### Texas Division of Emergency Management



### After Action Report & Improvement Plan

### **INSTRUCTIONS**

An After Action Report (AAR) is a consolidation of information gathered during the testing and evaluation of a community's emergency operations plan through an exercise. The report provides feedback to participating entities and governing agencies in the achievement of the exercise objectives and overall capabilities of the community. Information gleaned from this process, identifies and guides future improvement actions in the Improvement Plan (IP). Feel free to include additional information in the AAR/IP as part of internal processes within your community's emergency preparedness program.

To ensure grant compliance, review the appropriate guidance for all programs which this exercise is intended to fulfill a requirement and develop the AAR format accordingly. The <a href="DHS/FEMA Homeland Security Exercise and Evaluation Program (HSEEP) 2013">DHS/FEMA Homeland Security Exercise and Evaluation Program (HSEEP) 2013</a> guidelines describe the content that should be reported but does not require a specific format. Several templates are available to assist in generating the document from the HSEEP, TDEM and other state agency websites. Unless otherwise specified by grant requirements, communities may also choose to develop their own format.

### **GENERAL INFORMATION**

### Single Exercise Reporting

Each exercise should be documented as a separate activity. This allows for separate reporting of participating agencies, capability/objective analysis, and improvement planning.

- If the same activity (i.e. seminar or drill) is repeated several times to maximize involvement of jurisdiction or agency personnel, it may be reported as a single exercise.
- If a regional or multi-jurisdiction exercise is conducted, it <u>may</u> be possible for several
  jurisdictions to submit the same report provided all the necessary jurisdiction-specific
  information is included. Each jurisdiction must submit individually.

### Point of Contact Information

Each exercise reported by a jurisdiction should indicate a primary point of contact. This individual should be able to answer any questions regarding the content of the report. This person would also be contacted should there be a request to release the report outside the TDEM Exercise unit.

### Handling Instructions

Depending upon local policies, the capabilities tested, the level of evaluation, information contained in the discussion and assessment, jurisdictions may choose to limit, classify or prohibit further dissemination of the AAR and Improvement Plan.

### Real World Incidents

Developing an AAR/IP for emergency response to real-world incidents can be an extremely valuable means to identify best practices, resource gaps, lessons learned, and opportunities for improvement. Some grants may allow substitution of an exercise activity with a real-world response. To ensure compliance, review the appropriate guidance for all programs which this After Action Report is intended to fulfill an exercise requirement.



### **AFTER ACTION REPORT SECTIONS**

The following information should be provided in sufficient volume, description and detail that an emergency management professional with no knowledge of your community would be able to develop a Common Operating Picture of the exercise, its conduct and outcomes.

### **Executive Summary**

This section should provide a general overview of the goals, purpose and objectives of the exercise. For smaller activities such as seminars and drills, the capability analysis and/or conclusion may be included here.

### **Exercise Overview**

Information in this section should clearly identify the specific exercise. Data should include the exercise name, date(s), location(s), and participating local governmental and non-governmental agencies, mutual-aid jurisdictions, state and federal partners.

#### Scenario

Provide a complete description of the narrative, major or key updates, and injects that drove player action to accomplish the objectives. In most cases, the Master Scenario Events List (MSEL) does not need to be submitted. The scenario may be presented as a separate section, as part of the executive summary or in the exercise overview.

### Capability Analysis

Identify the Core Capabilities that were tested and evaluated in the exercise. Provide a description of the objectives within each capability, the observations, any discussion or analysis, and the outcomes. Recommendations are often included in this section. Seminars and workshops may include a brief analysis in the Executive Summary or Conclusion sections.

### Conclusion

The conclusion should provide a general review of the exercise, its overall outcome and potential improvements. For small exercises, this may be included in the Executive Summary.

#### Acronyms

Acronyms specific to your community or plans should be defined for readers not familiar with your community.

### **IMPROVEMENT PLAN**

Communities can gain valuable insight and make significant improvement by critical evaluation of plans, policies, and procedures demonstrated during exercises. The implementation of these improvements can be assigned and tracked through an improvement matrix. Again, unless specifically required by grant guidance, the columns of the matrix should be designed to serve the community's improvement program. At a minimum, consider the following sections.

