Management Alert:
Drinking Water Contamination in Flint, Michigan, Demonstrates a Need to Clarify EPA Authority to Issue Emergency Orders to Protect the Public

Project No. 17-P-0004

October 20, 2016
Report Contributors: Stacey Banks
Charles Brunton
Kathlene Butler
Allison Dutton
Tiffine Johnson-Davis
Fredrick Light
Jayne Lilienfeld-Jones
Luke Stolz
Danielle Tesch
Khadija Walker

Abbreviations

EPA U.S. Environmental Protection Agency
MDEQ Michigan Department of Environmental Quality
OECA Office of Enforcement and Compliance Assurance
OIG Office of Inspector General
SDWA Safe Drinking Water Act

Cover photo: Flint Water Plant, Flint, Michigan. (EPA OIG photo)

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.epa.gov/oig

Subscribe to our Email Updates
Follow us on Twitter @EPAoig
Send us your Project Suggestions
At a Glance

Why We Did This Review

The U.S. Environmental Protection Agency (EPA) Office of Inspector General (OIG) is reviewing the circumstances of, and the EPA’s response to, the contamination in the city of Flint, Michigan’s, community water system, including the EPA’s exercise of its oversight authority. We are issuing this report to alert the EPA about factors that delayed its intervention using emergency authority under Section 1431 of the Safe Drinking Water Act (SDWA). When our review is completed, we plan to issue a subsequent report.

After Flint switched its drinking water supply in April 2014, inadequate treatment exposed many of the residents to lead. Emergency authority was available to EPA to take actions to protect the public from contamination.

This report addresses the following EPA goals or cross-agency strategies:

- Protecting America’s waters.
- Protecting human health and the environment by enforcing laws and assuring compliance.
- Working to make a visible difference in communities.

Management Alert: Drinking Water Contamination in Flint, Michigan, Demonstrates a Need to Clarify EPA Authority to Issue Emergency Orders to Protect the Public

What We Found

EPA Region 5 had the authority and sufficient information to issue a SDWA Section 1431 emergency order to protect Flint residents from lead-contaminated water as early as June 2015. Region 5 had information that systems designed to protect Flint drinking water from lead contamination were not in place, residents had reported multiple abnormalities in the water, and test results from some homes showed lead levels above the federal action level.

EPA Region 5 did not issue an emergency order because the region concluded the state’s actions were a jurisdictional bar preventing the EPA from issuing a SDWA Section 1431 emergency order. However, the EPA’s 1991 guidance on SDWA Section 1431 orders states that if state actions are deemed insufficient, the EPA can and should proceed with a SDWA Section 1431 order, and the EPA may use its emergency authority if state action is not protecting the public in a timely manner. However, EPA Region 5 did not intervene under SDWA Section 1431, the conditions in Flint persisted, and the state continued to delay taking action to require corrosion control or provide alternative drinking water supplies.

In September 2015, EPA Region 5 first briefed the EPA headquarters’ Office of Enforcement and Compliance Assurance (OECA) about Flint’s water crisis. OECA recommended the region take SDWA Section 1431 action. During the fall, the state began to take actions to correct the problems in Flint. EPA Region 5 maintained that the state was acting, but the contamination continued. The EPA Administrator subsequently directed OECA to issue an emergency order on January 21, 2016. The emergency order stated the EPA had determined that Flint’s and Michigan’s responses to the drinking water crisis were inadequate, and the EPA ordered specific actions to address a public health threat.

These situations should generate a greater sense of urgency. We are issuing a management alert report on this matter to promote awareness and facilitate immediate EPA action. The OIG’s evaluation of the Flint drinking water crisis is ongoing, and we expect to issue an additional report when our work concludes.

Recommendations

We recommend that OECA update the EPA’s 1991 guidance on SDWA Section 1431 emergency authority. We also recommend that OECA require all relevant EPA drinking water and water enforcement program management and staff to attend training on SDWA Section 1431 authority.

Send all inquiries to our public affairs office at (202) 566-2391 or visit www.epa.gov/oig.

