



In the Rearview Mirror:
Implementation of the Gold King Mine
After-Action Review

January 13, 2017

Acknowledgements

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Numerous emergency response program personnel from across the agency
Office of Research and Development
Office of Environmental Information
IT Forum
Emergency Response and Communications Advisory Board
National Data Team
Regional Public Affairs Directors and staff
Tribal Notifications Team
Resource Compendium Review Subteam
Communications Subteam
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Introduction

In November 2015, the U.S. Environmental Protection Agency's Chief of Staff, Matt Fritz, established an agency team to conduct an After-Action Review of EPA's response to the Gold King Mine (GKM) release that occurred on August 5, 2015. The team, comprised of employees from across the agency, interviewed over a hundred people and reviewed a large volume of documents to identify lessons learned and develop recommendations for the Administrator's consideration. Among the documents reviewed were after-action reports from previous emergency responses, which showed that some of the issues identified at Gold King Mine were not new. On December 21, 2015, the After-Action Review Team submitted its report detailing ten specific recommendations to improve how the agency responds to emergency incidents and to ensure a highly effective EPA Emergency Response Program that can adapt quickly to dynamic, unpredictable situations. These recommendations, shown in Appendix A, were:

- Recommendation 1: Establish a National Incident Management Assistance Team (IMAT) at EPA.
- Recommendation 2: Institute Senior Official training plan.
- Recommendation 3: Institute ICS key leadership training plan.
- Recommendation 4: Establish an agency data and information management team.
- Recommendation 5: Improve data and information posting and communications.
- Recommendation 6: Establish Communications Strike Teams and broaden data training for PIOs and public affairs staff.
- Recommendation 7: Invest in data resources and clarify roles/responsibilities.
- Recommendation 8: Build capacity for rapid data collection, interpretation, and dissemination.
- Recommendation 9: Align public affairs resources and update communications procedures.
- Recommendation 10: Improve notification procedures, plans, and equipment.

All ten recommendations were the result of feedback from across the agency and input from impacted stakeholders. Recognizing EPA's important national role during a spill/release, natural disaster, or terrorist attack, the After-Action Report recommended ambitious timelines for implementation. Subsequently, the Administrator adopted all ten recommendations and requested that the Chief of Staff convene a cross-agency team to implement them. On February 12, 2016, Matt Fritz issued a memorandum announcing the start of this effort (Appendix B).

Over the past year, the implementation team has worked with many of the agency's dedicated staff to make these improvements. Thank you to all of those who have contributed to the success of this effort and provided feedback to make these changes even more sustainable. The team has sought to put the issues identified in the GKM After-Action Review in its "rear-view mirror;" that is, to put some of the issues that the agency has confronted over time during the course of a

response in our rearview mirror and look forward to continuous improvement of the agency's emergency response mechanisms and protocols.

This report focuses on the three main areas that the After-Action Report identified for improvement:

- Response management system and implementation;
- Data and information management; and
- Communications, outreach, and notification.

All of the team's final work products can be found at http://www.epaosc.org/GKM_afteraction. The major components of all ten of the recommendations have been completed; any outstanding items are noted. The team has also identified additional recommendations to build on this implementation work and continue to institutionalize the changes. Much of this work will require continued attention and resources, but we are confident that because of these efforts and the dedicated employees in the emergency response and public affairs programs, the agency is in a better position than ever before to meet the challenges that the next incidents will bring.

Response management system and implementation

Recommendation 1: Establish a National Incident Management Assistance Team (IMAT) at EPA

The OEM Director and the Regional Superfund Division Directors will create a national IMAT comprised of EPA staff who are appropriately trained to assume leadership of functional positions within ICS. To date, the Agency has prioritized building Incident Management Teams (IMTs) within each Region. The IMT is designed to perform some of the functions of an IMAT, but is trained and supported within each Region by only EPA Regional personnel. The Team recommends the implementation of a national IMAT that is ready to deploy within 24 hours to support the local Incident Commander.

Creating the National IMAT: To fulfill their roles in coordinating emergency responses, both the Federal Emergency Management Agency (FEMA) and the Coast Guard have developed IMATs that can be deployed to an incident and help the existing response structure quickly mobilize during the initial phase of an emergency or disaster response. Even before the GKM release and After-Action Report, the emergency response program looked into ways to create a nation-wide IMAT at EPA to fill or coach/mentor the key leadership positions (KLPs) within the Incident Command System (ICS) structure on the ground during a response. This effort took on new importance after the After-Action Review Team found that the response to the GKM release did not “go early and go big,” and the Administrator adopted the recommendation that a National IMAT be created on an accelerated schedule to help remedy this in the future.

The Office of Emergency Management (OEM) worked with the Regions and agency leadership to implement the After-Action Report's recommendation. OEM worked diligently with members of the implementation team and the Superfund Division Directors and Emergency Response

program personnel, including the National Incident Management System (NIMS) Integration Team workgroup, to develop initial drafts of a Concept of Operations (CONOPS) for the National IMAT. The implementation team worked with the Office of the Chief Financial Officer to secure funding for the initial meetings and training of the National IMAT members. At the same time, OEM began the process to hire a dedicated staff person at headquarters to coordinate the activities of the National IMAT.

Once funding was secured, OEM worked with the Regional groupings (described in further detail below) to recommend members for the initial 2-year staffing period. At the end of September, OEM announced the selection of Steve Ridenour as the National IMAT Coordinator and the 44-person National IMAT roster for Fiscal Years 2017-2018. Shortly after, the National IMAT members met at the EPA HQ Continuity of Operations (COOP) facility for a several day workshop, where Administrator McCarthy gave remarks and the members agreed to initial callback duty rotations. The National IMAT members also developed Standard Operating Procedures governing logistics for calling up the team, roster rotations, participation in training and exercises, and integration with Regional IMTs. The National IMAT again met in November for a several day training session which included an exercise to coordinate as a group, and valuable guidance and training from current Coast Guard IMAT leadership. The National IMAT was fully stood-up and ready to deploy, as needed, beginning on December 4, 2016.

Features and Capabilities of the EPA National IMAT: The National IMAT is a team comprised of 44 personnel from around the country with four members trained and able to fill each of the following 11 KLP roles within the incident response structure:

- Deputy Incident Commander
- Safety Officer
- Information Officer
- Liaison Officer
- Operations Section Chief
- Planning Section Chief
- Situation Unit Leader
- Resource Unit Leader
- Environmental Unit Leader
- Logistics Section Chief
- Finance Section Chief



Each team is selected from the existing backup region (BUR) groupings: Regions 1 and 2; Regions 3, 4, and 5; Regions 6 and 7; and Regions 8, 9 and 10. Based on a callback duty/on-call schedule among the BUR groupings, the National IMAT has the ability to deploy either a full 11-person team or a subset of the team to any location under EPA's Area of Responsibility within 24-48 hours of notification. The National IMAT Coordinator manages the day-to-day operations of the program when it is not involved in a response action.

The National IMAT will always be deployed in the event that EPA caused or is directly involved in a spill/release or when an incident involves multiple Regions. The National IMAT has

developed Standard Operating Procedures detailing the process for activating the team and additional situations where it may be deployed.

The National IMAT is intended to be a scalable resource to support the Regions by providing personnel who can assist in major incident management activities. Once deployed, the National IMAT members can assist the Regions to help coach/mentor or fill the KLPs within the Incident Command structure, support the Region in the Regional Emergency Operations Center (REOC), or establish and staff an Area Command Post if appropriate. The National IMAT will demobilize as soon as deemed appropriate, usually within two weeks.

National IMAT members have completed and will continue to receive training as a team, and each member has completed the standard ICS training for his or her respective position. At this time, it is envisioned that National IMAT members will participate in three to four weeks of training and exercises each year to maintain readiness.