- Recommendation/Improvement/Corrective Action
- Responsible agency and office
- Estimated completion date



### **TEXAS EMPG REPORTING REQUIREMENTS**

For AAR/IPs intended to meet the TDEM Local Emergency Management Performance Grant (EMPG) Guide standards, the following table will assist in identifying the information required for each exercise activity level.

|                               | Executive<br>Summary | Exercise<br>Overview | Scenario | Capability<br>Analysis | Conclusion | Improvement<br>Plan |
|-------------------------------|----------------------|----------------------|----------|------------------------|------------|---------------------|
| Seminar                       | Required             | Required             |          | Required               |            |                     |
| Workshop                      | Required             | Required             |          | Required               | Required   |                     |
| Special Event<br>Preparedness | Required             | Required             |          | Required               | Optional   |                     |
| Games                         | Required             | Required             | Required | Required               | Required   |                     |
| Tabletop                      | Required             | Required             | Required | Required               | Required   | Required            |
| Drill                         | Required             | Required             |          | Required               |            |                     |
| Functional                    | Required             | Required             | Required | Required               | Required   | Required            |
| Full-Scale                    | Required             | Required             | Required | Required               | Required   | Required            |
| Real World<br>Incident        | Required             | Required             | Required | Required               | Required   | Required            |



### **EXAMPLE AAR SECTIONS**

In general, the level of detail and length of discussion presented in an After Action Report corresponds to the level of the exercise activity being evaluated. Seminars, by their nature, may have very little in the way of scenario or capability analysis. Tabletop, functional and full-scale exercise reports will likely have much more extensive and specific information. AARs for Real World Incidents may be quite substantial.

Other factors that will influence the level of detail in an AAR include the number of capabilities evaluated and the level of specificity of the objectives. If the exercise produced an unexpected outcome, the analysis, evaluation and recommendations may be more extensive. Validation of inter-agency or inter-jurisdictional roles and responsibilities may require additional explanation.

The following examples span all sections of an After Action Report and Improvement Plan. Most sections give at least one discussion-based and one operations-based example. The level of exercise is indicated to help discern the focus of the example.

Again, this is an open design and does not specifically utilize a single template format.



### **EXECUTIVE SUMMARY**

### Overview:

#### Discussion Based Example

The City of Readyville and Homestead County has enjoyed the benefits of fiscal appropriations and grant funding to increase, improve and expand the collective community's interoperable communications systems. Over the past few years these funds have been used to evaluate existing systems, interface capacities, identify additional agencies and organizations needing inclusion, design and develop an integrated and comprehensive system that will support both local and mutual-aid response. The new system has been installed and tested. Policies and procedures have been updated, and training for all agencies has been accomplished.

An added benefit to this process has been the development of new, improved or expanded Mutual Aid agreements with governmental and non-governmental organizations within the county and surrounding jurisdictions. Prior to preparation for this exercise, many of these new agreements had only been evaluated at the conceptual level and implementation procedures were only in draft status.

Leadership in several components have identified the need to test and evaluate the entire system, policies, procedures and the accomplished training prior to the reassignment of the legacy system's transition to a back-up role. The City and County have collaborated to design, develop and conduct an exercise that evaluated the new communications system and several existing Mutual Aid Agreements. This provided an opportunity to discuss the new radios within public works, public health, parks and recreation, and with the independent school district. This exercise also incorporated citizen organizations to allow evaluation of existing plans to meet their individual and organizational special needs. Private businesses partnered with the city and county to coordinate and provide new and additional services.

### **Operations Based Example**

The City of Readyville and Homestead County has enjoyed the benefits of fiscal appropriations and grant funding to increase, improve and expand the collective community's interoperable communications systems. Over the past few years these funds have been used to evaluate existing systems, interface capacities, identify additional agencies and organizations needing inclusion, design and develop an integrated and comprehensive system that will support both local and mutual-aid response. The new system has been installed and tested. Policies and procedures have been updated, and training for all agencies has been accomplished.

An added benefit to this process has been the development of new, improved or expanded Mutual Aid agreements with governmental and non-governmental agencies within the county and surrounding jurisdictions. Prior to this exercise few had been tested in an operational environment.

