

Alaska Department of Environmental Conservation Division of Environmental Health Drinking Water Program

Background Image: Glacier Bay National Park, Alaska (Courtesy of: National Park Service)

Annual Compliance Report

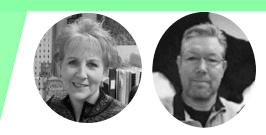
State of Alaska 2017

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Message from the Drinking Water Program Manager



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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 2017 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 2017, 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 10,300 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.

The DW Program was granted primacy for the EPA's Revised Total Coliform Rule (RTCR) in February, 2017. Implementation of the RTCR has resulted in a greater work load for staff as they respond to the requirements for Level 1 and 2 Assessments at water systems with coliform positive events. In 2017, a total of 42 Level 1 Assessments were triggered and a total of 9 Level 2 Assessments were reviewed and conducted by DW Program staff. To assist PWS owners and operators with remaining in compliance with the RTCR, staff developed an RTCR page on the DW Program webpage, which contains information, forms, and checklists pertinent to the RTCR: http://dec.alaska.gov/eh/dw/rtcr.html.

In response to the lead crisis in Flint, Michigan, EPA in 2016 required state primacy agencies to provide an increased level of oversight for PWSs that exceeded the lead action level (AL). During 2016, the DW Program provided a high level of compliance and technical assistance to water systems to select proper sample sites, determine if systems were currently exceeding the lead AL, and to determine the type of treatment or other mitigation needed by the system. These efforts continued throughout 2017. The DW Program, in partnership with the Epidemiology and Public Health Nursing sections of the Department of Health and Social Services (DHSS), completed a project in the community of Hydaburg funded by an EPA Multipurpose Grant. The Hydaburg project involved collecting blood and water samples in the community to determine if prolonged lead action level exceedances in the water system contributed to elevated blood lead levels in children. Blood samples were collected from all children under age 18 in the community in spring 2017. Water samples from approximately one-third of the homes were also collected. None of the children tested had elevated blood lead levels. A copy of the final report is available upon request.

During 2017, the DW Program continued to lose funding and staff due to budget cuts at both the state Section and federal level. Since 2014, the DW Program has lost 14 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 repeal several regulations, including the Class C regulations and the Emergency Preparedness and Response regulations. Class C regulations applied to PWSs that did not meet the requirements to be federally regulated, such as small Alaska Native Villages and small community water systems serving less than 25 people. In most other states, these types of water systems are regulated at the local level. Due to the lack of local jurisdictions in the State of Alaska, these types of systems were regulated at the state level. Lack of resources forced the state to repeal the Class C regulations in 2017. Currently these types of systems are considered to be private and are not subject to state oversight. This results in a lower level of public health protection for non-federally regulated systems in the state. The DW Program also began the process of repealing the Emergency Preparedness and Response regulation in 2017. This regulation requires PWSs to develop and maintain plans for responding to various types of emergencies. The repeal is part of a larger Technical Corrections and Housekeeping regulation project which is expected to be completed in 2018.

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Cindy Christian Drinking Water Program Manager, Field Operations Alaska Department of Environmental Conservation



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Definition of a Public Water System



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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 wat that have at least 15 service connections used by ye residents or regularly serve at least 25 year-round Examples of CWSs include a municipal water system a town or village, or a mobile home park.	ear-roundSystems are public waterresidents.systems that do not serve a
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	Transient Non-Community Water Systems (TNC) are public water systems that serve an average of at least 25 people at least 60 days

(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

daily at least 6 months of the year, such as

churches, schools, and office buildings.



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

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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.

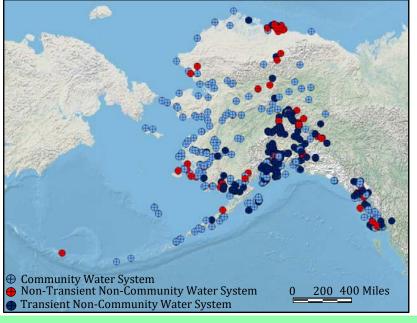
The PWSS Program is designed to supervise the implementation of the SDWA requirements for PWSs. The SDWA allows states, territories, and tribes to seek primacy, which is approval from EPA to administer and enforce the PWSS Program within their state, territory, or tribe. States must meet specific requirements 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. Alaska is one of the 56 states, territories, and tribes that have primacy.

Alaska Drinking Water Program Components

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 1,412 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 Assessments), Capacity Development, 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





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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 starting on page 11. However, compliance and enforcement activities are just two of the many activities of a comprehensive state drinking water program.

