



#### **OFFICE OF INSPECTOR GENERAL**

# Improvements Needed in EPA Training and Oversight for Risk Management Program Inspections

Report No. 13-P-0178

March 21, 2013





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#### **Abbreviations**

CAA Clean Air Act

CFR Code of Federal Regulations

EPA U.S. Environmental Protection Agency

EPCRA Emergency Planning and Community Right to Know Act

FY Fiscal Year

OARM Office of Administration and Resources Management OECA Office of Enforcement and Compliance Assurance

OEM Office of Emergency Management

OIG Office of Inspector General

OSHA U.S. Occupational Safety and Health Administration

RMP Risk Management Plan
RMProgram Risk Management Program

SEE Senior Environmental Employment

**Cover photos:** Heat exchanger used to heat anhydrous ammonia before it flows to a reactor to

produce a fertilizer product at a risk management program facility. The

highlighted area shows visible corrosion. (EPA photo)

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# At a Glance

#### Why We Did This Review

We conducted this review to determine whether the U.S. **Environmental Protection** Agency (EPA) has adequate management controls for ensuring the effectiveness of its Clean Air Act Section 112(r) risk management program (RMProgram) inspections. Congress enacted the RMProgram to reduce the risk of airborne chemical releases that could harm the public and lessen the impact of releases that do occur. Regulated substances include 77 toxic chemicals that could cause death or serious health effects. from short-term exposures and 63 flammable substances. Properly performed by trained, knowledgeable inspectors, inspections help ensure that facilities comply with RMProgram requirements. EPA is responsible for assessing compliance at over 86 percent of RMProgram facilities nationwide.

# This report addresses the following EPA Goals or Cross-Cutting Strategies:

- Enforcing environmental laws.
- Cleaning up communities and advancing sustainable development.

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

The full report is at: <u>www.epa.gov/oig/reports/2013/</u> 20130321-13-P-0178.pdf

# Improvements Needed in EPA Training and Oversight for Risk Management Program Inspections

#### What We Found

EPA's management controls for ensuring inspector training and inspection quality provide limited assurance of the effectiveness of its RMProgram inspections. Proper training helps inspectors conduct quality inspections. However, 15 of the 45 RMProgram inspectors nationwide received inspector credentials without documentation indicating that they met minimum training requirements. Further, six of the 12 supervisors did not meet minimum training requirements. EPA's management controls did not detect or prevent the cases of missed or undocumented training. Weaknesses in controls included limitations in training tracking systems and a lack of procedures to ensure that supervisors met their training requirements. Also, contracts and cooperative agreements for inspection services did not include training requirements.

EPA can strengthen its RMProgram inspection guidance and oversight to increase assurance that inspectors conduct effective inspections. EPA guidance did not establish minimum guidelines for the scope of inspections. Further, EPA did not have a process to monitor the quality of inspections. Generally, inspection reports did not explain the extent to which the inspectors reviewed specific elements of a covered process to determine compliance. Also, our observations of two inspections indicated that procedures to verify the facilities' RMProgram activities were limited.

An effective inspection program that includes properly trained personnel, guidance, and oversight helps ensure compliance with program regulations, thus decreasing the risk of airborne releases of chemicals that could harm the public.

#### **Recommendations and Agency Corrective Actions**

We recommend that EPA strengthen its management controls to ensure that inspectors and supervisors meet minimum training requirements. Also, EPA should strengthen guidance to include minimum inspection scope for RMProgram facilities. Further, EPA should develop minimum inspection reporting requirements and a monitoring program to assess the quality of inspections. EPA generally concurred with our draft report's recommendations, and has already initiated corrective actions in some cases. We consider five recommendations open and one recommendation closed. The Agency's response met the intent of the remaining recommendations, but the recommendations remained unresolved pending receipt of a formal corrective action plan with milestone dates and responsible party/office.

#### **Noteworthy Achievements**

EPA has made efforts to enhance the quality of RMProgram inspections. For example, EPA provided advanced training courses for inspectors in 2010, 2011, and March 2012. According to EPA, it also provided the training in August, October, and November 2012. EPA also conducted an internal assessment of the quality of inspection reports across all 10 regions in 2011.



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

THE INSPECTOR GENERAL

March 21, 2013

#### **MEMORANDUM**

**SUBJECT:** Improvements Needed in EPA Training and Oversight for

Risk Management Program Inspections

Report No. 13-P-0178

FROM: Arthur A. Elkins Jr. July a. Elki-

**TO:** Mathy Stanislaus, Assistant Administrator

Office of Solid Waste and Emergency Response

Cynthia Giles, Assistant Administrator

Office of Enforcement and Compliance Assurance

Craig E. Hooks, Assistant Administrator

Office of Administration and Resources Management

This is our report on the subject evaluation conducted by the Office of Inspector General of the U.S. Environmental Protection Agency. 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 audit resolution procedures.

#### **Action Required**

In accordance with EPA Manual 2750, you are required to provide a written response to this report within 60 calendar days. You should include a corrective actions plan for agreed-upon actions, including milestone dates. 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. Please email your response to Carolyn Copper, Assistant Inspector

General for Program Evaluation, at <a href="mailto:copper.carolyn@epa.gov">copper.carolyn@epa.gov</a>. We have no objections to the further release of this report to the public. We will post this report to our website at <a href="http://www.epa.gov/oig">http://www.epa.gov/oig</a>.

If you or your staff have any questions regarding this report, please contact Carolyn Copper at (202) 566-0829 or <a href="mailto:copper.carolyn@epa.gov">copper.carolyn@epa.gov</a>; or Rick Beusse, Director for Air and Research Evaluations, at (919) 541-5747 or <a href="mailto:beusse.rick@epa.gov">beusse.rick@epa.gov</a>.

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# Chapter 1 Introduction

#### **Purpose**

The U.S. Environmental Protection Agency is responsible for assessing compliance for over 86 percent of the 12,774 Clean Air Act Section 112(r) risk management program facilities nationwide. Our objective was to determine whether the EPA has adequate management controls for ensuring the effectiveness of its program inspections. Specifically, we sought to determine whether:

- Adequate systems were in place to ensure inspectors and first-line supervisors are properly trained.
- Adequate guidelines and oversight were in place to ensure that quality inspections are conducted.

#### **Background**

In 1984, an accidental airborne release of a hazardous chemical caused thousands of deaths and injuries in Bhopal, India. In response to this accident, Congress amended Section 112(r) of the CAA in 1990. The amendment enacted a program to prevent airborne releases of certain hazardous chemicals and to mitigate the consequences of such releases to the surrounding community. The EPA issued a rule implementing the RMProgram in 1996.

Facilities that contain more than the threshold quantity of any of 140 substances in a process are covered under the RMProgram. This includes 77 toxic chemicals that can cause serious health effects or death from short-term exposures, and 63 flammable gases and highly volatile flammable liquids. Covered sources are required to conduct a hazard assessment (including analyses of worst-case scenarios and 5-year accident history), implement accident prevention and emergency response programs, and submit a risk management plan to the EPA. The RMP describes and documents the facility's hazard assessment. The RMP must include the results of an offsite consequence analysis for a worst-case chemical accident at the facility. Facilities were required to submit their first RMP by June 21, 1999, and must update their RMP at least every 5 years. Facilities must also update their RMPs when onsite regulated substances or processes change.

Depending upon the characteristics of a covered process and the results of the worst-case analysis and 5-year accident history, a process may be subject to one of three sets of program requirements (program levels). The program level determines the extent of the prevention program required for the facility. Table 1 explains the requirements for each program level.