Maintaining the National IMAT: Now that EPA’s National IMAT has been established, there are ongoing costs for maintaining its readiness that will need to be met each year. Current estimates for Year 2 and beyond include travel and contract costs for a 3-day National IMAT meeting, Regional exercises including the National IMAT throughout the year, and information technology and communications equipment. OEM will continue to refine these estimates and look for ways to reduce costs, such as hosting events at the EPA HQ COOP facility. These ongoing costs are an investment. The flexibility and skills that this team brings will be invaluable to the national emergency response program and the Regions during complex and unpredictable situations. Quick and effective response to incidents reduces the risk to public safety, environmental damage, and potential legal liability, which will provide cost-savings to the agency, federal government, and state, local, and tribal resources in the long term.

Additionally, the current National IMAT Plan/CONOPS envisions that following one full year of operations (December 2017), OEM will conduct a proof of concept evaluation to address lessons learned, including the staffing approach, based on the initial implementation and early operations of the program. As a new resource to the emergency response program, the implementation team expects that tweaks will be made as needed to ensure that the National IMAT appropriately integrates with existing ICS structures and adds value to the agency’s response operations.

Recommendation 2: Institute Senior Official Training Plan

The OEM Director will update all ICS training materials for Senior Officials to align with current FEMA directives and, in consultation with the Regions, deliver ICS for Executives IS-700/IS-800 and the EPA Senior Official Training Course.

Updating Senior Official Training Materials: Based on the After-Action Report recommendations, the implementation team recognized the need to update and streamline the existing “Incident Management for Executives” training materials to make them more targeted toward what senior agency officials need to know about their responsibilities during an emergency soon after they are on-boarded. The original plan also called for requiring senior

agency personnel to take the online ICS-700 & -800 courses provided by FEMA, which give an overview of the NIMS and the National Response Framework (NRF).

The team significantly shortened the original training materials. This new slide deck was presented during a Headquarters COOP exercise with the agency's senior leadership in May, with feedback that it was still much too long and detailed to be useful to senior leaders. The team reconsidered the approach by further condensing the slides and dropping the requirement for senior leaders to complete the online FEMA training. Revised slides were presented at the agency-wide Senior Executive Service meeting in June, sent out to the Regions and Headquarters offices for additional comments via email, and presented again at an Executive Management Council meeting in July for final comments.

The new training consists of a half-hour training video entitled "Incident Management and Communications for Executives," based on the final version of the slide deck, which will be ready within the next month. The main areas that it encompasses include how senior agency leadership fits into the ICS structure, the roles and responsibilities of major players in a response and how senior leaders interact with them, and information on the agency's newest response resources (the National IMAT and Public Information Assistance Teams). Recognizing that communications between responders and with the public are just as critical as tactical management during a response, the materials have been broadened to include practical considerations for the role of communications in today's 24-hour news cycle. The video incorporates interviews from emergency response leadership and staff, as well as information based on agency experiences about what can happen if response protocols are not followed.

Senior leaders need to know that they have a very important role to play as an emergency unfolds, but that they also have dedicated staff to help them. We believe that the new training clearly and concisely articulates this. However, the team recommends further feedback and updates to this training as the agency's role and experience in emergency responses evolves.

Training Current Senior Leaders: Throughout the stakeholder review process for the training materials, the team strategically solicited feedback from numerous stakeholders, which included the following groups of senior agency personnel:

- Regional Administrators
- Deputy Regional Administrators
- Regional Superfund Division Directors
- Regional Public Affairs Directors
- Headquarters Assistant, Deputy Assistant, and Associate Administrators
- Headquarters and Regional emergency response staff

Through this process, the team not only solicited feedback, but also integrated the core messages of the training into EPA culture: that senior officials within EPA have their own important role in the ICS framework and trained professionals within the agency are there to support them in this role. Once the training video has been completed, the team recommends that all officials who may serve in a Senior Official role in an emergency response be required to attend a training session and watch the video.

Training New Senior Leaders: The After-Action Report recommended that all agency senior leadership be trained within 30 days after they are on-boarded. The final training approach developed by the implementation team incorporates several opportunities to reiterate the importance of senior leaders in the response framework. Upon on-boarding, all senior leaders will receive a short how-to guide provided by OEM containing both emergency response and COOP protocols with clear instructions for who to call if a situation arises prior to further training. Within 30 days, all political appointees and career deputies with the potential for involvement in responding to an incident or communicating to the public about it must coordinate with either OEM and the Office of Public Affairs (OPA) or their Regional Superfund Division and Public Affairs Office to watch the video with emergency response staff and participate in a question and answer period. The goal is not only to provide training, but to also encourage interaction between senior leaders and emergency response staff soon after starting at the agency. For senior leaders with major responsibilities in the emergency response program (e.g., the Assistant Administrator for the Office of Land and Emergency Management), additional training will be provided.

Recommendation 3: Institute Key Leadership Position Training Plan

The OEM Director will update ICS training materials and ensure staff is appropriately trained and certified in ICS protocols to fill the 11 key leadership positions for the Command and General staffs within 24 hours of an incident.

Updating Orders and Training Requirements: The team identified four EPA Orders relating to the agency's implementation of ICS which had not been updated for several years, including:

- EPA Order 2070 (Incident Management Teams)
- EPA Order 2071 (National Approach to Response)
- EPA Order 2072 (Response Support Corps)
- EPA Order 2073 (EPA Incident Command System Training, Qualifications and Certification Standards)



After these internal agency directives had been issued, FEMA made several updates to the National Response Framework and supporting documents that needed to be reflected within EPA's internal directives. Additionally, the team felt that much of the other ICS-related implementation work needed to be captured as well. Therefore, the team worked closely with OEM and the Regions to make the necessary updates. For example, the IMT Order was expanded to include the National IMAT alongside the regional IMTs. The National Approach to Response Order was updated to include the updated NRF, the National Disaster Recovery Framework, and updated Emergency Support Function 15 (ESF 15), as well as the National IMAT and integration of communication protocols into emergency response. The team partnered with an existing workgroup to make changes to the Response Support Corps Order governing the use of non-emergency response program personnel for response activities. Finally, the Order for training and qualifications was also amended to integrate the other After-Action Report implementation efforts.

The team solicited comments from all of the Regional Superfund Division Directors as well as the National Implementation Team, and had a robust directives clearance review comment period. All four amended orders were signed in October 2016.

The next review date for these orders is not until October 2019. However, they should be reviewed again before that time to ensure that they remain up-to-date with current FEMA guidance. One item still outstanding is updating the National Model for Incident Coordination found as Figure 2 in EPA Order 2071. With the enhanced coordination between the emergency response program and communications personnel, both groups have identified a need to amend the existing chart to better show the interrelation between the response operations and communication efforts. Because this chart is used across the agency for training and other materials, more detailed discussions are necessary to ensure the chart is accurate and useful. OEM is working with OPA on this updated chart, and expects to have a draft for stakeholder feedback by the end of the fiscal year.

Strengthening Key Leadership Position Training: Over the summer, the team worked with OEM to canvas the Regions on whether each regional IMT had at least three staff members trained and ready to fill each of the 11 KLPs. OEM identified gaps in several Regions due to personnel changes and retirements, as well as a need to update training to ensure interoperability with the National IMAT. With the help of the implementation team, OEM has secured travel funding for 286 students (Regional IMT members and all National IMAT members) and over 50 instructors, coaches, and support staff to conduct a nationwide EPA ICS Institute tentatively scheduled for late March in Pittsburg. OEM is covering the remainder of the costs from its own internal resources. This institute will include refresher training for the KLP positions, new training for integration of the National IMAT, and a large exercise designed to develop a cohesive approach to response between the IMTs and the National IMAT. OEM continues to work with contractor support to update and produce training materials for this training institute.