Listing of OIG reports.
MEMORANDUM

SUBJECT: Management Alert: Drinking Water Contamination in Flint, Michigan, Demonstrates a Need to Clarify EPA Authority to Issue Emergency Orders to Protect the Public
Report No. 17-P-0004


TO: Cynthia Giles, Assistant Administrator
Office of Enforcement and Compliance Assurance

During our evaluation to examine the circumstances of contamination in the city of Flint, Michigan’s, community water system, including the U.S. Environmental Protection Agency’s (EPA’s) response to the situation, we became aware of significant factors that delayed EPA intervention in Flint using its emergency authority granted under the Safe Drinking Water Act. We identified the need for the EPA to update and clarify how and when it should act in response to drinking water contamination. As a result, we are providing you with this management alert. We plan to issue a subsequent report when our evaluation concludes.

This report represents the opinion of the Office of Inspector General (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. Accordingly, the findings described in the report are not binding upon the EPA in any enforcement proceeding brought by the EPA or the U.S. Department of Justice.

Action Required

Prior to issuing this report, we met with agency officials to discuss our report, and the officials agreed with our recommendations, with revisions. Please provide a formal written response to this report within 30 calendar days that includes planned corrective actions and projected completion dates for the recommendations. Your response will be posted on the OIG’s public 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.

This report will be available at www.epa.gov/oig.
Table of Contents

Purpose ........................................................................................................................................... 1
Background ....................................................................................................................................... 1
Scope and Methodology .................................................................................................................. 3
Results of Review ............................................................................................................................ 4
  EPA Region 5 Had Sufficient Information and the Authority to Issue an Emergency Order in June 2015, but Did Not ................................................................. 5
Conclusion ....................................................................................................................................... 8
Recommendations ............................................................................................................................ 9
Status of Recommendations and Potential Monetary Benefits ..................................................... 10

Appendix

A  Distribution ................................................................................................................................. 11
Purpose

The U.S. Environmental Protection Agency’s (EPA’s) Office of Inspector General (OIG) has an ongoing review to examine the circumstances of, and the EPA’s response to, the contamination in the city of Flint, Michigan’s, community water system, including the EPA’s exercise of its oversight authority. The purpose of our issuing this initial report is to alert the EPA of key factors that delayed its intervention in Flint using its emergency authority granted under the Safe Drinking Water Act (SDWA), and to recommend that the EPA update and clarify how and when it should intervene. When our review is complete, we plan to issue a subsequent report.

Background

Inadequate drinking water treatment exposed many of the nearly 100,000 residents who were customers of the city of Flint community water system to lead. Flint switched from purchasing treated water from Detroit Water and Sewerage to sourcing and treating its water supply from the Flint River in April 2014. Treated water from Detroit Water and Sewerage included a corrosion-inhibiting additive, which lined pipes and connections to minimize the level of lead leaching into drinking water. Flint’s treatment of the new drinking water source did not include a process for reducing the corrosion of lead-containing pipes and connections, which allowed lead to begin leaching into drinking water.

After the source switch, residents began reporting to the EPA that there were color and odor problems with the water. In February 2015, the public health risk escalated as indications of lead were identified in the drinking water supply. In April 2015, the EPA discovered that the necessary corrosion control had not been added in the community water system since the source switch. In August and September 2015, private researchers identified numerous homes with lead contamination, and also identified an increase in the blood lead levels of children living in Flint.
In October 2015, Flint switched back to purchasing treated water from Detroit Water and Sewerage. In January 2016, the EPA Administrator directed the headquarters’ Office of Enforcement and Compliance Assurance (OECA) to issue an emergency administrative order under Section 1431 of the SDWA. This order required the city to, among other things: continue to add corrosion inhibitors; demonstrate it has the technical, managerial and financial capacity to operate the system presently and before it switches to a new water source; and sample water quality and make data publicly available.

On the day the EPA issued the emergency order, the EPA Administrator established the agency’s Policy on Elevation of Critical Public Health Issues. This policy, which supports the EPA’s mission to protect human health and the environment, calls for EPA leaders to encourage staff to elevate issues that have the following characteristics:

- “There appears to be a substantial threat to public health;
- “EPA is or can reasonably be expected to be a focus of the need for action; and/or
- “Other authorities appear to be unable to address or are unsuccessful in effectively addressing such a threat;
- “Recourse to normal enforcement and compliance tools is not appropriate or unlikely to succeed in the near term;
- “High and sustained public attention is possible.”

