

The EPA Should Better Prepare to Implement Public Notification Requirements When Lead in Drinking Water Poses Serious Risks to Human Health

June 10, 2024 | Report No. 24-P-0044



Report Contributors

Joon Choi
Michael Davis
Tim Roach
Denton Stafford
Lela Wong

Abbreviations

ALE	Action Level Exceedance
C.F.R.	Code of Federal Regulations
EPA	U.S. Environmental Protection Agency
LCR	Lead and Copper Rule
LCRI	Lead and Copper Rule Improvements
LCRR	Lead and Copper Rule Revisions
OGWDW	Office of Ground Water and Drinking Water
OIG	Office of Inspector General
SDWA	Safe Drinking Water Act
SDWIS	Safe Drinking Water Information System
U.S.C.	United States Code
WIIN Act	Water Infrastructure Improvements for the Nation Act

Key Definitions

Please see Appendix A for key definitions.

Cover Image

A glass of tap water. (U.S. Geological Survey image)

Are you aware of fraud, waste, or abuse in an EPA program?

EPA Inspector General Hotline

1200 Pennsylvania Avenue, NW (2431T)
Washington, D.C. 20460
(888) 546-8740
(202) 566-2599 (fax)
OIG.Hotline@epa.gov

Learn more about our [OIG Hotline](#).

EPA Office of Inspector General

1200 Pennsylvania Avenue, NW (2410T)
Washington, D.C. 20460
(202) 566-2391
www.epaoig.gov

Subscribe to our [Email Updates](#).
Follow us on X (formerly Twitter) [@EPAoig](#).
Send us your [Project Suggestions](#).



At a Glance

The EPA Should Better Prepare to Implement Public Notification Requirements When Lead in Drinking Water Poses Serious Risks to Human Health

Why We Did This Audit

To accomplish this objective:

The U.S. Environmental Protection Agency Office of Inspector General initiated this audit based on a request from the U.S. Senate Committee on Homeland Security and Governmental Affairs. The objective of the audit is to assess the EPA's preparation to implement the public notification requirements under section 2106 of the Water Infrastructure Improvements for the Nation Act.

The Act requires the EPA to implement notification requirements for a lead-action-level exceedance if the exceedance "has the potential to have serious adverse effects on human health as a result of short-term exposure." This requires public water systems to notify the persons served, the state primacy agency, and the EPA as soon as practicable, but not later than 24 hours after systems learn of the exceedance. The EPA is also required to provide the notices within 24 hours after it is notified if the public water system or state has not done so.

To support these EPA mission-related efforts:

- *Operating efficiently and effectively.*
- *Ensuring clean and safe water.*

To address this top EPA management challenge:

- *Maximizing compliance with environmental laws and regulations.*

Address inquiries to our public affairs office at (202) 566-2391 or OIG.PublicAffairs@epa.gov.

[List of OIG reports](#)

What We Found

At the time of our audit, the EPA was not ready to comply with the public notification requirements under section 2106 of the Water Infrastructure Improvements for the Nation Act. On January 15, 2021, the EPA published a final rule to implement these requirements for public water systems. The final rule included the EPA's determination that a lead-action-level exceedance, or lead ALE, is a Tier 1 public notification because it can have serious adverse effects on human health as a result of short-term exposure. The notification must provide information about the impacts of lead and what people can do to protect themselves. Although the Office of Water reported that it was in the process of developing a strategy, it had not developed a plan or milestones or provided guidance to help EPA regions, states, and water systems to be ready to comply with the notification requirements by the compliance date of October 16, 2024. The Office of Water also does not receive data in a timely manner to monitor lead ALE, oversee water systems' compliance with the notification requirements, and provide the notices if water systems and states have not done so. Based on tap water samples reported in the EPA's tracking system from January 2021 through March 2023, we identified 498 water systems with lead ALE, serving about 2.3 million people. With millions of people potentially affected by lead ALE, water systems, states, and the EPA must be ready to comply by October 2024.

The public could face continued exposure to lead without immediate information for mitigating the health risks if the EPA, states, and water systems are not ready to comply with the public notification requirements by the October 2024 compliance date.

Recommendations and Planned Agency Corrective Actions

We recommend that the assistant administrator for Water establish a plan for implementing the Tier 1 lead ALE public notification requirements so that water systems, the states, and the EPA are ready to comply by October 16, 2024. We also recommend that the assistant administrator develop procedures to receive and track lead ALE information as soon as it is available to the states to ensure compliance with the public notification requirements. The Agency concurred with our two recommendations and provided acceptable planned corrective actions and estimated milestone dates. These recommendations are resolved with corrective actions pending.



OFFICE OF INSPECTOR GENERAL
U.S. ENVIRONMENTAL PROTECTION AGENCY

June 10, 2024

MEMORANDUM

SUBJECT: The EPA Should Better Prepare to Implement Public Notification Requirements When Lead in Drinking Water Poses Serious Risks to Human Health
Report No. 24-P-0044

FROM: Sean W. O'Donnell, Inspector General *Sean W O'Donnell*

TO: Bruno Pigott, Acting Assistant Administrator
Office of Water

This is our report on the subject audit conducted by the U.S. Environmental Protection Agency Office of Inspector General. The project number for this audit was [OA-FY23-0034](#). This report contains findings that describe the problems the OIG has identified and corrective actions the OIG recommends. Final determinations on matters in this report will be made by EPA managers in accordance with established audit resolution procedures.

The Office of Water is responsible for the issues discussed in this report.