Once the ICS Institute has been held, the OEM Director will certify that all Regions have a sufficient number of staff appropriately trained in ICS protocols to fill the 11 KLPs, as well as that the agency is fully prepared to stand up an Incident Command in the field and the Headquarters Emergency Operations Center (HQ EOC) within 24 hours of an incident. Going forward, the current plan devotes annual resources to a series of smaller KLP courses throughout the country. This plan envisions three KLP courses each year, which will need contract support and travel funding to ensure EPA's emergency response capability remains strong. The team recommends that OEM continue to audit regional KLP staff readiness and assess whether another ICS Institute would be a cost-effective means to train emergency response staff in four to five years.

Streamline Data and Information Management, Training, and Communication

Recommendation 4: Establish an Agency Data and Information Management Team

The OEM Director, Regional Superfund Division Directors, ORD Deputy Assistant Administrator (DAA), and OPA Deputy Associate Administrator will establish a data management team to expedite and improve data and information management using SCRIBE during a national emergency response.

Using the SCRIBE Database: The After-Action Report recommended that the OEM Director and Regional Superfund Division Directors use SCRIBE as the exclusive agency database during a national response to improve consistency of data management (e.g., sampling, quality assurance/quality control, and data products). Working with the implementation team, the OLEM Assistant Administrator issued a memorandum notifying all employees that SCRIBE is the exclusive Agency database deliverable for sampling and analytical data during a national response. The database deliverable can also be provided by the EPA's Environmental Response Team (ERT) or another organization using an alternative method following the current SCRIBE schema. During a response, data will be obtained directly from the SCRIBE database and SCRIBE.NET, and tables generated from this database will be used rather than spreadsheets or other tools.

Establishing a Data Management Team: EPA has had an emergency response National Data Team since 2009, coordinated by OEM. After the GKM release, the focus of the team has turned to building capacity on the existing framework and improving agency processes through training and exercise opportunities. These efforts are designed to assist in building knowledge and expertise in data management during a response within each Region and at Headquarters.

To assist the Data Team with data issues and process improvement, OEM also established an Emergency Response Data and Communications Advisory Board, made up of representatives from the Regional Removal/Emergency Response programs, OEM, ERT, OPA, the Office of Environmental Information (OEI), the Office of Research and Development (ORD), and the Great Lakes National Program Office. The Board serves as an advisory group for products and recommendations made by the Office of Public Affairs and the Emergency Management IT Forum – a workgroup that has developed broad policies for information and data management for the emergency response program – in response to the After-Action Report to ensure goals for data management, data quality and public messaging are being met. The scope and functions of the Board are to:

- Review and comment on recommendations developed by the various groups working on the After-Action Report items to ensure there is a consistent vision applied to the recommendations from the perspective of data quality, data management and public communications;
- Serve as a conduit from the advisory board back to their respective communities to brief them on the recommendations;

- Bring comments and concerns from their respective communities back to the group to identify knowledge and policy gaps on response issues that intersect with these groups; and
- Provide subject matter experts to address national technical and data quality issues as needed.

The After-Action Report recommended that EPA use effective and consistent protocols for managing data and information during a response to avoid confusion within the agency and delays in relaying information to the public. During a response, the sharing of data should be done as efficiently as possible to avoid creating a time lag between EPA's receipt of results and communication of those results to the public. Further, data management protocols used by the agency should be streamlined so that Data Quality Objectives (DQOs) are clearly communicated. When multiple Regions and Headquarters are involved in decision making, overarching sampling guidance is needed to provide consistency across the various data collection efforts. The Regions should employ similar metrics and reference numbers, and develop Quality Assurance Project Plans (QAPPs) and sampling plans. However, the plans should be coordinated early in the response. In addition, as DQOs are defined and adjusted throughout the response, the Regions and Headquarters should coordinate consistently.

As a part of the ongoing plan to provide resources to implement these efforts, OEM hired a Data Management Coordinator to facilitate improvements to EPA's data capacity. The team has also explored additional funding with OCFO, and recommends that OEM be given additional travel dollars to support the capacity building activities such as trainings and workshops. The current budget estimates include a Data Team Planning Meeting and one Data Training Workshop annually.

Planning Joint Data Exercises: The OEM Director, in consultation with Regional Superfund Division Directors, ORD Deputy Assistant Administrator (DAA), and OPA Deputy Associate Administrator, is currently planning a joint exercise to validate the data management process and the flowchart developed for national level emergency responses. An Exercise Plan has been developed that identifies policies, procedures, administrative requirements, and exercise roles and responsibilities that will support the implementation of an exercise designed to address and fully identify critical issues and responsibilities connected with data and communications during a regional or national significant emergency response.

The National Data Team has already been conducting data specific exercises and workshops for the past several years for EPA emergency responders that focus on data issues and the agency's extramural technical contractors that support the program GIS and data efforts. These workshops/exercises focused on data management planning, data generation, verification, data management, and data analysis to support operational decision making during the response planning cycle. Moving forward as envisioned by the After-Action Report, these exercises will incorporate the use of data for data communication and distribution for regionally and nationally significant responses.

This will be accomplished through a two phased exercise approach. Phase one is a regional exercise connected to the annual Response Readiness exercise and evaluation process. Phase two is a nationally held exercise using the results from phase one.

The exercise is designed as a tabletop exercise delivered in a seminar format. Exercise play will be scenario based, but moderated and facilitated to address critical issues and the specific responsibilities of the primary players. Discussion will be facilitated using a series of questions where players will discuss and work through issues. However, because of time constraints, issues that need further research and deliberation will be noted and included in an action plan for further resolution. The action plan and a lessons learned after action report will be developed after the exercise.

The purpose of the phase one exercise is to evaluate the Region's approach to data management:

- Evaluate data and information management flow
- Coordinate with Regional Public Affairs
- Coordinate with backup Regions
- Identify training and resource gaps and needs

The phase two exercise will be an extension of the Regional scenario with additional Headquarters focused issues:

- Identify, along with OPA/Regional PAD, the public communication strategy for this event.
- How to coordinate with the incident organization structure
- How to coordinate with Headquarters personnel
- Identify deliverables the response staff need to generate (e.g., data tables, maps, and risk statements)
- Identify deliverables public affairs staff will generate

The goal of the exercise is to discuss and practice the agency's ability to share data, identify work products and deliverables needed to assist the response in using the data to provide public messaging and inform response stakeholders without any lengthy delays. Exercise discussions will address the posting of documents, website support, and other activities necessary to support the data and communications mission.

Recommendation 7: Invest in Data Resources and Clarify Roles/Responsibilities

Increase the number of trained personnel resources for the Environmental Units (EU) at the Headquarters and Regional levels. Staff EUs at the Regional and Headquarters levels on a 24-hour shift to provide timely data and information to meet expected deliverables.

Clarify data and information roles between the Region/Area Command and the Unified Command EU during a response and clarify responsibility for processing, interpreting, and sharing of data.

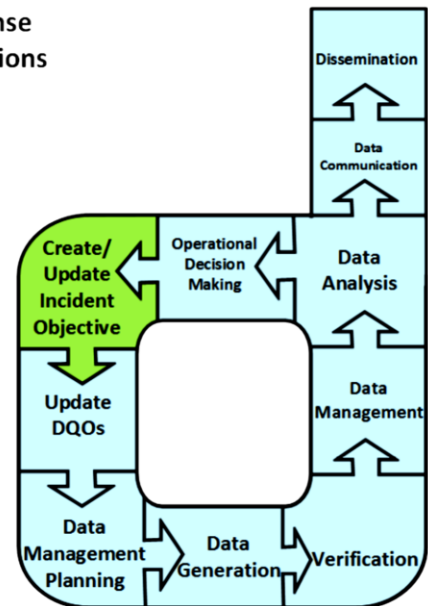
Clarifying Roles and Responsibilities: The OEM Director, in consultation with Regional Superfund Division Directors, tasked the IT Forum to develop guidance or a playbook on the mobilization, objectives, duties, responsibilities, and deliverables of the Regional and Headquarters data personnel during a national response. The guidance or playbook provides that

the National Data Team should include Headquarters data personnel in their training, include Headquarters personnel as part of the Data Team concept, and provide that Environmental Units will be staffed on 24-hour shifts during a response.

