Catalyst for Improving the Environment

## **Special Report**

# Fiscal Year 2007 Federal Information Security Management Act Report

**Status of EPA's Computer Security Program** 

Report No. 2007-S-00003

**September 25, 2007** 

Rudolph M. Brevard Vincent Campbell Sejal Shah Sabrena Stewart **Report Contributors:** 



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

OFFICE OF INSPECTOR GENERAL

September 25, 2007

Tatricia H. Will

#### **MEMORANDUM**

**SUBJECT:** Fiscal Year 2007 Federal Information Security Management Act Report:

Status of EPA's Computer Security Program

Report No. 2007-S-00003

**FROM:** Patricia H. Hill

Assistant Inspector General for Mission Systems

**TO:** Stephen L. Johnson

Administrator

Attached is the Office of Inspector General's Fiscal Year 2007 Federal Information Security Management Act Reporting Template, as prescribed by the Office of Management and Budget (OMB). In addition, Appendix A synopsizes the results of our significant Fiscal Year 2007 information security audits.

In accordance with OMB reporting instructions, I am forwarding this report to you for submission, along with the Agency's required information, to the Director, Office of Management and Budget.

#### Section C - Inspector General: Questions 1 and 2

Agency Name: Environmental Protection Agency Submission date: 21-Sep-07

Question 1: FISMA Systems Inventory

1. As required in FISMA, the IG shall evaluate a representative subset of systems used or operated by an agency or by a contractor of an agency or other organization on behalf of an agency.

In the table below, identify the number of agency and contractor information systems, and the number reviewed, by component/bureau and FIPS 199 system impact level (high, moderate, low, or not categorized). Extend the worksheet onto subsequent pages if necessary to include all Component/Bureaus.

Agency systems shall include information systems used or operated by an agency. Contractor systems shall include information systems used or operated by a contractor of an agency or other organization on behalf of an agency. The total number of systems shall include both agency systems and contractor systems.

Agencies are responsible for ensuring the security of information systems used by a contractor of their agency or other organization on behalf of their agency; therefore, self reporting by contractors does not meet the requirements of law. Self-reporting by another Federal agency, for example, a Federal service provider, may be sufficient. Agencies and service providers have a shared responsibility for FISMA compliance.

#### Question 2: Certification and Accreditation, Security Controls Testing, and Contingency Plan Testing

2. For the Total Number of Systems reviewed by Component/Bureau and FIPS System Impact Level in the table for Question 1, identify the number and percentage of systems which have: a current certification and accreditation, security controls tested and reviewed within the past year, and a contingency plan tested in accordance with policy.

				Que	stion 1					Ques	stion 2		
			a.		b.		C.		a.		b.		c.
		Agency	y Systems	Contract	or Systems	Sy: (Age Con	lumber of stems ncy and tractor stems)	systems	ber of s certified credited	systems security have be and rev	ber of for which controls en tested riewed in ast year	systems continge have be in accord	ber of for which ency plans en tested lance with licy
Bureau Name	FIPS 199 System Impact Level	Number	Number Reviewed	Number	Number Reviewed	Total Number	Total Number Reviewed	Total Number	Percent of Total	Total Number	Percent of Total	Total Number	Percent of Total
Office of Administrator	High	0	0	0	0	(	_	0		0		0	
	Moderate	2					2 0	0		0		0	
	Low	1	C					0		0		0	
	Not Categorized Sub-total	3						0		0		0	
Office of Air and Radiation	High	1						1		0		0	
onio o mi ana madanon	Moderate	11						0		1	100%	0	
	Low	6		1				0		0		0	
	Not Categorized	0						0		0		0	
Office of Admininstration and December Management	Sub-total	18						1		1		0	
Office of Admininstration and Resource Management	High Moderate	11						1		1	50%	0	
	Low	0						0		0		0	
	Not Categorized		C	0		(	0	0		0		0	
	Sub-total	11						1		1	50%	0	
Office of Chief Financial Officer	High	0						0		0		0	
	Moderate	16						0		1		0	
	Low Not Categorized	0						0		0		0	
	Sub-total	18						. 3		1		0	
Office of Environmental Information	High	0						0		0		0	
	Moderate	16						1		0		0	
	Low	16						0		0		0	
	Not Categorized Sub-total	32						0 1		0		0 <b>0</b>	
Office of General Counsel	High	0						0		0		0	
Cindo di Condital Councid	Moderate	1						0		0		0	
	Low	0					0	0		0		0	
	Not Categorized	0						0		0		0	
	Sub-total	1						0		0		0	
Office of International Activities	High Moderate	0						0		0		0	
	Low	0						0		0		0	
	Not Categorized	0						0		0		0	
	Sub-total	0			0	(	0	0		0		0	
Office of Inspector General	High	0					0	0		0		0	
	Moderate	7		-			1	1		0		0	
	Low Not Categorized	0						0		0		0	
	Sub-total	8						1		0		0	
Office of Prevention Pesticides and Toxic Substances	High	0						0		0		0	
	Moderate	6						0	0%	1		0	
	Low	1						0		0		0	
	Not Categorized Sub-total	7						0		1		0 <b>0</b>	
Office of Research and Development	High	0						0		0		0	
	Moderate	7						1		1	50%	0	
	Low	8	C	0				0		0		0	
	Not Categorized	0						0		0		0	
Office of Solid Waste and Emergency Response	Sub-total	15 0						0		1		0	
Onice of Solid waste and Emergency Response	High Moderate	4						0		1		0	
	Low	4						0		0		0	
	Not Categorized	0	0	0	0	(	0	0		0		0	
	Sub-total	8						0		1		0	
Office of Enforcement and Compliance Assurance	High	0						0		0		0	
	Moderate Low	8						0		1		0	
	Not Categorized	0						0		0		0	
	Sub-total	11						Ö		1		0	
Office of Water	High	0	0	0		(	0	0		0		0	
	Moderate	8						0		1		0	
	Low Not Categorized	0						0		0		0	
	Not Categorized Sub-total	8					3 1	0		1		0	
	Jub-total		1 1		U	٠ ر	1			1	100%	U	