In accordance with EPA Manual 2750, your office provided acceptable planned corrective actions and estimated milestone dates in response to OIG recommendations. All recommendations are resolved, and no final response to this report is required. If you submit a response, however, 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.

We will post this report to our website at www.epaoig.gov.

Table of Contents

Purpose	1
Background.....	1
Lead and Copper Rule.....	1
WIIN Act Section 2106.....	2
Tracking and Reporting for Exceedance of the Lead Action Level	4
Responsible Office	5
Scope and Methodology	6
Prior Report	6
Results.....	7
Lack of Implementation Plan for the Tier 1 Lead ALE Notice	7
Timely Data Needed for Compliance Oversight and Public Notification	9
Lack of Timely Notification Prolongs Public Exposure to Health Risks.....	10
Conclusions.....	10
Recommendations	10
Agency Response and OIG Assessment	11
Status of Recommendations	12

Appendixes

A	Key Definitions	13
B	Agency's Response to the Draft Report	14
C	Distribution	17

Purpose

The U.S. Environmental Protection Agency Office of Inspector General [initiated](#) this audit based on a request from the U.S. Senate Committee on Homeland Security and Governmental Affairs. The objective of the audit, as revised on May 2, 2023, is to assess the EPA's preparation to implement the public notification requirements under section 2106 of the Water Infrastructure Improvements for the Nation, or WIIN, Act.¹

Top management challenge addressed

This audit addresses the following top management challenge for the Agency, as identified in the OIG's *The EPA's Fiscal Year 2024 Top Management Challenges [report](#)*, issued November 15, 2023:

- Maximizing compliance with environmental laws and regulations.

Background

According to the EPA, there is no safe level of exposure to lead in drinking water. Lead is persistent, and it can accumulate in the body over time. Even low levels of lead in children's blood can result in behavior and learning problems, lower IQ, hyperactivity, slowed growth, hearing problems, and anemia. On December 16, 2016, the WIIN Act was passed. Section 2106 of the Act amended section 1414(c)(2) of the Safe Drinking Water Act, or SDWA, to require, among other things, public water systems to notify persons served within 24 hours of learning of a lead-action-level exceedance, or lead ALE, that "has the potential to have serious adverse effects on human health as a result of short-term exposure." We will refer to this notification as the **Tier 1 lead ALE notice** in this report.

Lead and Copper Rule

As authorized under SDWA section 1413, the EPA may delegate authority for administering and enforcing drinking water regulations to states. This authority is known as **primacy**. The EPA has approved primacy for all U.S. territories, the Navajo Nation, and 49 states but retains primacy for Wyoming, the District of Columbia, and Indian tribes other than the Navajo Nation. In this report, we will refer to an entity with primacy as a state. While states have primacy for drinking water regulations, the EPA has oversight responsibilities to ensure states and their water systems are appropriately implementing SDWA.

SDWA authorizes the EPA to establish national drinking water regulations for water systems. This includes regulations to control lead and copper in drinking water, known as the Lead and Copper Rule,

¹ WIIN Act section 2106 is codified at 42 U.S.C. § 300g-3(c). The report only addresses the notice requirements under 42 U.S.C. § 300g-3(c)(2), which was implemented by adding lead-action-level exceedances to the Tier 1 public notice requirements as provided at 40 C.F.R. § 141.202.

or LCR.² The LCR was published in June 1991 and has undergone various revisions, including [revisions](#) on January 15, 2021, known as the Lead and Copper Rule Revisions, or the LCRR.

The LCR establishes requirements for corrosion control treatment, lead service line replacement, and public education, among other things. The LCR also establishes monitoring requirements—including methods for collecting tap water samples to determine the lead concentration in drinking water—and outlines actions water systems must take when more than 10 percent of tap water samples collected during a monitoring period show lead above the action level of 15 parts per billion. One of these actions is to provide public education materials to the community served by the water system no later than 60 days after the end of the monitoring period in which a lead exceedance was detected.³ Public education materials must describe, among other things, the health effects of lead and the steps the public can take to reduce its exposure to lead.

The lead action level is exceeded if the concentration of lead in more than 10 percent of the tap water sample tested during the monitoring period, or the 90th percentile sample result, is greater than 15 parts per billion.

WIIN Act Section 2106

The WIIN Act amended SDWA section 1414(c)(2)(C) to require EPA regulations to specify notification procedures for a lead ALE if the exceedance “has the potential to have serious adverse effects on human health as a result of short-term exposure.” This requires public water systems to notify the persons served, their state, and the EPA as soon as practicable, but not later than 24 hours after systems learn of the lead ALE. The WIIN Act amendments to SDWA section 1414(c)(2)(D) require the EPA to provide the notices within 24 hours after the Agency is notified of the exceedance if the public water system or state has not provided the required notices. The notices must provide information such as the impacts of lead and what people can do to protect themselves.

SDWA section 1414(c)(2)(A) requires the EPA to issue regulations setting forth the manner, frequency, form, and content of notices after consulting the states. The EPA’s regulations at 40 C.F.R. part 141, subpart Q, implement this requirement (“Public Notification of Drinking Water Violations”). To comply with the WIIN Act, the EPA issued regulations to implement the public notification requirements for lead ALE, along with its LCR revisions. To make such updates, the EPA must follow an administrative process for developing and issuing regulations and comply with all applicable requirements, including providing public notice of the updates and the opportunity to comment on a proposed rule before the final rule is published. The EPA issued a notice of proposed rulemaking for the LCRR on November 13, 2019, and published the final rule on January 15, 2021, with an effective date of March 16, 2021, and a compliance date of January 16, 2024. The final rule established that lead ALEs require a Tier 1 public notification,

² The LCR, as amended, is 40 C.F.R. part 141 subpart I.