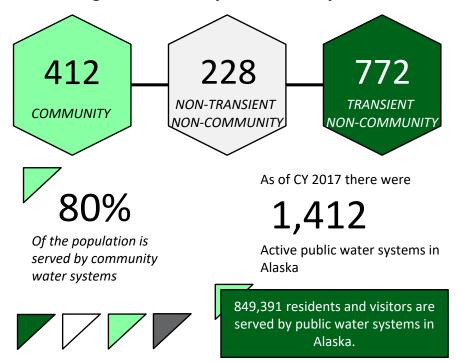
The major components and activities of Alaska's DW Program are listed below:

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 Electronic Data Reporting System (EDRS), the Electronic Sanitary Survey (ESS), Drinking Water Watch, the Drinking Water Protection database, and the Engineering Submittal Tracking database. Implement the Sanitary Survey Inspector 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

During CY 2017, there were 1,412 active PWSs in Alaska: 412 Community Water Systems (CWS); 228 Non-Transient Non-Community (NTNC) Water Systems; and 772 Transient Non-Community (TNC) Water Systems (see **Figure 2**).

Figure 2: Number of Public Water Systems



These 1,412 PWSs served a combined population of 849,391 residents of and visitors to the State of Alaska. While there are a greater number of systems classified as Transient Non-Community water systems, the majority of the population in Alaska is served from a Community Water System.

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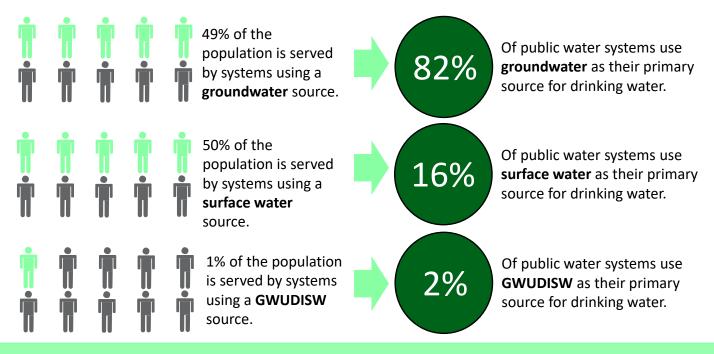
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Most of the PWSs in Alaska utilize groundwater as their source; however, a greater percentage of the population is served by systems using a surface water source (see **Figure 3**). This is primarily because several of the systems serving the largest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

NUMBER OF PWSs BY WATER SOURCE

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

PERCENTAGE OF POPULATION SERVED BY WATER SOURCE



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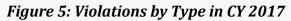
Analysis of Compliance for Alaska Public Water Systems in 2017

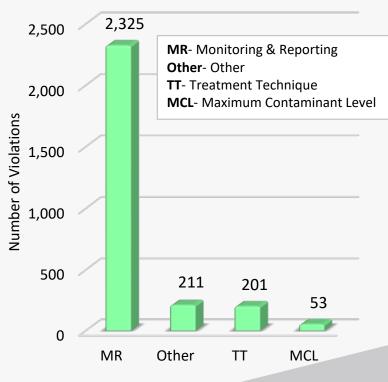
PWS Compliance with Sampling and Reporting Requirements

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 2017, no waterborne diseases were reported from Alaska PWSs; however, a number of violations were issued. A total of 2,790 federal violations were issued to 515 PWSs (or 36%) in Alaska, leaving 897 PWSs (or 64%) violation-free (see **Figure 4**). Monitoring and Reporting violations continue to be the most common violations, making up 83% of all violations issued to PWSs in Alaska during CY 2017 (see **Figure 5**). The 2,790 violations issued to PWSs across the state in CY 2017 is a decrease in the number of violations compared to CY 2016, when 5,447 violations were issued. This decrease can PWSs with no violations 36%

Figure 4: PWSs by Violation Status in CY 2017



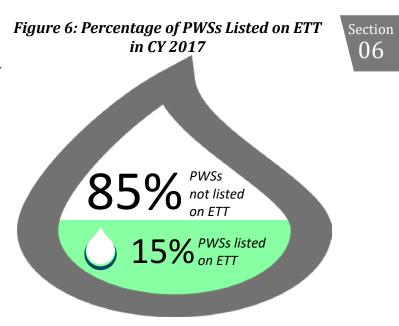


be attributed primarily to no monitoring violations being issued for Synthetic Organic Contaminants (SOC). Systems monitor for these contaminants or apply for a waiver on a periodic basis (every 3 years; current period is 2017-2019). Additionally, there was a reduction in the number of monitoring violations for Inorganic contaminants (IOCs), Volatile Organic Contaminants (VOCs), and Radionuclides in 2017.

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 2017, 206 PWSs appeared on this quarterly list at one time or another, leaving 1,206, or 85%, of Alaska's PWSs not classified as significantly out of compliance (see **Figure 6**).

During CY 2017, 128 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.



For further information about the ETT List or to view a copy of the current quarterly ETT List, please see the DW Program's ETT webpage at <u>http://dec.alaska.gov/eh/dw/dwmain/SNC.htm</u>.

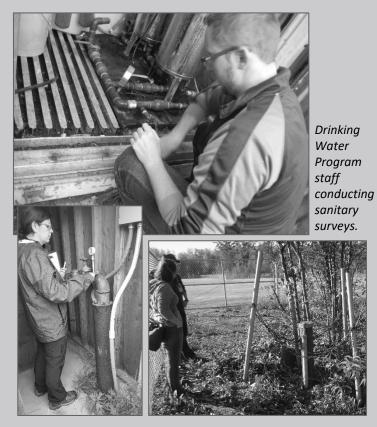
Further details on violations issued to Alaska PWSs during CY 2017 are specified on Attachments 1 and 2 of this report; the attachments are described in detail below:

Attachment #1 is a one-page summary showing the types of violations, organized by federal rule, that were issued to Alaska PWSs in CY 2017 (see page 21).