Leadership in several components have identified the need to test and evaluate the physical system, policies, procedures and the accomplished training prior to the reassignment of the legacy system's transition to a back-up role. The City and County have collaborated to design, develop and conduct an exercise that evaluated the new communications system and several existing Mutual Aid Agreements. This provided an opportunity to observe, test and evaluate the new radio systems and procedures within public works, public health, parks and recreation, and with the independent school district. This exercise allowed evaluation of existing plans to meet



non-governmental organizational needs, clarify roles and responsibilities, and identify duplication of effort or gaps in services. Private businesses partnered with the city and county to analyze potential new or additional services.

### Major Strengths Demonstrated: Discussion Based Example: Seminar

Participation was outstanding, representing most disaster response and recovery organizations within the community. After reviewing the new communications plan, several comments and suggestions were made for additional procedural processes. Contract vendors validated their communications capabilities and requirements for service and support.

### **Operations Based Example**

The following are significant actions observed or discussed that will be closely considered for incorporation into departmental or jurisdictional policies, plans or procedures.

- Use of portable SmartBoards to facilitate IAP development and improve situational awareness between various working groups.
- Consolidation of software programs that will be used in the EOC and ICP.
- Development of a nomenclature system for incident files being saved on the EM server.

### **Areas of Improvement:**

Discussion Based Example: Workshop

The new communications plan incorporates all emergency services agencies with each support service, but does not provide for support services organizations to communicate directly between each other. Temporarily, the Emergency Management office will begin compiling a phone and email list that will be made available to appropriate agency representatives with primary and secondary points of contact that includes all emergency support agencies as well as key contract vendors and community organizations. Long term solutions may include additional equipment purchases and procedures. Citizen organizations requested their internal and external communication needs be included in future improvements.

### **Operations Based Example**

Even though most actions taken were appropriate to the simulated incident, certain points were identified as needing specific modification. The following areas will be carefully reviewed for improvement to departmental or jurisdictional policies, plans or procedures.

Coordination of HazMat Awareness level training for personnel other than city and county employees. Identify additional city and county departments which will begin requiring such training for employees.

Consolidation of procedures for radio communication between multiple departments Coordination with the Information Technology department to provide server access to critical city and county agencies that respond to the EOC

Facilitate a needs assessment of communications systems in place or needed to support special and functional needs citizens



### **EXERCISE OVERVIEW:**

Exercise Name

Talk the Talk 2014

Exercise Date(s)

December 3-4, 2014

Exercise Type \_\_\_\_\_

Exercise Scenario HazMat - Facility
Lead Agency Readyville OEM

Exercise Location(s) Readyville EOC and Readyville FD/PD Training Center

### Organizations and Participants

|                         |                            |             | # of         |
|-------------------------|----------------------------|-------------|--------------|
| Jurisdiction            | Agency                     | Plan Status | Participants |
| Readyville              | Volunteer Fire Dept        | EOP Partner | 3            |
| Readyville              | Police Dept                | EOP Partner | 2            |
| Readyville              | Emergency Management       | EOP Partner | 2            |
| Readyville              | Public Works               | EOP Partner | 1            |
| Readyville              | Parks & Recreation Dept    | EOP Partner | 2            |
| Homestead Co ISD        | ISD                        | EOP Partner | 2            |
| Homestead Co            | Public Health Dept         | EOP Partner | 1            |
| Homestead Co            | Emergency Management       | EOP Partner | 2            |
| Homestead Co Pct 4      | Public Works               | EOP Partner | 1            |
|                         | Veterans Memorial Hospital | EOP Partner | 3            |
|                         | Sertoma Club               | Community   | 2            |
| Partner Co/Big Hat City | Fire Department            | Mutual Aid  | 2            |
| State                   | Parks & Recreation Dept    | State       | 1            |



### **EXERCISE SCENARIO**

#### Discussion Based Example - Tabletop

It is the Friday before spring break and the Homestead County Independent School District in conjunction with the Homestead County Public Health department and the local state park are hosting a Health and Fitness celebration at each campus. Just after lunch the students, most of the staff, and a significant number of parents have joined 10 to 12 presenters outside each campus' main building to discuss and practice healthy living choices which concludes with a 2K marathon through the local neighborhood surrounding each campus.