³ The lead action level is set forth in 40 C.F.R. § 141.80(c). The January 2021 revisions to the LCR did not change the action level of 15 parts per billion.

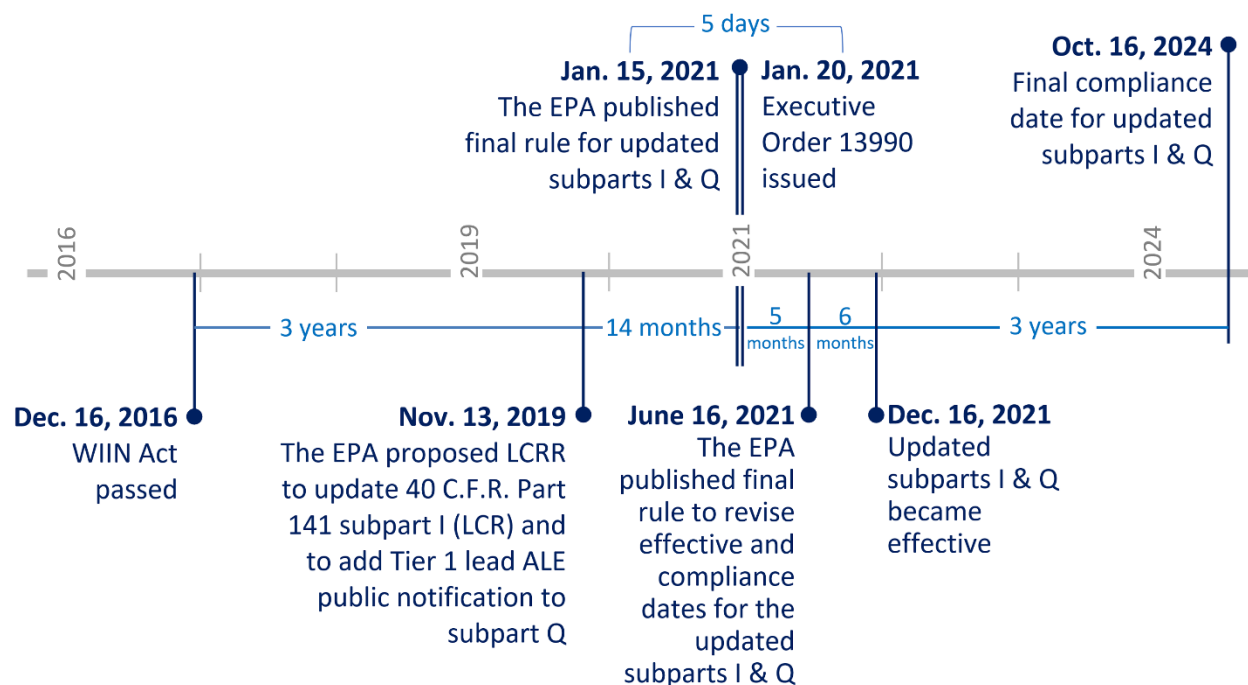
which is the EPA's most urgent notification under national primary drinking water regulations. This Tier 1 public notification is in addition to the public education materials required by 40 C.F.R. § 141.85.

The effective date is when the new rule is codified into the Code of Federal Regulations and the compliance date is when water systems must comply with the rule.

Delay of Effective and Compliance Dates

On January 20, 2021, the president issued Executive Order 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, directing federal agencies to review certain regulations to ensure regulatory decisions are guided by the best science and prioritize environmental justice, among other things. As a result, the EPA postponed the effective date of the updated regulations, including the LCR revisions and the Tier 1 lead ALE public notification, to allow for further public comments and EPA review in accordance with the executive order. The final rule published on June 16, 2021, was effective as of December 16, 2021, and has a compliance date of October 16, 2024. The new compliance date is about three years after the new effective date. This gives time for the EPA, states, and water systems to take necessary actions to comply with the LCR revisions and the Tier 1 lead ALE public notification requirements. Figure 1 provides a timeline of the key events related to the LCRR, including the Tier 1 lead ALE public notification requirements.

Figure 1: Timeline for implementation of the Tier 1 lead ALE notification requirements



Source: OIG summary of events. (EPA OIG image)

States Primacy Application Extension

One of the steps for states' compliance is to request EPA approval of its revised primacy program to adopt new or revised regulations. To be granted primacy, states must adopt regulations which are no less stringent than the national primary drinking water regulations. To retain primacy, 40 C.F.R. § 142.12 requires states to submit final requests to the EPA to approve program revisions that adopt the LCRR requirements no later than two years after the promulgation date of the revised regulation, or by January 2023. On December 17, 2021, the EPA extended this deadline to December 2023 because of the additional time needed to comply with Executive Order 13990.

In December 2022, the Office of Ground Water and Drinking Water, or the OGWDW, issued a memorandum to regional water divisions with guidance for states to apply for a primacy revision application extension, as allowed under 40 C.F.R. § 142.12. The OGWDW issued the memorandum based on the Agency's plans to further revise the LCR by October 2024. On December 6, 2023, the Agency published its proposed revision, known as [Lead and Copper Rule Improvements](#), or the LCRI, for public comment. The Agency expects to issue the final rule for the LCRI prior to October 16, 2024.