Attachment #2 is the list of PWSs that received MCL and/or Treatment Technique (TT) violations during CY 2017 (see page 22).

Sanitary Survey Compliance

A Sanitary Survey is an on-site inspection of the water system required for PWSs every 3 or 5 vears, 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 2017, DW Program staff completed 73 sanitary surveys while third-party Sanitary Survey Inspectors completed 248 surveys. By December 2017, only 82 of the 1,412 PWSs in the state were overdue for their sanitary survey, leaving 1,330 systems, or 94% of Alaska's PWSs, in compliance with their Sanitary Survey requirements.



The Revised Total Coliform Rule (RTCR), effective for PWSs on April 1, 2016, added new requirements

for seasonal water systems. Seasonal water systems that do no maintain pressure year-round are required to submit Seasonal Startup Procedures prior to beginning operations each year. Of the 256 seasonal water systems, 217, or 85%, submitted their Seasonal Startup Procedure form and total coliform sample on time.

Another major component of the RTCR is the Level 1 and Level 2 Assessment, which can be triggered through total coliform and/or *E. coli* routine and repeat sampling results. In CY 2017, PWSs in Alaska triggered 42 Level 1 Assessments and 9 Level 2 Assessments. During those assessments the most common sanitary defects identified include: (1) Sanitary Seal or Well Cap missing or not watertight, and (2) Leaks detected during assessment.

Drinking Water Program Compliance & Enforcement Activities

In CY 2017, DW Program staff continued to take a proactive approach to requiring compliance with drinking water regulations. These activities included phone 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 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. In CY 2017, the DW Program required 69 water systems to post these notices a total of 96 times; some water systems were placed on a BWN more than once during the year.

This continued proactive focus on technical and compliance assistance led to 6,995 total compliance assistance actions provided by DW Program staff to Alaska PWSs during CY 2017, which is a decrease from last year's (CY 2016) total of 8,202 compliance assistance actions.

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 2017, a total of 2,033 return to compliance actions were entered for 703 systems.

Rule Spotlight: Revised Total Coliform Rule

beginning with this 2017 Annual Compliance Report were we take a closer look at the compliance of a specific SDWA rule.

NEW! The Rule Spotlight section is new

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If a PWS has not returned to compliance in a timely manner, the DW Program uses a progressive enforcement response policy to achieve compliance, starting with a series of enforcement letters as the first steps towards more formal enforcement. During CY 2017, 3,360 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 2017, the DW Program took 1 formal enforcement action against a PWS in the State of Alaska (see **Figure 7**, for a summary of compliance and enforcement actions taken in CY 2017).

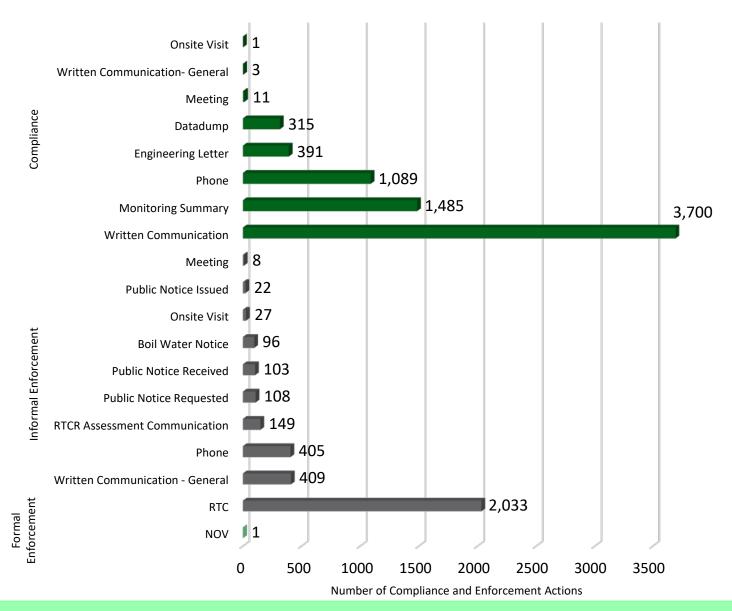


Figure 7: Summary of Compliance and Enforcement Actions Taken by DW Program Staff in CY 2017

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Drinking Water Program Activities in 2017

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.

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 2017, 103 plans received Approval to Construct, 80 plans received Interim Approval to Operate and 107 plans received Final Approval to Operate (see **Figure 8**).