Table 1: RMProgram levels

Level	Description	Requirements
Program 1	Processes that would not affect the public in the event of a worst-case release and with no accidents with specific offsite consequences within the past 5 years.	Limited hazard assessment requirements and minimal prevention and emergency response requirements.
Program 2	Processes not eligible for Program 1 or subject to Program 3.	Streamlined prevention program requirements, as well as additional hazard assessment, management, and emergency response requirements.
Program 3	Processes not eligible for Program 1 and either subject to the U.S. Occupational Safety and Health Administration's Process Safety Management standard under federal or state OSHA programs, or classified in one of 10 specified North American Industrial Classification System codes.	Imposes OSHA's Process Safety Management standard as the prevention program, as well as additional hazard assessment, management, and emergency response requirements.

Source: General Guidance on Risk Management Programs for Chemical Accident Prevention (Code of Federal Regulations, in 40 CFR Part 68), EPA 555-B-04-001, March 2009.

A facility's failure to follow program requirements could lead to accidental releases of harmful chemicals and/or inadequate responses to protect the public when such accidents occur. Between October 2008 and March 2012, 323 facilities reported 460 accidents to EPA. These accidents caused over \$264 million in onsite and offsite damages. Further, the accidents resulted in 14 worker fatalities, over 330 worker injuries, and over 64,000 people being sheltered in place.

#### EPA Implements the Risk Management Program in Most States

EPA's Office of Emergency Management, within EPA's Office of Solid Waste and Emergency Response, manages the RMProgram. EPA regions directly implement the RMProgram in most states. As of May 2012, only eight states and five local agencies had accepted full or partial delegation from EPA. EPA regions are responsible for assessing compliance at 11,057 facilities (or 86.6 percent) of the 12,774 active RMProgram facilities. Figure 1 shows the number of facilities that each region oversees.

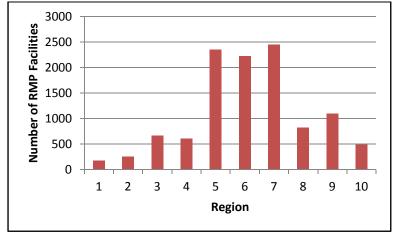


Figure 1: Number of RMProgram facilities overseen, by EPA region

Source: Prepared by the OIG based on data obtained from RMP National Database.

EPA's National Program Manager's Guidance specifies the number of inspections that EPA headquarters expects the regions to perform. Between fiscal years 2010 and 2012, the regions were to perform inspections at 5 percent of the total number of regulated facilities in the regions. Further, this guidance requires regions to conduct a percentage of inspections at high-risk facilities. In FY 2010, regions were to conduct 10 percent of the inspections at high-risk facilities, and 25 percent at high-risk facilities in FYs 2011 and 2012. A high-risk facility is one that meets one or more of the following characteristics established by OEM:

- Facilities whose reported RMP worst-case scenario population exceeds 100,000 people.
- Any RMProgram facility with a hazard index<sup>1</sup> greater than or equal to 25.
- Facilities that have had one or more significant accidental releases within the previous 5 years.

#### EPA Policy for Inspector Training

EPA Order 3500.1<sup>2</sup> establishes Agencywide training and development requirements for employees leading compliance inspections. These requirements are to ensure that inspectors have working knowledge of regulatory requirements, inspection methodology, and health and safety measures. Training requirements apply to all persons who lead compliance inspections under any EPA statute. This includes EPA personnel, contractors, and Senior Environmental Employment Program enrollees. The training program consists of three parts:

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<sup>&</sup>lt;sup>1</sup> Hazard index is defined roughly as a measure of the hazard of the chemicals onsite and the size of covered processes at the facility. More specifically, it is "the sum over all chemicals of log<sub>2</sub> (maximum quantity of inventory onsite/threshold), or, alternatively, as the number of chemicals times log<sub>2</sub> of the geometric mean of the maximum-to-threshold quantity ratio."

<sup>&</sup>lt;sup>2</sup> EPA, Training and Development for Individuals Who Lead Compliance Inspections/Field Investigations, December 23, 2002. Specifically cited as EPA Order 3500.1 A1.

- Occupational health and safety curriculum. Inspectors must take a minimum of 24 hours of health and safety training before conducting an inspection.
- **Basic inspector curriculum.** Inspectors must take basic inspector training. This training provides a comprehensive overview of knowledge and skills needed for compliance inspections under any EPA statute.
- **Program-specific curriculum.** Inspectors must take training in legal, programmatic, and technical subjects for their specific program.

Once trained, inspectors are issued EPA credentials authorizing them to perform inspections on EPA's behalf. These credentials are issued or re-issued on a periodic basis. The credentials process is outlined in EPA Order 3510.<sup>3</sup> The order states that credentials are issued to qualified individuals who have met the minimum inspector training requirements outlined in EPA Order 3500.1. EPA regions request credentials from EPA's Office of Administration and Resources Management, which issues credentials to the regions for distribution to the inspectors. To ensure that inspectors' first-line supervisors are knowledgeable about the program, EPA Order 3500.1 requires the supervisors to meet the following minimum training requirements within 1 year of becoming a supervisor:

- Health and safety requirements (knowledge and understanding).
- Basic inspector curriculum.
- Environmental Statutes Review offered by EPA's National Enforcement Training Institute.
- Documented self study of the program they are responsible for and developing a working knowledge.

Working knowledge is defined as the minimum knowledge needed to evaluate the completeness and quality of inspection reports and to sign off on the reports. Developing a working knowledge includes accompanying a lead inspector on an inspection.

#### EPA Guidance on Conducting RMProgram Inspections

EPA's guidance<sup>4</sup> for conducting RMProgram inspections outlines several basic steps for conducting an inspection:

- Selecting facilities for inspection. EPA regional offices are required to prioritize inspections at high-risk facilities and should inspect high-risk RMProgram facilities more frequently than other RMProgram facilities.
- Offsite activities. These activities include collecting background information on the facility, planning the inspection, preparing the inspection staff, and planning the logistics of the inspection.

<sup>&</sup>lt;sup>3</sup> EPA, EPA Federal Credentials for Inspections and Enforcement of Federal Environmental Statutes, EPA Order 3510, October 9, 2008. This Order was updated in October 2012.

<sup>&</sup>lt;sup>4</sup> EPA, Guidance for Conducting Risk Management Program Inspections under Clean Air Act Section 112(r), EPA-550-K-11-001, January 2011.

- **Onsite activities.** These activities include conducting the opening meeting, collecting and analyzing information, and conducting the closing conference.
- Concluding activities. These activities include an inspection team meeting to ensure inspection details were recorded accurately and writing the inspection report.
- **Post-inspection actions.** These actions include providing compliance assistance or pursuing enforcement action if necessary.

The guidance includes an inspection checklist to use during the inspection. The checklist assists the inspectors in determining whether regulatory requirements were met and helps to ensure that inspections meet a basic level of data quality. The guidance also includes an inspection report template. The January 2011 guidance is similar to the program guidance issued in 1999. The primary difference between the two guidance documents is that the 2011 guidance includes provisions for ensuring facility employee participation in the inspection. The 2011 guidance also recommends that the inspection include interviews of facility employees.

#### **Noteworthy Achievements**

To provide inspectors with the necessary technical knowledge to inspect program facilities, EPA provided specialized courses in 2010, 2011, and March 2012. According to EPA, it also provided the training in August, October, and November 2012. Below is a list of the courses:

- Risk Management Program Refinery Inspector Training, conducted in September 2010, April 2011, and October 2012.
- Understanding Codes & Standards and Mechanical Integrity for Risk Management Program Inspectors, conducted in October 2011 and March 2012.
- Ammonia Refrigeration Systems, Technology, and Safety Workshop for Risk Management Program Inspectors, conducted in November 2011, August 2012, and November 2012.

The Agency also took steps to increase the effectiveness of its inspection resources by implementing a process for identifying and inspecting a greater percentage of high-risk facilities. Further, EPA's OEM assessed the quality of inspection reports from all 10 regions in June 2011. OEM presented the results of its analysis to the regions. As a result of this analysis, OEM is considering whether guidance changes are needed to address the issues identified.