	Section	C - Insp	ector G	eneral:	Questio	ns 1 and	d 2						
Agency Name:	Environmental F	rotectio	n Agency	,				Submis	sion dat	e:	21-Sep-	07	
				Que	stion 1					Ques	tion 2		
			a. Systems		b. or Systems	Total N Sys (Ager Cont	c. umber of stems acy and tractor tems)	Numi	a. ber of certified credited	Num systems security have be and rev	b. ber of for which controls en tested riewed in ast year	Num systems continge have be in accord	c. ber of for which ncy plans en tested dance with licy
Bureau Name	FIPS 199 System Impact Level	Number	Number Reviewed	Number	Number Reviewed	Total Number	Total Number Reviewed	Total Number	Percent of Total	Total Number	Percent of Total	Total Number	Percent of Total
Region 1	High	0	0	0	0	0		0		0		0	
	Moderate	1		0	0	1		0		0		0	
	Low	0						0		0		0	
	Not Categorized Sub-total	0 1						0 <b>0</b>		0		0	
Region 2	High	0						0		0		0	
	Moderate	2						0		0		0	
	Low	0						0		0		0	
	Not Categorized Sub-total	0 <b>2</b>						0 <b>0</b>		0		0	
Region 3	High	0		0	0	0	0	0		0		0	
	Moderate	1						1		0		0	
	Low Not Categorized	0						0		0		0	
	Sub-total	1						1		0		0	
Region 4	High	0	0	0	0	0	0	0		0		0	
	Moderate	1					0	0		0		0	
	Low Not Categorized	0					0	0		0		0	
	Sub-total	1				1	0	0		0		0	
Region 5	High	0	0	0	0	0	0	0		0		0	
	Moderate	2					0	0		0		0	
	Low Not Categorized	1 0						0		0		0	
	Sub-total	3					0	0		0		0	
Region 6	High	0	0			0	0	0		0		0	
	Moderate	1						0		0		0	
	Low Not Categorized	0						0		0		0	
	Sub-total	1						0		0		0	
Region 7	High	0						0		0		0	
	Moderate	1 0						0		0		0	
	Low Not Categorized	0						0		0		0	
	Sub-total	1	0	0	0	1	0	0		0		Ö	
Region 8	High	0					0	0		0		0	
	Moderate Low	1						0		0		0	
	Not Categorized	0				0	0	0		0		0	
	Sub-total	2	0	0	0	2	0	0		0		0	
Region 9	High	0						0		0		0	
	Moderate Low	1 0						0		0		0	
	Not Categorized	0				0	0	0		0		0	
	Sub-total	1			0	2	0	0		0		0	
Region 10	High Moderate	0						0		0		0	
	Moderate Low	1 0						0		0		0	
	Not Categorized	0				0	0	0		0		0	
	Sub-total	1	0					0		0		0	
Agency Totals	High Moderate	109	1 15	0	0	1 121	16	1	100%	8		0	
	Moderate Low	109	15	12	0	121 49				0		0	
	Not Categorized	0	0			0	0	0		0		0	
	Total	154	16	17	1	171	17			8	47%	. 0	)

