



U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF INSPECTOR GENERAL

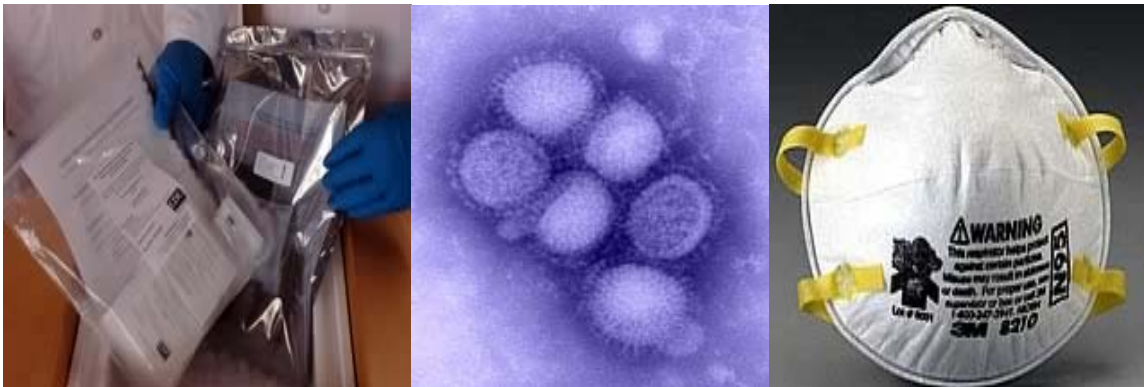
Catalyst for Improving the Environment

Evaluation Report

EPA Needs to Improve Continuity of Operations Planning

Report No. 10-P-0017

October 27, 2009



Report Contributors:

Gabrielle Fekete
Jeffrey Harris
Denton Stafford
Olga Stein
Steve Weber

Abbreviations

COOP	Continuity of Operations
EPA	U.S. Environmental Protection Agency
FCD 1	Federal Continuity Directive 1
HSPD-20	Homeland Security Presidential Directive 20
OEM	Office of Emergency Management
OIG	Office of Inspector General

Cover photos: *From left:* The Centers for Disease Control and Prevention-developed Polymerase Chain Reaction diagnostic test to detect novel influenza virus; image of the newly identified influenza virus; facemask to reduce transmission of influenza virus (photos courtesy Centers for Disease Control and Prevention).



At a Glance

Catalyst for Improving the Environment

Why We Did This Review

The objective of this evaluation was to determine how well the U.S. Environmental Protection Agency (EPA) can accomplish its mission essential functions in the event of a pandemic influenza or equivalent national emergency that necessitates Continuity of Operations (COOP) activation.

Background

Federal Continuity Directive 1 (FCD 1) requires EPA to develop a continuity plan that ensures its ability to accomplish its mission essential functions from an alternative site with limited staffing and without access to resources available during normal activities. EPA must be prepared to continue to function during an emergency and to effectively resume essential operations when they are interrupted.

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

To view the full report, click on the following link:
www.epa.gov/oig/reports/2010/20091027-10-P-0017.pdf

EPA Needs to Improve Continuity of Operations Planning

What We Found

EPA has limited assurance that it can successfully maintain continuity of operations and execute its mission essential functions during a significant national event such as a pandemic influenza outbreak. EPA's COOP policy does not clearly define authorities and responsibilities for continuity planning at all levels of the Agency and has not been updated to reflect current national directives and guidance. EPA lacks internal management controls, including guidance and systematic oversight, to ensure that regional offices have developed continuity plans that meet the requirements of FCD 1. Regional plans generally lack consistency, particularly in the area of mission essential functions, and there was no evidence that EPA Headquarters had reviewed, approved, or commented on the regional plans, their designation, or lack of essential functions.

EPA's continuity training and exercises have not prepared the Agency to provide essential services during a significant national event. EPA has not held and does not require any all-employee continuity training. Also, EPA's continuity exercises do not test EPA's ability to execute its mission essential functions following COOP activation. Four out of six regions contacted and all but one program office have not conducted internal exercises to test capabilities during a pandemic.

What We Recommend

EPA should establish a schedule to complete FCD 1 requirements, designate a lead office for COOP planning, and identify Headquarters and regional responsibilities and authorities. EPA should also develop consistent mission essential functions and COOP plan preparation and training guidance for all regions. Further, EPA Headquarters should review and approve all regional and program office COOP plans. The Agency concurred with our recommendations.