The Agency encouraged states to request an extension to submit primacy revision applications so that they could combine the LCRR and the LCRI into a single application to save time and resources. As of April 2024, the Agency has received extension requests for all states with primacy, with the exception of Colorado, Illinois, Indiana, and South Carolina. These four states will submit primacy revision applications to the Agency now while the remaining states will have until December 2025. In the LCRI proposed rule, the Agency stated that the EPA is retaining the October 2024 compliance date for the Tier 1 lead ALE public notification for water systems. According to OGWDW official, until the EPA approves the state program revision packages for the LCRR, the Agency will directly oversee water system compliance regarding the Tier 1 lead ALE public notification requirements.

Tracking and Reporting for Exceedance of the Lead Action Level

States use the EPA's Safe Drinking Water Information System, known as SDWIS, to report data, including tap water sampling results, water system noncompliance with drinking water regulations, and enforcement actions. The LCR under 40 C.F.R. § 141.90 requires water systems to submit sample results to the state within ten days following the end of the monitoring period. The new requirements starting in October 2024, state that public water systems with lead exceedances must, pursuant to 40 C.F.R. § 141.31(d), also send a copy of the Tier 1 notices to the EPA and their states within 24 hours after learning of a lead ALE.

States are required under 40 C.F.R. § 142.15(a) to submit quarterly reports to the EPA "on a schedule and in a format prescribed by the Administrator." The regulation requires the quarterly reports to include new violations of applicable drinking water regulations by public water systems and new enforcement actions taken by the states against public water systems, among other things. In addition, 40 C.F.R. § 142.15(c)(4) requires states to report quarterly to the EPA "in a format and on a schedule

prescribed by the Administrator,” the public water systems that exceeded the lead action level and the date that the exceedance occurred.

According to the Office of Water, EPA Water Supply Guidance 113, *Policy on Cutoff Dates for Submitting Data to SDWIS/FED*, issued on August 11, 1998, prescribed the schedule and format for quarterly report submission consistent with the requirements under 40 C.F.R. § 142.15 (c)(4). According to the policy, states have 90 days after the end of the quarter to upload data to SDWIS and make any necessary corrections before the data become official for EPA reporting purposes.

Responsible Office

The OGWDW, which is within the EPA’s Office of Water, oversees implementation of SDWA. The office develops and supports implementation of national drinking water regulations; oversees and assists funding of state drinking water programs and source water protection programs; builds capacity of drinking water systems; and provides information about drinking water quality to the public, including establishing guidance for public notifications.

The OGWDW consists of four divisions:

- The Standards and Risk Management Division develops drinking water regulations.
- The Drinking Water Capacity and Compliance Assistance Division implements drinking water regulations, which includes developing and providing guidance to EPA regions, states, and public water systems.
- The Drinking Water Infrastructure Development Division maintains SDWIS.
- The Water Infrastructure and Cyber Resilience Division supports the resilience of the water sector to all types of hazards.

States perform the day-to-day activities to implement and enforce regulations at drinking water systems within their jurisdictions to ensure that each water system meets state and EPA standards for safe drinking water. The ten EPA regional offices oversee the states to ensure that they appropriately implement drinking water standards.

The work under the OGWDW supports the following goals in the [FY 2022–2026 EPA Strategic Plan](#):

- Goal 2: Take Decisive Action to Advance Environmental Justice and Civil Rights.
- Goal 3: Enforce Environmental Laws and Ensure Compliance.
- Goal 5: Ensure Clean and Safe Water for All Communities.

According to the OGWDW, the fiscal year 2023 Drinking Water Program budget for the Office of Water was approximately \$65 million and for the OGWDW was approximately \$50.7 million, exclusive of state and tribal grant programs.

Scope and Methodology

We conducted this performance audit from November 2022 to December 2023 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 conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

We assessed the internal controls necessary to satisfy our audit objective.⁴ In particular, we assessed the internal control components—as outlined in the U.S. Government Accountability Office’s *Standards for Internal Control in the Federal Government*—significant to our audit objective. Any internal control deficiencies we found are discussed in this report.

To answer the audit objective, we reviewed the applicable laws, regulations, preambles to the LCR updates published in the Federal Register, and EPA policies. We met with staff and management at the OGWDW, as well as EPA Regions 5 and 9, to obtain an understanding of the drinking water regulations, rulemaking process, the Agency’s implementation plans and progress, and primacy revision application extension for the states. We also met with EPA regional staff to clarify their tracking and oversight of sample results and lead ALEs.

We analyzed data in the Agency’s SDWIS to determine the number of water systems with lead ALEs and the population these systems served. At the time of our fieldwork, the most recent tap water sampling results available in SDWIS was for the second quarter of fiscal year 2023, which ended on March 31, 2023. We downloaded the lead ALE report from SDWIS for sampling periods started after January 15, 2021, the date the EPA published the final rule that included the determination that a lead ALE requires a Tier 1 public notification. The report shows all water systems with lead ALE for each sampling period through March 31, 2023. To avoid recounting water systems that had exceedances in multiple sampling periods, we eliminated the older entries so that we only counted each water system once. To determine the number of people impacted, we looked at the most recent population count.