For each system selected for review, the OIG evaluated the system for compliance with either the Federal C&A or the security control testing requirements. As such, the percentage columns for questions 2a & b represent the percentage of systems evaluated in relationship to the total number of systems operated by the respective EPA program or regional office. Likewise, the percentage rat does not represent the rate in which the reviewed system complied with the evaluated Federal security requirement. The OIG did not test EPA systems for compliance with Federal contingency plan requirements.

ency Name:	Environmental Protection Agenc	v		
	Question 3: Evaluation of Agency Ov	•	Quality of Agency System Inv	ventory
3.a.	The agency performs oversight and contractor of the agency or other or	evaluation to ensure information s ganization on behalf of the agency	ystems used or operated by a meet the requirements of	
	Agencies are responsible for ensuring agency or other organization on behalf the requirements of law. Self-reporting may be sufficient. Agencies and service	he security of information systems us of their agency; therefore, self reporti by another Federal agency, for exam	ed by a contractor of their ng by contractors does not mee aple, a Federal service provider,	t Almost Always (96-100 the time)
	Response Categories:  Rarely- for example, approximately Sometimes- for example, approxima Frequently- for example, approxima Mostly- for example, approximately Almost Always- for example, approx	ately 51-70% of the time tely 71-80% of the time 81-95% of the time		,
3.b.	The agency has developed a comple national security systems) operated identification of the interfaces betwee including those not operated by or u	by or under the control of such agen each such system and all other	ency, including an	
	Response Categories:  - The inventory is approximately 0-50  - The inventory is approximately 51-7  - The inventory is approximately 71-8  - The inventory is approximately 81-9  - The inventory is approximately 96-1	% complete 0% complete 0% complete 5% complete		Inventory is 96-100% complete
3.c.	The IG generally agrees with the CIC	on the number of agency-owned s	systems. Yes or No.	Yes
3.d.	The IG generally agrees with the CIC	on the number of information cus		
	contractor of the agency or other or		•	Yes
3.e.	contractor of the agency or other ore.  The agency inventory is maintained	ganization on behalf of the agency.	Yes or No.	Yes Yes
		ganization on behalf of the agency.  and updated at least annually. Yes  ne Agency's inventory as 96-100% of  ect Identifier (UPI) associated with	Yes or No. s or No. complete, please identify the k	Yes known missing system our FY2008 Exhibit 53
3.e.	The agency inventory is maintained  If the Agency IG does not evaluate the Component/Bureau, the Unique Projection	ganization on behalf of the agency.  and updated at least annually. Yes  ne Agency's inventory as 96-100% of  ect Identifier (UPI) associated with	Yes or No. s or No. complete, please identify the k	Yes
3.e.	The agency inventory is maintained  If the Agency IG does not evaluate the Component/Bureau, the Unique Projection known), and indicate if the system is	ganization on behalf of the agency. and updated at least annually. Yes ne Agency's inventory as 96-100% ect Identifier (UPI) associated with an agency or contractor system.	Yes or No.  s or No.  complete, please identify the letthe system as presented in your Exhibit 53 Unique Project	Yes  known missing system our FY2008 Exhibit 53  Agency or Contractor
3.e.	The agency inventory is maintained  If the Agency IG does not evaluate the Component/Bureau, the Unique Projection known), and indicate if the system is	ganization on behalf of the agency. and updated at least annually. Yes ne Agency's inventory as 96-100% ect Identifier (UPI) associated with an agency or contractor system.	Yes or No.  s or No.  complete, please identify the letthe system as presented in your Exhibit 53 Unique Project	Yes  known missing system our FY2008 Exhibit 53  Agency or Contractor
3.e.	The agency inventory is maintained  If the Agency IG does not evaluate the Component/Bureau, the Unique Projection known), and indicate if the system is	ganization on behalf of the agency. and updated at least annually. Yes ne Agency's inventory as 96-100% ect Identifier (UPI) associated with an agency or contractor system.	Yes or No.  s or No.  complete, please identify the letthe system as presented in your Exhibit 53 Unique Project	Yes  known missing system our FY2008 Exhibit 53  Agency or Contractor
3.e.	The agency inventory is maintained  If the Agency IG does not evaluate the Component/Bureau, the Unique Projection known), and indicate if the system is	ganization on behalf of the agency. and updated at least annually. Yes ne Agency's inventory as 96-100% ect Identifier (UPI) associated with an agency or contractor system.	Yes or No.  s or No.  complete, please identify the letthe system as presented in your Exhibit 53 Unique Project	Yes  known missing system our FY2008 Exhibit 53  Agency or Contractor
