U.S. Environmental Protection Agency
Office of Inspector General

08-P-0273
September 23, 2008

# At a Glance

*Catalyst for Improving the Environment*

## Why We Did This Review

The Office of Inspector General contracted with Williams, Adley & Company, LLP to conduct the annual audit of the U.S. Environmental Protection Agency's (EPA's) compliance with the Federal Information Security Management Act. Williams, Adley & Company, LLP conducted network vulnerability testing of the Agency's local area network located at the EPA's Headquarters in Washington, DC.

## Background

The National Computer Center (NCC), located in Research Triangle Park, North Carolina, is responsible for managing the assignment of Internet Protocol (IP) addresses within EPA. The Enterprise Desktop Solutions Division (EDSD) is responsible for the network infrastructure required to support end user requirements.

**For further information, contact our Office of Congressional and Public Liaison at (202) 566-2391.**

# *Management of EPA Headquarters Internet Protocol Addresses Needs Improvement*

## What Williams, Adley & Company, LLP Found

Processes used to assign and track IP addresses within EPA Headquarters in Washington, DC, need strengthening to enforce accountability. Information provided by EPA representatives to support vulnerability testing of the Headquarters' network revealed that Agency personnel were not aware of the IP addresses assigned to them. This occurred because EPA needs a:

- Process to track the assignment of IP addresses
- Method to identify all active and assigned IP addresses

Vulnerability testing of the EPA Headquarters network identified 391 IP addresses with ***high-risk*** and/or ***medium-risk*** vulnerabilities. Although EDSD personnel conducted research to identify the Program Offices responsible for the IP addresses, EDSD could not identify the offices responsible for 273 of the IP addresses. As a result, 18 ***high-risk*** vulnerabilities exist where the responsible EPA offices could not be contacted to remediate the risks. Furthermore, without a full accounting of assigned IP addresses, EPA cannot be assured that its patch management or incident response processes are effective.

## What Williams, Adley & Company, LLP Recommends

Williams, Adley & Company, LLP recommends that EPA:

- Take immediate action to address all identified network security weaknesses and start risk mitigation actions to reduce the risks from the remaining 18 unidentified IP addresses.
- Develop and implement procedures to document and keep current a complete inventory of all IP addresses assigned to EPA Headquarters.
- Develop and implement a revised IP address allocation scheme to assign entire IP address blocks to Program Offices to eliminate fragmentation and improve security administration.
- Implement a process that augments the current vulnerability testing process used to identify active Headquarters IP address with the use of other network monitoring tools.
- Develop Plans of Actions and Milestones for each recommendation.

Due to the sensitive nature of the report's technical findings, the full report is not available to the public.