The City of Readyville's wastewater treatment plant, located just inside the city limits and 1½ miles northwest of Memorial Elementary, has recently undergone several capital improvements to include the chemical storage and dispensing systems. Today is the first of several tests to ensure the systems are operational. At 12:32, an alarm sounds on the pressure gauge of a pressurized chemical storage tank filled with methyl-ethyl-DoubleDeath. Technicians rush in, but within seconds, there is an explosion. At least 2 staff members are seriously injured. The pressurized system cannot be turned off except at the pressure valve next to the tank requiring additional hazardous materials protective garments which Readyville must request via mutual aid.

The temperature is 81 degrees and partly cloudy. Winds are from the northwest at 2-3 mph.

### Module 2:

The incident commander at the wastewater treatment plant has recommended shelter-inplace for anyone within  $\frac{1}{2}$  mile of the incident. He has recommended that anyone  $\frac{1}{2}$  mile to 2 miles from the plant be evacuated to a safe location. He has insufficient resources to commit to door- to-door notifications of the entire area and will be focusing his resources on the  $\frac{1}{2}$  to  $\frac{3}{4}$  mile band.

### Module 3:

Technical specialists recommend preparing for an 18 to 24 hour evacuation period. Media inquiries and citizen calls are asking about recovery plans and efforts, and environmental impacts.



### Operations Based Example - Functional

It is the Friday before spring break and the Homestead County Independent School District in conjunction with the Homestead County Public Health department and the local state park are hosting a Health and Fitness celebration at each campus. Just after lunch the students, most of the staff, and a significant number of parents have joined 10 to 12 presenters outside the building to discuss and practice health living choices, which concludes with a 2K marathon through the local neighborhood surrounding each campus.

The City of Readyville's wastewater treatment plant, located just inside the city limits and 1½ miles northwest of Memorial Elementary, has recently undergone several capital improvements to include the chemical storage and dispensing systems. Today is the first of several tests to ensure the systems are operational. At 12:32, an alarm sounds on the pressure gauge of a pressurized chemical storage tank filled with methyl-ethyl-DoubleDeath. Technicians rush in, but within seconds, there is an explosion. At least 2 staff members are seriously injured. The pressurized system cannot be turned off except at the pressure valve next to the tank requiring hazardous materials protective garments.

The temperature is 81 degrees and partly cloudy. Winds are from the northwest at 2-3 mph.

- 12:35 First arriving LE reports multiple injuries, requests 3 EMS, fire and hazmat response.
- 12:38 Wife of responding firefighter and parent of a third-grader arrives at Memorial Elementary and demands the campus take action to protect the children.
- 12:52 911 receives a call from a local adult day care facility ¾ of a mile east of the incident requesting assistance. Several of their clients are having difficulty breathing. Regular breathing treatments have not been effective. Others are showing increased confusion and irritability. They report that they cannot shelter-in-place due to a failure in their HVAC, and are requesting assistance in transporting 30 clients including 5 in wheelchairs and motorized scooters.
- 1:08 Hospital ED reports a walk-in victim is complaining of respiratory difficulty, skin irritation and weakness. He reports having been at the shopping center 3 blocks from the treatment plant.

Complete MSEL available if requested



### **EXERCISE OBJECTIVE ANALYSIS**

Discussion Based Example: Workshop

Core Capability: Operational Communications

Review technical specifications of various agency communications systems, confirm the technical ability of the mobile communications/command trailer to interface and integrate with each system independently. Review and revise mobile communications/command trailer plans, policies and procedures to include the new agency systems.

### Observations & Discussion:

The technical specifications of all city and county agencies fall within the technical abilities of the mobile communications/command trailer. Full technical data for private vendors and community organizations was not available but should interface within the system. Mobile communications/command trailer policies and procedures were drafted for further review by governing agencies.

### Recommendations:

The Readyville Police and Fire departments radio management teams will coordinate with each response and support agency separately to develop SOGs and conduct drills. The mobile communications/command trailer should be included in upcoming multi-agency exercises to fully test and evaluate these systems.