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<sup>&</sup>lt;sup>5</sup> EPA, Guidance for Auditing Risk Management Plans/Programs under Clean Air Act Section 112(r), EPA 550-B99-008, August 1999.

#### Scope and Methodology

To assess whether inspectors and first-line supervisors met minimum training requirements, we obtained the training records of all RMProgram inspectors and first-line supervisors from all 10 EPA regions. At the time of review there were 45 inspectors and 12 supervisors nationwide. We compared the training records with the training requirements outlined in EPA policies and guidance. These policies and guidance included EPA Order 3500.1, the EPA Credential and Inspector Training Policy Compendium, and EPA Order 1440.2 on Safety and Health Training Requirements for Agency Employees. We interviewed inspectors and first-line supervisors to determine why certain training requirements were not met. We reviewed the procedures and controls for ensuring that inspector training qualifications were met.

To assess whether adequate guidelines and oversight were in place to ensure that quality inspections were conducted, we obtained and reviewed applicable RMProgram policies, procedures, guidance, and performance measures. We interviewed staff and managers from EPA's OEM, Office of Enforcement and Compliance Assurance, and all 10 regions.

We reviewed inspection reports for RMProgram inspections conducted at 29 facilities deemed "high-risk" by OEM. These facilities included, but were not limited to, oil refineries, chemical plants, and electric utilities. These 29 facilities had reported a total of 120 covered processes on their latest risk management plans. The 29 inspections were conducted between July 2006 and August 2011 and included at least one report from each EPA region. During that time period, EPA conducted 3,117 inspections nationwide. We examined 11 of the 29 inspections in more detail to determine the scope of the inspection activities. These 11 inspections were selected because the facilities' worst-case scenario could impact populations greater than 10,000. We also interviewed inspectors and reviewed inspection documentation to determine the scope of these inspections.

We observed EPA inspections at two facilities. One of these facilities was a fertilizer manufacturing and retail facility, and its RMP included two covered processes involving anhydrous ammonia and aqueous ammonia. The other facility was a gas processing plant that had one RMProgram-covered process involving flammable mixtures and propane. Both facilities had a prior accidental release and high-hazard index.

We conducted our work from June 2011 to November 2012. We limited our review to EPA-managed inspection programs and did not review state or local agency programs. We conducted this evaluation in accordance with generally accepted government auditing standards. Those standards require that we obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our evaluation objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our objectives.

We assessed training based on compliance with the minimum guidelines established by EPA policy. We did not independently test inspector knowledge. We did not evaluate the quality of specific training courses required for inspectors. We did not assess whether specific inspectors or supervisors are capable of performing their job duties or the extent to which they are capable of performing those duties. We relied upon a judgmental sample of inspections in assessing controls over inspection quality. Thus, we cannot project our sample results to the universe of RMProgram inspections. We did not independently assess the effectiveness of inspections through our own verification of facility conditions or program implementation. Therefore, we did not make any conclusions as to the effectiveness of any specific inspection activity we reviewed. However, we reviewed reports from all 10 EPA regions and believe our sample size was sufficient to draw conclusions about the adequacy of management controls over the inspection process.

#### **Prior Reports**

In March 2012, we issued an early warning report<sup>6</sup> regarding EPA's use of contractors to conduct RMProgram inspections. This practice was prohibited in certain states by two separate appellate court rulings in the early 1980s (the U.S. Courts of Appeals for the Sixth and Tenth Circuits). The use of contractors to conduct CAA inspections on EPA's behalf was one of two issues presented to the U.S. Supreme Court in a 1983 case. Because the Supreme Court did not address the question of statutory authority, its decision left unresolved the pre-existing split in the federal circuit courts on the question of EPA's statutory authority to use contractors for CAA inspections. Accordingly, EPA issued a policy on February 22, 1984, stating that contractors should not, absent express permission from headquarters, be designated as representatives of EPA to conduct CAA inspections in states located in the Sixth and Tenth Circuits. EPA agreed with our recommendations and promptly initiated corrective actions.

An EPA OIG February 2009 report<sup>7</sup> noted that EPA needed to improve the implementation of the RMProgram. EPA had inspected less than half the identified high-risk facilities since the 1999 inception of the program. Also, EPA had not established procedures for identifying facilities that had not submitted RMPs, and had not resolved the status of facilities that needed to re-file RMPs. We recommended that EPA implement controls to identify covered facilities that have not filed RMPs, and that EPA target higher-priority facilities for inspection and track progress in completing these inspections. EPA agreed with our recommendations and completed the agreed-upon corrective actions.

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<sup>&</sup>lt;sup>6</sup> EPA OIG, Use of Contractors to Conduct Clean Air Act Risk Management Program Inspections in Certain States Goes Against Court Decisions, Report No. 12-P-0376, March 28, 2012.

<sup>&</sup>lt;sup>7</sup> EPA OIG, *EPA Can Improve Implementation of the Risk Management Program for Airborne Chemical Releases*, Report No. 09-P-0092, February 10, 2009.

EPA OIG issued a report in March 2009<sup>8</sup> on EPA Region 8's management of the RMProgram. We recommended that the regional administrator develop (1) a strategy for implementing the program that defines program goals, performance measures, and organizational responsibilities; and (2) an oversight process to evaluate the region's success in implementing the strategy. Region 8 agreed with our recommendations and completed the agreed-upon corrective actions.

<sup>&</sup>lt;sup>8</sup> EPA OIG, *EPA Region 8 Needs to Better Manage the Risk Management Program for Airborne Chemical Releases*, Report No. 09-P-0130, March 30, 2009.

# **Chapter 2**

# **EPA Needs Better Controls to Ensure That Minimum Inspector Training Requirements Are Met**

Of the 45 RMProgram inspectors nationwide, EPA had issued inspection credentials to 15 inspectors who lacked documentation showing that they met the minimum training requirements in EPA Order 3500.1. Further, six of the 12 first-line supervisors did not meet minimum training requirements in EPA Order 3500.1. EPA's management controls did not prevent or detect instances of missed or undocumented training. For example, EPA's tracking systems for training did not include all training requirements and regions did not audit compliance with EPA Order 3500.1. Sufficiently trained inspectors and supervisors provide for an effective inspection program that better ensures compliance with regulations and therefore decreases the risk of airborne releases of chemicals that could harm the public.

#### **RMProgram Training Requirements**

EPA Order 3500.1 requires all compliance inspectors to complete annual refresher training in the three major training areas discussed in chapter 1. The *EPA Credential and Inspector Training Policy Compendium* outlines the specific curriculum for each inspection program. Specific requirements for RMProgram inspectors include:

- Clean Air Act Confidential Business Information, Information Security Manual.
- Risk Management Plan Basics and Techniques.<sup>9</sup>
- Self-study/review of statutes/regulations and guidance/reference materials.
- Review of a minimum of two completed inspection reports.
- On-the-job training (conduct a minimum of three program inspections or audits with a senior inspector before leading an inspection).
- Program-specific refresher training as identified by an inspector's supervisor.

Inspectors must maintain their training records and provide a copy to their first-line supervisors. Training records include training certificates and certifications of self-studies and on-the-job training. According to a December 2009 OECA guidance document, all required training taken since the FY 2010 credentials reissuance cycle should be recorded in Train Trax, its successor system, or an appropriate alternative system. In April 2011, the Emergency Management Portal - Field Readiness Module replaced two databases, one of which was Train Trax.

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<sup>&</sup>lt;sup>9</sup> Since June 2008, OEM has offered the 3.5-day Risk Management Program Inspector Training, which combined and updated the separate Risk Management Plan Basics and Risk Management Plan Techniques courses.

During FY 2010, EPA had 45 RMProgram inspectors who were still RMProgram inspectors at the time of our inquiry. This included 26 EPA inspectors, 15 SEE inspectors, and four contractor inspectors. All 26 EPA inspectors were issued inspection credentials by OARM, and 11 of the 15 SEEs were issued regional inspection credentials. The remaining SEE inspectors and the four contractor inspectors were issued letters of authorization by their respective EPA regions to conduct inspections for EPA.

