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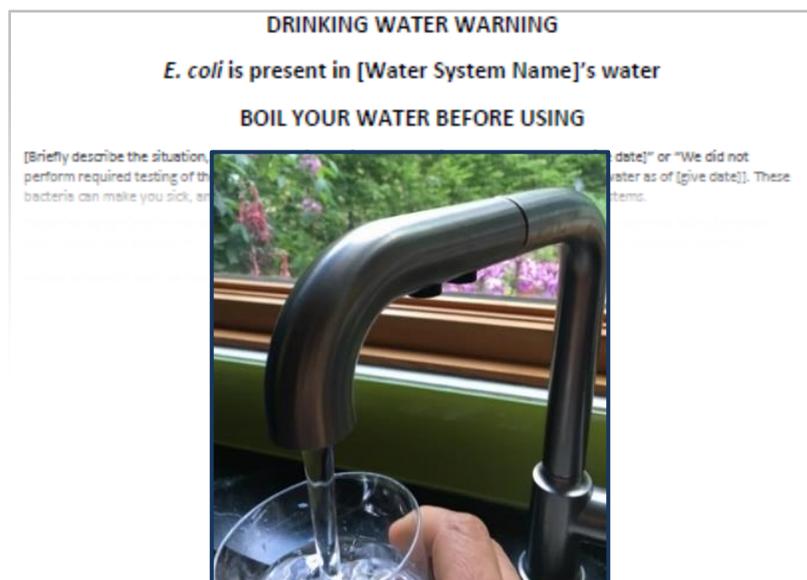
OFFICE OF INSPECTOR GENERAL

*Ensuring clean and safe water  
Compliance with the law*

## EPA Must Improve Oversight of Notice to the Public on Drinking Water Risks to Better Protect Human Health

Report No. 19-P-0318

September 25, 2019



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## Abbreviations

CFR	Code of Federal Regulations
EPA	U.S. Environmental Protection Agency
OIG	Office of Inspector General
SDWA	Safe Drinking Water Act
SDWIS	Safe Drinking Water Information System

**Cover Images:** In the foreground, clean and safe water supplied by a public water system (EPA OIG photo). In the background, part of an EPA public notice template for a situation where *E. coli* bacteria were found in a water supply.

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# At a Glance

## Why We Did This Project

The Office of Inspector General (OIG) for the U.S. Environmental Protection Agency (EPA) examined whether the EPA adequately ensures that public drinking water systems notify their consumers as required by public notice regulations authorized under the Safe Drinking Water Act, such as when the drinking water poses a risk to public health (e.g., when there are unsafe levels of contamination).

The EPA approved most states, territories and the Navajo Nation to operate their own drinking water programs. This is known as *primacy*. EPA regions directly implement drinking water programs in the remainder of Indian country, the District of Columbia and Wyoming; in this report we call this primacy, as well. The EPA oversees the primacy agencies.

### This report addresses the following:

- Ensuring clean and safe water.
- Compliance with the law.

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## ***EPA Must Improve Oversight of Notice to the Public on Drinking Water Risks to Better Protect Human Health***

### What We Found

Primacy agencies have the responsibility to oversee whether public water systems meet federal requirements, including notifying consumers of certain situations regarding their drinking water. We found that some primacy agencies do not consistently fulfill their responsibility to enforce drinking water public notice requirements. Specifically, some primacy agencies do not consistently record violations, nor do they track the need for and issuance of public notices.

In addition, the EPA's protocol for assessing primacy agency oversight does not fully cover all public notice requirements. As a result, not all primacy agencies know whether public water systems under their supervision appropriately notify consumers about drinking water problems, and the EPA and primacy agencies do not hold all public water systems to the same compliance standards.

The EPA does not have complete and nationally consistent information about public water systems' compliance with public notice requirements because primacy agencies do not use consistent methods to identify problems with public notice or record violations in the national drinking water database. As a result, the EPA cannot fully monitor compliance and oversee the implementation of this important part of the drinking water program.

Additionally, the EPA's public notice guidance documents to primacy agencies and public water systems are inconsistent with regulations and out of date. Consequently, primacy agencies lack accurate guidance on their oversight responsibilities. Public water systems also lack guidance about current, relevant tools to provide effective public notices and may miss opportunities to efficiently inform consumers about drinking water problems.

**Without reliable information about drinking water, consumers cannot make informed health decisions and the EPA cannot provide effective oversight.**

### Recommendations and Planned Agency Corrective Actions

We made nine recommendations, including that the EPA require primacy agencies to comply with oversight requirements related to public notice and to follow data reporting requirements. We also recommended that the agency update public notice guidance, define the acceptable methods and conditions under which notices can be delivered electronically, and improve public notice violation information in the national drinking water database. The EPA provided acceptable corrective actions and estimated completion dates for six recommendations. Three recommendations are unresolved, with resolution efforts in progress, because the action official for these recommendations, the Deputy Administrator, did not respond to our draft report.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
INSPECTOR GENERAL

September 25, 2019

**MEMORANDUM**

**SUBJECT:** EPA Must Improve Oversight of Notice to the Public on Drinking Water Risks  
to Better Protect Human Health  
Report No. 19-P-0318

**FROM:** Charles J. Sheehan, Deputy Inspector General

A handwritten signature in blue ink that reads "Charles J. Sheehan".

**TO:** Doug Benevento, Associate Deputy Administrator

David P. Ross, Assistant Administrator  
Office of Water

Susan Parker Bodine, Assistant Administrator  
Office of Enforcement and Compliance Assurance

This is our report on the subject audit conducted by the Office of Inspector General (OIG) of the U.S. Environmental Protection Agency (EPA). The project number for this audit was OPE-FY17-0020. This report contains findings that describe the problems the OIG has identified and corrective actions the OIG recommends. This report represents the opinion of the OIG and does not necessarily represent the final EPA position. Final determinations on matters in this report will be made by EPA managers in accordance with established audit resolution procedures.

Those responsible for this report are the EPA's Deputy Administrator, the Assistant Administrator for the Office of Water and the Assistant Administrator for the Office of Enforcement and Compliance Assurance.

In accordance with EPA Manual 2750, acceptable corrective actions and milestone dates were provided in response to Recommendations 3–7 and 9 in this report. These recommendations are considered resolved and no final response is required. However, if you submit a response, it will be posted on the OIG's website, along with our memorandum commenting on your response. Your response should be provided as an Adobe PDF file that complies with the accessibility requirements of Section 508 of the Rehabilitation Act of 1973, as amended. The final response should not contain data that you do not want to be released to the public; if your response contains such data, you should identify the data for redaction or removal along with corresponding justification.

**Action Required**

The three recommendations in this report issued to the Deputy Administrator—Recommendations 1, 2 and 8—are unresolved. In accordance with EPA Manual 2750, the resolution process begins

immediately with the issuance of this report. We are requesting a meeting within 30 days between the Associate Deputy Administrator and the OIG's Assistant Inspector General for Audit and Evaluation. If resolution is still not reached, the Associate Deputy Administrator is required to complete and submit a dispute resolution request to the Chief Financial Officer.

We will post this report to our website at [www.epa.gov/oig](http://www.epa.gov/oig).

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# Chapter 1

## Introduction

### Purpose

The Office of Inspector General (OIG) of the U.S. Environmental Protection Agency (EPA) examined whether the EPA adequately ensures that public drinking water systems notify the public as required by public notice regulations authorized under the Safe Drinking Water Act (SDWA), such as when water systems identify unsafe levels of contamination.

### Background

EPA data show that public water systems fail to issue notices to the public that meet all requirements nearly 6,000 times per year on average.<sup>1</sup> Public notice serves as a vital step in protecting consumers by alerting them when drinking water is not safe or when other problems occur with the management of their drinking water. Congress enacted the SDWA in 1974 to protect drinking water supplies and public health and included requirements to notify consumers of the quality of their drinking water. These requirements apply to nearly 147,000 public water systems in the United States. The nearly 50,000 community water systems—a subset of public water systems—supply drinking water to approximately 308 million consumers year-round.<sup>2</sup>

#### ***Drinking Water Program Authority***

Under the SDWA, the EPA approved 49 states, five territories and the Navajo Nation to each be a primary implementation authority for the federal drinking water program, also known as *primacy*. With this approval came the responsibility to oversee whether public water systems meet the federal requirements to notify consumers of certain situations regarding their drinking water. In this report, the term *primacy agency* includes any state, territory or tribe that operates its own drinking water program. Also in this report, the term *primacy agency* includes the EPA regions that directly implement the drinking water program in Wyoming (Region 8); the District of Columbia (Region 3); and Indian country, except the Navajo Nation (all regions). In these areas, the EPA

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<sup>1</sup> EPA data for 2001 through 2017 show that there were 101,361 public notice violations over this 17-year period for water systems active as of January 30, 2018, when the OIG retrieved the data from the Safe Drinking Water Information System.

<sup>2</sup> There were nearly 147,000 public water systems in the United States at the end of 2017. Nearly 50,000 public water systems (34 percent) are considered community water systems that supply drinking water to the same population year-round, such as in residential areas and schools. The other 97,000 public water systems covered by the SDWA include transient and non-transient, non-community water systems. These systems, which are located in places such as resorts and campgrounds, do not supply drinking water to the same populations year-round.

has the responsibilities of a primacy agency, as well as overall oversight and enforcement responsibilities.

### **Public Notice Requirements**

In the 1996 amendments to the SDWA, Congress reaffirmed its commitment to public notice by stating that “consumers served by public water systems should be provided with ... prompt notification of any violation of drinking water regulations.”<sup>3</sup> The EPA issued new public notice regulations in 2000 to implement the requirements of the 1996 amendments.<sup>4</sup> The public notice regulations mandate that public water systems notify their consumers when the systems violate national primary drinking water regulations or identify situations posing a risk to the public.

Since issuing the public notice regulations in 2000, the EPA has issued other SDWA regulations, including additional public notice requirements. For example, in 2013, the EPA issued the Revised Total Coliform Rule, a major drinking water regulation that includes public notice requirements.<sup>5</sup> The EPA also issued and updated guidance documents specifically related to public notice. Appendix A features a timeline of public notice-related developments.

The public notice regulations divide drinking water violations and other situations requiring public notice into three tiers with specific requirements, delivery time frames and delivery methods. Some of the attributes of the three tiers of public notice are described below and in Table 1:

- **Tier 1 notices** inform consumers about violations and situations with significant potential to have serious adverse human health effects due to *short-term exposure*. Public water systems must notify the primacy agency within 24 hours when a violation or situation requiring Tier 1 notice occurs. EPA regulations require public water systems to issue Tier 1 notices to consumers when consumers need to take immediate action to protect their health. Among other actions, Tier 1 notices advise consumers not to drink the water, to boil water before using, or not to use the water, depending on the threat posed by the situation. For example, drinking water systems must issue Tier 1 notices when the level of nitrate exceeds the maximum contaminant level, which is the maximum level allowed in drinking water.
- **Tier 2 notices** inform consumers about all other violations and situations with potential to have serious adverse health effects on human health because of *long-term exposure*. EPA regulations treat Tier 2 violations and situations as less urgent than Tier 1 violations and situations because of

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<sup>3</sup> Safe Drinking Water Act Amendments of 1996, Pub. L. 104–182, Sec. 3(10) (August 6, 1996).

<sup>4</sup> 40 CFR § 141 Subpart Q; 65 Fed. Reg. 26035 (May 4, 2000).