3.e.	The agency inventory is maintained  If the Agency IG does not evaluate the Component/Bureau, the Unique Projection known), and indicate if the system is	ganization on behalf of the agency. and updated at least annually. Yes ne Agency's inventory as 96-100% ect Identifier (UPI) associated with an agency or contractor system.	Yes or No.  s or No.  complete, please identify the letthe system as presented in your Exhibit 53 Unique Project	Yes  known missing system our FY2008 Exhibit 53  Agency or Contractor
3.e.	The agency inventory is maintained  If the Agency IG does not evaluate the Component/Bureau, the Unique Projection known), and indicate if the system is	ganization on behalf of the agency. and updated at least annually. Yes ne Agency's inventory as 96-100% ect Identifier (UPI) associated with an agency or contractor system.	Yes or No.  s or No.  complete, please identify the letthe system as presented in your Exhibit 53 Unique Project	Yes  known missing system our FY2008 Exhibit 53  Agency or Contractor
3.e.	The agency inventory is maintained  If the Agency IG does not evaluate the Component/Bureau, the Unique Projection known), and indicate if the system is	ganization on behalf of the agency. and updated at least annually. Yes ne Agency's inventory as 96-100% ect Identifier (UPI) associated with an agency or contractor system.	Yes or No.  s or No.  complete, please identify the letthe system as presented in your Exhibit 53 Unique Project	Yes  known missing system our FY2008 Exhibit 53  Agency or Contractor
3.e.	The agency inventory is maintained  If the Agency IG does not evaluate the Component/Bureau, the Unique Projection known), and indicate if the system is	ganization on behalf of the agency. and updated at least annually. Yes ne Agency's inventory as 96-100% ect Identifier (UPI) associated with an agency or contractor system.	Yes or No.  s or No.  complete, please identify the letthe system as presented in your Exhibit 53 Unique Project	Yes  known missing system our FY2008 Exhibit 53  Agency or Contractor
3.e.	The agency inventory is maintained  If the Agency IG does not evaluate the Component/Bureau, the Unique Projection known), and indicate if the system is	ganization on behalf of the agency. and updated at least annually. Yes ne Agency's inventory as 96-100% ect Identifier (UPI) associated with an agency or contractor system.	Yes or No.  s or No.  complete, please identify the letthe system as presented in your Exhibit 53 Unique Project	Yes  known missing system our FY2008 Exhibit 53  Agency or Contractor
3.e.	The agency inventory is maintained  If the Agency IG does not evaluate the Component/Bureau, the Unique Projection known), and indicate if the system is	ganization on behalf of the agency. and updated at least annually. Yes ne Agency's inventory as 96-100% ect Identifier (UPI) associated with an agency or contractor system.	Yes or No.  s or No.  complete, please identify the letthe system as presented in your Exhibit 53 Unique Project	Yes  known missing system our FY2008 Exhibit 53  Agency or Contractor
3.e.	The agency inventory is maintained  If the Agency IG does not evaluate the Component/Bureau, the Unique Projection known), and indicate if the system is	ganization on behalf of the agency. and updated at least annually. Yes ne Agency's inventory as 96-100% ect Identifier (UPI) associated with an agency or contractor system.	Yes or No.  s or No.  complete, please identify the letthe system as presented in your Exhibit 53 Unique Project	Yes  known missing system our FY2008 Exhibit 53  Agency or Contractor
3.e.	The agency inventory is maintained  If the Agency IG does not evaluate the Component/Bureau, the Unique Projection known), and indicate if the system is	ganization on behalf of the agency. and updated at least annually. Yes ne Agency's inventory as 96-100% ect Identifier (UPI) associated with an agency or contractor system.	Yes or No.  s or No.  complete, please identify the letthe system as presented in your Exhibit 53 Unique Project	Yes  known missing system our FY2008 Exhibit 53  Agency or Contractor
3.e.	The agency inventory is maintained  If the Agency IG does not evaluate the Component/Bureau, the Unique Projection known), and indicate if the system is	ganization on behalf of the agency. and updated at least annually. Yes ne Agency's inventory as 96-100% ect Identifier (UPI) associated with an agency or contractor system.	Yes or No.  s or No.  complete, please identify the letthe system as presented in your Exhibit 53 Unique Project	Yes  known missing system our FY2008 Exhibit 53  Agency or Contractor