Compliance Monitoring Data Portal (CMDP)

The CMDP is an online reporting application developed by EPA that allows certified laboratories to report compliance monitoring data directly to the DW Program. This program

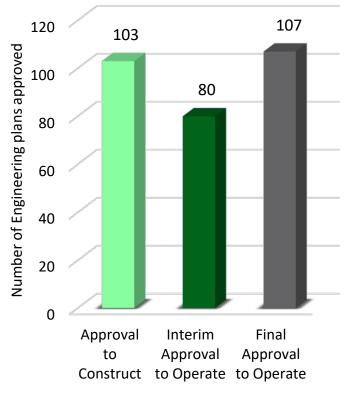
is similar to the Electronic Data Reporting System (EDRS) built and maintained by the State of Alaska. The DW Program intends to replace EDRS with CMDP by the end of CY2018. During CY2017, the DW Program installed a pre-production (test) version of CMDP allowing state staff and laboratories to become familiar with the application. In September 2017 laboratories were notified of the new CMDP webpage, the transition schedule, and given information on how to register for the pre-production version of the CMDP.

To view the lab notification memo: <u>http://dec.alaska.gov/eh/pdf/dw/cmdp-transition-dates-memo.pdf</u>

CMDP webpage: <u>http://dec.alaska.gov/eh/dw/cmdp</u>

Figure 8: Status of Engineered Plans in CY 2017





Drinking Water Protection Activities

The source of drinking water is a vitally important component of a PWS. DW Program staff work with communities to provide information about the vulnerability to contamination of their source water through Source Water Assessment (SWA) reports and by promoting voluntary protection efforts of their source of drinking water. During CY2017, the Drinking Water Protection group decided to stop completing and updating SWA reports. The process is not sustainable given current staff resources. Instead, efforts will focus on the strengths of the SWA reports, such as providing accessible and accurate drinking water source protection areas and the locations of wells and intakes (see **Figure 9**, for a summary of the number of delineations and location updates completed in CY 2017).

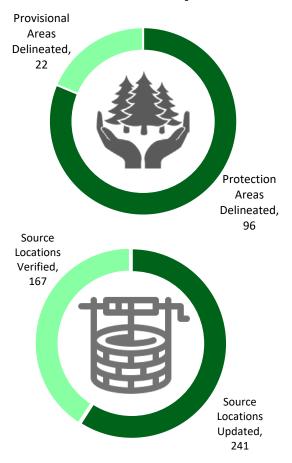
In addition, increased effort will be put towards developing incentives for community water systems to voluntarily develop Drinking Water Protection Plans and recognizing communities that have current Drinking Water Protection Plans.

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/DWP Overview.html.

Figure 9: Number of Delineations and Location Updates

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Groundwater Protection and Water Wells Stakeholder Workgroup

In CY 2017, the Drinking Water Protection group made revisions to the guidance document, *Best Management Practices – Maintaining or Decommissioning Water Wells and Boreholes.* This and other documents created by the stakeholder workgroup are located on the Private Drinking Water Wells & Systems website: <u>http://dec.alaska.gov/eh/dw/dwp/private-wells.aspx</u>

The workgroup met last in February 2017, and is currently functioning as needed. The minutes for all of the workgroup meetings can be found here: http://dec.alaska.gov/eh/dw/DWP/DWP WaterWells Mtng.html

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 CY2017, two (2) 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.

In CY2017, the public web map displaying drinking water protection areas, well and intake locations received approximately **7,787 viewer hits**, an **increase of 1,530** from last year. Since the map was created in 2012, it has received **39,421 cumulative viewer hits**. 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.

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: <u>http://dec.alaska.gov/das/gis/apps.htm.</u>

Story Map

Alaska DEC Drinking Water



Alaska DEC Drinking Water

Boil Water Notices

Other Programs Related to Public

During CY2017, the Drinking Water Protection group worked with Drinking Water Program IT staff to develop online tools for water systems to apply and pay for the 2017-2019 SOC Monitoring Waiver Renewals online. This has reduced the time required to process monitoring waiver applications. In CY2017, a total of **88** Synthetic Organic Chemical Monitoring Waivers for the 2017-2019 SOC Waiver cycle were reviewed and processed by the DW Program. The link to the 2017-2019 SOC Monitoring Waiver Online Application and Payment webpage is:

& Nitrates in ..

https://dec.alaska.gov/Applications/EH/DWPayments/SOCWaivers/Info.

The DW Program is not the only program within the DEC that works with PWSs; we have many partners who 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.

Alaska DEC Drinking Water

Water Systems

Protection Areas



Alaska DEC Drinking Water

& Wildfires



Example

thumbnails of Drinking Water Program publicly-

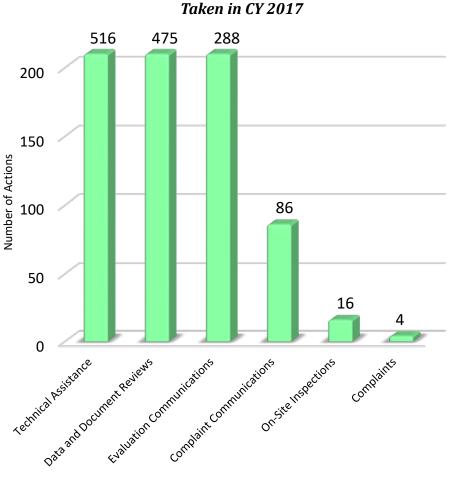
available

web maps.