<sup>5</sup> 78 Fed. Reg. 10269 (February 13, 2013); minor corrections issued in 79 Fed. Reg. 10665 (February 26, 2014).

reduced immediate risk to consumers. Tier 2 notices provide consumers with information about the situation and advise consumers to consult their doctor if they have specific health concerns. For example, public water systems must issue Tier 2 notices when monitoring shows that a contaminant, such as the volatile organic compound trichloroethylene, exceeds the maximum contaminant level. Long-term consumption of this water could harm consumers.

- **Tier 3 notices** inform consumers about other violations and situations, including monitoring violations. Tier 3 notices provide consumers with information about the violation or situation. For example, public water systems must issue Tier 3 notices when they do not collect the required samples for volatile organic compounds. Tier 3 notices provide consumers information about the management of their public water systems and other situations. For example, Tier 3 notices also are used to notify consumers of the availability of unregulated contaminant monitoring results.

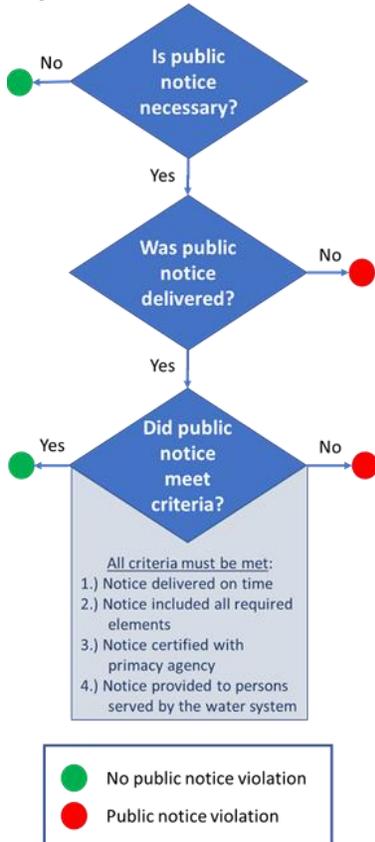
In addition, primacy agencies can require that public water systems issue public notice for situations not specified in federal regulations.

**Table 1: Public notice delivery requirements for public water systems**

Notice tier	Time frame for delivery	Approved delivery methods
<b>Tier 1</b> Immediate human health risk	Within 24 hours	<b>All water systems</b> <i>One or more of the following:</i> <ol style="list-style-type: none"> <li>1. Appropriate broadcast media (such as radio and television);</li> <li>2. Posting of the notice in conspicuous locations throughout the area served by the water system;</li> <li>3. Hand delivery of the notice to persons served by the water system; or</li> <li>4. Another delivery method approved in writing by the primacy agency.</li> </ol>
		<b>Community water systems</b> Unless directed otherwise by the primacy agency in writing, community water systems must provide notice by: <ol style="list-style-type: none"> <li>1. Mail or other direct delivery to each customer receiving a bill and to other service connections to which water is delivered by the public water system; and</li> <li>2. Any other method reasonably calculated to reach other persons regularly served by the system, if they would not normally be reached by the first method.</li> </ol>
<b>Tier 2</b> Potential human health risk  <b>AND</b>  <b>Tier 3</b> Other national primary drinking water regulation violations and situations	As soon as practical, but no later than 30 days	<b>Non-community water systems</b> Unless directed otherwise by the primacy agency in writing, non-community water systems must provide notice by: <ol style="list-style-type: none"> <li>1. Posting the notice in conspicuous locations throughout the distribution system frequented by persons served by the system, or by mail or direct delivery to each customer and service connection; and</li> <li>2. Any other method reasonably calculated to reach other persons served by the system, if they would not normally be reached by the first method.</li> </ol>
	No later than 1 year	

Source: OIG summary of 40 CFR §§ 141.201–204.

**Figure 1: Situations resulting in public notice violations**



Source: OIG graphic of EPA information.

As shown in Table 1, public water systems are encouraged to use a mix of delivery methods to reach all those served. By notifying the public about drinking water violations and other situations posing a risk to public health, public water systems educate the public; protect public health; build trust with consumers; and establish an ongoing, positive relationship with the community.

A public water system can violate public notice regulations in several ways, including if the public water system:

1. Fails to issue required notice (Figure 1).
2. Uses a delivery method that is not approved.
3. Does not issue the required notice within the designated time frame for delivery (outlined previously in Table 1).
4. Does not include all required elements in the notice (Table 2).
5. Does not provide the primacy agency within 10 days the notice and a statement certifying that all public notice requirements have been met.

According to EPA guidance, a public notice violation remains open until the public water system fulfills its public notice responsibilities, including notifying its consumers about the issue and providing proof to the primacy agency of its issuance of the public notice.

**Table 2: Required elements of a public notice**

<b>1</b>	A description of the violation or situation.	<b>6</b>	Actions consumers should take, including when they should seek medical help, if known.
<b>2</b>	When the violation or situation occurred.	<b>7</b>	What the public water system is doing to correct the violation or situation.
<b>3</b>	Any potential adverse health effects from the violation or situation, using standard language provided in regulations.	<b>8</b>	When the public water system expects to return to compliance or resolve the situation.
<b>4</b>	The population at risk, including subpopulations that are particularly vulnerable if exposed to the contaminant in their drinking water.	<b>9</b>	Name, address and telephone number of the public water system representative serving as a source for additional information concerning the notice.
<b>5</b>	Whether alternate water supplies should be used.	<b>10</b>	A statement encouraging notice recipients to distribute the notice to others.

Source: 40 CFR § 141.205.

As shown in Table 2, public notice regulations require that public notices include, among other elements, information regarding what the public water system is doing to correct the violation or situation and when the system expects the violation or situation to be corrected. Regulations also require repeated notices if the violation or situation persists. Regulations do *not* require that public water systems notify consumers when they have resolved the violation or situation that prompted public notice. However, the EPA encourages systems to issue a follow-up notice, particularly for Tier 1 violations or situations. Individual primacy agencies may require these follow-up notices.

### ***Oversight and Enforcement Responsibilities***

The EPA's water and enforcement program offices and the primacy agencies have specific oversight and enforcement responsibilities related to the drinking water program, with several responsibilities specific to public notice. The EPA's and primacy agencies' oversight and enforcement responsibilities are designed to ensure that public water systems follow drinking water regulations; deliver safe water; and notify their consumers when required, including when the drinking water is unsafe. Figure 2 shows the relationships and responsibilities among the EPA, the primacy agencies, the public water systems and the public they serve. (Directional arrows show how the different entities interact with each other.) Where an EPA region directly implements the drinking water program, the EPA has overall responsibilities for oversight and enforcement and the responsibilities of a primacy agency. Where an EPA region directly implements the drinking program on tribal lands, the EPA must use compliance and technical assistance to help tribal public water systems achieve compliance before turning to enforcement actions.<sup>6</sup>

EPA water program offices oversee primacy agencies to verify that their drinking water programs comply with the SDWA. The SDWA requires that the EPA act when neither a public water system nor the primacy agency has addressed a problem or notified consumers of the problem within the system.<sup>7</sup> The SDWA also requires that the EPA provide technical assistance to states and public water systems to help bring a system back into compliance.<sup>8</sup>

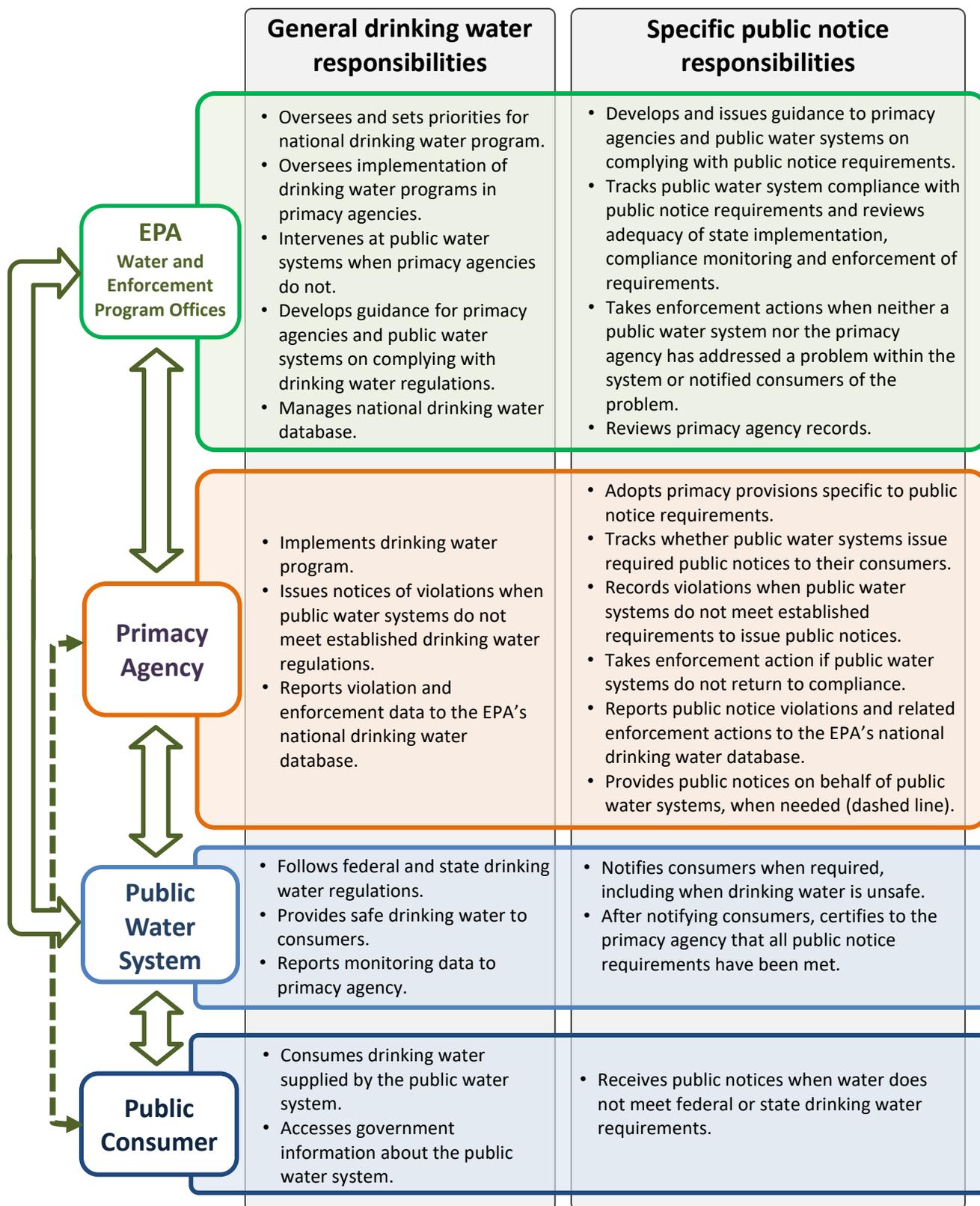
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<sup>6</sup> EPA [Memorandum](#), *Transmittal of Final Guidance on the Enforcement Principles Outlined in the 1984 Indian Policy*, January 17, 2001, from Steve A. Herman, Assistant Administrator for Enforcement and Compliance Assurance, to the Regional Administrators.

<sup>7</sup> SDWA § 1414(a)(1)(B).

<sup>8</sup> SDWA § 1414(a)(1)(A)(ii).

Figure 2: Drinking water program relationships and responsibilities



Source: OIG graphic from EPA information.