The GKM response and other emergency responses showed that the use and sharing of data is critical to the successful resolution of the response. This includes coordination between different components of Incident and/or Unified Command, Area Command, the impacted Region(s), and EPA Headquarters. During the reviews and debriefs following those incidents it was determined that a process overview was needed to consistently show the movement and use of data to properly serve those within the EPA Response Management System (RMS). The implementation team

assisted in the development of a “Playbook for Data Personnel” as a roadmap or high level blueprint to show how data is used throughout the EPA RMS, the various processes, and the roles and responsibilities to achieve the data and communications needs of the response. The collection, processing, management and distribution of data provides a backbone for EPA’s response operations. The Data Playbook’s concepts apply to all emergency response independent of significance, complexity, or level of interest. As with all emergency response doctrine, the response is flexible and will adjust and right size to address the data and communications needs at the local, regional, and national levels. All activities and data functions are initiated with the Incident Command/Unified Command (IC/UC) organization in the field until such time as the situation escalates to involve the REOC, HQ EOC, and/or other EPA offices or programs.

**EPA Emergency Response
Flowchart of Data Functions**

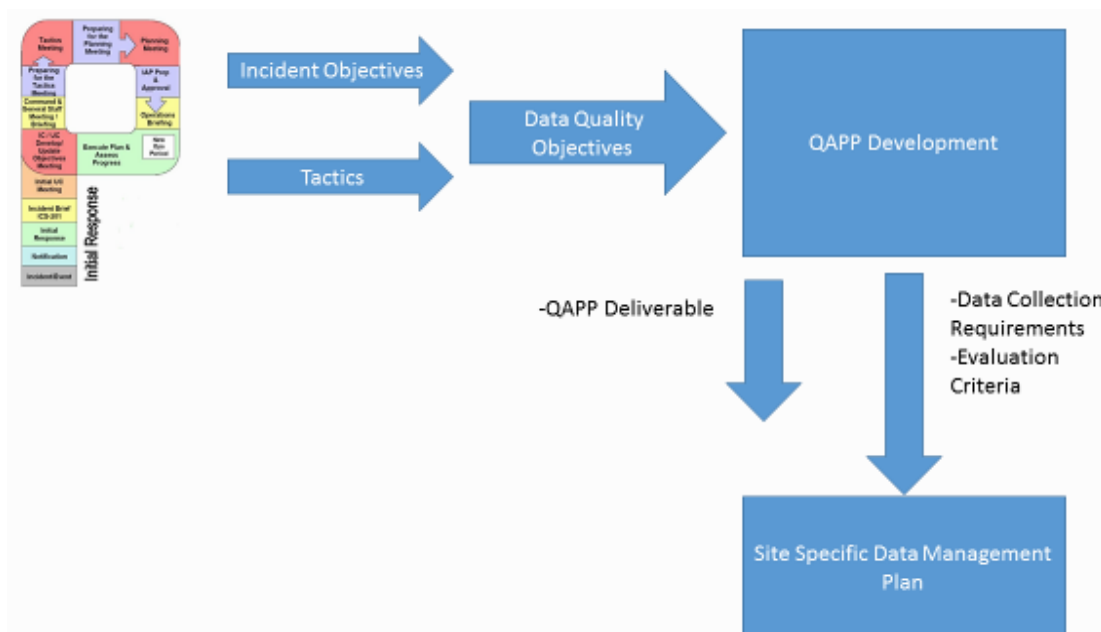


The Playbook addresses the following:

- Create/Update Incident Objectives
- Create/Update Data Quality Objectives
- Planning
- Data Generation
- Verification
- Data Storage
- Data Analysis
- Decision Making
- Data Communication/Messaging

Effective data management has been a core component of EPA’s ability to respond to an incident and communicate information both internally and externally to the public. Since the September 11th attacks, the agency has maintained workgroups focused on advancing data management practices and ensuring that EPA’s response and removal programs are prepared to capture, manage and distribute information.

The After-Action Report recommended that guidance for data management personnel be developed. Much like sampling plans and quality assurance plans, a Data Management Plan (DMP) identifies data requirements, key responsibilities and how information needs to be reported. EPA OLEM/OEM requires programmatic DMPs within each region to support emergency response activities. While Regional DMPs do an excellent job of outlining the high level requirements of each program, they will not entirely document the data requirements of a specific response. A site specific plan should always be developed to briefly identify the custom requirements of a specific incident.

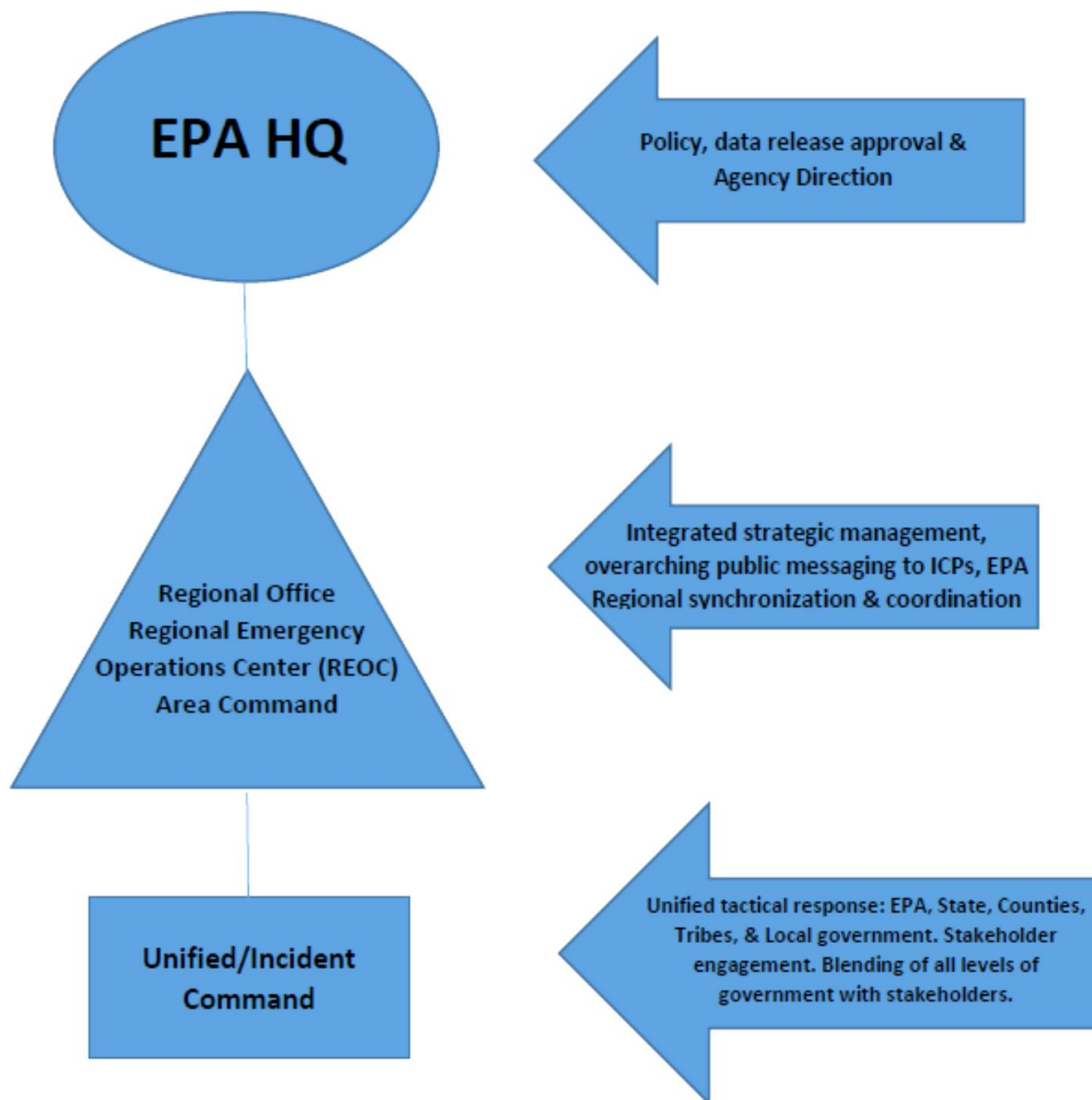


The DMP should address:

- Roles and Responsibilities
- Data Streams
- Data Elements
- Workflow
- Best Practices
- Data Verification Procedures

Improving Data Communications/Messaging: It is important that all incident response communications follow basic parameters that can be applied regardless of the incident. The information, and especially data, provided during an incident must be understandable, timely, accurate, and consistent. During an incident, requests for information from the public and the media, as well as from the White House, members of Congress and local, state, tribal and trust

territory officials, start immediately and continue throughout the response. Efficient information flow is critical to meeting public information needs, and the responsibilities of those gathering,



organizing and releasing this information must be clearly identified and coordinated through a well-defined process. In order to do so, the implementation team updated the agency’s Crisis Communication Plan (CCP), EPA Order 2010, which encompasses all aspects of communication during an incident, including the release of data.

Under the CCP, EPA implements an organized, integrated, and coordinated response to ensure the delivery of understandable, timely, accurate, and consistent information to the public in an incident. During a response, EPA will work with federal, state, local, tribal, trust territory and other unified command partners to coordinate on development and release of all materials,

including analytical data, Web content, and press releases. The CCP draws from best practices to establish key review and approval parameters, as well as roles and structures that organize information management during a response. To facilitate national consistency in the review, the CCP creates a framework for the approval and release of EPA information during an incident, while allowing for flexibility to meet regional needs. More information regarding the CCP is detailed under Recommendation 9 below.

In addition to the CCP, the Public Information Assistance Teams (PIATs) and epaosc.org guidelines are available to support the data communications and messaging process.

Recommendation 8: Build Capacity for Rapid Data Collection, Interpretation, and Dissemination

As an important part of the investment in data resources discussed in Recommendation 7, the ORD Deputy Assistant Administrator (DAA), in consultation with the OEM Director and Regional Superfund Division Directors, will build data capacity for rapid data collection, interpretation, and dissemination.

Using ORD's Reachback for Emergency Response (RACER): The After-Action Report's recommendation identified the need to build data capacity and identified ORD as a key agency conduit to do so. The initial recommendation specifically looked at ORD's RACER process. RACER is in place and operational within ORD and provides the organizational structure to efficiently serve the needs of an emergency response.

Over the course of implementing the recommendations, the team recognized that the ORD DAA has already provided training and capacity building to use RACER during emergency responses within ORD. In light of this, the team's work expanded to incorporate ORD services and capabilities into the EPA's broader emergency response program and toolkits. Through this revised recommendation, ORD and OEM are committed to educating the Agency's program offices and Regions about ORD capabilities and incorporating them into the national emergency response program.

Educating EPA Programs/Regions about ORD Capabilities: ORD is continuing to educate the agency's program offices and Regions about its capabilities through various upcoming trainings, as well as working to incorporate the access to them into the national emergency response protocols and the Regional and Area Contingency Plans for emergency response actions. The ORD DAA and the OEM Director, in consultation with Regional Superfund Division Directors, are currently working to implement a joint plan that defines how ORD services and capabilities can be included in the contingency planning, education, training, and exercise opportunities.

Communications, Outreach, and Notification

Recommendation 5: Improve Data and Information Posting and Communications

The OEM Director and Regional Superfund Division Directors will ensure the use of www.epaosc.org to effectively share data and other information within the Agency as well as with state, local, and tribal response partners. OPA will develop pre-incident data delivery templates to use during the initial phase of a response. Templates should describe the data analysis process and explain how much time it takes to analyze and validate sampling data.

Ensuring the Effective Use of [epaosc.org](http://www.epaosc.org): In 2001, EPA started using www.epaosc.org for On-Scene Coordinators (OSCs) to access, track and share information. Each year, EPA's incident response community creates hundreds of webpages on the [epaosc.org](http://www.epaosc.org) domain for incidents ranging from small spills to nationally-significant events.

Historically, EPA's public affairs community has been inconsistent in the levels of involvement and management of the public content on [epaosc.org](http://www.epaosc.org). Events in recent years have emphasized the critical need for OSCs and the public affairs community to work as a team in order to meet the agency's mission to provide accurate and timely information to the public.

In response to the issues identified in the After-Action Report, the implementation team worked with a workgroup to finalize governance guidelines for [epaosc.org](http://www.epaosc.org), in consultation with the emergency response and public affairs communities and the Office of Environmental Information. The new governance guidelines have been finalized and transmitted to agency personnel via a memorandum from the Assistant Administrators of OLEM, OEI and OPA.

These governance guidelines allow the use of the [epaosc.org](http://www.epaosc.org) domain and its webpages to provide information to the public and has established steps for the seamless transition between information on [epaosc.org](http://www.epaosc.org) and EPA's government domain (www.epa.gov) and vice-versa. These guidelines are intended to be used for all response webpages created on the [epaosc.org](http://www.epaosc.org) domain and are applicable to all new content and webpages beginning in Fiscal Year 2017 and moving forward. All previously created webpages and content will remain unchanged.

Specifically, the guidelines:

- Maintain the [epaosc.org](http://www.epaosc.org) domain's critical function in supporting the EPA response program to access, track, and share information;
- Support the OSC/PAD mutual responsibility to share information with the public;
- Improve efficiency and effectiveness for sharing information with the public;
- Seamlessly integrate [epaosc.org](http://www.epaosc.org) domain with EPA's online publication requirements;
- Improve coordination between EPA's response program, community involvement activities and the public affairs program;
- Enhance internal situational awareness and improve strategic communication planning;
- Support incident command and/or unified command goals and objectives;
- Safeguard against the public release of protected information; and

- Clarify expectations for information access levels for users: public, password protected (private), and exclusive access levels.

In addition, within 6 months, OEI and OLEM will work together to develop a plan for transitioning the epaosc.org domain to epa.gov. The final domain migration is expected to occur on or before January 1, 2018. This transition to epa.gov will:

- Provide the public with an agency-wide content search capability;
- Assure that EPA information is clear, consistent and approved for dissemination;
- Aid in meeting agency records management, analytics, and security requirements; and
- Protect the integrity and quality of EPA information.

Creating Pre-Incident Data Delivery Templates: Now that the Data Playbook has been created, OPA and the PIOs will collaborate with the National Data Team to identify the data tables and reports that will need to be created during the initial phase of a response. Identifying these products prior to an incident will enable these communities to create templates within SCRIBE.net and speed the process of communicating with the agency’s response partners and the public.

Recommendation 6: Establish Communications Strike Teams and Broaden Data Training for PIOs and Public Affairs Staff

The OPA Deputy Associate Administrator will establish three Communications Strike Teams with specialized skills in communicating complex technical information to the public. The OEM Director will expand the OEM Data Team’s training curriculum to include PIOs and public affairs personnel who are involved with data and information from the response and who use it to message, post to the Web, create press releases, or support social media; provide data awareness training to political and career senior leaders; and develop a course for Environmental Unit (EU) staff to ensure a more consistent approach to the functions and duties of this unit.