#### Section C - Inspector General: Questions 4 and 5

Agency Name: Environmental Protection Agency

#### Question 4: Evaluation of Agency Plan of Action and Milestones (POA&M) Process

Assess whether the agency has developed, implemented, and is managing an agency-wide plan of action and milestones (POA&M) process. Evaluate the degree to which each statement reflects the status in your agency by choosing from the responses provided. If appropriate or necessary, include comments in the area provided.

For each statement in items 4.a. through 4.f., select the response category that best reflects the agency's status.

#### Response Categories:

- Rarely- for example, approximately 0-50% of the time
- Sometimes- for example, approximately 51-70% of the time
- Frequently- for example, approximately 71-80% of the time
- Mostly- for example, approximately 81-95% of the time
- Almost Always- for example, approximately 96-100% of the time

4.a.	The POA&M is an agency-wide process, incorporating all known IT security weaknesses associated with information systems used or operated by the agency or by a contractor of the agency or other organization on behalf of the agency.	Almost Always (96-100% of the time)
4.b.	When an IT security weakness is identified, program officials (including CIOs, if they own or operate a system) develop, implement, and manage POA&Ms for their system(s).	Almost Always (96-100% of the time)
4.c.	Program officials and contractors report their progress on security weakness remediation to the CIO on a regular basis (at least quarterly).	Almost Always (96-100% of the time)
4.d.	Agency CIO centrally tracks, maintains, and reviews POA&M activities on at least a quarterly basis.	Almost Always (96-100% of the time)
4.e.	IG findings are incorporated into the POA&M process.	Almost Always (96-100% of the time)
4.f.	POA&M process prioritizes IT security weaknesses to help ensure significant IT security weaknesses are addressed in a timely manner and receive appropriate resources.	Almost Always (96-100% of the time)

POA&M process comments:

#### Question 5: IG Assessment of the Certification and Accreditation Process

Provide a qualitative assessment of the agency's certification and accreditation process, including adherence to existing policy, guidance, and standards. Provide narrative comments as appropriate.

Agencies shall follow NIST Special Publication 800-37, "Guide for the Security Certification and Accreditation of Federal Information Systems" (May 2004) for certification and accreditation work initiated after May 2004. This includes use of the FIPS 199, "Standards for Security Categorization of Federal Information and Information Systems" (February 2004) to determine a system impact level, as well as associated NIST document used as guidance for completing risk assessments and security plans.

The IG's quality rating included or considered the following aspects of the C&A process: (check all that apply)  5.b.  Security plan X  System impact level X  System test and evaluation Security control testing X  Incident handling Security awareness training Configurations/patching Other:	5.a.	The IG rates the overall quality of the Agency's certification and accreditation process as:  Response Categories:  Excellent  Good  Satisfactory  Poor  Failing	Satisfactory	
5.b.  System impact level X  System test and evaluation  Security control testing X  Incident handling  Security awareness training  Configurations/patching  Other:			Security plan	Х
Security control testing X Incident handling Security awareness training Configurations/patching Other:		(спеск ан тлат арріу)	System impact level	X
Incident handling Security awareness training Configurations/patching Other:			System test and evaluation	
Incident handling Security awareness training Configurations/patching Other:	5 b		Security control testing	X
Configurations/patching Other:	0.5.		Incident handling	
Other:			Security awareness training	
			Configurations/patching	
Comment: The OIG evaluated nine EPA systems for compliance with selected Federal C&A requirements. Our review disclosed that all				

Comment: The OIG evaluated nine EPA systems for compliance with selected Federal C&A requirements. Our review disclosed that all evaluated systems were complaint with the selected requirements. See question 5b for the evaluated C&A factors. Based on our limited review, we rated the Agency's C&A process as Satisfactory.