Among other requirements, primacy agencies must implement enforcement programs.<sup>9</sup> They must have authority to require public water systems to give public notice.<sup>10</sup> They also must report quarterly violation and enforcement information to the EPA.<sup>11</sup>

## Responsible Offices

Multiple EPA offices are responsible for the implementation and enforcement of drinking water regulations, including those pertaining to public notice:

- Within the Office of the Administrator, the Deputy Administrator supervises the Regional Administrators. The EPA has delegated many SDWA responsibilities to the Regional Administrators, including determining whether a state has primary enforcement responsibility for public water systems, issuing public water system supervision grants, commencing civil judicial actions, and issuing administrative orders requiring compliance.
- Within the Office of Water, the Drinking Water Protection Division of the Office of Ground Water and Drinking Water is responsible for implementing the SDWA, in collaboration with EPA regions, primacy agencies, tribes and water sector stakeholders, to ensure that Americans have safe drinking water. It develops and provides guidance to EPA regions, primacy agencies and public water systems on how to fulfill public notice responsibilities and requirements. The division also maintains the Safe Drinking Water Information System (SDWIS), which involves overseeing, and in some cases participating in, periodic reviews of primacy agency records.
- Within the Office of Enforcement and Compliance Assurance, the Water Enforcement Division of the Office of Civil Enforcement, and the Monitoring Assistance and Media Programs Division of the Office of Compliance, are responsible for drinking water enforcement actions and compliance assistance. These offices also work with the Office of Water to improve the accuracy of compliance information in the SDWIS.

## Scope and Methodology

We conducted our work from September 2017 to May 2019. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and

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<sup>9</sup> 40 CFR § 142.10(b).

<sup>10</sup> 40 CFR § 142.10(b)(6)(v).

<sup>11</sup> 40 CFR § 142.15.

conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We reviewed applicable laws, regulations, policies, procedures and guidance. We analyzed public notice violation data for 2001 through 2017, retrieved by the OIG from the EPA's drinking water database—the SDWIS—on January 30, 2018. We analyzed program documents, interviewed drinking water program and enforcement staff at EPA headquarters, and surveyed and interviewed the 10 EPA regional drinking water and enforcement programs for information about public notice.

We interviewed drinking water program staff in two states—Colorado and Pennsylvania—and gathered information from four public water systems. Additionally, we interviewed six nongovernmental organizations about public notice: the American Water Works Association, the Association of State Drinking Water Administrators, Clean Water Action, Earthjustice, the National Rural Water Association and the Natural Resources Defense Council.

We identified and reviewed two prior EPA OIG reports relevant to this audit (Appendix B).

## Chapter 2

# EPA Needs to Improve Oversight of Public Notice Requirements

The EPA needs to improve its oversight of public notice regulatory requirements. This need arises due to several factors in the EPA's oversight processes:

- Primacy agencies do not consistently enforce public notice regulations for drinking water violations, which leads to the EPA's inability to enforce public notice requirements.
- The EPA's national drinking water database lacks tools for tracking public notice compliance, which limits its use.
- The EPA's protocol for reviewing primacy agency oversight does not cover all key public notice requirements, which limits both information and focus on public notice at primacy agencies.
- The EPA's guidance documents have deficiencies so that public water systems and primacy agencies do not have needed information on how to comply with requirements.

As a result, the EPA does not know whether all primacy agencies fulfill their oversight responsibilities, and not all primacy agencies know whether public water systems under their supervision meet requirements for notifying consumers about drinking water problems.

### **Primacy Agencies Do Not Always Enforce Public Notice Regulations for Drinking Water Violations**

Not all primacy agencies consistently enforced public notice requirements. In addition, some primacy agencies did not track Tier 3 notices. If primacy agencies do not track public notice issuance, they cannot identify when there is a violation of public notice regulations. If primacy agencies do not record violations, not all public water systems are being held to the same public notice standards. If public water systems do not issue public notices properly, consumers and regulators do not know whether their drinking water complies with health-based standards. Even Tier 3 notices, which typically do not directly address human health risks, provide important information to consumers about public water system management and performance.

## ***Some Primacy Agencies Do Not Record Public Notice Violations***

EPA Region 8 and at least four states do not record public notice violations when public water systems do not provide required public notices. Region 8 directly implements the drinking water programs in Wyoming and 27 tribes. Seven EPA regions record public notice violations for all tiers of public notices; two regions do not track and therefore do not record violations for Tier 3 public notices, as detailed in the section below.

When EPA Region 8 issues orders to compel public water systems to return to compliance with public health-related regulations, the region includes public notice requirements as part of the order. However, contrary to public notice regulations for state primacy agencies,<sup>12</sup> the region does not record public notice violations in the national drinking water database.

### **Promising Public Notice Practice: *Swift Consultation Between State and Public Water System***

Pennsylvania requires public water systems to consult with the state within 1 hour of learning of a situation that will require Tier 1 public notice; federal regulations call for consultation within 24 hours. This early coordination between state and local officials improves communication to consumers on actions they need to take.

By not recording public notice violations, EPA Region 8 and at least four states do not meet the requirement that primacy agencies maintain a comprehensive enforcement program. Regional drinking water staff told us that when resources are limited, primacy agencies choose to focus on drinking water regulations that they assume directly impact human health, as opposed to public notice regulations. Region 8 personnel told us that

for 20 years the region has not allocated resources for a public notice rule manager. Over that time, the EPA's Office of Water allowed the region to operate its drinking water program in a manner inconsistent with the EPA's regulations and guidance.

Because of inconsistent oversight practices, the EPA did not hold all public water systems to nationally consistent compliance standards for public notice.

## ***Some Primacy Agencies Do Not Enforce Tier 3 Public Notice Requirements***

Primacy agencies varied in their oversight and enforcement of Tier 3 public notice requirements. In addition, not all water systems provided Tier 3 public notices in compliance with all regulatory requirements. Regulations allow public water systems up to 1 year from an event triggering a Tier 3 notice to issue the notice. Tier 3 notices provide important information to consumers about public water system management and performance.

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<sup>12</sup> 40 CFR § 142.15(a).

## Some Primacy Agencies Do Not Track Tier 3 Public Notices

Our review found that at least 11 primacy agencies (EPA Regions 9 and 10 and at least nine states) that track Tiers 1 and 2 public notices do not track Tier 3 public notices. If primacy agencies do not track Tier 3 public notices, they cannot issue notices of violation for failure to provide Tier 3 public notices. Public water systems inform consumers through Tier 3 notices when they fail to conduct required monitoring; the SDWA expressly mandates that public water systems provide notice for failure to monitor.<sup>13</sup> If a public water system has not conducted required monitoring, it cannot show whether drinking water meets the standards designed to minimize public health risks.

Because they do not track Tier 3 public notices, these primacy agencies lack information on whether public water systems fulfilled their Tier 3 notice responsibilities. Without proper oversight, primacy agencies are unable to record violations for not issuing public notices, compel compliance, and hold all public water systems accountable for complying with all public notice requirements.

## Some Primacy Agencies Grant Additional Time for Tier 3 Public Notices

The EPA allows community water systems to use required annual consumer confidence reports to deliver Tier 3 notices if the requirement to deliver Tier 3 notices within 1 year is met. At least nine primacy agencies (EPA Regions 6 and 9 and at least seven states) allow public water systems to include *all* Tier 3 notices issued during the year in the corresponding annual consumer confidence or other report.

However, this practice does not currently comply with the SDWA<sup>14</sup> because public water systems employing this practice may issue consumer confidence reports up through July 1 of the following year, which may be beyond the 1-year time frame required for Tier 3 violations. For example, a consumer would not be notified of a Tier 3 violation that occurred in January until receiving the annual report 18 months later.

In 2018, Congress amended the SDWA to require community water systems serving 10,000 or more persons to provide their consumer confidence reports twice a year.<sup>15</sup> When this change is implemented in 2020, delivery of all Tier 3 notices with the twice-a-year reports will allow these systems to meet the 1-year delivery time frame. For smaller systems,

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<sup>13</sup> SDWA § 1414(c)(1)(A)(ii).

<sup>14</sup> SDWA § 1414 (c)(2)(E)(i).

<sup>15</sup> America's Water Infrastructure Act of 2018 § 2008 (P.L. 115-270).

the SDWA would need to be amended if the practice of delivering all Tier 3 notices through an annual report is to continue.

## **Existing National Drinking Water Database Makes Tracking Public Notice Compliance Difficult**

Primacy agencies told us that the current SDWIS database is not user friendly and lacks tools to assist primacy agencies with tracking compliance with public notice requirements. As a result, not all primacy agencies that track public notices use the SDWIS. For example, Pennsylvania uses its own data management system, which automatically tracks compliance and notifies staff of violations. In addition, none of the eight EPA regions that track public notices use the SDWIS for that purpose. Instead, they use different methods to track the public notices, such as spreadsheets, handwritten notes, electronic tracking systems or other alternatives. These regions then upload violations data to the SDWIS.

The EPA told us it plans to replace the SDWIS in 2020 with “SDWIS Prime,” which is expected to include improved public notice tracking tools. The Office of Water anticipates that SDWIS Prime will help primacy agencies manage Tier 3 public notice violations through an automated procedure that will identify potential violations when the triggering conditions exist. This could improve reporting of Tier 3 public notice violations to the EPA. However, because the EPA has not yet released SDWIS Prime, we could not evaluate whether SDWIS Prime will improve tracking of public notice compliance, recording of violations, and thus oversight.

## **EPA File Review Protocol Does Not Fully Address Public Notice**

The EPA’s protocol for reviewing primacy agency drinking water program files does not include procedures for either reviewing Tier 3 public notices or citing primacy agencies for failure to fulfill their regulatory requirement to retain public notice records.<sup>16</sup> Moreover, the additional document that the EPA provides to reviewers summarizing the various drinking water rules does not summarize public notice requirements.

The EPA conducts these reviews to verify the reliability of data in the SDWIS and to identify opportunities for improving primacy agency drinking water programs. By not including review of Tier 3 public notices, not citing agencies for failing to retain required public notice records, and not providing a summary of public notice requirements, the EPA diminishes the importance of public notice and allows the inconsistencies that we identified in the oversight of public notice requirements to continue.

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<sup>16</sup> 40 CFR § 142.14(f).

We recognize that including reviews of Tier 3 public notices might provide logistical challenges for those conducting file reviews because public water systems have up to a year to issue required Tier 3 public notices. The EPA suggested, and we agreed, that an acceptable alternative would be to include an analysis of Tier 3 public notice in the protocol for reviewing the public water system supervision program. Regulations require that the EPA conduct annually these reviews of each primacy agency.<sup>17</sup>

## Deficiencies in EPA Guidance Hinder Effective Public Notice Practices

We found six deficiencies in the EPA’s primary guidance documents—the *2010 State Implementation Guidance*<sup>18</sup> and the *2010 Public Notification Handbooks*<sup>19</sup>—related to public notices. Because of these deficiencies, public water systems do not have clear information about how to comply with requirements and effectively and efficiently inform consumers about drinking water problems. In addition, primacy agencies do not have clear guidance on their oversight responsibilities.

### 1. Guidance on Delivery Methods Inconsistent with Regulations

The EPA’s *2010 Guidance* and one of the *2010 Handbooks* provide information on public notice delivery methods for community water systems that is inconsistent with EPA regulations (Table 3). The guidance does not consistently describe the range of options, omitting from a table that summarizes the regulations the alternatives (in red bold text in Table 3) that provide public water systems the flexibility to innovate and to use methods that would best reach their consumers. By narrowly defining requirements in the documents, the EPA gives the impression that public water systems cannot adopt other direct delivery methods, such as telephone alerts and email, which may efficiently and effectively reach consumers.