# **Inspectors Issued Credentials Without Documentation That Minimum Training Requirements Were Met**

Fifteen of the 37 RMProgram credentialed inspectors nationwide were issued inspection credentials in 2010 without documentation showing that they met the minimum training requirements. Another three contractor inspectors had not taken all required training. Table 2 summarizes the missed and undocumented training.

Table 2: Missing or undocumented inspector training requirements

	Missed or undocumented training					Credentials		
Employee type	Self- study	Confidential business information	Health and safety	On-the- job training	Other	issued without proper documentation		
EPA	Х			_		Y		
EPA	Х	Х				Υ		
EPA	Х		$x_3$			Y		
EPA	Х	Х				Y		
EPA	Х	Х				Υ		
EPA				Х		Υ		
EPA	Х			Х		Υ		
EPA	Х			Х		Υ		
EPA	Х			Х		Υ		
EPA	Х			Х		Υ		
EPA				Х		Υ		
EPA				Х		Υ		
EPA				Х		Υ		
SEE				Х		Y <sup>1</sup>		
SEE	Х			Х		$Y^1$		
Contractor	Х	X	Х	Х	Х	NA <sup>2</sup>		
Contractor	Х	Х				NA <sup>2</sup>		
Contractor	Х	Х		-		NA <sup>2</sup>		

<sup>&</sup>lt;sup>1</sup> SEE employees are issued regional credentials or letters of authorization.

Source: OIG-developed table based on analysis of training data.

We contacted all 15 of the EPA and SEE inspectors and they indicated the following:

- Two inspectors confirmed they did not complete the training.
- Two inspectors said they could not get on-the-job training because they
  were pioneers in implementing the program, but they did not obtain an
  exemption from the requirement.

<sup>&</sup>lt;sup>2</sup> Contractors are issued regional letters of authorization.

<sup>&</sup>lt;sup>3</sup> Inspector did not take annual health and safety refresher in 2010 after he was issued credentials.

- Four inspectors said they had completed the required training but had not documented it, and the undocumented training involved self-studies.
- Four inspectors self-certified that they completed the required self-studies and/or on-the-job training about a year after their credentials were issued.
- Three inspectors provided a list of at least three inspections each of them had participated in as part of the on-the-job training requirement, something they did not do during the re-credentialing process in FY 2010.

We also contacted one of the three contractors with missing or undocumented training; this contractor confirmed that he did not complete the required training.

#### **Program Refresher Requirements Need to Be Clarified**

Ten inspectors may not have met requirements for basic and program-specific refresher training, depending upon the interpretation of EPA Order 3500.1. These 10 inspectors did not take basic or program-specific refresher training on an annual basis. Three regions interpreted EPA's guidance to only require this training on an as-needed basis, while the other seven interpreted EPA's guidance to require this training annually. A staffer in one region noted that guidance used phrases that he interpreted as meaning training was at the supervisor's discretion. These phrases included "any necessary refresher" and "additional training necessary." However, the guidance also used language that could be interpreted to require the training annually, such as "all compliance inspectors/field investigators, full-time or part-time, must complete annual refresher training...."

#### **Half of Supervisors Missed Minimum Training Requirements**

Six of 12 first-line supervisors nationwide did not meet their minimum training requirements. These requirements are to be completed within 1 year of becoming a supervisor. Three more supervisors had not completed the training but were still within the first year of their supervisory position. Missed training included the environmental statutes review course and accompanying a lead inspector on an inspection. Two of the six supervisors were not aware of these two requirements. This training helps provide supervisors with the knowledge needed to evaluate the quality and completeness of inspection reports.

#### **Management Controls Did Not Ensure Completion of Required Training**

The Agency's management controls over inspector training did not prevent or detect instances where inspectors and supervisors missed or did not record completion of training requirements. Weaknesses in management controls included:

- Limitations in tracking systems for training.
- Missing training provisions in contracts and cooperative agreements.

- No designated responsibility for issuing credentials to contractor and SEE inspectors.
- Lack of procedures to ensure supervisors meet training requirements.
- No designated responsibility for auditing regional compliance with EPA Order 3500.1.

#### Limitations in Tracking Systems for Training

According to December 2009 OECA guidance, EPA regions should use Train Trax, its successor system (Emergency Management Portal - Field Readiness Module), or a comparable system to track training. Eight regions used the successor system, but we noted that the successor system had limitations that could hinder a region's ability to accurately track inspector training against EPA requirements. Not all training requirements were populated in the system. In addition, email alerts were not sent to inspectors when impending due dates for training were approaching or training was overdue. Further, training certificates could not be uploaded into the system. OEM staff acknowledged the new system's limitations and said they were in the process of correcting these deficiencies as of January 2013.

Regions 5 and 6 used their own systems to track training. Region 6's Superfund Division, which inspects smaller non-Title V program facilities, did not use a tracking system. We noted that Region 5's system did not send email alerts to inspectors when impending due dates for training are approaching or training is overdue. The section chief for the Region 5 RMProgram stated that his division is working on establishing a comprehensive training documentation standard operating procedure that includes an annual reminder mechanism.

#### Requirements Not Included in Contracts and Cooperative Agreements

EPA Order 3500.1 requires EPA senior officials to ensure that inspector training requirements are included in extramural agreements for inspection services. All regions had extramural agreements to conduct RMProgram inspections during FYs 2009, 2010, and 2011. With the exception of Region 9's contract, these agreements did not require compliance with EPA inspector training requirements.

Six regions (1, 2, 4, 7, 9, and 10)<sup>10</sup> had agreements for contractors to conduct inspections. Only Region 9's contract included provisions requiring the contractor inspectors to meet EPA Order 3500.1 training requirements. Contracting officers and program personnel who helped develop contracts were not aware of EPA's policy to include inspector training requirements in contracts.

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<sup>&</sup>lt;sup>10</sup> According to staff in Regions 1 and 10, their regions were not using contractors to lead RMProgram inspections at the time we finished our review in June 2012. Additionally, since November 9, 2011, Region 1 inspection support has been ordered from a Region 4 contract.

Eight regions (1, 3, 5, 6, 7, 8, 9, and 10) used SEE enrollees to conduct inspections, and each region had a cooperative agreement with a grantee. However, none of these agreements contained EPA Order 3500.1 training requirements. The agreements were supplemented with position descriptions, and regional offices generally included some training requirements in the position descriptions. However, Region 3 was the only region to require compliance with EPA Order 3500.1 training requirements in its SEE position descriptions.

#### Responsibility for Issuing Credentials to Contractor and SEE Employees Not Addressed

EPA's policy is to present a credential to an official of the facility at the beginning of the inspection. EPA Order 3510 states that EPA credentials, which provide inspection authority, should be issued only to qualified individuals. This applies to both EPA and non-EPA employees. However, the order does not address the responsibility for issuing credentials to contractor or SEE inspectors. We found that no contractors or SEE enrollees were issued official EPA credentials as described in EPA Order 3510. SEEs were issued regional credentials or letters of authorization, and contractors were issued letters of authorization. EPA Order 3510 does not discuss regional credentials. Further, the order does not state that letters of authorization can be used in lieu of credentials. The order states that these letters are issued for on-the-job training, providing specialized expertise in the program area or emergency situations.

EPA updated EPA Order 3510 in October 2012, establishing responsibilities for the issuance of credentials to SEEs and contractors.

# No Procedures for Ensuring First-Line Supervisors Meet Training Requirements

EPA Order 3500.1 does not contain procedures for ensuring that first-line supervisors meet their training requirements. Three regions (2, 5, and 8) did not have a process for ensuring first-line supervisors meet training requirements. Also, in Region 6, two divisions conducted RMProgram inspections but one of those divisions did not have a process to ensure its supervisor met training requirements.