Prior Report

During this audit, we identified a concern that warranted the Agency’s immediate attention: the public was not promptly notified of lead ALEs. As a result, we issued a management alert titled *The EPA Should Determine What Interim Actions Can Be Taken to Immediately Notify the Public When Lead in Drinking Water Exceeds the Agency’s Action Level*, Report No. [23-N-0024](#), on July 20, 2023. We recommended that the Office of Water determine what immediate actions the Agency can take to promptly notify the public of lead ALEs to reduce risks to human health pending the October 2024 compliance date for the LCRR, including the Tier 1 lead ALE public notification requirements. The EPA agreed with our

⁴ An entity designs, implements, and operates internal controls to achieve its objectives related to operations, reporting, and compliance. The U.S. Government Accountability Office sets internal control standards for federal entities in GAO-14-704G, *Standards for Internal Control in the Federal Government*, issued September 10, 2014.

recommendation and proposed corrective action, with which we accepted. The recommendation was resolved in December 2023. In response to our recommendation, the OGWDW issued an implementation memorandum in April 2024 to its regional water division directors urging them to encourage states to use their existing authorities to work with water systems to provide Tier 1 lead ALE public notification as soon as practicable but no later than 24 hours after the system learns of a lead ALE in advance of the October 2024 regulatory compliance date.

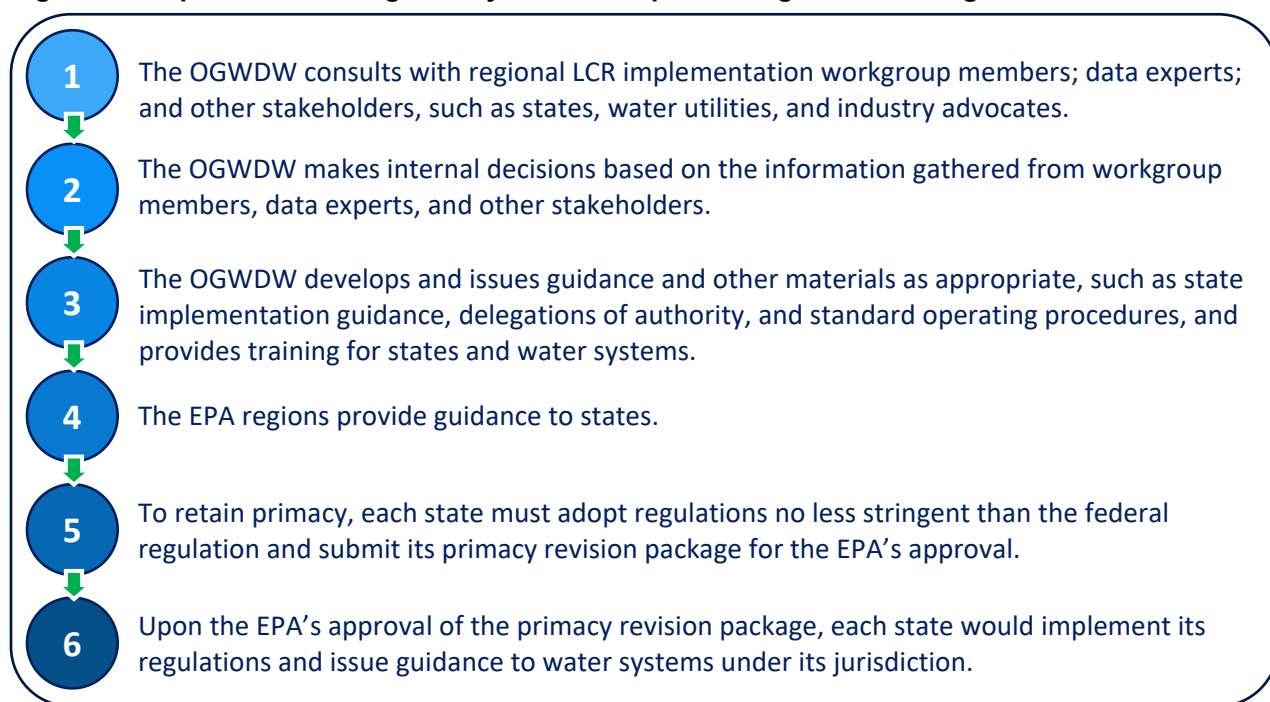
Results

At the time of our audit, the EPA was not ready to comply with the public notification requirements under section 2106 of the WIIN Act. On January 15, 2021, the EPA published a final rule to update drinking water regulations to implement the WIIN Act public notification requirements. Water systems must comply with these requirements by October 16, 2024, by issuing the Tier 1 lead ALE notices within 24 hours of learning of a lead ALE. Although the OGWDW said that it was in the process of developing a strategy, it had not established a plan or milestones or provided guidance to help EPA regions, states, and water systems to be ready to comply with the requirements by October 2024. The EPA also does not receive data in a timely manner to oversee water system compliance and immediately notify the public when a water system or state has not done so. The lack of timely notification may prolong public exposure to lead exceedances without the public knowing about them. This is a significant health risk because the EPA has determined that lead ALE has the potential to have serious adverse effects on human health even with short-term exposure.

Lack of Implementation Plan for the Tier 1 Lead ALE Notice

As of August 2023, with more than half of the three-year preparation period passed, the OGWDW had not developed a plan or established milestones for implementing the Tier 1 lead ALE notices or provided guidance to the regions, states, or public water systems on the implementation steps and milestones. The OGWDW explained at the time of the audit that the Agency did not have formal written procedures for implementing new EPA regulations because the process varies based on the rule and the complexity of the regulation. When asked about the procedures for implementing the Tier 1 lead ALE notification requirements, OGWDW management said that the office plans to complete the steps generally used for implementing new regulations, as summarized in Figure 2, by October 2024.