**Table 3: EPA’s guidance for public notice delivery method options for community water systems is inconsistent with regulations**

Applicable notice tier	Delivery method options in regulations	Delivery method options in EPA guidance table <sup>a</sup>
Tier 1	Broadcast media, posting, hand delivery <b>or another delivery method</b> approved in writing by the primacy agency (40 CFR § 141.202)	Broadcast media (radio or television), posting or hand delivery
Tiers 2 and 3	Mail <b>or other direct delivery</b> (40 CFR § 141.203 and 40 CFR § 141.204)	Mail or hand delivery

Source: OIG summary of public notice regulations and EPA guidance. Emphasis added by OIG.

<sup>a</sup> *2010 State Implementation Guidance*, Table 3-2 and *2010 Revised Public Notification Handbook*, Table 2.

<sup>17</sup> 40 CFR § 142.17.

<sup>18</sup> [EPA 816-R-09-012](#), *Revised State Implementation Guidance for the Public Notification (PN) Rule*, March 2010.

<sup>19</sup> [EPA 816-R-09-013](#), *Revised Public Notification Handbook*, March 2010; and [EPA 816-R-09-009](#), *Public Notification Handbook for Transient Noncommunity Water Systems*, March 2010.

## **2. Guidance on Modern Methods for Notice Delivery Is Limited**

The EPA's *2010 Guidance* and *2010 Handbooks* contain limited information on using modern methods for delivery of public notices. They do not thoroughly address methods and conditions by which public water systems could directly deliver the required public notices electronically. In addition, they lack information on the use of modern communication methods, such as social media and automated alert systems, to provide public notice.

EPA regulations require that public community water systems deliver Tiers 2 and 3 public notices, as well as annual consumer confidence reports, by mail or other direct delivery. The EPA allows public water systems to include Tier 3 public notices as part of the annual report. In 2013, the EPA issued a policy memorandum identifying options for *electronic* direct delivery of consumer confidence reports.<sup>20</sup> Under these criteria, a community water system that electronically bills all customers could distribute its consumer confidence report using the same system and meet the direct-delivery requirement. However, the EPA's decision to allow electronic direct delivery of the consumer confidence report led at least one primacy agency to conclude that Tier 3 notices could no longer be included with these annual reports.

The EPA should encourage electronic direct delivery of public notices, such as with the annual consumer confidence reports. Allowing electronic delivery of Tiers 2 and 3 notices would reduce the cost of issuing these notices and has the potential to more effectively reach consumers.

Regulations specify some delivery methods, such as broadcast media and mail, but also allow delivery of Tier 1 notices by "another delivery method approved in writing by the primacy agency" and of Tiers 2 and 3 notices by "other direct delivery." Although the EPA's intent in releasing public notice regulations in 2000 was "to give greater latitude to [s]tates to develop alternative programs ... to provide greater flexibility to public water systems to tailor distribution of the notice to best reach persons served," the *2010 Guidance* and *2010 Handbooks* provide limited information on what this flexibility might entail.

The case study on the following page illustrates how one public water system in Georgia used Twitter and Facebook to quickly inform its customers of the need to boil their water due to a water main break. This boil water notice is not required by federal regulation but is a special type of advisory required by Georgia. We include it here as an example of effective use of social media. Social media outreach efforts, such as those described in the case study, could supplement traditional delivery methods, such as issuing press releases to broadcast and print media, to reach a broader audience quickly.

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<sup>20</sup> EPA [Memorandum](#), *Safe Drinking Water Act – Consumer Confidence Report Rule Delivery Options*, January 3, 2013, from Peter Grevatt, Director, Office of Ground Water and Drinking Water, Office of Water, to Water Division Directors, Regions I-X.

## Case Study: Public Notice in DeKalb County, Georgia

During a public water emergency in March 2018, DeKalb County alerted customers about the need to boil their drinking water through traditional press releases sent to broadcast media and through posting to its website, Facebook page and Twitter account. The images below are samples of tweets and Facebook posts by the Department of Watershed Management.

The department alerted customers to boil their drinking water due to a large diameter water main break that caused water pressure drops in parts of the water system.

The department informed customers that repair work was initiated and customers should continue to boil their drinking water until officially notified by DeKalb County.

The department informed customers that it completed the water main repairs ahead of schedule and cancelled the countywide boil water advisory.

March 7  
2018

March 8  
2018

March 9  
2018

Facebook

**DeKalb Watershed**  
March 7 · 🌐

A large main water main break occurred in a 48-inch transmission main at 5718 Buford NE Hwy in Doraville. The main break is causing low water pressure and affecting residents in the area. In an abundance of caution for our citizens and to protect the public from any potential health hazards, residents in the affected area are being asked to boil water for at least one minute, or to a rolling boil, prior to drinking, cooking or preparing baby food. Residents are also advised to conserve water. For more information, contact the DeKalb County Watershed Department at 770-270-6243. #PreventFOG

Twitter

**DeKalb Watershed**  
@DeKalbWatershed

DEKALB RESIDENTS: BOIL WATER ADVISORY: A large diameter water main break is causing water pressure in parts of the water system to drop to dangerously low levels. (1 of 2)

3/7/18, 09:14

6 Retweets 1 Like

**DeKalb Watershed**  
@DeKalbWatershed

DEKALB RESIDENTS- BOIL WATER ADVISORY: When this occurs a potential health hazard may exist in these areas of zero pressure from backflow and/or back-siphonage of water of unknown quality into the water distribution system. (2 OF 2)

3/7/18, 09:14

9 Retweets 2 Likes

Twitter

**DeKalb Watershed**  
@DeKalbWatershed

DeKalb Watershed customers: Countywide Boil Water Advisory Lifted. The new water main installed 24 hours ahead of schedule. [ow.ly/BSKz30iRzQT](http://ow.ly/BSKz30iRzQT)



3/9/18, 17:01

Facebook

**DeKalb Watershed**  
March 9 · 🌐

DeKalb Watershed customers: Countywide Boil Water Advisory Lifted. The new water main installed 24 hours ahead of schedule. <http://ow.ly/BSKz30iRzQT> #FOG



Like Comment Share

### **3. Handbooks Do Not Incorporate Latest Drinking Water Regulations**

When the EPA issued the Revised Total Coliform Rule in 2013, it included public notice requirements for violations of the total coliform regulations.<sup>21</sup> In 2016, the agency released public notice instructions and templates for the Revised Total Coliform Rule. However, the EPA did not revise its *2010 Handbooks* with updated instructions and templates for public notices to reflect the revised regulations. As a result, the *2010 Handbooks* contain outdated information and templates that do not comply with the revised regulations. Water systems that rely on the *2010 Handbooks* may issue a public notice that does not comply with the revised regulations.

### **4. Handbooks Lack Procedures for Public Water Systems to Achieve Compliance**

The EPA's *2010 Handbooks* were designed to help public water systems understand public notice requirements and do not include information on the steps that a public water system must take to return to compliance after it violates the public notice requirements. A public notice violation occurs because a public water system has not notified consumers about an issue with their drinking water or has not carried out other public notice requirements.

However, once a system has violated public notice requirements, coming back into compliance with these requirements may not be simple. For example, if the water system does not notify consumers about the underlying drinking water issue before resolving it, the public notice about the now-resolved issue may confuse consumers. As such, public water systems need clear direction on how to return to compliance after a public notice violation, and the EPA should provide public water systems this information on achieving compliance in the handbooks.

### **5. Handbooks Reference Out-of-Date Tools**

We identified in the EPA's *2010 Handbooks* several inactive weblinks and instances where the cited information no longer appears on the linked website. For example, the EPA removed the *PNiWriter* tool from its website in 2014. This web-based tool assisted public water systems with developing public notices. Although the EPA notes on its [compliance assistance website](#) that this resource was taken offline, the EPA has not updated the handbooks. The *2010 Handbooks* still direct public water systems to access the *PNiWriter* at a webpage that no longer exists.

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<sup>21</sup> 78 Fed. Reg. 10269 (February 13, 2013); minor corrections issued in 79 Fed Reg. 10665 (February 26, 2014). The EPA considers total coliform levels a useful indicator of other pathogens in drinking water. Information on total coliform helps public water systems determine the adequacy of water treatment and the integrity of the distribution system.

As another example, the *2010 Handbooks* do not direct public water systems to an important information source created after the last update to the handbooks: the *Drinking Water Advisory Communication Toolbox*.<sup>22</sup> The Centers for Disease Control and Prevention, the EPA, and the American Water Works Association published this collaborative toolbox in 2011 and updated it in 2016. It is designed to help public water systems better communicate with partners, stakeholders and the public during a drinking water advisory to protect public health. The EPA misses a valuable opportunity to promote more effective communication by not including a reference to the toolbox in its handbooks.

**Promising Practice:  
Online Tool for Generating  
Public Notices**

In Colorado, public water systems can use an [online tool](#) to generate notices that comply with public notice regulations. Colorado also created an online video that assists public water systems in using this tool.

## **6. Handbooks Contain Limited Resources for Translation Services**

Public notice regulations require that, for public water systems serving a large proportion of non-English speaking consumers:

[N]otice must contain information in the appropriate language(s) regarding the importance of the notice or contain a telephone number or address where persons served may contact the water system to obtain a translated copy of the notice or request assistance in the appropriate language.<sup>23</sup>

In its *2010 Handbooks*, the EPA outlines how public water systems can determine whether translation is needed. The *2010 Handbooks* also provide four important and relevant phrases translated into over 20 languages by the state of Washington's Department of Health, as well as two notice templates translated into Spanish. However, the *2010 Handbooks* contain limited resources to assist in providing a full notice in languages other than English and Spanish. EPA regional staff told us that public water systems need more assistance with providing translated notices.

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<sup>22</sup> Centers for Disease Control and Prevention, the EPA, and the American Water Works Association, 2016, *Drinking Water Advisory Communication Toolbox*, [CS224256](#).

<sup>23</sup> 40 CFR § 141.205(c)(2)(i).

### **Promising Practice: Translations for Public Notices**

The state of Washington translated the following four basic drinking water messages into 27 languages:

- *This report contains important information about your drinking water. Have someone translate it for you or speak with someone who understands it.*
- *Boil your water before using.*
- *Don't drink the water.*
- *Children under 12 months old should not drink the water. Don't use the water to make formula.*

For example, the following translations are provided for the phrase *Don't drink the water*:

Japanese:

水を飲まないでください。

Russian:

Не пейте воду.

By offering these translated statements [online](#), water systems in the state of Washington and across the country can readily use them in their public notices, increasing the likelihood that more of their consumers will receive important information on the quality of their drinking water.

### **EPA Needs to Update Guidance**

The EPA's *State Implementation Guidance* and *Public Notification Handbooks* provide pertinent guidance to primacy agencies and public water systems on how to implement their public notice responsibilities. However, in their current forms, these documents provide some public notice guidance that is inconsistent with regulations, is out of date or has other deficiencies. The EPA needs to update and revise its public notice guidance to improve the ability of public water systems to efficiently and effectively inform consumers about drinking water problems and promote improved oversight by primacy agencies.

## **Conclusion**

The EPA and primacy agencies need to improve oversight of public notice requirements. Primacy agencies do not consistently track public notices to verify that they occur when required by regulations, nor do primacy agencies consistently record violations when public water systems did not fulfill their public notice responsibilities. The lack of oversight of public notice requirements leaves public water systems unaccountable for their responsibilities to (1) provide public notice when regulations require it and (2) certify that notice was provided to consumers.