Establishing Communications Strike Teams: In response to the first part of the recommendation, on August 2016, a workgroup comprised of emergency response and public affairs staff from the Regions and Headquarters finalized the CONOPs for the agency’s Public Information Assistance Teams (PIATs).¹

The PIATS will be formed and deployed to support the Field Public Information Officer (Field PIO) and Regional Public Affairs Director (PAD) in establishing a communication framework to support the communication objectives generally required during a federal response to an incident. The PIAT is not directly involved in the communication activities and tactics of the response; rather, its primary function is to support of the PAD by developing a standardized

¹ The workgroup recommended using the name “Public Information Assistance Team” to apply more broadly and be more representative of the types of assistance provided by these three geographically based teams during emergency responses.

mechanism to organize, integrate, and coordinate EPA information. The PIATs will establish plans, protocols, procedures, and structures that EPA will use to coordinate information internally and provide information externally and achieve EPA's communication objectives during a response.

The six-member team will arrive on-scene within 24 hours of activation and demobilize upon completion of its mission in support of the Field PIO, typically within five to seven days. PIAT activations will be authorized by a Field PIO, Regional PAD, or Regional Administrator, in coordination with the National Incident Coordinator, Regional Incident Coordinator, Incident Commander, and/or the Associate Administrator for OPA. There are no stated criteria for when to activate a PIAT, as the decision will be based on both response needs and the necessity to maintain a well-trained team. The PIATs are not intended for sustained operations, but rather to stand up communication systems for the Regionally-managed long-term response organization.

Three geographic PIATs have been identified for assessment during the initial year of the program. They are:

Eastern: Regions 1, 2, 3, 4 with Region 1 PAD serving as PIAT lead for the first year

Central: Regions 5, 6, 7 with Region 6 PAD serving as PIAT lead for the first year

Western: Regions 8, 9, 10 with Region 9 PAD serving as PIAT lead for the first year

During the first year, each PIAT leader will identify five subject matter experts from the Regions and Headquarters offices to fill the corresponding responsibilities for the team. Over the course of the first year, there will be two to four voluntary deployments of each team. Each team will test, define, develop, and improve standard operating protocols and systems; practical experience will help refine position requirements and design training programs for PIOs across the agency. These protocols and systems will be shared with Incident Commanders and others in the Regional IMT and National IMAT structures, as well as other federal agencies as appropriate, to solicit feedback and provide awareness. Post-event feedback will be used to design and modify the long-term program.

Broadening Data Training: In response to the second part of the recommendation, public affairs personnel and those serving as PIOs should take diverse emergency response training, especially data training. The National Data Team hosts an annual emergency response data management workshop. This workshop builds capacity and enables the agency to augment the bench of trained field data managers to support the Regions during emergency responses. The range of topics includes how to properly staff and coordinate data management resources, how to develop and implement data management plans to support field operations, and implementing GIS web viewers to support response. The workshop includes presentations, case studies and tabletop exercises focusing on field data management during emergencies. This workshop provides an opportunity to train PIOs and other public affairs personnel on how best to use and access data and information during an emergency response.

Other training opportunities to improve the use of data and information during an emergency response are addressed within the course curriculum at the annual OSC Academy and the KLP

courses provided through the ICS Institute. The training received will be tested and validated during the regional and national data and information management exercises designed as a result of this report.

Finally, the PIO KLP training curriculum is being updated to reflect the After-Action recommendations as well as lessons learned through the initial National IMAT meetings/training.

Recommendation 9: Align Public Affairs Resources and Update Communication Procedures

The OPA Deputy Associate Administrator, OCIR Principal Deputy Associate Administrator, OEM Director, and the appropriate Regional Public Affairs Directors will develop/update and align Standard Operating Procedures (including social media), emergency preparedness resource lists, and communications templates, and toolkits for PIOs, Liaison Officers, and staff. The SOPS will address redaction practices. These changes will assess the technology needs of EPA's PIOs and their staff to identify needed improvements in mobile emergency response communications. The EPA Communications Strike Teams, referenced in Recommendation 6, will ensure a consistent, convenient, and reliable tracking system to document media, intergovernmental, and public inquiries.

The OPA Deputy Associate Administrator and the OEM Director will update and expand the Crisis Communication Plan (CCP) to address a wider spectrum of EPA response activities. In addition, the updated Plan should incorporate process excellence principles in its crisis communications response framework in order to achieve a more nimble process and better utilize advances in technology. These updates will incorporate social media, data review standards, redaction practices, a public inquiry tracking system, and equipment needs into the CCP. The updated CCP will ensure that all public affairs leadership and support personnel are fully trained in, and adhere to, the Agency's updated processes. The OPA Deputy Associate Administrator and the OEM Director will re-institute and convene EPA's Crisis Communications Workgroup, which should meet at least annually, to maintain and further the intent and value of the CCP.

The EPA Communications Strike Teams and the IC PIO will tap into state and local PIO networks to leverage existing resources.

Creating a Resource Compendium for Emergency Response Communications: In response to the After-Action Report, the implementation team and a workgroup of public affairs staff from across the agency established an Emergency Response Communications Resource Compendium. This on-line compendium, which resides on SharePoint and www.epaosc.org, is a directory of toolkits, job aids, templates and best practice fact sheets, press releases, messaging and other resources for emergency response communicators. An updated "Public Information Officer Job Aid Field Guide" is also part of the compendium. The field guide should be used during

incidents being managed under ICS. The guide provides tools, tips and advice for working a response. The tips should serve as a guide to standardize PIO operations across the Agency and share successful methods that have worked in past deployments.

Updating the Crisis Communications Plan: A workgroup comprised of OEM and public affairs representatives, from the Regions and Headquarters, completed updates to the agency's CCP. On November 30, 2016, EPA Order 2010 was approved.

The CCP helps to ensure that the agency will implement an organized, integrated, and coordinated response to ensure the delivery of understandable, timely, accurate, and consistent information to the public during an incident response. It promotes the widest practical and appropriate dissemination of information to the public concerning its activities and strengthens our ability to coordinate on development and release of all materials, including analytical data, digital content and press releases. The CCP addresses new and improved methods to integrate public affairs and communications resources into the agency's emergency response program.

The revised CCP can be activated for any incident by the Associate Administrator for OPA, a Regional Administrator or by the NIC. The CCP will always be activated under the following two scenarios: 1) if EPA caused or is directly involved in the release or incident; or 2) the release or incident involves multiple Regions.

Additional situations when the CCP may also be activated include, but are not limited to:

- The incident will exceed the response resources of the region;
- The incident will attract national, perhaps international, sustained political and/or media attention;
- Simultaneous incidents occur in different regions, triggering the need for resource prioritization; and
- The incident is the result of a terrorist act, for which the EPA may serve as a response partner under the National Strategy for Homeland Security.

Developing Emergency Printing Guidelines: Standard Operating Procedures (SOPs) for emergency printing were developed in conjunction with the Agency Printing Control Officer, Regional Printing Control Officers and Regional PADs. The SOPs apply to "emergency printing" during an EPA response to disasters and other time-critical responses where there is an urgent need for printing services. The SOPs will guide the PADS, OSCs and other EPA emergency response personnel and their supervisors in following the correct procedures for printing services during an emergency.

Updating the Translation Services Contract to Respond to Emergency Situations: Working with the Office of Civil Rights, the translation services (Limited English Proficiency) contract was amended to include provisions for 24 hour or less turnaround times; evening and weekend contact options; enhanced attention to regional dialects of certain languages; and options for contractor to work with agency graphics support to ensure efficient and timely delivery of services.

Establishing the Senior Liaison for Crisis and Public Affairs: To ensure the continued alignment and updating of communication procedures, the implementation team established the Senior Liaison for Crisis and Public Affairs Coordination position. The Liaison will report to the Associate Administrator for OPA and will, among other duties:

- Maintain strong working relationships with EPA’s emergency response and public affairs communities, ensuring the availability and use of efficient systems for transmitting and elevating information.
- Serve as subject matter expert for executive crisis communications related requirements and resources, including assurance of training for executives and communications directors.
- Serve as the OPA lead in the HQ EOC, responsible for staffing, tracking systems, coordination with the Environmental Unit Leader on data communications, and liaison to the OPA web team for incident specific webpages.
- Serve as the national lead for the PIAT network (that coordinates with the National IMAT) and advises the OPA Associate Administrator regarding activation/deployment of these teams and makes recommendations for Headquarters membership on these teams.
- Serve as the coordinating instructor for public affairs/crisis communications training for the ICS Institute and OSC Academy, ensuring a qualified cadre of trainers from Headquarters and the Regions.