Figure 2: Steps the OGWDW generally uses for implementing new water regulations



Source: The EPA. (EPA OIG image)

As of August 2023, the OGWDW was at the first step of the rule implementation process, in which the LCR implementation workgroup conducts periodic meetings to consider the LCRR implementation issues and questions and to identify stakeholder needs. OGWDW management said that it was developing a strategy to implement the Tier 1 lead ALE notification requirements. Specifically, it was exploring methods for communicating lead ALE information and working with states to request an extension for primacy revision applications. The extension will postpone the deadline for states to file the program revision applications. OGWDW officials also said that, although Tier 1 notification for lead ALE is a new requirement, the EPA and the OGWDW have been implementing public notification requirements since 1987. OGWDW officials said that the office has developed various guidance documents and trainings in the past for public notifications and regulation implementation, and that it plans to complete the preparation process for the new requirements by October 2024.

Although the EPA is working on methods for communicating lead ALE information, the Agency had not issued any guidance or established milestones for implementation. While Tier 1 public notifications are not new to the EPA, this is the first time the Agency is required to oversee compliance for lead ALE public notification and provide the notices when water systems or states have not done so. This effort may not be easy to implement given the requirement for the EPA to issue the Tier 1 lead ALE notices within 24 hours after it is notified of the exceedance if the state or water system has not already provided the notice. Without a written plan that includes milestone dates, the EPA does not have reasonable assurance that the Agency, states, and water systems will be ready to comply with the requirements by October 2024.

In its February 2024 response to our draft report, the OGWDW stated that the workgroup will be finalizing and delivering implementation guidance, tools, and training in 2024. Also, in response to our recommendation in the management alert referenced in the “Prior Report” section, the OGWDW issued an implementation memorandum in April 2024 to the EPA’s regional water division directors. The memorandum asked the regions to encourage states to use their existing authorities to work with water systems to provide more rapid notices when there is a lead ALE before the October 2024 compliance date. The memorandum also included a link to the Agency’s public website where the OGWDW posted its implementation tools, such as public notification templates, factsheets, and frequently asked questions. These documents will be helpful in preparing water systems, states, and EPA regional offices to comply with the notification requirements by October 2024.

Timely Data Needed for Compliance Oversight and Public Notification

The EPA lacks timely data needed to oversee lead ALE and water system compliance with the Tier 1 lead ALE notification requirements. WIIN Act section 2106 requires the EPA to issue regulations for water systems to send notifications to persons served, as well as to the EPA and their state, as soon as practicable, but no later than 24 hours after a water system learns of a lead exceedance that “has the potential to have serious adverse effects on human health as a result of short-term exposure.” The WIIN Act also requires the EPA to provide the notices if the responsible water system or state has not provided them.

SDWIS contains information as to which water systems have identified lead ALE. However, states do not have to upload data to SDWIS until 90 days after the end of the quarter, even though the LCR requires water systems to submit tap water sampling results to states within ten days after the end of the monitoring period. According to the EPA, this 90-day lag time allows states to verify the data. However, this time lag makes it difficult for the EPA to oversee water system compliance with the Tier 1 lead ALE notification requirements in a timely manner or provide the notices if the water system or state has not done so, as required under the WIIN Act.

The OGWDW needs to develop procedures to receive and track lead exceedance data and notices in a timely manner so that it can verify that water systems and states are notifying the public within 24 hours after learning of a lead ALE and the EPA can provide notices if needed. Although the proposed LCRI provision, if included in the final rule, will shorten the lag time, from 90 day to 15 days after the end of the quarter or 24 hours after receiving a lead ALE notification from a water system, the final rule for the LCRI has not been promulgated. Once that is done, 40 C.F.R. § 142.12 will allow an additional two years for states to submit their primacy applications with the updated regulation and another 90 days for the EPA to approve or disapprove the applications. The Agency stated it expects to issue the LCRI final rule prior to October 16, 2024, with a proposed compliance date in 2027. Until the LCRI final rule is issued and states are required to comply with the new rule, the Agency should develop procedures to obtain the lead ALE data as soon as the data is available to the states. The EPA could then determine in a more timely manner whether water systems notified persons served about lead ALEs and take action when the notification has not occurred.

Lack of Timely Notification Prolongs Public Exposure to Health Risks

The EPA published a final rule for the LCR revisions on January 15, 2021, establishing that a lead ALE requires Tier 1 public notification, which is the EPA's most urgent notification category under the drinking water regulations and requires that the water systems notify persons served within 24 hours of learning of the exceedance. The lack of timely EPA oversight and notification may delay the public from receiving information about health risks and protection measures regarding lead. Based on the 90th percentile sample results reported in SDWIS, from January 15, 2021, through March 31, 2023, we identified 498 water systems with lead ALEs. These systems served approximately 2.3 million people.

Until the Tier 1 lead ALE public notification requirements are implemented, people may continue being exposed to this health risk without timely information on how to protect themselves. Prior to October 2024, water systems must distribute public notifications within 60 days after the end of the monitoring period. With millions of people potentially affected by lead ALEs, water systems, states, and the EPA need to be prepared to issue Tier 1 lead ALE notices beginning in October 2024 so that the public will be immediately alerted to lead exceedances and informed of health risks and ways to protect themselves.

