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Accessible Version

July 28, 2025

Mr. Carter Farmer Chief Information Officer Environmental Protection Agency 1200 Pennsylvania Avenue, NW Washington, DC 20460

Chief Information Officer Open Recommendations: Environmental Protection Agency

Dear Mr. Farmer:

I am writing to you with respect to your role as the Chief Information Officer (CIO) for the Environmental Protection Agency (EPA). As an independent, non-partisan agency that works for Congress, GAO's mission is to support Congress in meeting its constitutional responsibilities and help improve the performance and ensure the accountability of the federal government. Our work includes investigating matters related to the use of public funds, evaluating programs and activities of the U.S. Government at the request of congressional committees and subcommittees or on the initiative of the Comptroller General, and as required by public laws or committee reports. Our duties include reporting our findings and recommending ways to increase economy and efficiency in government spending. The purpose of this letter is to provide an overview of the open, publicly available GAO recommendations to EPA that call for the attention of the CIO.

We identified recommendations that relate to the CIO's roles and responsibilities in effectively managing IT. They include strategic planning, investment management, and information security. We have previously reported on the significance of the CIO's role in improving the government's performance in IT and related information management functions. Your attention to these recommendations will help ensure the secure and effective use of IT at the agency.

Currently, EPA has 11 open recommendations that call for the attention of the CIO. Each of these recommendations relates to a GAO High-Risk area: (1) Ensuring the Cybersecurity of the Nation or (2) Improving IT Acquisitions and Management.² In addition, GAO has designated one of the 11 as a priority recommendation.³ Fully implementing these open recommendations could significantly

¹See for example, GAO, Federal Chief Information Officers: Critical Actions Needed to Address Shortcomings and Challenges in Implementing Responsibilities, GAO-18-93 (Washington, D.C.: Aug. 2, 2018).

²GAO, High-Risk Series: Heightened Attention Could Save Billions More and Improve Government Efficiency and Effectiveness, GAO-25-107743 (Washington, D.C.: Feb. 25, 2025).

³Priority recommendations are those that GAO believes warrant priority attention from heads of key departments or agencies. They are highlighted because, upon implementation, they may significantly improve government operations, for example, by realizing large dollar savings; eliminating mismanagement, fraud, and abuse; or making progress toward addressing a high-risk or duplication issue. Since 2015, GAO has sent letters to selected agencies to highlight the importance of implementing such recommendations.

improve EPA's ability to deter threats and manage its critical systems, operations, and information. I have summarized selected recommendations here. See the enclosure for a full list, and additional details on the recommendations.

Ensuring the Cybersecurity of the Nation. EPA needs to take additional steps to secure the information systems it uses to carry out its mission. For example, we recommended that the agency establish a process for conducting an organization-wide cybersecurity risk assessment. Until EPA does so, the agency may miss opportunities to identify risks that affect the entire organization, and to implement solutions to address them.

We also recommended that EPA fully implement all event logging requirements as directed by the Office of Management and Budget. Until EPA implements this recommendation, there is increased risk that the agency will not have complete information from logs on its systems to detect, investigate, and remediate cyber threats.

Improving IT Acquisitions and Management. EPA needs to better manage and track its IT resources. For example, we recommended that the agency complete annual reviews of its IT portfolio consistent with federal requirements. Until EPA does so, investments with substantial cost, schedule, and performance problems may continue unabated without necessary corrective action.

We also recommended that EPA complete its covered Internet of Things (IoT) inventory within the revised time frame it had proposed.⁴ Given the enormous array of disparate devices that may be considered part of IoT, it is important that EPA identifies and documents any of those devices connected to its information systems. Until EPA implements this recommendation, the agency will lack visibility into the IoT devices in its enterprise environment and the ability to mitigate IoT cybersecurity risks.

Copies of this letter are being sent to the appropriate congressional committees and the Federal CIO. The letter will also be available at no charge on the GAO website at https://www.gao.gov. In addition, we sent a separate letter related to agency-wide priority recommendations, which conveys the importance of enhancing information technology and cybersecurity, to the Administrator of EPA.⁵

If you have any questions or would like to discuss any of the recommendations outlined in this letter, please do not hesitate to contact me at marinosn@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this letter. Our teams will continue to coordinate with your staff on addressing these 11 open recommendations that call for the attention of the CIO. I appreciate EPA's continued commitment and thank you for your personal attention to these important recommendations.

Sincerely,



Nick Marinos Managing Director

⁴Internet of Things generally refers to the technologies and devices that allow for the network connection and interaction of a wide array of devices that interact with the physical world, or "things", through such places as buildings, vehicles, transportation infrastructure, or homes.

⁵GAO, *Priority Open Recommendations: Environmental Protection Agency,* GAO-25-108095 (Washington, D.C.: Apr. 30, 2025).