#### Regions Have Not Audited Compliance With EPA Order 3500.1

EPA Order 3500.1 requires each region to identify a single point-of-contact with responsibility for periodically auditing the region's compliance with the order. However, eight regions had not designated an audit point of contact. Also, although Regions 4 and 10 had designated points of contact for auditing compliance with the order, no audits had been conducted as of May 2012. Further, the Agency had not issued guidance on how to conduct these audits and how frequently.

#### **Conclusions**

EPA's management controls did not ensure RMProgram inspectors met minimum training requirements. If inspectors are not meeting minimum training requirements, EPA lacks assurance that its inspectors are conducting quality inspections that help to ensure facilities follow program requirements. These requirements are designed to prevent accidental releases of harmful chemicals and to ensure adequate responses to protect the public when such accidents occur. Given the hazards addressed by the RMProgram, inspector training also helps inspectors protect themselves from potentially dangerous exposures.

#### Recommendations

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

- 1. Revise the program-specific curriculum training for CAA 112(r) Risk Management Program inspectors to clarify the basic and program-specific inspector refresher requirements.
- 2. Develop guidance for conducting compliance audits per EPA Order 3500.1, ensure that each region designates a single point of contact responsible for auditing regional compliance with EPA Order 3500.1, and require periodic reporting of regional compliance with the order.

We recommend that the Assistant Administrator for Administration and Resources Management:

- 3. Strengthen controls over the credentials process to ensure that credentials are only issued to inspectors who demonstrate that they have met the minimum training requirements of EPA Order 3500.1.
- 4. Amend existing cooperative agreements for SEE enrollee inspectors to require compliance with EPA Order 3500.1 and ensure that SEE enrollee position descriptions for RMProgram inspectors include the specific training requirements applicable to the position.
- 5. Direct EPA Regions 2, 4, 7, and 10 to amend their contracts for inspection support to include provisions requiring contractor inspectors to meet EPA Order 3500.1 training requirements.

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

6. Correct limitations in the Emergency Management Portal – Field Readiness Module training system, such as populating the system with a

complete list of training requirements and enabling certificates to be uploaded into the system.

#### **Agency Comments and OIG Evaluation**

OECA disagreed with our draft report's recommendation 1 to revise EPA Order 3500.1 to clarify the basic and program-specific refresher training requirements. Instead, OECA proposed an alternative correction action to revise the CAA 1112(r) RMProgram specific inspector training requirements to clarify refresher training requirements. OCEA plans to complete this action by February 28, 2013. We accept OCEA's alternative action and have revised recommendation 1 of the final report to reflect the alternative corrective action. Accordingly, the recommendation is open pending completion of the corrective action.

OECA agreed with the draft report's recommendation 2. OECA proposed to develop a checklist to aid the regions in auditing the credential process. OCEA plans to complete this action and request regional points of contacts for this process by February 28, 2013. OECA stated that it anticipates the Agency's larger Consistent Field Operations project will address periodic reporting of compliance with the credentials process. We confirmed that the Agency's planned actions resulting from the Consistent Field Operations project and implementation of the Field Operations Guidelines meet the intent of the periodic reporting clause in our draft report recommendation 2. Thus, we consider recommendation 2 to be open pending completion of the first two parts of the recommendation. Appendix B contains OECA's response to the draft report.

OARM concurred with recommendations 3, 4, and 5. OARM stated that OECA's planned corrective actions to address recommendation 2 will provide the necessary strengthening of the credentials process. OARM also stated that it will continue to validate that supervisors have signed the Credential Request Form. Thus, recommendation 3 is closed. OARM plans to complete recommendation 4 by June 30, 2013. Recommendation 4 is open pending its completion. OARM agreed to complete corrective actions for recommendation 5 pending completion of certain actions by OCEA. Thus, recommendation 5 is unresolved pending receipt of a planned completion date. Appendix C contains OARM's response to the draft report.

OSWER concurred with recommendation 6 and indicated in its written response that the corrective actions were complete. However, in confirming whether the actions were completed, OSWER staff said that one of the system enhancements was not finished. Thus, the recommendation is unresolved pending receipt of a planned completion date for the remaining enhancement. Appendix D contains OSWER's response to the draft report.

# **Chapter 3**

# Limited Documentation and Oversight Prevented Assurance That Inspections Were Effective

RMProgram inspection reports lacked information to demonstrate that effective inspections were conducted. In general, reports did not describe the scope of the inspection, such as what processes were reviewed. Further, reports did not explain the extent to which the inspectors reviewed specific elements of a process. Our onsite observations of two inspections indicated that procedures to verify implementation of the facility's RMProgram activities were limited. EPA did not have a process for periodically monitoring the quality of inspections. Further, EPA inspection guidance did not provide minimum guidelines for the scope of inspections. Inspections are a critical Agency tool for ensuring that RMPrograms are implemented in accordance with regulations. A facility's failure to follow program requirements could lead to accidental airborne releases of harmful chemicals, as well as an inadequate response to protect the public when such releases occur.

#### **EPA's RMProgram Inspection Process**

All regions used inspection checklists to assist in conducting their RMProgram inspections. Appendix A lists the RMProgram elements included in EPA's checklist for a program level 3 process.

EPA's RMProgram inspection guidance also provides recommended inspection activities. These activities range from document reviews to more detailed analyses and site verifications to determine whether a facility is implementing its program activities as described in its program documentation. EPA's 1999 inspection guidance did not recommend employee interviews. However, the 2011 inspection guidance notes that to provide for an effective inspection and to assist in the collection and analysis of information, the inspector(s) may interview employees. The guidance explains that having an employee who works at the facility and has knowledge of the program participate in the inspection may assist the inspector(s) in evaluating compliance. The guidance states that special attention should be paid to comparing the facility's RMP to policies and procedures actually implemented, especially for production or equipment changes.

We reviewed 29 RMProgram inspection reports for compliance with EPA guidance. This included at least one report from each region. The inspections were conducted between July 2006 and August 2011. All of the reports were for inspections of high-risk facilities identified by OEM.

#### Inspection Reports Lacked Details Demonstrating Effective Inspections

We found it difficult to ascertain the scope of inspections based on the inspection reports. All regions used an inspection checklist. These checklists ask yes/no/not applicable and fill-in-the-blank questions. The inspection report narratives often did not explain what work was conducted to address the questions. Also, EPA's inspection reports often did not include the reporting components recommended by guidance. The following table provides details on information not included in the 29 reports reviewed.

Table 3: Information missing from inspection reports

Description	Number of reports without the information (out of 29)
Facility emergency contact	23
RMP initial submission date	28
RMP updated submission date	21
Reason for selecting facility	24
Facility process identifications	25
Inspector signature	12
Employee interviews	24
Approver signature	23
Lead inspector name	22
40 CFR Part 68 implementer contact information	22

Source: Information developed by OIG based on analysis of EPA inspection reports.

Regional staff told us that they did not include some of the facility and RMP information because it was available in documentation attached to the reports. However, we noted that some inspection reports of multiple process facilities did not identify the process IDs of the processes inspected.

In June 2011, OEM started a review of inspection reports and identified problems consistent with what we identified. OEM found that:

- Some reports contained few supporting facts and documentation.
- Some reports contained facilities' offsite consequence analysis data that should not be publicly disclosed.
- Some reports included conclusive statements and recommendations outside of EPA's authority.
- Some inspections were performed by one inspector in a half day or less yet reportedly covered the entire inspection checklist.
- Many inspection findings were based on the existence or completeness of required documentation rather than actual facility status or conditions.
- Some reports suggested that inspectors were not reviewing the facility RMP prior to inspection.
- Most reports did not describe the level of employee participation in the inspection.