After the emergency order was issued, OECA provided SDWA enforcement training to some headquarters and regional managers and staff. In addition, the EPA Region 5 acting Regional Administrator stated he is taking steps to implement the Administrator’s new policy.

**What SDWA and EPA Guidance Provides**

Congress enacted the SDWA in 1974 to protect the quality of drinking water in the United States. Public water systems are required to comply with SDWA. States, territories and tribes (collectively referred to as “states” herein) have primary implementation and enforcement authority.¹ The EPA retains national oversight responsibility for state administration and enforcement of SDWA.

Section 1431 provides the EPA with emergency authority to address imminent and substantial endangerment to human health from drinking water contamination. The EPA can use this discretionary authority whenever:

---

¹ Nearly all states, including Michigan, have primacy to implement the SDWA. Primacy is granted to states that adopt regulations at least as stringent as national requirements, develop adequate procedures for enforcement (including conducting monitoring and inspections), adopt authority for administrative penalties, and maintain records and make reports as the EPA may require.
(1) contamination is in or likely to enter a drinking water source which may present an imminent and substantial endangerment to the health of persons; and

(2) the appropriate state and local authorities have not acted to protect human health.

The EPA’s authorized actions include issuing administrative orders requiring specific actions that are necessary to protect human health or commencing a civil judicial action.

In 1994, the EPA Administrator delegated the authority to issue administrative emergency orders under Section 1431 to EPA Regional Administrators and, in multi-regional cases or cases of national significance, to the Assistant Administrator for OECA. The authority to make a Section 1431 judicial referral remains with headquarters.

The EPA’s Final Guidance on Emergency Authority under Section 1431 of the Safe Drinking Water Act (1991) is designed, in part, to encourage more widespread use of the EPA’s Section 1431 authority by more fully explaining situations where this authority may be applied. This guidance clarifies that the EPA may use its emergency authority even when a state is acting or is going to act. Regarding whether the state action is in fact protecting the public from the contaminants in a timely fashion:

If EPA has information that State/local agencies are going to act, EPA must decide whether the action is timely and protective of public health. If EPA determines that the action is insufficient and State and local agencies do not plan to take stronger or additional actions to ensure public health protection, in a timely way, EPA should proceed with an action under Section 1431.

**Scope and Methodology**

We began our evaluation in February 2016, and our work is ongoing. We are conducting this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform our work to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. Our ongoing work may provide supplemental findings to this report. We believe that the evidence obtained provides a reasonable basis for the findings and conclusions in this report based on our audit objectives.

We reviewed the laws, regulations, policies, procedures and guidance related to the SDWA program. At EPA headquarters, we interviewed the EPA Administrator, and staff and officials from the Office of General Counsel, Office
of Water and OECA. We also interviewed staff and officials in EPA Region 5, including the former EPA Region 5 Regional Administrator and the Region 5 acting Regional Administrator. Further, we interviewed staff from the Michigan Department of Environmental Quality (MDEQ), former and current employees of the city of Flint, and Flint residents. In addition, we reviewed criteria documents provided to us by the EPA and MDEQ.

Results of Review

Based on information we obtained, EPA Region 5 had the information it needed about the drinking water issues in Flint in June 2015 to exercise its discretionary authority to issue an emergency order under SDWA Section 1431. The information EPA Region 5 had in June 2015 met the two requirements necessary for an emergency order under SDWA Section 1431, as shown in Table 1:

Table 1: SDWA Section 1431 Emergency Order Requirements and EPA’s Information about Flint Events in June 2015

<table>
<thead>
<tr>
<th>Emergency order requirement</th>
<th>EPA’s information about Flint events by June 2015</th>
</tr>
</thead>
</table>
| 1. The contamination may present imminent and substantial endangerment to human health. | • EPA Region 5 received the first Flint drinking water distribution system lead sampling test result, indicating a requirement for corrosion control (February 2015).<sup>2</sup>  
• State informed EPA Region 5 that no corrosion control was in place (April 2015).  
• EPA Region 5 had information that at least four homes had lead in drinking water in concentrations above the action level (June 2015).<sup>3</sup> |
| 2. Appropriate state and local authorities have not acted to protect the health of persons. | • State informed EPA that no corrosion control was in place (April 2015).  
• State and city had not disclosed risk of potential lead exposure to the public. |

Source: SDWA Section 1431 and OIG analysis of EPA Region 5 documents.