Tracking public notice is the only way that primacy agencies—EPA regions and states—know whether public water systems under the agencies' supervision appropriately notify consumers. As a result, primacy agencies do not have the information that they need to enforce the public notice provision of the SDWA, and the EPA does not have reliable compliance information.

In its *Fiscal Year 2018–2022 Strategic Plan*, the EPA says, “One of EPA’s highest priorities must be to create consistency and certainty for the regulated community. Consistency in how the laws and regulations are applied across the country is part of that process.” To align with this high priority, the EPA should require that primacy agencies—states and EPA regions—fully meet oversight and enforcement responsibilities related to public notice. The EPA also should provide up-to-date guidance to primacy agencies and public water systems that promotes effective and compliant public notice.

To address problems with oversight, the EPA needs to take actions to improve regulatory oversight by the EPA’s Office of Water, the EPA’s Office of Enforcement and Compliance Assurance, EPA regions, and state drinking water programs. These actions should include verifying that public water systems provide notices when required and issuing public notice violations to systems when they do not distribute notices in accordance with regulations. By conducting its own national review of the adequacy of primacy agency implementation, compliance monitoring, and the reporting and enforcement of public notice requirements, the EPA would improve its ability to manage and oversee a nationally consistent public notice program.

## Recommendations

We recommend that the Deputy Administrator:

1. Require EPA Regional Administrators to comply with public notice requirements of the Safe Drinking Water Act and the public notice regulations where the EPA directly implements the act.
2. Require EPA Regional Administrators to verify that primacy agencies within each region fully implement oversight of public notice responsibilities.

We recommend that the Assistant Administrator for Water:

3. Define for primacy agencies and public water systems acceptable methods and conditions under which the electronic delivery of Tiers 2 and 3 notices meet the Safe Drinking Water Act’s direct delivery requirement.
4. Update the EPA’s drinking water program review protocols to include steps for reviewing Tier 3 notices and for citing primacy agencies that do not retain complete public notice documentation.

5. Update and revise the 2010 *Revised State Implementation Guidance for the Public Notification Rule* to include:
  - a. Public notice delivery methods that are consistent with regulations.
  - b. Information on modern methods for delivery of public notice.
6. Update and revise the 2010 *Public Notification Handbooks* to include:
  - a. Public notice delivery methods that are consistent with regulations.
  - b. Information on modern methods for delivery of public notice.
  - c. Public notice requirements for the latest drinking water regulations.
  - d. Procedures for public water systems to achieve compliance after violating a public notice regulation.
  - e. Up-to-date references to compliance assistance tools.
  - f. Additional resources for providing public notice in languages other than English.

We recommend that the Assistant Administrator for Water and the Assistant Administrator for Enforcement and Compliance Assurance:

7. Conduct a national review of the adequacy of primacy agency implementation, compliance monitoring, reporting and enforcement of the Safe Drinking Water Act's public notice requirements.

## **Agency Response and OIG Evaluation**

The EPA responded to the draft report on July 8, 2019, and August 12, 2019.

The Office of Water and the Office of Enforcement and Compliance Assurance provided acceptable corrective actions and estimated completion dates for Recommendations 3–7. Recommendations 1 and 2 are unresolved, with resolution efforts in progress, because the action official for the recommendations, the Deputy Administrator, did not respond to our draft report.

The agency responses and the OIG's evaluation of those responses are in Appendices C and D. The EPA also provided technical comments. Where appropriate, the OIG revised the report to address those technical comments.

## **Chapter 3**

# **EPA Needs to Improve Public Notice Data in the National Drinking Water Database**

The SDWIS—the EPA’s national drinking water database—contains inconsistent information about public water system compliance with public notice requirements. Data entered into the database by states and EPA regions provide the EPA and the public with information about public water system compliance with public notice requirements. However, the EPA does not have complete and nationally consistent public notice information in this database. Primacy agencies do not use consistent methods to identify problems with public notice or report public notice violations to the EPA, which affects the reliability of public notice violation data. Without reliable data about public notice violations, the EPA cannot fully monitor compliance, track public notice violations, or oversee the implementation of this important part of the drinking water program. Additionally, the public cannot access reliable information about public water system compliance with these requirements.

### **Regulations Establish Clear Requirements for Primacy Agencies to Report Public Notice Violations**

Federal drinking water regulations establish when and how primacy agencies should report data to the EPA, including violations of public notice requirements.<sup>24</sup> The EPA’s *2010 Guidance* reiterates the regulatory requirement that primacy agencies report quarterly public notice and other drinking water violations to the EPA. The *2010 Guidance* emphasizes that reporting complete violation information by primacy agencies is critical to the public notice process.

### **Inconsistent Data Provide a Misleading National Summary of Adherence to Public Notice Requirements**

The SDWIS contains inconsistent information about public water system compliance with public notice requirements. According to the SDWIS, primacy agencies issue nearly 6,000 public notice violations per year on average to public water systems.<sup>25</sup> However, the number of violations is likely underreported because primacy agencies do not consistently track or record public notice violations in the SDWIS, as discussed in Chapter 2. The EPA needs accurate data to effectively manage and oversee the national drinking water program, including requirements to notify the public of drinking water violations and other situations posing a risk to public health.

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<sup>24</sup> 40 CFR § 142.15(a).

<sup>25</sup> The SDWIS data for 2001 through 2017 show 101,361 public notice violations over these 17 years for water systems that were active as of January 30, 2018, when the OIG retrieved the data.

We found wide variability in the number of public notice violations that primacy agencies recorded in the SDWIS from 2001 through 2017. For example, the SDWIS shows 13 primacy agencies recorded zero public notice violations—either ongoing or returned to compliance. In contrast, over those same 17 years, three primacy agencies each issued over 17,000 public notice violations.

It is not always clear whether low violation numbers result from problems with reporting or a lack of violations. Several different factors contribute to low or high numbers of recorded public notice violations and impact the consistency of public notice violation information in the SDWIS (Table 4 on next page). Factors that contribute to low numbers of recorded public notice violations impact the accuracy of information in the SDWIS more than factors that contribute to high numbers of recorded violations.

Without consistent reporting of public notice information from all primacy agencies, the EPA cannot effectively manage and oversee the SDWIS program and the national drinking water program.

## **Open Violations in SDWIS Obscure National Picture of Compliance with Public Notice Requirements**

More than a quarter of public notice violations issued from 2001 through 2017 were marked as open in the SDWIS. Primacy agencies are to record in the SDWIS when a public water system returns to compliance. Open public notice violations in the SDWIS obscure the national picture of compliance with public notice requirements and suggest that public water systems have not addressed public notice violations and continue to not comply with requirements.

To reduce the number of open violations and clarify the national picture on public notice, the EPA issued a guidance memorandum on February 22, 2011, providing a method for resolving legacy public notice violations—older than 5 years—in the SDWIS.<sup>26</sup> From April 1 to September 30, 2011, 23 states took advantage of this one-time opportunity and resolved approximately 5,200 public notice violations. The state of Wisconsin, for example, resolved nearly 49 percent (2,520) of these legacy public notice violations.

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<sup>26</sup> EPA [Memorandum](#), *Guidance for Safe Drinking Water Act Primacy Agencies on How to Enter Resolving Action Codes into SDWIS for Past Public Notice Violations and Clarification on How to Address Public Notification Violations in Certain Circumstances*, February 22, 2011, from Mark Pollins, Director, Water Enforcement Division, and Edward J. Messina, Acting Director, Monitoring Assistance and Media Programs Division, EPA Office of Enforcement and Compliance Assurance, to Drinking Water Enforcement Managers, Regions 1–10.

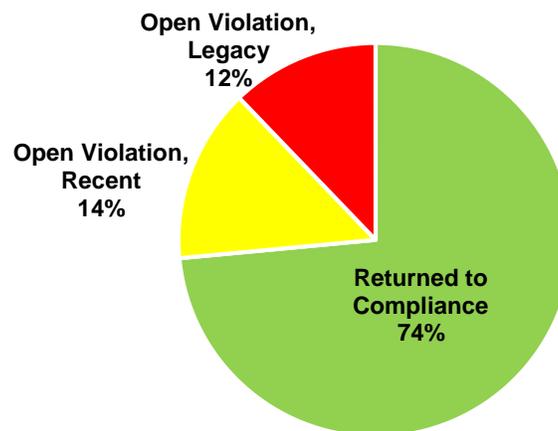
**Table 4: Factors contributing to wide variability in number of public notice violations in SDWIS**

Factor	Specifics	Potential impact
<b>Resulting in few violations in the SDWIS</b>		
No violations	A primacy agency does not need to issue public notice violations because public water systems do not violate drinking water regulations or experience other specific situations that trigger public notice requirements.	The SDWIS would <i>accurately</i> show no public notice violations.
Small number of public water systems	A primacy agency that oversees small numbers of public water systems could have lower potential for public notice violations.	The SDWIS could <i>accurately</i> show no or few public notice violations.
Provide public notices to public water system	A primacy agency that drafts or completes a public notice for a public water system may result in the system's compliance with public notice requirements.	The SDWIS could <i>accurately</i> show no or few public notice violations.
Failure to track violations	A primacy agency issues notices of violation for not fulfilling public notice requirements but does not record public notice violations.	The SDWIS would <i>inaccurately</i> show no or few public notice violations.
Focus on compliance assistance	An EPA region that focuses on providing compliance assistance to tribal water systems instead of issuing notices of violations would issue fewer formal enforcement actions.	The SDWIS would <i>inaccurately</i> show no or few public notice violations.
Inconsistent classification of violations	A primacy agency that records public notice violations in a manner inconsistent with agency guidance.	The SDWIS would <i>inaccurately</i> show no or few public notice violations.
<b>Resulting in many violations in the SDWIS</b>		
Large number of public water systems	A primacy agency that oversees large numbers of public water systems has potential for higher number of public notice violations.	The SDWIS could <i>accurately</i> show high number of public notice violations.
More stringent reporting requirements	A primacy agency that holds public water systems to more stringent timelines for public notice delivery has potential for higher number of systems missing deadlines.	The SDWIS could <i>accurately</i> show high number of public notice violations.
Automated processes	A primacy agency that uses automated compliance determination processes could effectively identify situations that trigger public notice requirements and public notice violations.	The SDWIS could <i>accurately</i> show high numbers of public notice violations.
Dedicated compliance staff	A primacy agency with a dedicated public notice compliance staff could focus on identifying and tracking public notice violations.	The SDWIS could <i>accurately</i> show high numbers of public notice violations.
Decentralized organization of primacy agency	A primacy agency that has delegated authority to local agencies could lead to different interpretations of requirements.	The SDWIS could <i>inaccurately</i> show high numbers of public notice violations.

Source: OIG summary and analysis.

After the EPA presented primacy agencies with the one-time opportunity to resolve their legacy violations, open public notice violations continued to accumulate in the SDWIS. Twenty-six percent (26,846) of public notice violations issued to active public water systems between 2001 and 2017 remain open in the SDWIS (Figure 3), even though the public water systems have likely resolved the situation that prompted the need for public notice. SDWIS data also show that 12 percent (more than 12,000) of open public notice violations are *legacy* violations that occurred before 2013 (Figure 3).

**Figure 3: Compliance status of public notice violations, 2001 through 2017 (N = 101,361)**



Source: OIG analysis of public notice violation data in the SDWIS, retrieved on January 30, 2018.

