	30	Ground Water Rule
AK2291300	CARIBOU HOTEL & RESTAURANT	TNCWS	260	Ground Water Rule
AK2261096	CHIGNIK LAKE WATER SYSTEM	CWS	220	Ground Water Rule
AK2300769	CIRCLE WASHETERIA	CWS	110	Ground Water Rule
AK2260202	CLARKS POINT WATER SYSTEM	CWS	128	Ground Water Rule
AK2212924	COHOE SUBDIVISION	CWS	36	Ground Water Rule
AK2242953	COPPER RIVER SEAFOODS – KENAI	TNCWS	122	Ground Water Rule
AK2390358	DENALI CABINS, SO./MILE 229	TNCWS	96	Ground Water Rule
AK2380620	DOT & PF TOK COMBINED FACILITY	TNCWS	26	Ground Water Rule
AK2210794	FOREST PARK TC	CWS	175	Ground Water Rule
AK2242694	GOOD TIME CHARLIES	TNCWS	202	Ground Water Rule
AK2220033	HEART OF WILLOW MEDICAL BUILDING	TNCWS	154	Ground Water Rule
AK2225970	HIDDEN HILLS BAPTIST CHURCH	TNCWS	30	Ground Water Rule
AK2218651	HOLY SPIRIT CENTER	TNCWS	29	Ground Water Rule
AK2226047	INTERACT MINISTRIES	NTNCWS	93	Ground Water Rule
AK2310374	IVORY JACKS	TNCWS	88	Ground Water Rule
AK2211897	KATHY O ESTATES	CWS	242	Ground Water Rule
AK2340565	KOBUK WATER SYSTEM	CWS	93	Ground Water Rule
AK2260040	KOLIGANEK WATER SYSTEM	CWS	167	Ground Water Rule
AK2271732	KSD ANIAK SECONDARY SCHOOL	NTNCWS	80	Ground Water Rule
AK2272751	KSD UPPER KALSKAG PRIMARY SCHOOL	NTNCWS	50	Ground Water Rule
AK2260634	L&PSD NEWHALEN SCHOOL	NTNCWS	73	Ground Water Rule
AK2391736	LDS / DENALI CHAPEL	TNCWS	52	Ground Water Rule
AK2226017	LITTLE FRIENDS CHILDCARE	NTNCWS	47	Ground Water Rule
AK2271017	LKSD TUNTUTULIAK ANGAPAK SC	NTNCWS	101	Ground Water Rule
AK2270697	LOWER KALSKAG WATER SYSTEM	CWS	302	Ground Water Rule
AK2260090	MANOKOTAK WATER SYSTEM	CWS	293	Ground Water Rule
AK2270273	MARSHALL WATER SYSTEM	CWS	308	Ground Water Rule
AK2300159	MINTO COMMUNITY WATER SYSTEM	CWS	205	Ground Water Rule
AK2227262	MOM & POPS 4 CORNERS PLAZA	TNCWS	270	Ground Water Rule
AK2223023	MSBSD CAREER CENTER	NTNCWS	575	Ground Water Rule
AK2225165	MSBSD KNIK-GOOSE BAY ELEM.	NTNCWS	897	Ground Water Rule
AK2226452	MSBSD SNOWSHOE ELEMENTARY	NTNCWS	427	Ground Water Rule
AK2224272	MSBSD TANAINA ELEMENTARY	NTNCWS	439	Ground Water Rule
AK2224882	MSBSD WILLOW ELEMENTARY	NTNCWS	250	Ground Water Rule
AK2261143	NORTH PACIFIC SEAFOODS, PEDERSON POINT	TNCWS	300	Ground Water Rule
AK2360785	NULATO RIVER WELL	CWS	470	Ground Water Rule
AK2250396	RENDEZVOUS	TNCWS	56	Ground Water Rule
AK2218652	RIVERS EDGE CONDOMINIUM	CWS	168	Ground Water Rule
AK2360866	RUBY WATER SYSTEM	CWS	215	Ground Water Rule

Public Water Systems with Maximum Contaminant Level and/or Treatment Technique Violations for CY 2019

Ground Water Rule Treatment Technique Violation						
	(Violation Code 41, 42, 45, 48)					
PWSID	Water System Name	System Type	Population Served	Contaminant		
AK2241062	SALMON CREEK TRAILER COURT	CWS	125	Ground Water Rule		
AK2260294	SAND POINT WATER SYSTEM	CWS	1,102	Ground Water Rule		
AK2223145	SCOTWOOD ESTATES WATER SYSTEM	CWS	90	Ground Water Rule		
AK2218739	SHEPHERD OF THE HILLS LUTHERAN CHURCH	TNCWS	60	Ground Water Rule		
AK2225753	SLAVIC EVANGELICAL CHURCH	NTNCWS	368	Ground Water Rule		
AK2222848	SWISS CASTLE WATERWORKS	CWS	75	Ground Water Rule		
AK2263045	SWSD TOGIAK K12 SCHOOL	NTNCWS	280	Ground Water Rule		
AK2380638	TETLIN UTILITY SYSTEM	CWS	150	Ground Water Rule		
AK2261193	TRIDENT SEAFOODS CORP. AKUTAN	NTNCWS	1,400	Ground Water Rule		
AK2370471	TROPHY LODGE	TNCWS	57	Ground Water Rule		
AK2215558	TUDOR EAST APARTMENTS	CWS	78	Ground Water Rule		
AK2270223	TULUKSAK WATER SYSTEM	CWS	373	Ground Water Rule		
AK2271211	TUNTUTULIAK WASHETERIA AND WATERING PT	CWS	350	Ground Water Rule		
AK2210299	TURNAGAIN ARM BBQ PIT	TNCWS	122	Ground Water Rule		
AK2260032	TWIN HILLS WATER SYSTEM	CWS	87	Ground Water Rule		
AK2271790	UNITED PENTECOSTAL CHURCH	TNCWS	121	Ground Water Rule		
AK2250493	VFW KODIAK POST #7056	TNCWS	46	Ground Water Rule		
AK2249303	VOLCANO VIEW RV PARK	TNCWS	100	Ground Water Rule		
AK2244955	VOZNESENKA VILLAGE	CWS	300	Ground Water Rule		
AK2220020	WASILLA COMMUNITY CHURCH	TNCWS	74	Ground Water Rule		
AK2340507	WHITE MOUNTAIN WATER SYSTEM	CWS	210	Ground Water Rule		
AK2262571	WINDMILL GRILLE	TNCWS	85	Ground Water Rule		
AK2220429	WOLF EYE CENTER	NTNCWS	77	Ground Water Rule		
AK2220096	WORD OF FAITH ASSEMBLY	TNCWS	26	Ground Water Rule		
Lead and Copper Rule Treatment Technique Violation						
(Violation Code 57, 58, 59, 63, 64, 65)						
			Population			
PWSID	Water System Name	System Type	Served	Rule		
AK2270257	GOODNEWS BAY	CWS	250	Lead & Copper Rule		
AK2272016	NEW KASIGLUK WATER SYSTEM	CWS	276	Lead & Copper Rule		
AK2225995	OMEGA BUILDING	NTNCWS	137	Lead & Copper Rule		
AK2271211	TUNTUTULIAK WASHETERIA AND WATERING PT	CWS	350	Lead & Copper Rule		
AK2310926	VALLEY WATER COMPANY	CWS	1,575	Lead & Copper Rule		