Information Technology and Cybersecurity

Enclosure

cc: Mr. Greg Barbaccia, Federal CIO, Office of Management and Budget

Enclosure

Chief Information Officer Open Recommendations to the Environmental Protection Agency

This enclosure includes the open, publicly available GAO recommendations to the Environmental Protection Agency (EPA) that call for the attention of its Chief Information Officer (CIO). We have divided these recommendations into two categories: (1) ensuring the cybersecurity of the nation and (2) improving IT acquisitions and management.

Ensuring the Cybersecurity of the Nation

Federal agencies depend on IT systems to carry out operations and process, maintain, and report essential information. The security of these systems and data is vital to protecting individual privacy and ensuring national security. Table 1 provides information on the open cybersecurity-related recommendations relevant to the EPA CIO.

Table 1: Open Chief Information Officer-related Cybersecurity Recommendations for the Environmental Protection Agency (EPA)

GAO report number	GAO report title	Recommendation
GAO-19-384	Cybersecurity: Agencies Need to Fully Establish Risk Management Programs and Address Challenges	The Administrator of EPA should establish a process for conducting an organization-wide cybersecurity risk assessment. (Recommendation 40)*
GAO-20-126	Cloud Computing Security: Agencies Increased Their Use of the Federal Authorization Program, but Improved Oversight and Implementation Are Needed	The Administrator of EPA should update the list of corrective actions for the selected operational system to identify the specific weakness, estimated funding and anticipated source of funding, key remediation milestones with completion dates, changes to milestones and completion dates, and source of the weaknesses. (Recommendation 21)
		The Administrator of EPA should prepare the letter authorizing the use of cloud service for the selected operational system and submit the letter to the Federal Risk and Authorization Management Program (FedRAMP) program management office. (Recommendation 22)
GAO-24-105658	Cybersecurity: Federal Agencies Made Progress, but Need to Fully Implement Incident Response Requirements	The Administrator of EPA should ensure that the agency fully implements all event logging requirements as directed by Office of Management and Budget guidance. (Recommendation 15)

Source: GAO summary based on previously issued reports. | GAO-25-108540

^{*}Indicates a priority recommendation.

Improving IT Acquisitions and Management

Federal IT investments too frequently fail to deliver capabilities in a timely, cost-effective manner. Key management challenges—such as a lack of disciplined project planning and program oversight—continue to hamper effective acquisition and management of the government's IT assets. Table 2 provides information on the open IT acquisition and management-related recommendations relevant to the EPA CIO.

Table 2: Open Chief Information Officer (CIO)-related IT Acquisition and Management Recommendations for the Environmental Protection Agency (EPA)

GAO report number	GAO report title	Recommendation
GAO-23-105618	Air Pollution: EPA Needs to Develop a Business Case for Replacing Legacy Air Quality Data Systems	The Assistant Administrator of EPA's Office of Mission Support should identify factors for evaluating whether EPA's IT systems may be ready for replacement or retirement. (Recommendation 1)
		The Assistant Administrator of EPA's Office of Air and Radiation should consider documenting an operational analysis for Air Quality System and AirNow. (Recommendation 2)
		The Assistant Administrator of EPA's Office of Air and Radiation should develop and document a business case for a new IT system for air quality data based on considerations for how such a system could address the challenges currently posed by Air Quality System and AirNow. The business case should consider an analysis of alternatives, if appropriate. (Recommendation 3)
GAO-24-106137	Cloud Computing: Agencies Need to Address Key OMB Procurement Requirements	The Administrator of EPA should ensure that the CIO of EPA updates guidance to put a cloud service level agreement (SLA) in place with every vendor when a cloud solution is deployed. The guidance should include language that addresses the Office of Management and Budget's (OMB) required elements for SLAs, including continuous awareness of the confidentiality, integrity, and availability of its assets; a detailed description of roles and responsibilities; and remediation plans for noncompliance. (Recommendation 29)
		The Administrator of EPA should ensure that the CIO of EPA updates guidance regarding standardizing cloud SLAs. (Recommendation 30)
GAO-25-107041	IT Portfolio Management: OMB and Agencies Are Not Fully Addressing Selected Statutory Requirements	The Administrator of EPA should direct its agency CIO to work with OMB to ensure that annual reviews of its IT portfolio are conducted in conjunction with the Federal CIO and the Chief Operating Officer or Deputy Secretary (or equivalent), as prescribed by the Federal Information Technology Acquisition Reform Act. (Recommendation 35)
GAO-25-107179	Internet of Things: Federal Actions Needed to Address Legislative Requirements	The Administrator of EPA should direct the CIO to complete the covered Internet of Things inventory within the revised time frame it has proposed. (Recommendation 6)

Source: GAO summary based on previously issued reports. | GAO-25-108540