Of the 29 inspection reports reviewed, we selected 11 for more detailed analysis. We asked the inspectors of these 11 inspections for any information not included in the reports that provided the basis for their findings. In some cases we were able to determine the activities and analyses the inspectors conducted to provide the basis for their findings. This may have included reviews of supporting documents, such as maintenance records. These activities and analyses by the inspectors generally did not include physically verifying the maintenance work. Further, the additional documentation did not explain how and which activities or components of a process were selected for review. Thus, we could not determine the scope of the inspections.

We also observed two onsite inspections—one at a level 3 facility and another at a level 2 facility—that were both included on OEM's high-risk facility list. We noted that these inspections did not include interviews of non-management facility employees, and only included limited verification of the facilities' implementation of its program. Regarding these two inspections:

- The program level 3 facility inspection was at a gas processing plant. The facility had experienced an accidental release in 2008 requiring the evacuation of 40 people. The facility had one RMProgram-covered process involving flammable mixtures and propane. This process contained approximately 100 vessels, 11 each of which would be covered by certain program elements (for example, mechanical integrity). During the approximately 8 hours spent on site, the inspectors were able to obtain samples of documentation relating to six of these vessels and were able to inspect these vessels. Due to an emergency shutdown of the facility and evacuation of employees at the time of the inspection, the inspection team was unable to interview any employees.
- The program level 2 facility inspection was at a fertilizer manufacturing and wholesale facility. The facility had reported two covered processes involving anhydrous ammonia and aqueous ammonia. In 2008, the facility experienced an accidental release of ammonia. This accident resulted in medical treatment for four persons but no hospitalizations. During the 1-day inspection, the inspectors reviewed RMProgram records and toured the facility. This inspection identified a covered process that had not been included in the facility's RMP.

Documenting the scope of inspections helps in planning future inspections and assists national program management. Information on the scope of an inspection can aid an inspector when conducting a later inspection of the same facility. The inspector can use this information to select and review program processes and activities not reviewed during the prior inspection. The inspector can also use this

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<sup>&</sup>lt;sup>11</sup> Vessel is defined in 40 CFR §68.3 as any reactor, tank, drum, barrel, cylinder, vat, kettle, boiler, pipe, hose, or other container.

information to follow up on problem areas and ensure that the facility corrected identified problems. Also, information on the scope of inspections could be useful for managers in providing national guidance. This information could help identify areas that need extra scrutiny or identify effective inspection activities.

#### **Oversight of Inspections Could Be Strengthened**

Management controls could be strengthened to provide better assurance that inspections are rigorous enough to detect program violations in important program elements, such as process hazard analysis and mechanical integrity. We identified three areas where controls could be strengthened:

- Post-inspection monitoring.
- Supervisory oversight.
- Guidance to address inspection scope and reporting requirements.

#### Post-Inspection Monitoring Program

Neither headquarters nor the regions had implemented regular post-inspection monitoring programs to review and assess the quality of inspections and inspection reports against established procedures and guidance. OEM initiated a first-time assessment of inspection reports to determine inspection compliance with RMProgram inspection guidance about 1 week prior to OIG's announcement of our evaluation. OEM reviewed approximately five reports from each region. The results of OEM's review were consistent with the results of our review. OEM's findings demonstrate the benefits of periodic review.

#### Supervisor Oversight

EPA Order 3500.1 states that first-line supervisors can ensure the quality of inspections through the use of performance standards, reviewing inspection reports, and accompanying inspectors. However, only six regions had a first-line supervisor accompany inspectors on an inspection, and this was not a regular exercise in any of these regions. In general, the regions told us inspection reports were reviewed by peers, supervisors, or enforcement coordinators. Reports in eight regions were not signed by a reviewer or approver.

#### Additional Guidance on Inspection Scope and Reporting

EPA guidance states that the scope of the inspections should be determined by the region, but does not provide minimum guidelines for the scope of inspections. Further, guidance does not specifically require inspection reports to explain the methodology inspectors used to select processes and related activities for review during an inspection.

The size and complexity of facilities covered by the program vary greatly. For example, a dairy may only have one process subject to RMProgram requirements, while an oil refinery can have over 30 processes subject to those requirements. As the elements of the program apply to each covered process, a multi-process facility essentially represents several programs. Inspector resources and time needed to conduct a quality inspection at these different facilities would therefore vary accordingly. At larger facilities in particular, inspectors may have to select a sample of processes to review. Within each program element for that process, the inspectors would need to sample certain activities for detailed review and verification. Information on the inspector's methodology is critical to determining the extent to which a facility's program was inspected and whether the inspection was rigorous enough to detect and prevent potential violations.

We analyzed the time spent onsite for the 29 inspections. Based on information provided in the inspection reports, we calculated the number of inspector hours spent onsite at the facility. <sup>12</sup> The average time spent at the facility by an inspector was 12 hours; the average number of inspector hours (inspectors multiplied by hours at the facility) was 29 hours.

Larger and more complex facilities are generally included on EPA's list of highrisk facilities and need more time to inspect. National program guidance for FYs 2010 through 2012 required regions to inspect at least 5 percent of all their RMProgram facilities with a nationwide target of 578 for FY 2012. In addition, program guidance increased the number of inspections at high-risk facilities. The expected number of inspections at high-risk facilities was 10 percent of all inspections for FY 2010 and increased to 25 percent for FYs 2011 and 2012.

Assuming that current inspection resources are being effectively used, it is unlikely that regions can spend more time inspecting high-risk facilities and continue to meet an overall program goal to inspect 5 percent of all facilities each year. EPA plans to reduce the overall inspection target for FY 2013 to 500, with 30 percent at high-risk facilities. According to OEM management, if requested budget increases are not approved, they plan to reduce the target to 460 while maintaining the 30-percent target for high-risk facilities. An increase in funding would represent a change in recent years' trends. Combined Emergency Planning and Community Right to Know Act (EPCRA) and RMProgram funding has declined since FY 2009. Table 4 shows the regions' combined RMProgram and EPCRA budgets for FYs 2009–2011. <sup>13</sup>

<sup>&</sup>lt;sup>12</sup> Many reports did not include starting and ending times. To be conservative in our estimates, we counted these inspections as lasting 8 hours. However, our observations and other documentation indicate that some 1-day inspections do not include 8 hours at the facility.

<sup>&</sup>lt;sup>13</sup> EPA's budget combines funding for the EPCRA and RMPrograms.

Table 4: EPA regions' combined RMProgram and EPCRA budgets

Fiscal year	Budget (in \$000s)	Budget change from previous year	Percent budget change from previous year
2009	\$6,492	N/A	N/A
2010	\$6,284	(208)	(3.2)
2011	\$6,095	(189)	(3.0)

Source: OIG analysis of budget figures obtained from OEM.

#### **Conclusions**

EPA should strengthen its program guidance and oversight to ensure that it conducts effective inspections at program facilities. We found that inspection reports lacked information on the scope of the inspection. An effective inspection program is a critical EPA tool for ensuring compliance with program regulations and decreasing the risk of airborne releases of harmful chemicals that could impact the public. It is important that EPA conduct effective inspections at facilities covered under the RMProgram because of the potential consequences of noncompliance with the program requirements. A facility's failure to follow program requirements could lead to accidental releases of harmful chemicals and/or inadequate responses to protect the public when such accidents occur.

#### Recommendations

We recommend that the Assistant Administrator for Solid Waste and Emergency Response coordinate with the Assistant Administrator for Enforcement and Compliance Assurance to:

- 7. Revise inspection guidance to recommend minimum inspection scope for the various types of facilities covered under the program and provide more detailed examples of minimum reporting.
- 8. Develop and implement an inspection monitoring and oversight program to better manage and assess the quality of program inspections, reports, supervisory oversight, and compliance with inspection guidance.
- 9. Analyze national program measures to assess whether the number of required inspections should be modified to allow more time for inspecting larger and more complex high-risk facilities.