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Environmental Health Laboratory in 2017

During CY 2017, the EH Laboratory certified 48 laboratories for drinking water analysis (27 certifications for microbiological analysis including 2 for Cryptosporidium, and 21 certifications for chemical analysis) and performed a variety of analytical and technical assistance actions. These actions ranged from sending technical assistance emails to full reviews of a laboratory's Standard **Operating Procedures and Quality Assurance Manuals** (see Figure 10). For more information about the DEC EH Laboratory, please visit the webpage located at http://dec.alaska.gov/eh/lab/i ndex.htm.



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 he/she is 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 http://www.dec.alaska.gov/water/opcert/index.htm.

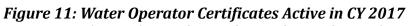
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In the State of Alaska, there are several different certification levels for operators (see **Figure 11** for a breakdown by certification level). In CY 2017, there were 2,194 active certifications held by 1,523 operators statewide. Many operators hold multiple levels of certification, with Level IV being the highest and requiring the most education and training.

PWSs also have corresponding classification levels determined by the complexity of the system components. Figure 12 provides a breakdown of the number of water systems by **Classification Level during CY** 2017. 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.

Operator Certification in 2017

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 2017, 64 courses were approved by the **Operator Certification Program**, through which operators taking the courses may get 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.



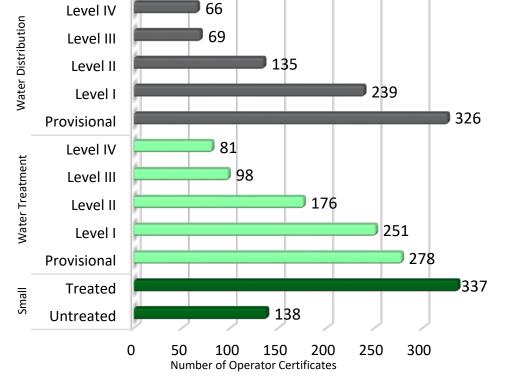
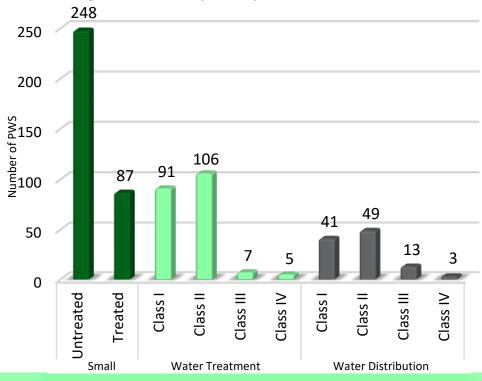


Figure 12: PWSs by Classification Level in CY 2017



Glossary of Terms



Annual Compliance Report (ACR)

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

A Public Water System (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 highway rest stops or 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

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 2017 Alaska Public Water System Compliance Report



As required by the Safe Drinking Water Act Amendments of 1996, the State of Alaska DW Program has made the Alaska PWS Annual Compliance Report for 2017 available to the public. Interested individuals can obtain a copy of the Alaska PWS Annual Compliance Report for 2017 by accessing the DW Program webpage or contacting Jeanine Vance or Rachel Westbrook.

- Drinking Water Program webpage: <u>http://dec.alaska.gov/eh/dw.aspx</u>
- Direct Link to Annual Compliance Report: <u>http://dec.alaska.gov/eh/dw/dwmain/acr-vio.html</u>
- Address of Responsible State Department: 555 Cordova Street, Anchorage, AK 99501
- Contact Names:

Jeanine Vance Jeanine.vance@alaska.gov Phone: 907-269-2007 Fax Number: 907-269-7655 Rachel Westbrook Rachel.Westbrook@alaska.gov Phone: 907-269-7630 Fax Number: 907-269-7655

Attachment #1 State of Alaska Public Water System Annual Compliance Report Violations for CY 2017

	N	ICL	Treatmen	t Technique	Moni	toring	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	48	31	431	188	155	136
Surface Water Treatment Rules (Violation Codes: Treatment Technique 33, 37, 40, 41, 42, 43, 44, 45 47; Monitoring 29, 31, 32, 36, 38)			54	24	481	77		
Ground Water Rule (Violation Codes: Treatment Technique 41, 42, 45, 48; Monitoring 19, 31, 34)			94	53	9	6		
Disinfection Byproducts Rules (Violation Codes: MCL 02, 11, 13; Treatment Technique 12, 46; Monitoring 27, 30, 35)	40	11	1	1	302	100		
Inorganic Contaminants (IOCs) (Violation Codes: MCL 01, 02; Monitoring 03, 04)	10	5			125	119		
Volatile Organic Contaminants (VOCs) (Violation Codes: MCL 01, 02; Monitoring 03, 04)	0	0			840	29		
Synthetic Organic Contaminants (SOCs) (Violation Codes: MCL 01, 02; Monitoring 03, 04)	0	0			0	0		
Radionuclides (Violation Codes: MCL 01, 02; Monitoring 03, 04)	2	1			28	8		
Lead and Copper Rule (Violation Codes: Treatment Technique 57, 58, 59, 63, 64, 65; Monitoring 51, 52, 56, 66)			4	4	109	60		
Consumer Confidence Report Rule (Violation Codes: Reporting 71)							47	35
Public Notification Rule (Violation Codes: Reporting 75)							9	6
Total Number of Federally Regulated PWSs in Alaska CY 2017:						1,412		
Total Number of PWSs with 1 or more Violations, 36% of PWSs (all rules, all violation types as noted above) :						s (all rules, all	515	
	Total Numb	er of Violatio	ns in CY 201	7:			2,790	