Recommendation 10: Improve Notification Procedures, Plans, and Equipment

The OLEM Assistant Administrator, in consultation with the Regional Administrators, will develop new Geographic Response Plans, particularly for high-risk areas, to ensure notification contacts and protocols are comprehensive and updated, in a consistent format, and include tribal jurisdiction and BIA contacts, where tribes may be impacted.

The OLEM Assistant Administrator, in consultation with the Regional Administrators, will update Health and Safety Plan templates to include detailed site-specific notification procedures and telecommunications equipment needed for remote and high-risk sites.

The OEM Director, in coordination with the USCG NRC, will identify opportunities to incorporate tribal contacts into the NRC call system and implement as soon as possible.

Improving Notification Procedures and Plans: Geographic Response Plans and Health and Safety Plans contain contact information for state, local, and tribal partners to quickly notify affected parties in an emergency response. To ensure that these plans contain regularly updated contact information, the OLEM Assistant Administrator issued two memos requiring regions to improve notification protocols. On September 4, 2015, he issued a memo entitled *Review of Regional and Area Contingency Plans for Downstream Notifications*, requesting all Regions to develop Area and Sub-Area Contingency Plans (i.e. Geographic Response Plans) for areas that

cross regional boundaries. The memo required that these plans include comprehensive notification contact information in a consistent format with well-developed protocols to provide clear direction and easy access to information in the event of an emergency. By the deadlines in the memo, all 10 regions responded affirmatively that Geographic Response Plans were in place and contained updated notification protocols that ensured redundancy of notification to downstream users. They also conducted tests of notification procedures and capabilities to ensure these were effective.

To improve notification contact information and protocols, the implementation team launched a workgroup that brought together OLEM, the Office of International and Tribal Affairs, OPA, and Regional representation. This team mirrored the cooperation needed between Headquarters and the Regions, and between the emergency response, public affairs, and tribal specialist staff.

The Regional submissions in response to this first memo did not comprehensively address tribal contacts, so the workgroup recommended that the OLEM Assistant Administrator issue a second memo, *Identifying Emergency Response Contacts for Tribal Governments*, dated September 12, 2016, which required the Regions to submit plans for identifying tribal government contacts and to update those contacts annually. Each of the ten Regions responded affirmatively that they had or would soon put in place, comprehensive contact lists and plans to update such lists annually. In addition, the Regions strengthened notification protocols by improving communication among the public affairs, regional response teams, and tribal specialist staff.

Through outreach and coordination, the workgroup also encouraged tribes to participate in the automated National Response Center notification call system. Since last summer, OLEM presented to the EPA tribal partnership groups, regional tribal operations committees (RTOCs), and at the Tribal Lands and Environment Forum, as well as distributed information via EPA's regional tribal newsletters. Last year, approximately twelve tribes were signed up to receive automatic notification. After the outreach, thirty-three tribes have now signed up for this system.

To improve notification contact information and protocols, the workgroup reached out to the Regional Response Team, the National Response Team, the PADs, and many of the tribes through several already organized meetings and conferences.

Each year, OEM will coordinate with the Emergency Response Removal Managers to ensure that tribal notification plans are current and the Regions have all updated their contact lists annually, at a minimum. OEM will also check in quarterly with the NRC to determine whether additional tribes are participating in the NRC notification system. OLEM will continue to work with tribes through outreach and coordination events to improve the agency's readiness to notify impacted tribes in the event of environmental releases. Regions can utilize the RTOC and Headquarters can use the National Tribal Operations Committee meetings to remind the tribes of the importance of updating their contact information and encouraging additional participation in the NRC automated system.

Improving Notification Equipment:

The EPA Emergency Responder Health and Safety Manual found on [epaosc.org](http://epaossc.org) provides guidance for the development of a site-specific Emergency Response Plan (ERP). The ERP requirements are detailed in **Text Box 7**, re-created here. The Health and Safety Plan review checklist, developed from OSHA regulations, is used to ensure the completeness of the plan. It requires the safe and effective response to emergencies and under site control provisions and ensures that site communications have been established. The emergency alerting and response procedures within the ERP address the notification actions and responsibilities of onsite personnel.

Sustained remote communications are critical and improvements have been made to enhance agency capability. As part of its national assets, EPA maintains 56 existing Portable Satellite Units (PSU) within 15 different geographic locations across the U.S. to maintain contact in emergency response situations and in remote areas. The PSUs were purchased during the response to Hurricane Katrina. Over the past year, the agency has upgraded the modems of 42 PSUs to better support data transmission and Voice Over Internet Protocol (VoIP). Providing high-speed Internet connection is essential for emergency response personnel. In addition, all PSUs and many Mobile Command Posts have VoIP phone systems that provide incoming/outgoing voice connectivity via toll-free or local telephone numbers with unlimited domestic minutes. Using at least three earth-orbiting satellites available to avoid any line of sight issues, the PSUs provide a “pipeline” of 4 by 4 megabytes dedicated (to EPA) bandwidth at a rate which is enough to support video conferencing.

Conclusion

Since the Gold King Mine release, the agency has made tremendous progress strengthening its emergency response program and institutionalizing processes to regularly assess and improve EPA’s response preparedness. These actions will provide information that the agency can use to balance priorities and refine strategies at a moment’s notice based on the state of EPA response capabilities and resources consistent with the agency’s authorities and responsibilities. Emergency preparedness must incorporate the unpredictability of events and the prevention of catastrophic system failures. The agency can achieve this goal by ensuring adherence to the principles of ICS while recognizing the dynamic nature of incident response, which may require adaptation or improvisation to maintain effectiveness. EPA must prioritize its commitment to a reliable and sustainable state of response readiness because the capability to respond to an

Text Box 7 ERP Requirements

ERP requirements under HAZWOPER include:

- Pre-emergency planning.
- Personnel roles, lines of authority, training, and communication.
- Emergency recognition and prevention.
- Safe distances and places of refuge.
- Site security and control.
- Evacuation routes and procedures.
- Decontamination procedures that are not covered by other sections of the HASP.
- Emergency medical treatment and first aid.
- Emergency alerting and response procedures.
- Critique of response and follow-up.
- PPE and emergency equipment.

incident and mitigate threats cannot be developed during an incident. With this in mind, the implementation team has identified the need for two long-term investments in EPA's emergency response and crisis communications capabilities.

First, the agency should sustain resource investment and funding for training and positions within OEM, Regional Superfund and Emergency Response Offices, public affairs, and intergovernmental relations. Certifying training and conducting frequent exercises at the Regional and Headquarters levels are necessary to maintain and test proficiency and foster a culture for success in executing the principles of ICS. The agency must prioritize, with dedicated funding, maintaining KLP positions three deep in each of the Regions.

Second, the agency should continue to strengthen cross-agency collaboration and communication. Emergency response, public affairs, and intergovernmental relations staff must train and cross-train frequently in order to stay abreast of new developments and work well as a team. Programs and processes need to be regularly evaluated to find gaps and make improvements. Both of these long-term investments will depend on strong leadership and accountability.

The implementation team does not believe that putting the issues highlighted in the After-Action Report in its "rearview mirror" means forgetting about them. The agency's response to Gold King Mine presented unique challenges, as have most of the major responses that EPA has been involved in over the last decade. Emergency response is not static, and the agency must continue to have a nimble process to ensure flexibility and scalability of resources. Over the past year, many employees throughout the agency have worked tirelessly to help EPA meet these challenges through the work identified in this report. There is still more to do, and we encourage the agency to maintain a commitment to these newly created resources to ensure that EPA can adequately carry out its mission to protect public health and the environment even during a disaster or terrorist attack.