#### **Agency Comments and OIG Evaluation**

OSWER generally agreed with this chapter's findings and recommendations. OSWER noted that the corrective actions to implement our draft report's recommendations 7, 8, and 9 require coordinated effort between OSWER and OECA. Thus, we have revised the recommendation in our final report to

acknowledge OECA's role. OSWER's response suggested that we combine recommendations 7 and 8 and offered revisions to recommendation 9 to fully address the findings in our report. We agreed with these suggestions and combined our draft report recommendations 7 and 8 into final report recommendation 7. We also revised draft recommendation 9, which is now recommendation 8 in the final report. Draft report recommendation 10 is now recommendation 9 in the final report. OSWER provided estimated completion dates for actions that meet the intent of our final report recommendations 7 and 8. Thus recommendations 7 and 8 are open pending completion of the planned actions. Recommendation 9 is unresolved pending receipt of a planned completion date for the corrective action.

## Status of Recommendations and **Potential Monetary Benefits**

#### RECOMMENDATIONS

POTENTIAL MONETARY BENEFITS (in \$000s)

Rec. No.	Page No.	Subject	Status <sup>1</sup>	Action Official	Planned Completion Date	Claimed Amount	Agreed-To Amount
1	14	Revise the program-specific curriculum training for CAA 112(r) Risk Management Program inspectors to clarify the basic and program-specific inspector refresher requirements.	0	Assistant Administrator for Enforcement and Compliance Assurance	2/28/13		
2	14	Develop guidance for conducting compliance audits per EPA Order 3500.1, ensure that each region designates a single point of contact responsible for auditing regional compliance with EPA Order 3500.1, and require periodic reporting of regional compliance with the order.	0	Assistant Administrator for Enforcement and Compliance Assurance	2/28/13		
3	14	Strengthen controls over the credentials process to ensure that credentials are only issued to inspectors who demonstrate that they have met the minimum training requirements of EPA Order 3500.1.	С	Assistant Administrator for Administration and Resources Management	1/11/13		
4	14	Amend existing cooperative agreements for SEE enrollee inspectors to require compliance with EPA Order 3500.1 and ensure that SEE enrollee position descriptions for RMProgram inspectors include the specific training requirements applicable to the position.	0	Assistant Administrator for Administration and Resources Management	6/30/13		
5	14	Direct EPA Regions 2, 4, 7, and 10 to amend their contracts for inspection support to include provisions requiring contractor inspectors to meet EPA Order 3500.1 training requirements.	U	Assistant Administrator for Administration and Resources Management			
6	14	Correct limitations in the Emergency Management Portal – Field Readiness Module training system, such as populating the system with a complete list of training requirements and enabling certificates to be uploaded into the system.	U	Assistant Administrator for Solid Waste and Emergency Response			
7	21	Coordinate with the Assistant Administrator for Enforcement and Compliance Assurance to revise inspection guidance to recommend minimum inspection scope for the various types of facilities covered under the program and provide more detailed examples of minimum reporting.	0	Assistant Administrator for Solid Waste and Emergency Response	7/31/14		
8	21	Coordinate with the Assistant Administrator for Enforcement and Compliance Assurance to develop and implement an inspection monitoring and oversight program to better manage and assess the quality of program inspections, reports, supervisory oversight, and compliance with inspection guidance.	0	Assistant Administrator for Solid Waste and Emergency Response	9/30/14		
9	21	Coordinate with the Assistant Administrator for Enforcement and Compliance Assurance to analyze national program measures to assess whether the number of required inspections should be modified to allow more time for inspecting larger and more complex high-risk facilities.	U	Assistant Administrator for Solid Waste and Emergency Response			

 $<sup>\</sup>begin{array}{ll} 1 & O = \text{recommendation is open with agreed-to corrective actions pending} \\ & C = \text{recommendation is closed with all agreed-to actions completed} \\ & U = \text{recommendation is unresolved with resolution efforts in progress} \end{array}$ 

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# Description of RMProgram Elements

RMProgram	
element	General description of program element requirements
Management	Management system to oversee implementation of the program elements.
Hazard	Assessment to determine the potential hazards presented by the covered process. Include
Assessment	worst-case release scenarios, offsite consequences analysis, and 5-year accident history.
Prevention	Includes information pertaining to the hazards of the regulated substances used or produced
Program:	by the process, information pertaining to the technology of the process, and information
Process Safety	pertaining to the equipment in the process.
Information	
Process Hazard	Identify, evaluate, and control the hazards involved in the process. Update and re-evaluate at
Analysis	least every 5 years.
Operating	Written procedures that provide clear instructions for safely conducting activities involved in
Procedures	each covered process consistent with the process safety information
Training	Each employee involved in operating a process, and each employee before being involved in
	operating a newly assigned process, shall be trained in an overview of the process and in the
	operating procedures.
Mechanical	Applies to certain process equipment such as storage vessels, piping, and vents. Establish
Integrity	and implement written procedures to maintain the ongoing integrity of process equipment.
Management of	Establish and implement written procedures to manage changes to process chemicals,
Change	technology, equipment, and procedures; and changes to stationary sources that affect a
D 0: ://	covered process.
Pre-Start Up	Required safety review when new stationary sources are built and existing stationary sources
Review	are modified and the modification is significant enough to require a change in the process
0	safety information.
Compliance	Evaluate facility compliance with the RMProgram at least every 3 years to verify that
Audits Incident	procedures and practices are adequate and are being followed.  Investigate each incident that resulted in, or could reasonably have resulted in, a catastrophic
Investigation	release of a regulated substance.
Employee	Develop a written plan of action for implementing employee participation requirements.
Participation	Employees and their representatives shall be consulted on the conduct and development of
Ганипранон	process hazards analyses and on the development of the other elements of process safety
	management. Employees provided with access to process hazard analyses and to all other
	information required under the RMProgram.
Hot Work Permit	Must issue permit for hot work conducted on or near a covered process. Permit shall
THE WORK I CHILL	document that the fire prevention and protection requirements in 29 CFR 1910.252(a) have
	been implemented prior to beginning the hot work operations.
Contractors	Obtain and evaluate information regarding the contract owner's or operator's safety
23.11.401010	performance and programs when hiring a contractor to work on or near a covered process.
Emergency	For facilities where employees will respond to accidental releases. Develop and implement
Response	an emergency response program for the purpose of protecting public health and the
_	environment.

Source: OIG analysis of checklists and 40 CFR Part 68.

## OECA Response to Draft Report

December 21, 2012

#### **MEMORANDUM**

**SUBJECT:** Response to Draft Report: Improvements Needed in EPA Training and Oversight

for Risk Management Program (RMP) Inspections, Project No. OPE-FY11-

0012

**FROM:** Cynthia Giles

Assistant Administrator

Office of Enforcement and Compliance Assurance

**TO:** Carolyn Copper

Assistant Inspector General for Program Evaluation

This memorandum is in response to the *Draft Report: Improvements Needed in EPA Training and Oversight for Risk Management Program (RMP) Inspections, Project No. OPE-FYII-0012* (Draft Report) issued on November 29, 2012, by the Office of the inspector General (OIG). We appreciate the opportunity to review and comment on the Draft Report and respond to the recommendations directed to the Office of Enforcement and Compliance Assurance (OECA).

With respect to the factual accuracy of the Draft Report, recommendation #2 on page 20 references "EPA Order 3510." The correct reference should be "EPA Order 3500.1." We have confirmed with Rick Beusse, Director, Office of Program Evaluation, OIG that this was a typographical error.

With respect to the two recommendations for which OECA was designated the "Action official", we offer the following response and proposed corrective actions:

Recommendation 1: Revise EPA Order 3500.1 to clarify training requirements for basic and program-specific refresher training.

OECA Response: OECA does not concur with this recommendation. OECA does not agree that the language in EPA Order 3500.1 is ambiguous regarding refresher training requirements, or that revisions to the Order are necessary. However, OECA agrees that clarity on the basic and program-specific refresher training requirements for the Clean Air Act (CAA) 112(r) Risk Management Program (RMP) can be provided via revisions to the CAA 112(r) RMP program specific inspector training requirements. OECA will complete these revisions by February 28, 2013.