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) - 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.

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 (MCL) and/or Treatment Technique (TT) Violations in CY 2017

Bolded system names indicate multiple violations issued for rule during CY 2017

Chemical/Radionuclide Rules Maximum Contaminant Level Exceedance Violation (Violation Code 01, 02)					
		Population			
PWSID	Water System Name	System Type	Served	Contaminant	
AK2220189	BIG LAKE RESORT CONDOMINIUM ASSOC	CWS	26	Arsenic	
AK2315400	GRAF RHEENEERHAAJII	TNCWS	27	Nitrate	
AK2243658	KB SUB. WATER SERVICE ASSOC.	CWS	170	Arsenic	
AK2340141	DIOMEDE JOINT UTILITIES	CWS	184	Arsenic / Nitrate	
AK2241012	RIVER TERRACE TC	CWS	337	Arsenic	
AK2340191	WALES WATER SYSTEM	CWS	173	Combined Uranium	

Revised Total Coliform Rule Maximum Contaminant Level Exceedance Violation (Violation Code 1A)						
PWSID	Water System Name System Type Served Contaminant					
AK2110106	ECHO RANCH BIBLE CAMP - JUNEAU	TNCWS	160	E.coli		

	Disinfection Byproducts Rule Maximum Contaminant Level Exceedance Violation (Violation Code 02, 11, 13)					
Population						
PWSID	Water System Name	System Type	Served	Contaminant		
AK2340222	DEERING UTILITY SYSTEM	CWS	160	TTHM & HAA5		
AK2360272	GALENA WATER SYSTEM WTP-1	CWS	670	TTHM		
AK2120224	HYDABURG	CWS	415	TTHM & HAA5		
AK2130083	KAKE MUNICIPAL WATER	CWS	415	HAA5		
AK2120606	KASAAN	CWS	46	TTHM & HAA5		
AK2120169	KLAWOCK	CWS	904	HAA5		
AK2340060	KOTZEBUE MUN. WATER SYSTEM	CWS	3,290	HAA5		
AK2340484	SHISHMAREF WATER SYSTEM	CWS	572	TTHM		
AK2121510	SOUTH TONGASS WATER UTILITY	CWS	975	HAA5		
AK2120216	THORNE BAY, CITY OF	CWS	470	TTHM & HAA5		
AK2120012	VALLENAR VIEW MOBILE HOME PARK	CWS	225	HAA5		

	Revised Total Coliform Rule Treatment Technique Violation (Violation Code 2A, 2C, 2D)				
			Population		
PWSID	Water System Name	System Type	Served	Rule	
AK2244808	ALPINE INN	TNCWS	30	RTCR	
AK2271148	BETHEL TRAILER COURT	CWS	500	RTCR	
AK2245587	BIRCH RIDGE GOLF COURSE, INC.	TNCWS	30	RTCR	
AK2261591	BRISTOL BAY BOROUGH DOCK	TNCWS	200	RTCR	
AK2111526	CHILKAT RIVER ADVENTURES	TNCWS	81	RTCR	
AK2260202	CLARKS POINT WATER SYSTEM	CWS	128	RTCR	
AK2243446	DIV PARKS CLAM GULCH #2	TNCWS	116	RTCR	
AK2248226	DIV PARKS MORGANS LANDING	TNCWS	50	RTCR	
AK2242864	DIV PARKS NINILCHIK VIEW	TNCWS	50	RTCR	
AK2111465	GOLD RUSH TRAIL CAMP	TNCWS	256	RTCR	
AK2241444	INLET FISH PRODUCERS INC	TNCWS	100	RTCR	
AK2247953	KACHEMAK SELO #3	CWS	150	RTCR	
AK2270697	LOWER KALSKAG WATER SYSTEM	CWS	302	RTCR	
AK2241703	PACIFIC STAR SEAFOODS K1	TNCWS	152	RTCR	
AK2240901	PACIFIC STAR SEAFOODS K2	TNCWS	64	RTCR	
AK2244298	RIVER QUEST PHASE 1 SUBDIVISION	TNCWS	227	RTCR	
AK2121131	SALMON FALLS RESORT, LTD.	TNCWS	100	RTCR	
AK2243161	SALTRY	TNCWS	75	RTCR	
AK2280040	SHAGELUK WATER SYSTEM	CWS	60	RTCR	
AK2121463	SILVERKING LODGE	TNCWS	46	RTCR	
AK2111544	SKAGWAY BORDER STATION	TNCWS	233	RTCR	
AK2248470	STOP N GO CAFE	TNCWS	99	RTCR	
AK2291130	TATITLEK WATER SYSTEM	CWS	95	RTCR	
AK2261274	TRIDENT SEAFOODS INC. NAKNEK	TNCWS	400	RTCR	
AK2217233	USFS BLACK BEAR CG	TNCWS	35	RTCR	
AK2215370	USFS WILLIWAW # 2 MIDDLE	TNCWS	40	RTCR	
AK2215388	USFS WILLIWAW # 3 WEST	TNCWS	40	RTCR	
AK2215362	USFS WILLIWAW #1 EAST	TNCWS	40	RTCR	
AK2218551	USFS WILLIWAW #4	TNCWS	25	RTCR	
AK2224955	WILLOW CREEK RESORT	TNCWS	74	RTCR	
AK2130423	YAKUTAT LODGE	TNCWS	30	RTCR	