	Section C - Inspector General: Questions 6 and 7	
ncy Name:	Environmental Protection Agency	
	Question 6: IG Assessment of Agency Privacy Program and Privacy Impact Assessment	nent (PIA) Process
6.a.	Provide a qualitative assessment of the agency's Privacy Impact Assessment (PIA) process, as discussed in Section D II.4 (SAOP reporting template), including adherence to existing policy, guidance, and standards.	
	Response Categories: - Response Categories: - Excellent - Good - Satisfactory - Poor - Failing	Satisfactory
	Comments: The EPA has implemented a Privacy Impact Assessment (PIA) process. The procedures are available evaluation was based on whether applicable PIA guidance exist, was current, and available to the EP implementation of the PIA guidance.	
6.b.	Provide a qualitative assessment of the agency's progress to date in implementing the provisions of M-06-15, "Safeguarding Personally Identifiable Information" since the most recent self-review, including the agency's policies and processes, and the administrative, technical, and physical means used to control and protect personally identifiable information (PII).	
	Response Categories: - Response Categories: - Excellent - Good - Satisfactory - Poor - Failing	Satisfactory
	Comments: The Agency has developed an interim policy to address safeguarding personnally identifiable inform aware of the importance of safeguardning PII through the Agency's on-line FY2007 Information Secu has identified some areas where EPA could improve its practices for approving the download and ac separate memorandum to the Chief Information Officer in October 2007 documenting our findings.	rity Awareness Training. However, the Old
	Question 7: Configuration Management	
7.a.	Is there an agency-wide security configuration policy? Yes or No.  Comments:	Yes
7.b.	Approximate the extent to which applicable information systems apply common security configurations established by NIST.	
	Response categories:	
	<ul> <li>Rarely- for example, approximately 0-50% of the time</li> <li>Sometimes- for example, approximately 51-70% of the time</li> <li>Frequently- for example, approximately 71-80% of the time</li> <li>Mostly- for example, approximately 81-95% of the time</li> <li>Almost Always- for example, approximately 96-100% of the time</li> </ul>	
	Comments: The OIG did not test EPA systems for compliance with NIST common security configurate evaluate EPA's standard configuration documents (SCD) against NIST requirements, if available, or intended that for all EPA SCDs selected for review, the SCD's content was consistent with a published applicable operating system platform. However, the contractor identified that EPA should take steps Based on interviews with EPA officials, the contractor learnt that EPA is currently updating five of the provide EPA with the final analysis for each reviewed SCD in a separate document.	ndustry best practices. The contractor uthoritative document for securing the to update six of the reviewed SCDs.

Agency Name:	Environmental Protection Agency	
	Question 8: Incident Reporting	
	or not the agency follows documented policies and procedures for reporting incidents inter appropriate or necessary, include comments in the area provided below.	nally, to US-CERT, and to law
8.a.	The agency follows documented policies and procedures for identifying and reporting incidents internally. Yes or No.	Yes
8.b.	The agency follows documented policies and procedures for external reporting to USCERT. Yes or No. (http://www.us-cert.gov)	Yes
8.c.	The agency follows documented policies and procedures for reporting to law enforcement. Yes or No.	Yes
	Question 9: Security Awareness Training	
lac the agency	ensured security awareness training of all employees including contractors and those	
• •	ensured security awareness training of all employees, including contractors and those significant IT security responsibilities?	
employees with	significant IT security responsibilities?	
employees with Response Categ - Rarely- or app	significant IT security responsibilities? proximately 0-50% of employees	Almost Always (96-100% of employees)
employees with Response Categ - Rarely- or app - Sometimes- o	significant IT security responsibilities?	Almost Always (96-100% of employees)
mployees with desponse Categ - Rarely- or app - Sometimes- o - Frequently- o - Mostly- or app	significant IT security responsibilities?  provimately 0-50% of employees or approximately 51-70% of employees or approximately 71-80% of employees proximately 81-95% of employees	Almost Always (96-100% of employees)
Response Categ Response Categ Rarely- or app Sometimes- or Frequently- or Mostly- or app	significant IT security responsibilities?  provimately 0-50% of employees or approximately 51-70% of employees or approximately 71-80% of employees proximately 81-95% of employees proximately 81-95% of employees ys- or approximately 96-100% of employees	Almost Always (96-100% of employees)
Response Categ Response Categ Rarely- or app Sometimes- or Frequently- or Mostly- or app Almost Alway	significant IT security responsibilities?  provimately 0-50% of employees or approximately 51-70% of employees or approximately 71-80% of employees proximately 81-95% of employees	Almost Always (96-100% of employees)  Yes
reployees with response Category Rarely- or apples of Sometimes or Frequently- or Almost Alway	significant IT security responsibilities?  provies: proximately 0-50% of employees or approximately 51-70% of employees or approximately 71-80% of employees proximately 81-95% of employees ys- or approximately 96-100% of employees  Question 10: Peer-to-Peer File Sharing or explain policies regarding peer-to-peer file sharing in IT security awareness training,	