<sup>2</sup> Under SDWA, the Lead and Copper Rule requires optimized corrosion control for systems servicing populations over 50,000. The rule also deems a drinking water system to have optimized corrosion control when lead sampling results fall at 5 parts per billion or less at test sites throughout the system. The city’s lead sampling results were 6 parts per billion.

<sup>3</sup> The Lead and Copper Rule requires that drinking water utilities take action when lead exceeds 15 parts per billion in a sample of homes. An action level exceedance is not a violation, but it triggers other required actions to minimize exposure to lead and copper in drinking water. Those other actions include water quality parameter monitoring, corrosion control treatment, source water monitoring/treatment, public education, and lead service line replacement.
EPA Region 5 Had Sufficient Information and the Authority to Issue an Emergency Order in June 2015, but Did Not

By June 2015, EPA Region 5 had information that the city of Flint exceeded the lead level at which corrosion control is required, and that Flint was not using a corrosion inhibitor. EPA Region 5 also had information that at least four homes had concentrations of lead in household drinking water above the action level of 15 parts per billion. These factors and others indicated that some residents were being exposed to lead-contaminated water, and that exposure to lead-contaminated drinking water was likely to increase as corrosion continued within the distribution system.

Additional information from the public provided further evidence of Flint drinking water abnormalities. Between April 2014 (month of the water source switch) and June 2015, EPA Region 5 received many documented complaints from Flint residents. 4

By June 2015, EPA Region 5 also knew that the state and local authorities were not acting quickly to protect human health. In February 2015, the state initially told the EPA that Flint had an optimized corrosion control program in place. Subsequently, in April 2015, the state admitted that Flint was not using corrosion control, but the state also said none was required. Neither state nor local authorities disclosed the risks of potential lead contamination to residents.

EPA Region 5 began discussing the issue with the state and offered the state technical assistance in February 2015. However, instead of acting immediately to protect human health, the state delayed action by awaiting the results of the second round of lead sampling (not anticipated until August 2015). The state argued Flint had as many as 5 years from the date of the source switch to optimize corrosion control. The city of Flint also did not take action.

On June 24, 2015, an EPA Region 5 regulations manager produced an interim report about lead contamination identified in Flint homes and described major public health concerns in the city of Flint. However, on July 9, 2015, the then Flint mayor held a press conference assuring Flint residents that the water was safe to drink. Despite these conditions, the region did not issue an emergency order because the region concluded the state’s ongoing activities were a jurisdictional bar preventing the EPA from issuing a SDWA Section 1431 emergency order.

The EPA’s 1991 guidance on taking emergency action under Section 1431 describes how and when the EPA can use its emergency authority even if a state or local agency acts:

---

4 These complaints were submitted to EPA Region 5 directly or forwarded to Region 5 from the EPA OIG or the White House.
The Regions should not view this standard - whether a State or local authority has acted to protect the health of persons - as an issue of whether these authorities have “failed” to protect public health. Instead, these authorities intentionally may defer action to EPA because the Section 1431 authority may be more powerful or expeditious…. Further, State or local authorities may decide to take action jointly with EPA. In such cases, EPA would determine that State and local authorities have not acted (on their own) to protect the health of persons. Therefore, EPA may proceed with Section 1431 actions when State and local authorities are working jointly with EPA.

Our analysis of the publicly available data on SDWA Section 1431 actions taken by EPA regions prior to the Flint incident shows that it is rare for a region to issue an emergency order to a municipality in a state with primacy. OIG analysis showed that the vast majority of the SDWA Section 1431 emergency orders taken by EPA occurred in Wyoming and in Indian country, where the EPA regions directly implement SDWA and there is no “state” entity to consider. Based on the publicly available data, the majority of Section 1431 emergency orders issued by the EPA were to businesses and federal facilities.5

Emergency action by EPA Region 5 could have required the city and state to provide alternative water supplies to affected residents, study the extent and severity of lead contamination within the water system, or immediately begin corrective actions to reduce and eliminate lead contamination in the drinking water system. However, EPA Region 5 did not intervene under SDWA Section 1431 to require immediate actions to protect human health, and the conditions in Flint continued.