Conclusions

As provided by the WIIN Act section 2106 and based on the EPA's determination in 2021 that a lead exceedance can have serious adverse effects on human health as a result of short-term exposure, the public must be notified as soon as practicable but no later than 24 hours after the water system learns of the exceedance. If the water system or state fails to provide the Tier 1 lead ALE notice, the EPA must do so within 24 hours of being notified of the exceedance. Water systems must comply with the Tier 1 lead ALE public notification requirements starting in October 2024, eight years after the passage of the WIIN Act. Further delays could occur if the EPA does not develop a plan for implementation, as well as for identifying and reporting lead exceedances to the public. The OGWDW should act to ensure that the EPA, states, and water systems are ready to comply with the requirements to prevent prolonging the public's exposure to the health risks of lead in drinking water without timely notification.

Recommendations

We recommend that the assistant administrator for Water:

1. Establish a plan for implementing the Tier 1 lead-action-level exceedance public notification requirements, so that water systems, states, and the EPA are ready to comply by the October 16, 2024 compliance date.
2. Develop procedures to receive and track lead-action-level exceedance information as soon as it is available to the states to ensure compliance with the public notification requirements.

Agency Response and OIG Assessment

The Office of Water concurred with our two recommendations and provided acceptable planned corrective actions and estimated milestone dates. We consider these recommendations resolved with corrective action pending.

For Recommendation 1, the Office of Water said that the Agency established a workgroup with states to collaboratively develop a notification template to support implementation of the Tier 1 lead ALE notices. The EPA plans to distribute the notification template to the EPA regions, states, and other stakeholders, and publish it on the EPA's website by March 31, 2024. The template was issued to EPA regional offices in April 2024 and posted on the Agency's public website.

The Office of Water also plans to issue a standard operating procedure describing the process to distribute the Tier 1 lead ALE notices and notify the primacy agency and the EPA. In addition, the EPA plans to test the standard operating procedures to ensure proper distribution and reporting of the Tier 1 lead ALE notices using a diverse set of EPA-identified water systems by August 31, 2024.

For Recommendation 2, the Office of Water said it plans to issue a standard operating procedure and provide training on how the states and the EPA will implement receiving and tracking of the Tier 1 lead ALE notices by October 16, 2024.

Appendix B contains the Office of Water's response to the draft report. The office also provided technical comments, which we considered and incorporated as necessary.

Status of Recommendations

RECOMMENDATIONS

Rec. No.	Page No.	Subject	Status ¹	Action Official	Planned Completion Date
1	10	Establish a plan for implementing the Tier 1 lead-action-level exceedance public notification requirements, so that water systems, states, and the EPA are ready to comply by the October 16, 2024 compliance date.	R	Assistant Administrator for Water	8/31/24
2	10	Develop procedures to receive and track lead-action-level exceedance information as soon as it is available to the states to ensure compliance with the public notification requirements.	R	Assistant Administrator for Water	10/16/24

* C = Corrective action completed.

R = Recommendation resolved with corrective action pending.

U = Recommendation unresolved with resolution efforts in progress.

Key Definitions

Tier 1 Lead ALE Notice	As used in this report, it is the public notice required by the revisions to the LCR, mandated by WIIN Act section 2106 amendment to SDWA and the public notification regulations at 40 C.F.R. part 141, subpart Q, for a lead ALE that can have serious adverse effects on human health as a result of short-term exposure.
Lead ALE	As provided in 40 C.F.R. § 141.80, the lead action level is exceeded when more than 10 percent of tap water samples collected during the monitoring period show a lead concentration above 15 parts per billion.
LCRR	The January 2021 updates to the national primary drinking water regulations in 40 C.F.R. part 141, subpart I (Control of Lead and Copper, or the Lead and Copper Rule) and subpart Q (Public Notification of Drinking Water Violations).
LCRI	The December 2023 proposed updates to the national primary drinking water regulations which the Agency expects to issue final rules prior to October 16, 2024.
State	As used in this report, states, territories, and tribes which the EPA granted the authority to have primary responsibility for administration and enforcement of the drinking water regulations.
Public Water System	As defined by 40 C.F.R. § 141.2, a system for the provision of public water for human consumption that has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Agency's Response to the Draft Report



ASSISTANT ADMINISTRATOR FOR WATER

WASHINGTON, D.C. 20460

MEMORANDUM

SUBJECT: Response to Office of Inspector General Draft Report OA-FY23-0034, *The EPA Should Better Prepare to Implement Public Notification Requirements When Lead in Drinking Water Poses Serious Risks to Human Health*, dated December 18, 2023

FROM: Radhika Fox

For: Best-Wong, Benita

TO: Sean O'Donnell, Inspector General

Digitally signed by Best-Wong, Benita
Date: 2024.02.20
16:47:07 -05'00'

Thank you for the opportunity to respond to the recommendations in the draft report OA-FY23-0034, *The EPA Should Better Prepare to Implement Public Notification Requirements When Lead in Drinking Water Poses Serious Risks to Human Health*. The following is our position on each of the draft report recommendations. The Office of Water concurs with Recommendations 1 and 2 and has provided suggested corrective actions for your consideration. Additionally, attached are technical comments on the draft report.

Agency Response to Recommendations

OIG Recommendation 1

We recommend that the Assistant Administrator for Water establish a plan for implementing the public notification requirements under section 2106 of the Water Infrastructure Improvements for the Nation Act to ensure that water systems, states, and the EPA are ready to comply with the requirements by the October 16, 2024, compliance date.