# Summary of Significant Fiscal Year 2007 Security Control Audits

During Fiscal Year 2007, the U.S. Environmental Protection Agency's (EPA's) Office of Inspector General (OIG) initiated numerous audits of EPA's information technology security program and information systems. The following synopsizes key findings.

# 1. EPA Could Improve Processes for Managing Contractor Systems and Reporting Incidents, Report No. 2007-P-00007, January 11, 2007

EPA had not established procedures to ensure identification of all contractor systems. EPA has not ensured that information security requirements were accessible by the contractors and appropriately maintained. As a result, EPA system inventories may not include all appropriate contractor systems, and its contractors may not be implementing adequate security safeguards.

Although EPA offices were aware of the Agency's computer security incident response policy, many offices lacked local reporting procedures, had not fully implemented automated monitoring tools, and did not provide sufficient training on local procedures. EPA offices also did not have access to network attack trend information necessary to implement proactive defensive measures.

In response to our final report, Office of Environmental Information officials indicated that they had complete actions on four of the report recommendations. The Office of Environmental Information is continuing to work on updating the Agency's Information Security Manual, which will provide Agency officials procedures for determining when contractor information systems are subject to Federal information security requirements. EPA has also updated its Computer Security Incident Response Capability procedures to better define the local incident handling procedures. EPA indicated that it is also providing regular training to the information security community on prioritizing security incidents and escalating notifications

# 2. EPA Could Improve Controls Over Mainframe System Software, Report No. 2007-P-00008, January 29, 2007

The contractor that performed this review for the OIG identified several weaknesses in EPA's internal controls over its mainframe system software, including:

- Roles and responsibilities were not clearly assigned.
- Change controls were not performed in accordance with Agency policies.
- Policies, procedures, and guides could be strengthened.
- Security settings for sensitive datasets and programs were not effectively configured or implemented.

As a result of these weaknesses, EPA is exposed to greater risk since its mainframe system software could potentially be comprised.

# 3. EPA Needs to Strengthen Financial Database Security Oversight and Monitor Compliance, Report No. 2007-P-00017, March 29, 2007

We discovered weaknesses in how EPA offices (1) monitor databases for known security vulnerabilities, (2) communicate the status of critical system patches, and (3) monitor the use of and access to database administrator accounts and privileges. These weaknesses exist because EPA had not implemented security processes to (1) actively monitor systems that share data with the Integrated Financial Management System, (2) share and collect information on the implementation of critical system patches, and (3) effectively manage access controls. Without these processes, the integrity of critical data in key Office of the Chief Financial Officer systems could be undermined. As a result, the Office of the Chief Financial Officer cannot ensure that the integrity of the data it provides to senior Agency officials is adequately protected. We also identified specific technical weaknesses in three of the financial databases that share data with the Integrated Financial Management System.

# 4. EPA Needs to Strengthen Its Privacy Program Management Controls, Report No. 2007-P-00035, September 17, 2007

EPA needs to set up a more comprehensive management control structure to govern and oversee the program. In particular, EPA needs to establish goals and activities for the Privacy Program and measure progress. Further, EPA needs to update its Privacy Program policies and establish processes to manage and make these policies available to responsible EPA personnel. Also, EPA needs to set up compliance and accountability processes to ensure adherence with key Privacy Program tenets. These weaknesses existed because of the low priority EPA managers placed on the Privacy Program. A major loss of privacy information could result in substantial harm, embarrassment, and inconvenience to individuals. It could lead to identity theft or other fraudulent use of the information, which in addition to harming the individuals involved could be costly to the Agency and its reputation.

#### Appendix B

### **Distribution**

Office of the Administrator
Assistant Administrator for Environmental Information and Chief Information Officer
Agency Followup Official
Agency Followup Coordinator
General Counsel
Associate Administrator for Congressional and Intergovernmental Relations
Associate Administrator for Public Affairs
Director, Office of Technology Operations and Planning
Senior Agency Information Security Officer
Acting Inspector General