**Promising Practices:**

***Identifying the Need for Public Notice Through Automatic Compliance Determinations***

Pennsylvania uses its drinking water data management system to track public notice. The system identifies the need for public notice through automatic compliance determinations.

***Adapting SDWIS***

North Carolina dedicated resources to develop add-ons to the SDWIS that allow its small number of compliance officers to manage and track public notices.

Regional drinking water staff said resource constraints led states to prioritize their public-notice work, with more focus on fulfilling drinking water requirements that directly affect public health, especially health-based violations that would require Tiers 1 and 2 public notices. Some states lack the resources to track or follow up on public notice violations in the SDWIS, enter data and close legacy public notice violations in the database.

The presence of open legacy violations in the SDWIS may cause the EPA and consumers to believe that public water systems do not resolve public notice violations and continue to be out of compliance. Resolving these open legacy public notice violations would improve the accuracy of SDWIS information on compliance with these requirements and assist the EPA in overseeing public notice.

## **Expected Upgrade to SDWIS Prime Does Not Include Actions to Improve Public Notice Data**

The EPA's *Fiscal Year 2018–2022 Strategic Plan* commits the agency to collaborating with primacy agencies to share more complete public water monitoring data through the SDWIS. Additionally, the EPA's Office of Water, Drinking Water Protection Division, commits to modernizing data systems, including the SDWIS, and working with partners to improve data completeness and quality for national decision-making and informing the public.

The Office of Water set goals for modernizing the SDWIS through the development of SDWIS Prime to address longstanding data management problems. These goals include improving data quality and adherence to drinking water requirements, as well as devising new business procedures for compliance determinations. However, these plans do not include correcting public notice violation data quality problems like those associated with legacy violations. Without taking this additional step, even after the implementation of SDWIS Prime, the public notice violation data available to the EPA, primacy agencies and consumers could remain incomplete and inconsistent.

### **Conclusion**

Without reliable data on public notice violations in the SDWIS, the EPA cannot consistently oversee (1) implementation of public notice requirements by public water systems and primacy agencies and (2) the national drinking water program. Additionally, the public does not have access to complete public notice violation data through this national database, which limits consumers' access to information needed to make informed decisions about protecting their health.

### **Recommendations**

We recommend that the Deputy Administrator:

8. Direct EPA regions to require primacy agencies to adhere to requirements for accurate quarterly entry of public notice violation data into the Safe Drinking Water Information System.

We recommend that the Assistant Administrator for Water and the Assistant Administrator for Enforcement and Compliance Assurance:

9. Implement a strategy and internal controls to improve the consistency of public notice violation data available in the EPA's new national drinking water database, including the review and update of open public notice violations prior to migrating the data to the new database.

## **Agency Response and OIG Evaluation**

The EPA responded to the draft report on July 8, 2019, and August 12, 2019.

Recommendation 8 is unresolved, with resolution efforts in progress, because the action official, the Deputy Administrator, did not respond to our draft report. The Office of Water and the Office of Enforcement and Compliance Assurance provided acceptable corrective action and estimated completion date for Recommendation 9.

The agency responses and the OIG's evaluation of those responses are presented in Appendices C and D.

The EPA also provided technical comments. Where appropriate, the OIG revised the report to address these technical comments.

# Status of Recommendations and Potential Monetary Benefits

## RECOMMENDATIONS

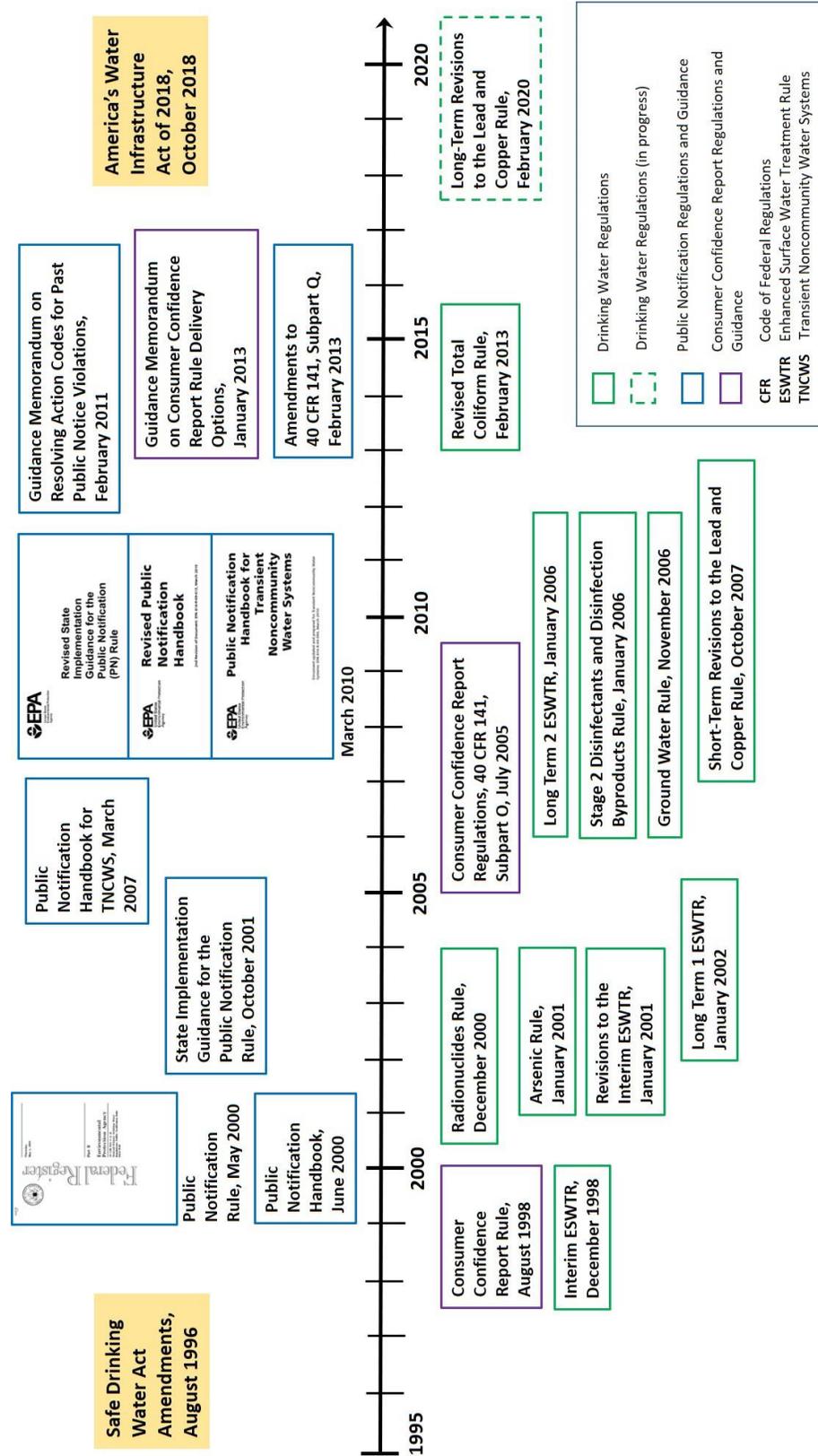
Rec. No.	Page No.	Subject	Status <sup>1</sup>	Action Official	Planned Completion Date	Potential Monetary Benefits (in \$000s)
1	19	Require EPA Regional Administrators to comply with public notice requirements of the Safe Drinking Water Act and the public notice regulations where the EPA directly implements the act.	U	Deputy Administrator		
2	19	Require EPA Regional Administrators to verify that primacy agencies within each region fully implement oversight of public notice responsibilities.	U	Deputy Administrator		
3	19	Define for primacy agencies and public water systems acceptable methods and conditions under which the electronic delivery of Tiers 2 and 3 notices meet the Safe Drinking Water Act's direct delivery requirement.	R	Assistant Administrator for Water	9/30/20	
4	19	Update the EPA's drinking water program review protocols to include steps for reviewing Tier 3 notices and for citing primacy agencies that do not retain complete public notice documentation.	R	Assistant Administrator for Water	12/31/20	
5	20	Update and revise the 2010 <i>Revised State Implementation Guidance for the Public Notification Rule</i> to include: <ul style="list-style-type: none"> <li>a. Public notice delivery methods that are consistent with regulations.</li> <li>b. Information on modern methods for delivery of public notice.</li> </ul>	R	Assistant Administrator for Water	6/30/20	
6	20	Update and revise the 2010 <i>Public Notification Handbooks</i> to include: <ul style="list-style-type: none"> <li>a. Public notice delivery methods that are consistent with regulations.</li> <li>b. Information on modern methods for delivery of public notice.</li> <li>c. Public notice requirements for the latest drinking water regulations.</li> <li>d. Procedures for public water systems to achieve compliance after violating a public notice regulation.</li> <li>e. Up-to-date references to compliance assistance tools.</li> <li>f. Additional resources for providing public notice in languages other than English.</li> </ul>	R	Assistant Administrator for Water	9/30/20	
7	20	Conduct a national review of the adequacy of primacy agency implementation, compliance monitoring, reporting and enforcement of the Safe Drinking Water Act's public notice requirements.	R	Assistant Administrator for Water and Assistant Administrator for Enforcement and Compliance Assurance	12/31/20	
8	25	Direct EPA regions to require primacy agencies to adhere to requirements for accurate quarterly entry of public notice violation data into the Safe Drinking Water Information System.	U	Deputy Administrator		
9	25	Implement a strategy and internal controls to improve the consistency of public notice violation data available in the EPA's new national drinking water database, including the review and update of open public notice violations prior to migrating the data to the new database.	R	Assistant Administrator for Water and Assistant Administrator for Enforcement and Compliance Assurance	9/30/20	

<sup>1</sup> C = Corrective action completed.

R = Recommendation resolved with corrective action pending.

U = Recommendation unresolved with resolution efforts in progress.

# Timeline of Public Notice-Related Regulations and Guidance Following the 1996 Amendments to the Safe Drinking Water Act



Source: OIG analysis of EPA information.

## **Prior EPA OIG Reports**

We identified two prior EPA OIG reports that were relevant to this audit:

- *EPA Is Taking Steps to Improve State Drinking Water Program Reviews and Public Water Systems Compliance Data*, Report No. [17-P-0326](#), July 18, 2017.
- *Drinking Water: EPA Needs to Take Additional Steps to Ensure Small Community Water Systems Designated as Serious Violators Achieve Compliance*, Report No. [16-P-0108](#), March 22, 2016.

In *EPA Is Taking Steps to Improve State Drinking Water Program Reviews and Public Water Systems Compliance Data*, the OIG reported that the agency's program reviews did not exhibit the level of comprehensiveness and region-to-region consistency shown in previous data verifications. Most of the reviews examined by the OIG did not cover all eight drinking water rules with monitoring and reporting requirements. The EPA has worked to address this lack of consistency and comprehensiveness by establishing a national workgroup that developed guidance for conducting program reviews, developing tools for regional staff to use during on-site reviews, and holding training sessions on program review protocol. Based on the agency's engagement to correct the identified issues in this report, the OIG made no recommendations.

In *Drinking Water: EPA Needs to Take Additional Steps to Ensure Small Community Water Systems Designated as Serious Violators Achieve Compliance*, the OIG reported that small community water systems face challenges to providing safe, reliable and affordable drinking water to customers, such as adapting to new regulatory standards, aging infrastructure, source water availability and protection issues, and budgetary constraints. Related to public notice, the OIG found that neither EPA Region 2 nor the Puerto Rico Department of Health knew whether systems in Puerto Rico issued required public notices for drinking water violations. In response, the OIG recommended that Region 2, among other steps, address deficiencies in the public notice system in Puerto Rico. Region 2 agreed and, as of March 28, 2018, certified to the OIG that it completed all agreed-to corrective actions.