Attachment #2

Public Water Systems with Maximum Contaminant Level (MCL) and/or Treatment Technique (TT) Violations in CY 2017

Disinfection Byproducts Rule Treatment Technique Violation (Violation Code 12, 46)						
PWSID	PWSID Water System Name System Type Served Rule					
	NORTH FORK PROFESSIONAL BLDG	NTNCWS	400	DBP Stage 1		

Surface Water Treatment Rules Treatment Technique Violation (Violation Code 33, 37, 40, 41, 42, 43, 44, 45, 47)				
			Population	
PWSID	Water System Name	System Type	Served	Rule
AK2260595	ADAK UTILITIES	CWS	220	SWTRs
AK2300222	ARCTIC VILLAGE WATER SYSTEM	CWS	175	SWTRs
AK2130198	BARTLETT COVE WATER SYS	NTNCWS	123	SWTRs
AK2340125	BUCKLAND WATER SYSTEM	CWS	461	SWTRs
AK2260228	CHIGNIK BAY WATER SYSTEM	CWS	302	SWTRs
AK2261444	CHIGNIK LAGOON WATER SYSTEM	CWS	350	SWTRs
AK2110855	HAINES FERRY TERMINAL	TNCWS	200	SWTRs
AK2120541	HOLLIS SCHOOL	NTNCWS	42	SWTRs
AK2220692	ISLANDER BAR & RESTAURANT	TNCWS	74	SWTRs
AK2250087	KARLUK WATER SYSTEM	CWS	52	SWTRs
AK2340117	KIVALINA WATER SYSTEM	CWS	452	SWTRs
AK2240464	NANWALEK	CWS	281	SWTRs
AK2271874	NATIVE VILLAGE OF SLEETMUTE	CWS	82	SWTRs
AK2260260	NONDALTON	CWS	205	SWTRs
AK2130122	PELICAN UTILITIES	CWS	230	SWTRs
AK2260359	PERRYVILLE WATER SYSTEM	CWS	130	SWTRs
AK2261216	PETER PAN SEAFOOD PORT MOLLER	TNCWS	140	SWTRs
AK2271059	PLATINUM CITY WATER SYSTEM	CWS	51	SWTRs
AK2340379	SELAWIK SAFEWATER FACILITY	CWS	846	SWTRs
AK2130075	SITKA	CWS	11,702	SWTRs
AK2121510	SOUTH TONGASS WATER UTILITY	CWS	975	SWTRs
AK2270176	ST. MARYS WATER SYSTEM	CWS	561	SWTRs
AK2291130	TATITLEK WATER SYSTEM	CWS	95	SWTRs
AK2262351	TRIDENT SEAFOODS INC. SAND PT	NTNCWS	400	SWTRs