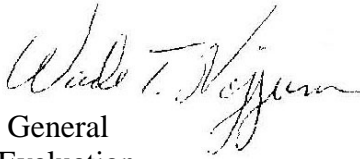
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
INSPECTOR GENERAL

October 27, 2009

MEMORANDUM

SUBJECT: EPA Needs to Improve Continuity of Operations Planning
Report No. 10-P-0017

FROM: Wade T. Najjum 
Assistant Inspector General
Office of Program Evaluation

TO: Mathy Stanislaus
Assistant Administrator for Solid Waste and Emergency Response

This is our report on the subject evaluation conducted by the Office of Inspector General (OIG) of the U.S. Environmental Protection Agency (EPA). This report contains findings that describe the problems the OIG has identified and corrective actions the OIG recommends. This report represents the opinion of the 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 resolution procedures.

The estimated cost of this report – calculated by multiplying the project’s staff days by the applicable daily full cost billing rates in effect at the time – is \$519,022.

Action Required

In accordance with EPA Manual 2750, you are required to provide a written response to this report within 90 calendar days. You should include a corrective actions plan for agreed upon actions, including milestone dates. We have no objections to the further release of this report to the public. This report will be available at <http://www.epa.gov/oig>.

If you or your staff have any questions regarding this report, please contact me at 202-566-0827; or Jeffrey Harris, Director for Program Evaluation, Cross-Media Issues, at 202-566-0831 or harris.jeffrey@epa.gov.

Table of Contents

Chapters

1	Introduction	1
	Purpose	1
	Background	1
	Noteworthy Achievements.....	2
	Scope and Methodology.....	2
2	EPA’s Continuity of Planning Operations Is Inconsistent	4
	EPA’s Continuity Policy Should Be More Definitive and Strengthened	4
	Regional Continuity Plans Vary Significantly.....	5
	Training and Exercises Are Insufficient	6
	Conclusion.....	8
	Recommendations	8
	Agency Comments and OIG Evaluation	8
	Status of Recommendations and Potential Monetary Benefits.....	10

Appendices

A	Agency Comments on Draft Report	11
B	Distribution	14

Chapter 1

Introduction

Purpose

The overall objective of this evaluation was to determine how well the U.S. Environmental Protection Agency (EPA) can accomplish its mission essential functions in the event of a pandemic influenza or equivalent national emergency that necessitates Continuity of Operations (COOP) activation. Specifically, we sought to evaluate:

- The COOP responsibilities and authorities of EPA Headquarters and regional offices,
- The consistency of mission essential functions across EPA and its regional offices, and
- COOP exercises and training across EPA and its regional offices.

Background

Spurred in part by occasional warnings of potential terrorist threats in the post-9/11 era, policymakers have intensified their focus on COOP issues. COOP planning is a segment of Federal Government contingency planning linked to continuity of government. Together, COOP and continuity of government are designed to ensure survival of a constitutional form of government and the continuity of essential federal functions.

Broadly, COOP planning refers to the internal effort of an organization, such as a branch of government, department, or office, to assure that the capability exists to continue essential operations in response to a comprehensive array of potential operational interruptions. EPA must be prepared to continue to function during all hazards, an emergency, or threat of an emergency, and to effectively resume essential operations after they are interrupted. COOP plans provide EPA with the capability to perform these essential functions for up to 30 days.

The Department of Homeland Security's Federal Continuity Directive 1 (FCD 1) requires EPA to develop a continuity plan that ensures its ability to accomplish its mission essential functions from an alternative site, with limited staffing and without access to resources available during normal activities. A limited set of government functions determined to be vital activities are defined as the agency's "mission essential functions." These functions are used to identify supporting tasks and resources that must be included in the agency's continuity planning process.

It is EPA's policy to have in place a comprehensive program (COOP) to ensure continuity of its essential functions under all emergency circumstances. Under Homeland Security Presidential Directive 20 (HSPD-20), EPA is required to designate an Agency Continuity Coordinator charged with ensuring EPA's continuity program is consistent with federal policies. The Office of Solid Waste and Emergency Response's Office of Emergency Management (OEM) is responsible for developing EPA's Continuity Plan.

EPA's Office of Homeland Security is responsible for coordinating the Agency's intra-agency Pandemic Influenza preparedness planning. During a pandemic outbreak, EPA performs a support role to the Departments of Homeland Security and Health and Human Services in preparing and protecting the nation's drinking water and wastewater critical infrastructure. EPA must be prepared for a pandemic scenario where social distancing is a key coping strategy because essential services and functions may be broader than 30-day COOP planning. The Federal Government therefore recommends that government entities and the private sector plan with the assumption that up to 40 percent of their staff may be absent for periods of about 2 weeks at the height of a pandemic wave with lower levels of staff absent for a few weeks on either side of the peak.