## Agency's Supplemental Response to Draft Report and OIG Response



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

AUG 12 2019

**MEMORANDUM**

**SUBJECT:** Supplemental Response to the Office of Inspector General Draft Project No. OPE-FY17-0020, "Drinking Water: EPA Must Improve Public Notice Oversight to Better Protect Human Health," dated May 22, 2019

**FROM:** David P. Ross, Assistant Administrator  
Office of Water

Susan Parker Bodine, Assistant Administrator  
Office of Enforcement and Compliance Assurance

**TO:** Kathlene Butler, Director of Water Issues  
Office of Audit and Evaluation

Thank you for the opportunity to provide additional clarification to the EPA's intended corrective actions to the Office of Inspector General's draft report "Drinking Water: EPA Must Improve Public Notice Oversight to Better Protect Human Health." As a follow-up to the Agency's response letter dated July 8, 2019, below are the EPA's intended corrective actions to OIG's recommendations.

**AGENCY'S RESPONSE TO REPORT RECOMMENDATIONS**

**Agreements**

No.	Recommendation	High-Level Intended Corrective Action(s)	Estimated Completion by Quarter and FY
1	Require EPA regional administrators to comply with public notice requirements of the Safe Drinking Water Act and the public notice regulations where the EPA directly implements the act.	1.1 The EPA will issue an implementation memorandum to the regional Water Division Directors as a reminder of their roles and responsibilities for implementation of the PN Rule.	1 <sup>st</sup> Quarter FY 2020
		1.2 The EPA will provide training(s) targeted for regional and primacy agency staff. The goal of the training will be to provide an overview of PN requirements and share tools and resources.	2 <sup>nd</sup> Quarter FY 2020

No.	Recommendation	High-Level Intended Corrective Action(s)	Estimated Completion by Quarter and FY
2	Require EPA regional administrators to verify that primacy agencies within their region fully implement their oversight of public notice responsibilities.	2.1 The EPA will issue an implementation memorandum to the regional Water Division Directors as a reminder of their roles and responsibilities for implementation of the PN Rule. This memorandum will clarify the regions' oversight role of primacy agencies for implementing the PN Rule.	1 <sup>st</sup> Quarter FY 2020
		2.2 The EPA will provide training(s) targeted for regional and primacy agency staff. The goal of the training will be to provide an overview of PN requirements and share tools and resources.	2 <sup>nd</sup> Quarter FY 2020
3	Define for primacy agencies and public water systems acceptable methods and conditions under which the electronic delivery of Tier 2 and 3 notices meet the Safe Drinking Water Act's direct delivery requirement.	3.1 The EPA will issue a memorandum that discusses and clarifies the appropriate electronic delivery methods for Tier 2 and Tier 3.	3 <sup>rd</sup> Quarter FY 2020
		3.2 Following the issuance of the memorandum, the EPA will host a training session for primacy agencies, public water systems and other water sector stakeholders to understand the appropriate mechanisms to utilize for electronic delivery of public notifications.	4 <sup>th</sup> Quarter FY 2020
4	Update the EPA's drinking water program review protocol to include steps for reviewing Tier 3 notices and for citing primacy agencies that do not retain complete public notice documentation.	4.1 The EPA will update the review protocol to address PN record keeping requirements in the summary report.	2 <sup>nd</sup> Quarter FY 2020
		4.2 The Agency recommends using the SDWA PWSS Annual Program Review as the most effective tool for reviewing Tier 3 PN implementation. After discussion between the OIG and the EPA, the OIG agreed with the EPA recommendation, and intends to update the report to reflect this. The EPA will update the PWSS program review protocol to include review for Tier 3 PN for the next two consecutive fiscal years.	1 <sup>st</sup> Quarter FY 2021
5	Update and revise the 2010 Revised State Implementation Guidance for the Public Notification Rule to include: <ul style="list-style-type: none"> <li>a. Public notice delivery methods that are consistent with regulations.</li> <li>b. Information on modern methods for delivery of public notice.</li> </ul>	5.1 The EPA will revise the State Implementation Guidance per OIG's recommendation.	3 <sup>rd</sup> Quarter FY 2020

<b>No.</b>	<b>Recommendation</b>	<b>High-Level Intended Corrective Action(s)</b>	<b>Estimated Completion by Quarter and FY</b>
6	<p>Update and revise the 2010 Public Notification Handbooks to include:</p> <ul style="list-style-type: none"> <li>a. Public notice delivery methods that are consistent with regulations.</li> <li>b. Information on modern methods for delivery of public notice.</li> <li>c. Public notice requirements for the latest drinking water regulations.</li> <li>d. Procedures for public water systems to achieve compliance after violating a public notice regulation.</li> <li>e. Up-to-date references to compliance assistance tools.</li> <li>f. Additional resources for providing public notice in languages other than English.</li> </ul>	6.1 The EPA will revise the Public Notification Handbook per OIG's recommendation.	4 <sup>th</sup> Quarter FY 2020
7	Conduct a national review of the adequacy of primacy agency implementation, compliance monitoring, reporting and enforcement of the Safe Drinking Water Act's public notice requirements.	7.1 The EPA's OECA and OW will conduct a national review of the adequacy of primacy agency implementation, compliance monitoring, reporting, and enforcement of the SDWA PN requirements.	4 <sup>th</sup> Quarter FY 2020
		7.2 OECA will pilot test a new framework for regional review of primacy agency response to violations, including whether public notice requirements are met. Upon completion of the pilot, OECA will review the results and, if the approach is effective, will finalize the framework and implement a national program for periodic regional reviews of primacy agencies.	1 <sup>st</sup> Quarter FY 2021
8	Direct EPA regions to require primacy agencies to adhere to requirements for the accurate quarterly entry of public notice violation data into the Safe Drinking Water Information System.	8.1 The EPA will include PN data entry requirements for SDWIS in the memorandum identified in Corrective Action 1.1 and 2.1.	1 <sup>st</sup> Quarter FY 2020
		8.2 Following the memo, the EPA will provide training(s) targeted for regional and primacy agency staff.	3 <sup>rd</sup> Quarter FY 2020

No.	Recommendation	High-Level Intended Corrective Action(s)	Estimated Completion by Quarter and FY
9	Implement a strategy and internal controls to improve the consistency of public notice violation data available in the EPA's new national drinking water database, including the review and update of open public notice violations prior to migrating the data to the new database.	9.1 The EPA will identify appropriate methods for primacy agencies to resolve outstanding PN violations. OECA and OW will jointly issue a new memo similar to the 2011 memo " <i>Guidance for SDWA Primacy Agencies on How to Enter Resolving Action Codes into SDWIS for Past Public Notice Violations and Clarification on How to Address Public Notification Violations in Certain Circumstances.</i> "	3 <sup>rd</sup> Quarter FY 2020
		9.2 Following the issuance of the memorandum, the OECA and OW will provide training for regional and primacy agency staff.	4 <sup>th</sup> Quarter FY 2020

We appreciate the engagement of the OIG on this draft report. Please let us know or our staff, Steven Moore for OW (Moore.Steven@epa.gov, 202-564-0992) and Gwendolyn Spriggs for OECA (Spriggs.Gwendolyn@epa.gov, 202-564-2439), if you have any questions related to this letter and the EPA's intended corrective actions.

**OIG Response:** In its supplemental August 12, 2019, memorandum, the Assistant Administrator for Water and the Assistant Administrator for Enforcement and Compliance Assurance provided acceptable corrective actions and estimated completion dates for Recommendations 3–7. These recommendations are resolved with corrective actions pending.

In follow-up email communications, the Office of Water and the Office of Enforcement and Compliance Assurance confirmed that through the corrective actions proposed in response to Recommendation 9, the EPA will implement a strategy and internal controls to improve the consistency of public notice violation data available in the SDWIS, including the review and update of open public notice violations. The strategy will include identifying appropriate methods for primacy agencies to resolve outstanding public notice violation data in the SDWIS and issuing a memorandum authorizing the use of these violation data resolution methods. The internal controls will include training EPA regional and primacy agency staff on these resolution methods. Given these clarifications, the corrective actions and estimated completion dates for Recommendation 9 are acceptable. Recommendation 9 is resolved with corrective actions pending.

Recommendations 1, 2 and 8 are unresolved, with resolution efforts in progress, because the action official for the recommendations, the Deputy Administrator, did not respond to our draft report.

## **Agency's Initial Response to Draft Report and OIG Response**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUL 8 2019

### **MEMORANDUM**

**SUBJECT:** Response to the Office of Inspector General Draft Project No. OPE-FY17-0020, "Drinking Water: EPA Must Improve Public Notice Oversight to Better Protect Human Health," dated May 22, 2019

**FROM:** David P. Ross, Assistant Administrator  
Office of Water *DPoss*

Susan Parker Bodine, Assistant Administrator  
Office of Enforcement and Compliance Assurance *Susan Parker Bodine*

**TO:** Khadija Walker, Acting Director of Water Issues  
Office of Audit and Evaluation

Thank you for the opportunity to review the subject audit report. The EPA has worked closely with the Office of Inspector General (OIG) to provide detailed information regarding the implementation of the drinking water program via a series of conference calls, and with this response, the Agency is transmitting a document that provides several technical comments and clarifications on the draft version of the report.

### **THE EPA'S OVERALL POSITION**

The EPA strongly supports public health protection through implementation of the Safe Drinking Water Act, and works collaboratively with states, tribes, and territories to provide oversight and assistance in the implementation of the National Primary Drinking Water Regulations (NPDWR). NPDWRs address over 90 contaminants for approximately 147,000 public water systems nationwide. The EPA supports the implementation of NPDWRs through the Public Water System Supervision program, the Drinking Water State Revolving Fund loans and set-asides, and the Agency's training, technical assistance, and oversight efforts. The EPA is committed to continuing to provide tools that will modernize management of drinking water data, such as the recent release of the Compliance Monitoring Data Portal to support electronic reporting and the development of the updated Safe Drinking Water Information System (SDWIS

Prime). The EPA also strongly supports the consumer's right to know about the quality of their drinking water through Consumer Confidence Reports (CCR), public education, and public notice (PN) requirements. The EPA will also continue to enhance our oversight tools, such as the annual Public Water System Supervision (PWSS) program review, to ensure we are able to identify successes and challenges in implementation of drinking water regulations, as well as training and technical assistance needs for states and drinking water systems.

## THE EPA'S RESPONSE TO REPORT RECOMMENDATIONS

The EPA welcomes the OIG's recommendations on potential improvements to the implementation and enforcement of the PN requirements. However, the EPA found that the draft report inaccurately describes both the PN requirements and implementation of the program, as well as statements made by the EPA Regions. The EPA is transmitting with this response an electronic version of the OIG's draft report that contains clarifications, edits and technical recommendations. The EPA will be available to discuss these comments with the OIG to address any questions or provide alternative language or examples.

### **Recommendations #1 & #2:**

The EPA will be able to implement Recommendations #1 and #2 as drafted in the report, which state that the Deputy Administrator shall require the EPA regional administrators to comply with PN requirements and verify that their region fully implements oversight of the PN requirements.