Recommendation 2: Develop guidance for conducting compliance audits per EPA Order 3500.1, ensure that each region designates a single point of contact responsible for auditing regional compliance with EPA Order 3500.1, and require periodic reporting of regional compliance with the Order.

OECA Response: OECA concurs with the recommendation to develop guidance and ensure that each region designates a single point of contact. However, instead of guidance for conducting audits per EPA Order 3500.1, OECA will commit to developing a checklist for the regions to assist them as they audit their inspection credential programs. OECA will develop the checklist, and request the single points of contact by February 28, 2013. With respect to periodic reporting of regional compliance with the Order, OECA anticipates that this issue will be addressed as part of the larger Agency Consistent Field Operations (CFO) effort that has been charged by the EPA Deputy Administrator to be led by the [Consistent Field Operations] CFO workgroup. A specific task of the [Consistent Field Operations] CFO workgroup involves ensuring implementation of, and ongoing compliance with, Field Operations Group (FOG) guidelines, including guidelines for inspector training and qualifications.

Should you have any questions or concerns regarding this response, please contact Gwendolyn Spriggs, the OECA Audit Liaison, at 202-564-2439.

#### Attachment

cc: Lisa Lund, OECA/OC
Susan Shinkman, OECA/OCE
Mamie Miller, OECA/OC
Lauren Kabler, OECA/OCE
Gwendolyn Spriggs, OECA/OAP
Mathy Stanislaus, OSWER
Johnsie Webster, OSWER
Craig Hooks, OARM
Bernie Davis, OARM
Rick Beusse, OIG

## OARM Response to Draft Report

#### January 11, 2013

#### **MEMORANDUM**

SUBJECT: Response to Draft Report: Improvements Needed in EPA Training and Oversight

for Risk Management Program Inspections

FROM: Craig E. Hooks

**Assistant Administrator** 

TO: Carolyn Copper, Assistant Inspector General for Program Evaluation

Office of Inspector General

The Office of Administration and Resources Management appreciates the opportunity to review and provide comments to the above cited November 29, 2012, report, Project No. OPE-FY11 - 0012). For clarification purposes, EPA Order 3510, most recently dated 10/31/2012, should be cited in the report rather than 3500.1. Responses to recommendations 3, 4 and 5 addressed to OARM are provided below:

Recommendation 3: "Strengthen controls over the credentials process to ensure that credentials are only issued to inspectors who demonstrate that they have met the minimum training requirements of EPA Order 3500.1."

Response: OARM agrees with this recommendation although it should be directed to OECA, which, in their response to recommendation 2, committed to developing a checklist for use by headquarters and regional programs to assist in auditing their inspection credential programs and ensuring proper documentation and completion certification of inspector training requirements prior to requesting a new or reissued credential. OARM will continue the practice of validating that a supervisor has signed the Credential Request Form, which not only verifies that the employee has completed the training, but that the credential is necessary for their job performance and which credential is being authorized. This is consistent with our responsibilities as stated on page 7 of order 3510: "OARM will provide EPA employees a credential only after verification by the employee's supervisor that they have completed all required training ..."

Recommendation 4: "Amend existing cooperative agreements for SEE enrollee inspectors to require compliance with EPA Order 3500.1 and ensure that SEE enrollee position descriptions for RMProgram inspectors include the specific training requirements applicable to the position."

Response: OARM agrees with this recommendation. To ensure compliance with order 3510, by June 30, 2013, OARM's Office of Human Resources will amend all existing SEE cooperative agreements to require that SEE enrollee position descriptions for inspectors include a requirement that all EPA-required training applicable to the position be listed in the position description.

Recommendation 5: "Direct EPA Regions 1, 2, 4, 7, and 10 to amend their contracts for inspection support to include provisions requiring contractor inspectors to meet EPA Order 3500.1 training requirements."

Response: OARM agrees with this recommendation. In order 3510, page 6, section 4g, OECA is responsible for establishing requirements for non-EPA written agreements, including contract statements of work and contracts. After these requirements are developed, OARM can collaborate with the regions to ensure the contracts are modified.

If you have any questions about these responses, OARM's points of contact are: recommendation 3: Diane Dixon, Security Management Division - (202) 564-2154; recommendation 4: Yvette Carter, Office of Human Resources- (202) 564-7896; and recommendation 5: Lisa Maass, Office of Acquisition Management- (202) 564-2498.

cc: Cynthia Giles, OECA
Lawrence Starfield, OECA
John Bashista, OAM
Susan Kantrowitz, OHR
Renee Page, OA
John Showman, OPRM

## OSWER Response to Draft Report

January 16, 2013

**SUBJECT:** OSWER Response to the OIG Draft Evaluation Report, "Improvements Needed

in EPA Training and Oversight for Risk Management Program Inspections"

**FROM:** Mathy Stanislaus

**Assistant Administrator** 

**TO:** Carolyn Copper

Assistant Inspector General for Program Evaluation

Thank you for the opportunity to review and comment on the Draft OIG Evaluation Report, "Improvements Needed in EPA Training and Oversight for Risk Management Program Inspections". The Office of Solid Waste and Emergency Response (OSWER) has completed its review and concurs with the proposed recommendations specific to OSWER. Additionally, we have made several specific editorial comments on the factual accuracy and content of the recommendations in the draft report, which we have included in the attached copy of the report.

On the whole, we agree with the findings and recommendations discussed in the report. For the past several years we have been working in close coordination with the Office of Enforcement and Compliance Assurance (OECA) on several of these issues. It is encouraging that the findings in the report show we are moving in the right direction and we will continue working to further improve the implementation of the Risk Management Program. Below is our response to the recommendations.

In Chapter 2, recommendation 6 states:

6. Correct limitations in the Emergency Management Portal – Field Readiness Module training system, such as populating the system with a complete list of training requirements and enabling certificates to be uploaded into the system.

This recommendation was completed in September 2012.

In Chapter 3, recommendations 7 - 10 state:

- 7. Revise inspection guidance to recommend minimum inspection scope for the various types of facilities covered under the program.
- 8. Expand guidance on reporting to provide more detailed examples of minimum reporting.

- 9. Develop a post-inspection monitoring program to assess the quality of program inspections and compliance with inspection guidance.
- 10. In coordination with OECA, analyze national program measures to assess whether the number of required inspections should be modified to allow more time for inspecting larger and more complex high-risk facilities.

OSWER will continue to work closely with OECA in developing appropriate policies, procedures, and guidance to implement these recommendations. For recommendations 7 and 8, OSWER and OECA will work with the Regions to develop draft guidance by December 2013, which specifies minimum inspection scope and examples for various types of inspections to assist Regions in focusing their limited resources on the most significant issues at facilities. Based on discussions with and reviews by the Regions, a final guidance will be published in July 2014.

For recommendation 9, OSWER and OECA are working with the Regions to identify key components of a repository of inspection reports in order to better ensure and assess the quality of RMP inspections. This repository system will be developed by the end of FY2014 and piloted with the Regions in FY2015. During the pilot, a process will be developed and implemented to review and assess the quality of the inspections and reports against established procedures and guidance.

We would also like to point out that our office has been, and will continue to, work closely with OECA as we analyze and assess the national RMP program measures as per your recommendation 10. Specifically, OSWER and OECA jointly have revised their National Program Manager Guidance each year to reduce the overall number of RMP inspections while increasing the percentage of high risk inspections in order to ensure the Regions have the resources and time to inspect these more complex, higher risk facilities. We are also providing more in-depth, technical training to our inspectors related to the types of high risk facilities they will be inspecting.

Again, we appreciate the opportunity to provide our responses to the recommendations in this report. If you have any questions or comments, please contact Kim Jennings at (202) 564-7998.

Attachment

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