Noteworthy Achievements

The EPA Continuity Program has ensured the development of a COOP plan for each regional office. The Agency recently developed its Primary Mission Essential Function, as required by federal directives, and received approval from the Assistant to the President for Homeland Security and Counterterrorism on June 1, 2009. Regional continuity planners have developed a self-evaluation tool, shared best practices, held annual meetings, and partnered with Headquarters continuity planners through details to OEM.

Scope and Methodology

We conducted this performance evaluation in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the evaluation to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based upon our objectives. We performed our evaluation from September 2008 through August 2009.

This evaluation specifically focused on the management of EPA's COOP program planning process. This includes federal requirements that dictate the roles and responsibilities for EPA, and how specific offices have discharged those responsibilities. Our field work included:

- Interviews with officials in EPA's OEM and Office of Homeland Security to determine Headquarters and regional COOP responsibilities and authorities;
- Review of current Regional COOP Plans for Regions 1-10 and Research Triangle Park, North Carolina, focusing on consistency of mission essential functions;
- Review of Headquarters and selected regional COOP exercise "after action" reports for Fiscal Years 2008-2009 to determine the extent of EPA preparedness for COOP events; and
- Interviews with regional COOP planners on consistency of mission essential functions, responsibility and authority, and exercises and training.

Our review included examining applicable laws, regulations, and Agency guidance. We also reviewed internal controls as relevant to our objectives. This is our first examination of COOP planning and EPA's ability to accomplish its mission essential functions; there have been no prior Office of Inspector General (OIG) reviews in this area.

Chapter 2

EPA's Continuity of Operations Planning Is Inconsistent

EPA has limited assurance that it can successfully maintain continuity of operations and execute its mission essential function during a significant national event such as a pandemic influenza outbreak. Continuity planning is inconsistent because EPA policy does not clearly define authority or Headquarters and regional responsibilities to reflect current national directives and guidance. EPA has not provided the regions with adequate guidance detailing the identification and prioritization of essential functions, nor reviewed, approved, or commented on regional plans or essential functions. Further, EPA lacks systematic oversight to ensure that regions have developed continuity plans that adequately incorporate FCD 1. EPA's COOP training and exercises are insufficient to prepare or assess the Agency's ability to provide its essential services during a significant emergency. As a result, EPA is not prepared to provide its essential services that protect human health and the environment during a significant national event.

EPA's Continuity Policy Should Be More Definitive and Strengthened

EPA has not updated its continuity policy to reflect current national directives (HSPD-20) and guidance (FCD 1.) EPA's current COOP policy, EPA Order 2030.1A, "Continuity of Operations Policy," does not clearly define authorities and responsibilities for COOP planning at all Agency levels.

HSPD-20 and FCD 1 require the heads of federal executive agencies to appoint a senior accountable official at the Assistant Secretary level as the Continuity Coordinator for the department or agency. EPA designated the Assistant Administrator for Solid Waste and Emergency Response as the Agency's Continuity Coordinator via a November 6, 2007, memorandum. However, this memorandum did not define the responsibility and reach of authority for the coordinator. OEM staff also said EPA has not outlined the coordinator's role.

EPA Order 2030.1A, dated April 2005, predates HSPD-20 and FCD 1 and does not meet all national requirements. Specifically, EPA Order 2030.1A does not mention the role or responsibilities of the Agency Continuity Coordinator. Instead, this order outlines the responsibilities of EPA's Emergency Coordinator. The absence of the Agency Continuity Coordinator's role and responsibilities contributes to the inconsistencies we found throughout EPA's COOP planning efforts.

EPA Order 2030.1A does not define the lead authority for continuity planning and guidance development. Under current policy, EPA's Emergency Coordinator is responsible for ensuring that the developed EPA COOP plan follows this order. The Regional Administrators and Laboratory Directors are also responsible for developing COOP plans in accordance with this order. The Emergency Coordinator does not have direct approval authority over the Regional Administrators' and Laboratory Directors' COOP plans.