The EPA continues to implement PN requirements and works collaboratively with the primacy agencies and the public water systems to provide training and technical assistance and address interpretation challenges. The draft report notes that *primacy agencies do not consistently track public notice or enforce public notice requirements* and has inaccurately characterized implementation practices by some of the EPA Regions. On page 10, the report incorrectly states that *Region 8 personnel told us that the region has not allocated resources to track public notice for 20 years*. The EPA Region 8 program provided the following response to this statement:

*When a Tier 1 violation occurs, Region 8 immediately notifies the water system operator of the violation and PN requirements and provides a template for PN. Region 8 routinely issues formal enforcement actions for Tier 1 violations, which always require the issuance of PN. Region 8 ensures that appropriate PN is conducted to notify the public of these acute health-based violations. There have been no Tier 1 PN violations in Region 8 because of this practice. Region 8 also implements, tracks, and enforces many aspects of Tier 2 and Tier 3 PN violations, including: notifying water system operators of the violation and PN requirements, providing a template for PN, ensuring the appropriate PN is distributed when the underlying violations are included in formal enforcement orders, and reviewing every CCR to ensure it accurately includes Tier 1, 2, and 3 violations from the reporting year. Region 8 utilizes the CCR review to enhance PN implementation in Region 8.*

**OIG Response:** Region 8 personnel told us that for 20 years the region has not allocated resources for a public notice rule manager. We discussed the implications of not having someone dedicated to the public notice rule. As Region 8’s response above states, “Region 8 also implements, tracks, and enforces **many** aspects of Tier 2 and Tier 3 [public notice] violations” (emphasis added). Through Recommendation 1, we ask that Region 8 comply with all public notice requirements where it directly implements the SDWA.

The draft report inaccurately states that Region 6 is not complying with the Tier 3 PN timing requirements when delivering the PN in the CCRs. Region 6 does not allow Tier 3 notices to be issued outside of the 1-year window. Region 6 confirmed that they allow the use of the CCR as long as the 1-year requirement is met. Any violations that occur outside of the 1-year period must be issued separately to meet the 1-year time period.

**OIG Response:** On March 20, 2018, Region 6 responded in writing to our questions, contradicting the statement made above. Region 6 wrote, “We have allowed water systems to address Tier 3 [public notices] in the following year’s [consumer confidence report] even if the violation occurred in the early part of the previous year (the [consumer confidence report], and the [public notice], would be delivered more than 365 [days] after the violations occurred).”

The draft report incorrectly states on page 11 that Region 9 does not track Tier 3 PNs. Region 9 does track Tier 3 PNs through the generation and distribution of CCRs for community water systems. Region 9 produces draft CCRs for each public water system that includes all Tier 3 violations from the previous calendar year. The region reviews all final CCRs to ensure that Tier 3 notices are included and track the delivery and certification of those reports to the water system customers. Region 9 issues violations for failure to issue a CCR by July 1<sup>st</sup> or failure to include all required tier 3 PNs. Region 9 acknowledges that they did allow Tier 3 PNs to be issued outside of the 1-year window through CCRs for violations that might have occurred in the 1<sup>st</sup> and 2<sup>nd</sup> quarters of the calendar year and will work to implement corrections to address this issue.

**OIG Response:** On October 27, 2017, Region 9 responded in writing to our questions, contradicting the agency response above. Region 9 wrote, “[T]he Region is not tracking Tier 3 [public notice] or meeting all the proper [public notice] protocols when using the [consumer confidence report] for [public notice] requirements.”

### **Recommendation #3**

The EPA will be able to implement Recommendation #3, which states that the EPA will define for primacy agencies and public water systems acceptable methods and conditions under which electronic delivery of Tier 2 and Tier 3 notices meet SDWA’s direct delivery requirement.

The draft report states that the *EPA suppresses adopting innovative methods, such as telephone alerts, email and social media, which would efficiently and effectively reach consumers*. The EPA discussed extensively with the OIG throughout the process of the audit that the PN regulations specifically allow systems to work with the primacy agency to use appropriate

delivery methods best suited to their community. The goal for PN delivery is to reach all persons served by the system. The EPA acknowledges that communities may favor specific communication methods, for example, local newsletters or radio, and therefore the Agency allows systems and primacy agencies the flexibility within the PN regulation to identify the most effective delivery methods.

The draft report recommendations for innovative delivery methods are inconsistent with existing policies in the 2013 *Safe Drinking Water Act – Consumer Confidence Rule Delivery Options* memorandum (CCR Options memo) developed following a retrospective review. In the CCR Options memo, the EPA specifically identified that social media platforms would not meet direct delivery requirements because they are membership-based and require the customer to join that platform, and the EPA also explained that automated phone calls are not considered direct delivery because the entire content of a notification that meets the requirements of the federal law could not be provided in a phone call.

**OIG Response:** We modified the report to clarify that public notice delivery through social media would be a method that would supplement other direct delivery methods. The determination that automated phone calls are not considered direct delivery for the purpose of delivering the consumer confidence report may not apply to delivery of public notices, as the required elements for public notices are different from the report. In our opinion, using automated phone messages may be more effective than relying on broadcast media, as the public water system would have complete control over the message sent.

To illustrate the OIG’s recommendation of alternative electronic delivery methods, the report includes a case study on page 15 titled *Case Study: Public Notice in DeKalb County, Georgia*. This example shows the use of Facebook and Twitter to provide notice, which is inconsistent with the CCR Options memo and does not meet the federal PN content requirements. The EPA supports the use of various supplemental delivery methods like these, in addition to the minimum delivery methods, in order to ensure all customers, including non-bill paying customers, are notified. However, the EPA strongly urges that this case study be removed as it does not meet the PN requirements and could create confusion in the regulated community. An alternate option is for the OIG to add a paragraph that clearly states that this case study does not meet the PN requirements and was included as an example of supplemental notification via social media.

**OIG Response:** The case study stated that the water system also alerted consumers through traditional press releases sent to broadcast media. We modified the final report to further clarify the nature of the notice.

The EPA has clearly outlined the requirements for electronic delivery of CCR in the CCR Options memo. Tier 3 PN notifications, if eligible to be reported in the CCR report for that year, may be shared electronically with distribution of the CCR report.

**OIG Response:** The EPA needs to clearly inform public water systems and primacy agencies that electronic delivery of Tier 3 public notices through inclusion in the consumer confidence report meets the requirement for direct delivery.

The report states that electronic delivery of Tier 2 PN would more effectively reach consumers, but existing information does not support that statement. Information provided to the EPA by the members of the regulated community that have implemented electronic CCR delivery, indicates that water systems do not have a comprehensive list of customer emails, and are simply including a URL link with the bill or postcard that is mailed to the customer. In addition, the primacy agencies have indicated that, on average, less than 20% of the systems are using electronic delivery of CCR. For this reason, responsible implementation of Tier 2 PN relies on the primacy agency working with their public water systems to determine the most effective way to deliver this critical public health information.

**OIG Response:** The draft report stated that “[a]llowing electronic delivery of Tier 2 and 3 notices ... has the **potential** to more effectively reach consumers” (emphasis added). Unless the EPA clearly informs public water systems and primacy agencies that electronic delivery may be used to deliver Tiers 2 and 3 public notices, as has been allowed since 2013 with consumer confidence reports, the primacy agencies and public water systems will not include electronic delivery as an option when they determine effective ways to deliver the notices.

### **Recommendations #5 & #6**

The OIG recommends that the EPA update the 2010 Guidance and the 2010 Handbook because these documents are inconsistent with regulations, out of date, and have other deficiencies. Upon further clarification from the OIG, the EPA learned that this statement was made because the EPA did not include the term *another delivery method* in Table 3 of the 2010 Guidance and 2010 Handbook, has not deleted the PN iWriter as a resource tool, and published the Revised Total Coliform Rule (RTCR) PN requirements in a stand-alone document. The EPA agrees that the 2010 Guidance and 2010 handbook would benefit from the deletion of the reference to the PN iWriter and the addition of the already published RTCR PN requirements. However, the EPA does not believe that the nature of these updates impeded the primacy agencies’ ability to implement the regulation or that the manuals are inconsistent with the regulations. The EPA also disagrees with characterization that the guidance documents narrowly define delivery method requirements. The regulations and guidance documents identify minimum delivery requirements and allow public water systems to work with their primacy agency to use appropriate delivery methods best suited to their community, which is reflected in the guidance materials.

The draft report also recommends that the EPA provide additional resources for providing PN in languages other than English. The EPA recognizes that translating technical information and notices are a challenge. Literal translation may not adequately portray the message due to differences in sentence structures and word choices used across languages, in addition to unique cultural styles within a language. The EPA provides translated sentences in 27 languages to convey that the notice includes important information regarding their drinking water and to please speak with someone who can explain the information provided. The EPA took this approach after learning that earlier translations were not accurate and were confusing to the public. It is important for the public water system to have the flexibility to invest in their translations and tailor them based on the unique characteristics of their community.

**Recommendation #7:**

The OIG recommends that the EPA's Office of Water and Office of Enforcement and Compliance Assurance conduct a national review of the adequacy of primacy agency implementation, compliance monitoring, reporting, and enforcement of the SDWA PN requirements. The EPA will be able to implement this recommendation. However, the EPA stresses that this review must be done in the context of the SDWA PWSS Annual Review, not file reviews as implied by the draft report. The draft report states that the EPA's protocol for reviewing primacy agency oversight (file review protocol) does not cover all key PN requirements, which thus limits both information and focus on PN at primacy agencies. The file review protocol states that *only PN associated with violations confirmed by the audit team should be reviewed*. The PN for Tier 3 violations can be included in CCRs and may not appear until after the file review period. For this reason, only PN for Tier 1 and 2 violations are typically reviewed. The file review protocol includes information about PN throughout the document, linked to the rule specific cases that require PN. The file review protocol is not the appropriate tool to use to analyze Tier 3 PN implementation.

**OIG Response:** We agree that the annual Public Water System Supervision review would be an appropriate vehicle for reviewing Tier 3 public notice and added text to the report acknowledging this alternative.

**Recommendation #8:**

The OIG recommends that the EPA regions adhere to accurately entering violations into SDWIS on a quarterly basis. Part of accurately implementing the PN program is to report violations on a quarterly basis. The EPA intends to implement this recommendation in conjunction with Recommendation #1 and #2 in order to improve implementation consistency of the PN requirements across the EPA regions. The EPA recommends that the OIG consider including Recommendation #8 as part of Recommendation #1 and 2.

**OIG Response:** We agree that the actions to address Recommendation 8 may be taken in conjunction with actions to address Recommendations 1 and 2.

**Recommendation #9:**

The OIG recommends that the EPA implement a strategy and internal controls to improve the consistency of PN violation data in the EPA's national drinking water database, including the review and update of old PN violations prior to migrating the data to the new database. The EPA will be able to implement this recommendation. The EPA is currently working on SDWIS Prime development and will be taking these recommendations into account as development of the database continues.

We appreciate the engagement of the OIG on this draft report and look forward to working together to address these comments. We strongly recommend that the OIG update the sections highlighted in this letter, as well as consider the additional comments provided by the EPA via track changes on the draft report. It is critical that the regulated community is not misinformed regarding the law as applied to PN. As written, the report seems to imply that the EPA is providing inconsistent guidance and resources to the regulated community and is limiting their ability to seek alternative methods that best fit their communities.

Please let us know if you have any questions related to this letter. The EPA looks forward to meeting with the OIG again regarding this report to address questions, edits, and other comments to ensure the accuracy of this report and enhance implementation of the PN regulation.

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