Appendices

Appendix A: GKM After-Action Report Recommendations At-A-Glance

Recommendation	Action Item	Responsible Office
1. Establish a National Incident Management Assistance Team (IMAT) at EPA.	Develop plan for IMAT. Establish IMAT.	OEM Director and the Regional Superfund Division Directors.
2. Institute Senior Official training plan.	Update ICS training materials for Senior Officials. Senior leadership complete ICS and Senior Official training. Implement plan to brief new political appointees on ICS within 30 days of appointment.	OEM Director and the Regional Superfund Division Directors.
3. Institute ICS key leadership training plan.	Update relevant orders and ICS training to reflect current FEMA directives. Each Region will train and certify appropriate staff in 11 ICS key leadership positions. Be prepared to standup IC in the field and HQ EOC within 24 hours of incident.	OEM Director and the Regional Superfund Division Directors.
4. Establish an agency data and information management team.	OLEM AA will notify all employees that SCRIBE will be exclusive agency database during a national response. Establish data management team. Develop a data flowchart for national-level responses. Plan and complete joint exercise.	OLEM AA, OEM Director, Regional Superfund Division Directors, ORD DAA, and OPA Deputy Associate Administrator.
5. Improve data and information posting and communications.	Develop use guidelines using for www.epaossc.org . Develop outreach materials on EPA's data management process for use during an emergency response	OEM Director, Regional Superfund Division Directors, and OPA Deputy Associate Administrator.
6. Establish Communications Strike Teams and broaden data training	Coordinate for the Data Workshop. Identify three geographic Communications Strike teams.	OEM Director, IT Forum, OPA Deputy Associate Administrator, and

for PIOs and public affairs staff.	<p>Adjust EU course to include PIOs and public affairs staff.</p> <p>Develop a plan to create a course for EU staff on duties and functions of unit.</p> <p>Provide data awareness training to senior leadership annually.</p>	Regional Superfund Division Directors.
7. Invest in data resources and clarify roles/responsibilities.	Develop guidance or playbook for data personnel.	OEM Director and the Regional Superfund Division Directors.
8. Build capacity for rapid data collection, interpretation, and dissemination. (revised during implementation)	<p>Provide training and capacity building to use RACER.</p> <p>Educate the agency about ORD capabilities and incorporate ORD into national emergency response protocols and plans.</p> <p>Complete joint implementation plan for ORD capabilities.</p>	OEM Director, ORD DAA, and Regional Superfund Division Directors.
9. Align public affairs resources and update communications procedures.	<p>Immediately identify state and local PIO networks.</p> <p>Develop SOPs for communications during an emergency response.</p> <p>Update and expand the CCP.</p>	OPA Deputy Associate Administrator, OEM Director, and the Regional Public Affairs Directors.
10. Improve notification procedures, plans, and equipment.	<p>Develop new Geographic Regional Plans and update protocols and contact information in contingency plans to include tribes.</p> <p>Update Health and Safety plans to address remote and high-risk sites.</p> <p>Incorporate tribal contacts into NRC call system.</p>	OLEM AA, RAs, OEM Director.
Appoint implementation czar		Office of the Administrator.

Appendix B:

GKM After-Action Review Implementation Team Charge Memorandum



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

February 12, 2016

Memorandum

OFFICE OF
THE ADMINISTRATOR

Subject: Gold King Mine After-Action Review Team Report

From: Matt Fritz *mfritz*
Chief of Staff

To: Mathy Stanislaus, Nitin Natarajan, Barry Breen, Reggie Cheatham, Liz Purchia, Shaun McGrath, Ron Curry, Jared Blumenfeld, Tom Burke

In November 2015, on the behalf of Administrator McCarthy, I requested an after-action review of EPA's response to activities at the Gold King Mine focused on the events immediately following the release on August 5, 2015. The review purpose was to capture the lessons learned from this response and to develop recommendations to apply to current and future actions.

After six weeks of document review and interviews, the review team submitted its report, including ten recommendations, to me. The full report, including the ten recommendations and names of the team members is attached. As I had requested, the team approached the review as a learning opportunity to support a strong and effective emergency response program. In conducting the review, the team spoke with you and many of your staff and they have expressed to me their appreciation for the cooperation they received as they conducted their review. I also appreciate the cooperation and express my thanks to the team for the professionalism, commitment and hard work in conducting the review.

After a careful review and following discussions with the Administrator, I have determined that the report and recommendations provide a compelling basis for moving forward to take action now to improve how the agency responds to emergency incidents and ensure a highly effective EPA Emergency Response Program that can adapt quickly to dynamic, unpredictable situations we are sure to face.

The ten recommendations include specific actions for the agency to move forward on with deadlines for implementation. The recommendations focus on the following:

- Streamlining and standardization of data and information management in order to quickly and accurately release information;
- Establishing a National Incident Management Assistance Team (IMAT);
- Improving the capacity and training for all incident management functions to ensure consistent implementation of the Incident Command System at EPA;
- Institute Senior Official training regarding roles and responsibilities in an IC;
- Establishing communications strike teams and integrating public affairs and updated communication protocols into emergency response;
- Improving notification procedures, plans and the use of equipment for emergency response actions; and
- Ensuring that the EPA Emergency Response Program timely scales- up for significant, unique, and multi-region responses.

To ensure timely implementation of the recommendations from this report, I have assembled a small implementation team to work with the Office of Land and Emergency Management (OLEM), the Office of Public Affairs, the Regions and other offices throughout the agency that can work toward delivering the actions outlined in the review that will improve our response practices. I will be holding weekly meetings to support you and the team, and to review progress on implementation of these recommendations.

I will lead the implementation team and assisting me with this effort will be: Julia Burch, Nancy Grantham, Tito Irizarry David Kluesner, Eric Mosher, Allyn Stern, Susan Studlien, and Eric Wilber. Collectively, they bring a wealth of experience from a variety of disciplines to this particular effort and their contributions will be incredibly valuable as we strive for continual improvement in the way we approach emergency responses.

I trust that you share my view, and that of the team, that the Emergency Response Program is not static and needs to be forward thinking; imagining and planning for the full spectrum of situations that occur – including ones the agency has yet to encounter. As the landscape associated with emergency responses continuously changes, there are no longer situations or responses that can be considered “typical” or “routine”; each and every one is unique and we need to bear that in mind as we face these challenges and work within a well-established and practiced framework designed to govern emergency response operations across the country. Recognizing and ensuring consistent adherence to the roles and responsibilities from the Incident Commander to Senior Agency Officials must be EPA’s approach to all responses. These recommendations stem from that framework and, once implemented, will only improve this agency’s ability to respond today and into the future.

In addition to the Gold King Mine After-Action report, the Administrator requested OLEM to prepare a separate review of the policies, procedures and practices the Agency uses when making the decision to engage in emergency and time critical removal actions. A copy of the “Engagement Review” also is attached and includes five recommendations that focus on the need for greater consistency across the regions and an examination and adoption of best practices across the national emergency response program. The Office of Emergency Management (OEM) in OLEM will assume the lead for working with the Regional Removal Managers and On-Scene Coordinators to implement these five recommendations related to “engagement” decision making and will do so in a manner that is consistent with and supports the recommendations in the Gold King Mine Report. OLEM/OEM will provide progress quarterly reports to the EPA Chief of Staff and Deputy Administrator.

I look forward to our ongoing dialogue focused on our emergency response program. In many respects, the team of individuals that fill those roles across the country are the faces of the agency to the public we serve. In order to best support their efforts and fulfill our overall response mission, it is imperative that we move forward with the timely implementation of the recommendations identified following the Gold King Mine release.

Thank you.