Regional Continuity Plans Vary Significantly

While the EPA regions have actively participated in continuity planning since the mid-1990s, mission essential functions and regional COOP plans vary significantly from region to region. There was no evidence that EPA Headquarters formally reviewed, approved, or commented on the regional plans, their designation, or lack of essential functions. EPA lacks internal management controls, including guidance and systematic oversight, to ensure regional offices have developed continuity plans that adequately satisfy FCD 1 requirements.

The identification and prioritization of mission essential functions is a prerequisite for COOP planning, as they establish the parameters that guide COOP planning. For example, FCD 1 directs all federal agencies to identify alternative facilities, staff, and resources necessary to support continuation of these functions. Proper identification of mission essential functions is vital to ensure EPA has the ability to deliver its mission essential functions and services uninterrupted during a range of potential emergencies. The COOP plans we reviewed for identified mission essential functions varied in number and scope. Regions generally did not prioritize or establish the time sensitivity of the functions they had identified.

Also, the apparent importance of the functions was not consistent. For example, a number of mission essential functions were of clear importance, such as:

- “Ensure the continued and uninterrupted command, control, and leadership of the EPA.”
- “Emergency Response program, time critical actions EPA needs to take.”
- “Communicate and coordinate with state agencies and local governments.”

Other identified functions appeared of questionable importance or overly vague:

- “Oversee the ethics program for the Agency.”
- “Protect the office's workforce in accordance with guidance issued by EPA.”
- “Support current ongoing EPA activities that cannot or should not be disrupted...”

EPA Headquarters last issued guidance for COOP planning in 2005. This guidance outlined basic minimum requirements for continuity plans, training, and coordinating personnel. However, unlike EPA Order 2030.1A, FCD 1 does require EPA Headquarters to review and approve Agency mission essential functions that are a necessary element to COOP plan development. We found no evidence of the EPA Continuity Coordinator's review of regional plans. OEM receives courtesy copies of the plans but does not formally review them. This absence of management controls has resulted in inconsistent continuity planning nationally, and may negatively impact EPA's readiness to respond to an incident of national significance.

Our review of COOP plans developed or being used by the regions during Fiscal Year 2009 showed that many regional offices had not incorporated all of the FCD 1 requirements. EPA regions were still citing Federal Preparedness Circular 65, which was superseded by FCD 1 in February 2008. Issues such as vital records, devolution (capability to transfer statutory authority and responsibility), and reconstitution (resume normal agency operations) had not been fully addressed by many regions. To address the issue of devolution, the regions recently formed a work group.

Although regional COOP plans generally adhered to the FCD 1 criteria, we found four elements that needed improvement in more than one region:

- Identification of Essential Functions
- Vital Record Management
- Devolution of Control and Direction
- Reconstitution

Our results show that not all regions have differentiated their essential functions from their normal business operations, and not all regions have determined how they will address vital record issues, potential devolution issues, or reconstitution of normal activities.

Training and Exercises Are Insufficient

EPA's continuity training and exercises do not sufficiently prepare or assess the Agency's ability to provide its essential services during a significant emergency. EPA's training scenarios primarily test equipment, communication systems, and access to records. Four out of six regions contacted and all but one program office have not conducted internal exercises for a pandemic. Feedback and lessons learned in "after action" reports indicate the need for more realistic exercises. However, EPA lacks a consistent process for addressing the recommendations or gaps identified from these lessons learned.

EPA training scenarios lack a comprehensive focus. We found that all regions reviewed activated a telephone tree or similar emergency system, deployed

essential personnel to site, tested information technology and communication systems, and reviewed vital records. Few training scenarios required a complete deployment of resources and used minimal staff at the alternative site. Exercises held at designated alternative sites focused primarily on discussion of possible scenarios and communication issues rather than operation of essential functions. For example, Regions 1, 2, and 9 all conducted “tabletop” exercises¹ at their alternative sites but did not require a complete deployment of resources using designated staff.

We found that only Headquarters’ Office of Prevention, Pesticides, and Toxic Substances and Region 6 have conducted internal exercises for the pandemic influenza. Other regions have added a Pandemic Influenza Annex to their COOP plans but have not conducted exercises that would prepare for this scenario. The pandemic scenario includes unique requirements, such as a telework component, where staff would have to work for many contiguous days in a social distancing situation.

Regions vary on the extent and frequency of training for all employees. We asked several of the regional COOP planners if they provided continuity training for all of their employees. One replied that regional staff could find COOP information on the regional Intranet site. Another said he relies on the divisional COOP planners to provide this. EPA Headquarters has not held and does not require any all-employee continuity training.