Ground Water Rule Treatment Technique Violation (Violation Code 41, 42, 45, 48)				
			Population	
PWSID	Water System Name	System Type	Served	Rule
AK2220160	ALASKAN TRAILS RV PARK	TNCWS	474	Ground Water Rule
AK2225572	ALASKAN VIEW MOTEL	TNCWS	51	Ground Water Rule
AK2227701	AMERICAN LEGION POST 15	TNCWS	27	Ground Water Rule
AK2315146	BADGER ROAD BAPTIST CHURCH	TNCWS	40	Ground Water Rule
AK2260464	BBBSD NAKNEK	NTNCWS	130	Ground Water Rule
AK2220310	BIRCHVIEW TOWNHOME CONDOS	CWS	25	Ground Water Rule
AK2212974	BIRCHWOOD SALOON	TNCWS	159	Ground Water Rule
AK2391728	BLACK DIAMOND GOLF COURSE	TNCWS	206	Ground Water Rule
AK2391956	BLACK DIAMOND GOLF EMPLOYEE HOUSING	TNCWS	65	Ground Water Rule
AK2224769	CAMP LA DA SA	TNCWS	252	Ground Water Rule
AK2291300	CARIBOU HOTEL & RESTAURANT	TNCWS	260	Ground Water Rule
AK2261096	CHIGNIK LAKE WATER SYSTEM	CWS	220	Ground Water Rule
AK2260202	CLARKS POINT WATER SYSTEM	CWS	128	Ground Water Rule
AK2333314	COLDFOOT CAFE	TNCWS	120	Ground Water Rule
AK2292705	COPPER RAIL DEPOT SALOON	TNCWS	35	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
AK2227199	EQUESTRIAN ACRES	CWS	950	Ground Water Rule
AK2370219	GAKONA JUNCTION VILLAGE	TNCWS	49	Ground Water Rule
AK2291499	GLENNALLEN WATER WORKS	CWS	365	Ground Water Rule
AK2215566	HOMER DRIVE APTS.	CWS	50	Ground Water Rule
AK2300191	HUSLIA PUBLIC WATER SYSTEM	CWS	300	Ground Water Rule
AK2310374	IVORY JACKS	TNCWS	88	Ground Water Rule
AK2292330	KENNY LAKE FIRE HALL	CWS	200	Ground Water Rule
AK2340230	KIANA WATER SYSTEM	CWS	455	Ground Water Rule
AK2340565	KOBUK WATER SYSTEM	CWS	93	Ground Water Rule
AK2260040	KOLIGANEK WATER SYSTEM	CWS	167	Ground Water Rule
AK2360214	KOYUKUK SAFEWATER FACILITY	CWS	97	Ground Water Rule

Attachment #2

-	Technique (TT) Violations in CY 2017						
	Ground Water Rule Treatment Technique Violation (Violation Code 41, 42, 45, 48)						
			Population				
PWSID	Water System Name	System Type	Served	Rule			
AK2260634	L&PSD NEWHALEN SCHOOL	NTNCWS	73	Ground Water Rule			
AK2391736	LDS / DENALI CHAPEL	TNCWS	52	Ground Water Rule			
AK2271017	LKSD TUNTUTULIAK ANGAPAK SC	NTNCWS	101	Ground Water Rule			
AK2260090	MANOKOTAK WATER SYSTEM	CWS	293	Ground Water Rule			
AK2300159	MINTO COMMUNITY WATER SYSTEM	CWS	205	Ground Water Rule			
AK2223616	MSBSD BIG LAKE ELEM #2 NEW	NTNCWS	365	Ground Water Rule			
AK2227092	MSBSD GLACIER VIEW SCHOOL	NTNCWS	50	Ground Water Rule			
AK2225968	MSBSD RON LARSON SCHOOL	NTNCWS	505	Ground Water Rule			
AK2220723	MSBSD TRAPPER CREEK ELEMENTARY	NTNCWS	34	Ground Water Rule			
AK2220085	MSBSD TWINDLEY BRIDGES CHARTER SCHOOL	NTNCWS	55	Ground Water Rule			
AK2224882	MSBSD WILLOW ELEMENTARY	NTNCWS	250	Ground Water Rule			
AK2260367	NEW STUYAHOK WATER SYSTEM	CWS	510	Ground Water Rule			
AK2220133	PIONEER PLAZA I	TNCWS	62	Ground Water Rule			
AK2310879	RAINBOW VALLEY MHP	CWS	105	Ground Water Rule			
AK2220100	REAL LIFE CHURCH	TNCWS	70	Ground Water Rule			
AK2226035	RIVER BEND SUBDIVISION	CWS	320	Ground Water Rule			
AK2360866	RUBY WATER SYSTEM	CWS	215	Ground Water Rule			
AK2226027	SANDERSON BUILDING	TNCWS	116	Ground Water Rule			
AK2225697	SCHWABENHOF RESTAURANT	TNCWS	31	Ground Water Rule			
AK2380638	TETLIN UTILITY SYSTEM	CWS	150	Ground Water Rule			
AK2224806	THREE BEARS STORE 80	NTNCWS	484	Ground Water Rule			
AK2260032	TWIN HILLS WATER SYSTEM	CWS	87	Ground Water Rule			
AK2340507	WHITE MOUNTAIN WATER SYSTEM	CWS	210	Ground Water Rule			
AK2225653	WILLOW UNITED METHODIST CHURCH	TNCWS	46	Ground Water Rule			
AK2220096	WORD OF FAITH ASSEMBLY	TNCWS	26	Ground Water Rule			

Public Water Systems with Maximum Contaminant Level (MCL) and/or Treatment Technique (TT) Violations in CY 2017

Lead and Copper Rule Treatment Technique Violation (Violation Code 57, 58, 59, 63, 64, 65)				
			Population	
PWSID	Water System Name	System Type	Served	Rule
AK2340222	DEERING UTILITY SYSTEM	CWS	150	Lead & Copper Rule
AK2272016	NEW KASIGLUK WATER SYSTEM	CWS	276	Lead & Copper Rule
AK2225995	OMEGA BUILDING	NTNCWS	160	Lead & Copper Rule
AK2310926	VALLEY WATER COMPANY	CWS	1575	Lead & Copper Rule

Annual Compliance Report 207, Attachment 2