In the absence of EPA intervention in Flint, the state continued to delay taking action to require corrosion control or provide alternative drinking water supplies. Additional data in August and September 2015 demonstrated lead contamination was widespread, and also demonstrated an increase in the blood lead levels of children living in Flint. It was not until December 2015 that Flint began adding a corrosion inhibitor to optimize corrosion control in the water system.

---

5 OIG analyzed information from the EPA’s public Enforcement and Compliance History Online database. The EPA informed the OIG that this public database does not reflect all EPA Section 1431 actions taken.
Region 5 did not formally brief OECA about Flint’s water issues until September, 2015. Staff and managers in OECA viewed the Flint situation as one in which it was appropriate for the region to take Section 1431 action, and recommended that the region take such action. However, Region 5 declined to take emergency action, on the basis that the ongoing state actions constituted a jurisdictional bar.

Table 2 provides examples of federal, state and local events occurring in Flint during the fall and early winter.

Table 2: Examples of Federal, State and Local Actions in Flint—September 2015 through January 2016

<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>• External researchers inform the EPA about broader scope of lead contamination and elevated blood lead levels in Flint children.</td>
</tr>
<tr>
<td></td>
<td>• Flint mayor announces that corrosion control will be initiated; invites EPA experts to Flint.</td>
</tr>
<tr>
<td></td>
<td>• City of Flint and Genesee County issue formal health advisory.</td>
</tr>
<tr>
<td>October</td>
<td>• Region 5 establishes Flint task force to provide technical expertise.</td>
</tr>
<tr>
<td></td>
<td>• Michigan develops a 10-point action plan.</td>
</tr>
<tr>
<td></td>
<td>• Flint returns to purchasing treated water from Detroit Water and Sewerage.</td>
</tr>
<tr>
<td>November</td>
<td>• EPA Office of Water issues memo verifying that the Lead and Copper Rule requires that large drinking water systems, such as Flint, have optimized corrosion control technologies in place.</td>
</tr>
<tr>
<td></td>
<td>• Region 5 Flint task force concludes that contamination in Flint is still not controlled, because the city did not comply with a request for information that would give this assurance.</td>
</tr>
<tr>
<td>December</td>
<td>• Flint begins to implement supplemental corrosion control.</td>
</tr>
<tr>
<td></td>
<td>• Flint mayor declares state of emergency.</td>
</tr>
<tr>
<td>January</td>
<td>• Michigan governor declares state of emergency.</td>
</tr>
<tr>
<td></td>
<td>• President declares federal state of emergency for Flint.</td>
</tr>
<tr>
<td></td>
<td>• EPA issues emergency order to MDEQ and Flint.</td>
</tr>
</tbody>
</table>

Source: OIG

According to OECA staff and management, as these events unfolded, OECA continued to discuss a Section 1431 action with EPA Region 5 leadership, stressing that this would formalize the state’s planned actions. This would also have federalized the response. However, OECA and the EPA Administrator’s office did not initiate SDWA 1431 action from the EPA headquarters level, and continued to rely on EPA Region 5’s determination that the state was acting. However, the contamination continued.

The Administrator, in delegating to OECA the authority for SDWA Section 1431 emergency action, limited OECA to taking these actions in “multi-regional cases or cases of national significance.” However, the Administrator retains the authority to act in all cases. Only in January 2016 did it become clear to OECA that even though the contamination continued to be unresolved by months of ongoing activity, the EPA Region 5 Regional Administrator did not adequately recognize the available authority under Section 1431 to take an emergency action.
The EPA Administrator directed OECA to issue an emergency order to the state of Michigan, MDEQ and the city of Flint on January 21, 2016.

While the 1991 guidance provides that the EPA may proceed if state actions do not serve to protect public health, the guidance does not provide examples of state actions that would and would not be deemed timely and protective. The guidance also does not provide a checklist or other tools for determining when the Regional Administrators and OECA Assistant Administrator should consider emergency action under SDWA Section 1431.

We are issuing a management alert report on this matter to promote awareness and facilitate EPA action to clarify and update its guidance and scenarios under which a SDWA Section 1431 emergency order should be considered. The OIG’s evaluation of the Flint drinking water crisis is ongoing, and we expect to issue an additional report when our work concludes.