EPA does not have a consistent process for addressing the recommendations or gaps identified from lessons learned during the exercises. The after action reports we reviewed all contain different formats and schedules for completion. Generally, each report contains sections where the regional COOP manager identifies action items and deadlines to complete these items, and designates the staff/group responsible for the item. Each regional COOP planner is responsible for his or her own plan after action reports and deadlines.

After action reports indicated the need for more realistic exercises; the reports often described gaps or necessities in these areas. One comment provided by staff was, “The MTSD [Management and Technical Services Division] will work to ensure essential staff know their role/responsibilities.” Another report recommended that the “Notification program for all EPA HQ employees in the National Capital Region must be exercised during a COOP deployment.” Staff offered recommendations to improve the design of the exercise, including: “Recommend more regular and realistic exercises; need to grow exercise into an actual event simulation” and “Recommend increasing the interaction with other AA [Assistant Administrator]-ships and external partners.”

¹ A tabletop exercise is the analysis of a simulated emergency situation in an informal, stress-free environment. There is minimal attempt at simulation in a tabletop exercise. Equipment is not used, resources are not deployed, and time pressures are not introduced. This is the simplest type of exercise to conduct in terms of planning, preparation, and coordination.

Conclusion

EPA has limited assurance that it can successfully maintain continuity of operations and execute its mission essential function during a significant national event such as a pandemic influenza outbreak. EPA's current policy does not clearly define authority and EPA Headquarters and regional responsibilities. This has created inconsistencies in continuity planning and training, and varying mission essential functions and continuity plans by the regions. As a result, there is no assurance that EPA will be able to provide its essential services to protect human health and the environment during a national emergency.

Recommendations

We recommend that the Assistant Administrator for Solid Waste and Emergency Response:

- 2-1 Establish a schedule for the completion of the requirements in FCD 1.
- 2-2 Establish Headquarters and regional COOP responsibilities and authorities, including designating a lead office for COOP planning.
- 2-3 Develop consistent guidance and procedures for preparing regional COOP plans.
- 2-4 Develop consistent mission essential functions and priorities for all regions to include in their COOP plans.
- 2-5 Develop training guidance that incorporates realistic scenarios that prepare personnel to perform mission essential functions during a COOP activation (i.e., from an alternate location with limited staff).
- 2-6 Review and approve COOP plans, priorities, training, and exercises to ensure that EPA's regional and program offices (a) systematically identify their mission essential functions and personnel, and (b) are prepared to respond to an all-hazards event.

Agency Comments and OIG Evaluation

In written comments on a draft of this report, the Assistant Administrator for Solid Waste and Emergency Response and the Acting Assistant Administrator for Homeland Security generally agreed with our findings regarding consistency of continuity planning, EPA's continuity policy, regional continuity plans, and training and exercises. They also included a table of the Office of Solid Waste and Emergency Response's planned completion dates for our recommendations. These actions are consistent with the intent of our recommendations. However, the Agency officials did not concur with the OIG's overall conclusion that EPA

has “no assurance” that it can successfully maintain continuity of operations and execute its mission essential functions during a significant national event such as a pandemic influenza outbreak. We modified the report language in light of the Headquarters’ ongoing actions in response to FCD 1 and the various exercises conducted in several regions. The Agency’s written response is in Appendix A.

Status of Recommendations and Potential Monetary Benefits

RECOMMENDATIONS						POTENTIAL MONETARY BENEFITS (in \$000s)	
Rec. No.	Page No.	Subject	Status ¹	Action Official	Planned Completion Date	Claimed Amount	Agreed To Amount
2-1	8	Establish a schedule for the completion of the requirements in FCD 1.	O	Assistant Administrator for Solid Waste and Emergency Response	11/15/2009		
2-2	8	Establish Headquarters and regional COOP responsibilities and authorities, including designating a lead office for COOP planning.	O	Assistant Administrator for Solid Waste and Emergency Response	6/30/2010		
2-3	8	Develop consistent guidance and procedures for preparing regional COOP plans.	O	Assistant Administrator for Solid Waste and Emergency Response	10/30/2010		
2-4	8	Develop consistent mission essential functions and priorities for all regions to include in their COOP plans.	O	Assistant Administrator for Solid Waste and Emergency Response	10/30/2010		
2-5	8	Develop training guidance that incorporates realistic scenarios that prepare personnel to perform mission essential functions during a COOP activation (i.e., from an alternate location with limited staff).	O	Assistant Administrator for Solid Waste and Emergency Response	2/15/2011		
2-6	8	Review and approve COOP plans, priorities, training, and exercises to ensure that EPA's regional and program offices (a) systematically identify their mission essential functions and personnel, and (b) are prepared to respond to an all-hazards event.	O	Assistant Administrator for Solid Waste and Emergency Response			