Response to OIG Recommendation 1 – Concur:

OW concurs with Recommendation 1. There are several types of 24-hour notice timelines added by WIIN [SDWA 1414(c)(2)(C), SDWA 1414(c)(2)(D), 1414(c)(5)(B)(iii)(I), 1414(c)(5)(B)(iv)(II), and 40 CFR, Part 141.202]. Therefore, OW recommends when referring to the Lead and Copper Rule Revisions' action level exceedance, Tier 1 public notice, that the term Tier 1 ALE PN should be used as there are specific requirements associated with this type of public notice. In addition, the EPA is now developing the implementation plan for the Lead and Copper Rule Revisions, not the WIIN Act. The EPA implemented the WIIN Act requirement to promulgate requirements for Tier 1 ALE PN under the LCRR.

Proposed Corrective Actions:

OW proposes the following Corrective Actions to satisfy this recommendation:

1. The EPA established a LCRR EPA and State Workgroup to collaboratively develop a notification template to support implementation of the Tier 1 ALE PN. The EPA will distribute the notification template to the EPA Regions, states, and other stakeholders, and publish on the EPA's website. Expected completion March 31, 2024.
2. Finalize a Standard Operating Procedure describing the process to distribute the Tier 1 ALE PN, notify the primacy agency and the EPA. In addition, the EPA will pilot test the SOP to ensure proper distribution and reporting of the Tier 1 ALE PN using diverse set of EPA-identified water systems. Expected completion August 31, 2024.

OIG Recommendation 2

We recommend that the Assistant Administrator for Water develop procedures to receive and track lead-action-level exceedance information as soon as it is available to the states to ensure compliance with 24-hour public notice requirements.

Response to OIG Recommendation 2 – Concur:

OW concurs with Recommendation 2. There are several types of 24-hour notice timelines added by WIIN [SDWA 1414(c)(2)(C), SDWA 1414(c)(2)(D), 1414(c)(5)(B)(iii)(I), 1414(c)(5)(B)(iv)(II), and 40 CFR, Part 141.202]. Therefore, OW recommends when referring to the Lead and Copper Rule Revisions' action level exceedance, Tier 1 public notice, the term Tier 1 ALE PN should be used as there are specific requirements associated with this type of PN.

Proposed Corrective Actions:

OW proposes the following Corrective Actions to satisfy this recommendation:

1. Finalize a Standard Operating Procedure describing how the primacy agencies and the EPA will implement receiving and tracking the Tier 1 ALE PN

associated with action level exceedances. Expected completion October 16, 2024.

2. Provide training targeted for the EPA Regional and primacy agency staff on how to use the SOP to implement receiving and tracking the 24-hour public notices. Expected completion September 30, 2024.

Thank you again for the opportunity to respond to the recommendations in the draft report OA-FY23-0034. If you have any questions, please contact me or your staff may contact OW's Audit Follow-Up Coordinator, Carla Hagerman, at Hagerman.Carla@epa.gov.

ATTACHMENT (1)

1. Technical Comments on the OIG Draft Report OA-FY23-0034

cc: Katherine Trimble, OIG
Shelley Howes, OIG
Michael D. Davis, OIG
Tim Roach, OIG
Benita Best-Wong, OW
Carla Hagerman, OW
Macara Lousberg, OW
Janita Aguirre, OW
Nancy Grantham, OW
Jennifer McLain, OGWDW
Yu-Ting Guilaran, OGWDW
Karen Wirth, OGWDW
Marietta Echeverria, OGWDW
Ron Bergman, OGWDW
Ed Moriarty, OGWDW
Faisal Amin, OCFO
Sue Perkins, OCFO
Andrew LeBlanc, OCFO

Distribution

The Administrator
Deputy Administrator
Chief of Staff, Office of the Administrator
Deputy Chief of Staff for Management, Office of the Administrator
Agency Follow-Up Official (the CFO)
Assistant Administrator for Water
Regional Administrators, Regions 1–10
Agency Follow-Up Coordinator
General Counsel
Associate Administrator for Congressional and Intergovernmental Relations
Associate Administrator for Public Affairs
Principal Deputy Assistant Administrator for Water
Deputy Assistant Administrators for Water
Senior Advisor, Office of Water
Chief of Staff, Office of Water
Director, Office of Regional Operations
Director, Office of Continuous Improvement, Office of the Chief Financial Officer
Director, Office of Program Analysis, Regulatory, and Management Support
Associate Director, Office of Program Analysis, Regulatory, and Management Support
Director, Office of Ground Water and Drinking Water, Office of Water
Deputy Director, Office of Ground Water and Drinking Water, Office of Water
Office of Policy OIG Liaison
Office of Policy GAO Liaison
Audit Follow-Up Coordinator, Office of the Administrator
Audit Follow-Up Coordinator, Office of Water
Audit Liaison, Office of Ground Water and Drinking Water, Office of Water
Audit Follow-Up Coordinators, Regions 1–10



Whistleblower Protection

U.S. Environmental Protection Agency

The whistleblower protection coordinator's role is to educate Agency employees about prohibitions against retaliation for protected disclosures and the rights and remedies against retaliation. For more information, please visit the OIG's whistleblower protection [webpage](#).

Contact us:



Congressional Inquiries: OIG.CongressionalAffairs@epa.gov



Media Inquiries: OIG.PublicAffairs@epa.gov



EPA OIG Hotline: OIG.Hotline@epa.gov



Web: epaoig.gov

Follow us:



X (formerly Twitter): [@epaoig](https://twitter.com/epaoig)



LinkedIn: linkedin.com/company/epa-oig



YouTube: youtube.com/epaoig



Instagram: [@epa.ig.on.ig](https://www.instagram.com/epa.ig.on.ig)



www.epaoig.gov