**Conclusion**

EPA Region 5 had sufficient information to issue an emergency order to Flint as early as June 2015, but did not. Issuing an emergency order to a state or local entity is a rare occurrence at the EPA. The former EPA Region 5 Regional Administrator believed that the state of Michigan’s actions to address the Flint situation barred formal federal action. While events were complicated, given what we know about the consequences of the Flint drinking water contamination, it is clear that EPA intervention was delayed. These situations should generate a greater sense of urgency. The EPA must be better prepared and able to timely intercede in public health emergencies like that which occurred in Flint.

To that end, the EPA has since taken some responsive steps by issuing the policy on elevation of critical public health issues and conducting SDWA enforcement trainings. However, the EPA can do more to emphasize that SDWA Section 1431 is a tool that should be used in cases where responding with urgency will protect human health. This management alert identifies initial actions we believe the EPA must take to clarify regions’ authorities to use this tool, and to clarify OECA’s role in recommending and taking emergency action to immediately address urgent drinking water issues.

Specifically, the EPA should update its 1991 SDWA Section 1431 guidance to include relevant examples of how and when Section 1431 orders have been issued, and examples of timely and protective state action. The updated guidance should include the current delegation of authority for issuing Section 1431 orders, and should establish a guide to give employees direction about when Section 1431 emergency action could be taken. Further, the EPA should require all relevant EPA drinking water and water enforcement management and staff to attend training on the use of the authorities provided in SDWA Section 1431. As the
OIG completes its work, it will examine the management and program controls in place at the EPA and make further recommendations as warranted.

**Recommendations**

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

1. Update the EPA’s *Final Guidance on Emergency Authority under Section 1431 of the Safe Drinking Water Act (1991)* to:
   
a. Include the most relevant examples of Safe Drinking Water Act Section 1431 orders nationwide and examples of state actions that would be considered timely and protective.
   
b. Reflect the current delegations of authority to both the Regional Administrators and the Assistant Administrator for Enforcement and Compliance Assurance.
   
c. Establish checklists for when both the Regional Administrators and the Assistant Administrator for Enforcement and Compliance Assurance should consider emergency action under the Safe Drinking Water Act Section 1431.

2. Train, in cooperation with the Assistant Administrator for Water, all relevant EPA drinking water and water enforcement program management and staff on the Safe Drinking Water Act Section 1431 authority and updated guidance.
# Status of Recommendations and Potential Monetary Benefits

## RECOMMENDATIONS

<table>
<thead>
<tr>
<th>Rec. No.</th>
<th>Page No.</th>
<th>Subject</th>
<th>Status</th>
<th>Action Official</th>
<th>Planned Completion Date</th>
<th>Potential Monetary Benefits (in $000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9</td>
<td>Update the EPA’s Final Guidance on Emergency Authority under Section 1431 of the Safe Drinking Water Act (1991) to:</td>
<td>Assistant Administrator for Enforcement and Compliance Assurance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>a. Include the most relevant examples of Safe Drinking Water Act Section 1431 orders nationwide and examples of state actions that would be considered timely and protective.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Reflect the current delegations of authority to both the Regional Administrators and the Assistant Administrator for Enforcement and Compliance Assurance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Establish checklists for when both the Regional Administrators and the Assistant Administrator for Enforcement and Compliance Assurance should consider emergency action under the Safe Drinking Water Act Section 1431.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>Train, in cooperation with the Assistant Administrator for Water, all relevant EPA drinking water and water enforcement program management and staff on the Safe Drinking Water Act Section 1431 authority and updated guidance.</td>
<td>Assistant Administrator for Enforcement and Compliance Assurance</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. O = Recommendation is open with agreed-to corrective actions pending.
   C = Recommendation is closed with all agreed-to actions completed.
   U = Recommendation is unresolved with resolution efforts in progress.
Appendix A

Distribution

Office of the Administrator
Assistant Administrator for Enforcement and Compliance Assurance
Regional Administrator, Region 5
Agency Follow-Up Official (the CFO)
Agency Follow-Up Coordinator
General Counsel
Associate Administrator for Congressional and Intergovernmental Relations
Associate Administrator for Public Affairs
Principal Deputy Assistant Administrator, Office of Enforcement and Compliance Assurance
Deputy Assistant Administrator, Office of Enforcement and Compliance Assurance
Deputy Regional Administrator, Region 5
Audit Follow-Up Coordinator, Office of Enforcement and Compliance Assurance
Audit Follow-Up Coordinator, Region 5