¹ O = recommendation is open with agreed-to corrective actions pending

C = recommendation is closed with all agreed-to actions completed

U = recommendation is undecided with resolution efforts in progress

Appendix A***Agency Comments on Draft Report*****MEMORANDUM**

SUBJECT: Response to the OIG Draft Evaluation Report “EPA Needs to Improve Continuity of Operations Planning,” Project No. OPE-08-0024

FROM: Mathy Stanislaus
Assistant Administrator
Office of Solid Waste and Emergency Response

Juan Reyes
Acting Assistant Administrator
Office of Homeland Security

TO: Jeffrey K. Harris, PhD
Director for Program Evaluation, Cross Media Issues
Office of Inspector General

Thank you for the opportunity to review and comment on the subject OIG draft report. The report addresses EPA’s continuity policy, Regional continuity plans, training and exercises and provides a list of recommendations for improvement. We would also like to thank you for incorporating some of the comments that we had requested in our June 25, 2009, response to the discussion draft and for describing noteworthy achievements at Headquarters and in the Regions.

As we stated in our June response, the OIG performed the evaluation in the midst of OSWER’s efforts to update the EPA Headquarters Continuity Plan, the Pandemic Influenza Annex, and the Devolution Annex. We are also in the process of updating the existing EPA Order that incorporates the requirements of the Department of Homeland Security’s Federal Continuity Directives 1 and 2. We generally agree with the findings regarding consistency of continuity planning, EPA’s continuity policy, Regional continuity plans, and training and exercises. However, many of the OIG’s concerns will be addressed upon completion of the updated Continuity of Operations Plan and a revised EPA Order.

We do, however, take exception that these findings lead to a conclusion that EPA has “no assurance” that it can successfully maintain continuity of operations and execute its mission essential functions during a significant national event such as a pandemic influenza outbreak. Recognizing that our program does need improvement, we have made extensive progress developing our COOP plans and exercising key capabilities of essential personnel. While our exercises have shown areas in need of improvement, we have been evaluated by FEMA, GAO and other independent subject-matter assessors, and these appraisals have generally received acceptable scores for key Federal requirements. Based on your findings and our program

knowledge, we assess that your conclusion of “no assurance” is imprecise because it does not accurately reflect the status of our program, and is not consistent with previous outside evaluations. We ask that the statement be changed to “limited assurance” to more accurately reflect the state of our COOP Program.

As requested, we have included the table of proposed recommendations and OSWER’s planned completion dates. We look forward to coordinating with OIG, other AAships, and the Regional offices to continue to improve our continuity program. If you have any questions, please contact Deborah Dietrich, Director of the Office of Emergency Management, at 202-564-6743.

Attachment

OIG Recommendations to Improve EPA's Continuity Program

Recommendation	Subject	OSWER Planned Completion Date
2-1	Establish a schedule for completion of the requirements in FCD 1.	11/15/2009
2-2	Establish Headquarters and Regional COOP responsibilities and authorities, including designating a lead office for COOP planning.	6/30/2010
2-3	Develop consistent guidance and procedures for preparing Regional COOP plans.	10/30/2010
2-4	Develop consistent mission essential functions and priorities for all Regions to include in their COOP plans.	10/30/2010
2-5	Develop training guidance that incorporates realistic scenarios that prepare personnel to perform mission essential functions during a COOP activation (i.e., from an alternate location with limited staff).	2/15/2011
2-6	Review and approve COOP plans, priorities, training, and exercises to ensure that EPA's Regional and program offices (a) systematically identify their mission essential functions and personnel, and (b) are prepared to respond to an all-hazards event.	Annual review

Appendix B

Distribution

Office of the Administrator
Assistant Administrator for Solid Waste and Emergency Response
Acting Assistant Administrator for Homeland Security
Director, Office of Emergency Management, Office of Solid Waste and Emergency Response
General Counsel
Agency Follow-up Official (the CFO)
Agency Follow-up Coordinator
Associate Administrator for Congressional and Intergovernmental Relations
Associate Administrator for Public Affairs
Audit Follow-up Coordinator, Office of Solid Waste and Emergency Response
Acting Inspector General