Discussion Based Example: Special Event

#### Core Capability: Operational Communications

Identify various agency communication methods and coordinate an inclusive and integrated communications system to provide interoperability between promoter, facility and city/county responders. Develop an all-inclusive ICS communications plan.

### Observations & Discussion:

The promoter does not have sufficient organizational communications capabilities to support emergency response, and therefore will be issued interoperable radios from the venue. Due to expansion from previous year's footprint, additional public address speakers will need to be acquired and installed.

#### Recommendations:

Provide introductory ICS and Communications briefing to promoter and venue staff upon arrival.



Operations Based Example: Drill

Core Capability: Operational Coordination

To test and evaluate the ability of the EOC and ICP to develop, maintain, and communicate a common situational awareness of the incident, coordinate resources, and public safety measures.

#### Observations & Discussion:

The ICP struggled to gain situational awareness due to the on-scene distances involved. Information received at the EOC was often incomplete or contradictory between agencies, increasing the need for verification. Emergency support vendors had difficulty maintaining radio contact with the mobile communications/command trailer.

#### Recommendations:

Tracking of assets between city/county agencies and support vendors is fragmented due to message management and radio interoperability. Additional training for staff in the mobile communications/command trailer may eliminate some interoperability issues. The EOC and ICP would greatly benefit by having reliable on-scene internet access for communication, allowing for digital images and video

Operations Based Example: Full-Scale

Core Capability: Operational Coordination

To test and evaluate the ability of the EOC to provide assistance to the ICP while coordinating community support response activities such as evacuation and shelter operations.

### Observations & Discussion:

Situational Awareness – Upon activation, EOC leadership rapidly achieved situational awareness via phone calls with the ICP. Information was relayed to other EOC staff by verbal updates and posting in the EOC Information Management System. Situational Awareness throughout the EOC was maintained by regular verbal updates and high priority verbal announcements.

Resource Accountability – Emergency management staff had difficulty in resolving initial resource employment and city-wide availability. Resource lists were either unavailable or significantly out of date. Staff resorted to calling field offices of some agencies. Ongoing accountability was accomplished utilizing a T-Card system found in the hall storage closet.

Evacuation – Initializing the evacuation procedures was efficient and expedient as many of the regular school bus drivers had volunteered to participate in the exercise. Coordination and tracking of evacuation busses between the bus barn, local neighborhoods and destination shelters was ineffective. Law enforcement communicated transportation needs directly to the bus barn, and requests were filled directly. Available EOC staff resorted to phone calls and emails to the shelter locations to ascertain when, how many and from where evacuation busses were arriving. The process greatly improved upon arrival of trained radio operators who could connect with the school bus drivers and their dispatch system.

Sheltering – The process of registering citizens upon arrival at the shelters was extensive and labor intensive on shelter staff. Volunteer victims reported waiting up to 30 minutes after exiting the bus to register and enter the main shelter area where water, snacks and



restrooms were available. Staff were frequently interrupted by requests for occupancy counts and data surveys. Some volunteer victims were concerned the volume and detail of the requested information was intrusive.

### Recommendations:

Investigate commercial software capable of integrating emergency service dispatch with the EOC information systems. Update the city and county resource lists for each agency. Identify additional staff positions to receive radio operator training within the EOC. Review and evaluate the citizen shelter registration process for opportunities to expedite, or allow self-registration.



### **CONCLUSIONS**

### Discussion Based Example

The City of Readyville and Homestead County were able to support both communities with an effective and efficient response. By bringing in a more diverse representation of the citizens and businesses of Readyville and Homestead County, new partnerships were developed to address unmet needs within and between the two communities. Additions and updates to the communications plan and resource management processes will be incorporated into upcoming planning meetings.

Participants in the exercise felt that it was a good learning opportunity and stated a greater support of the emergency management programs as a result. Local citizen organizations, private businesses and Homestead County ISD have expressed a desire to be included more aggressively and more often in city and county emergency management planning, training and exercises.

### **Operations Based Example**

This exercise provided a unique opportunity to integrate the state parks, our school district and neighborhood watch groups in a preparedness activity. Participants were able to self-identify resource gaps and opportunities to share assets to meet those needs. Some of these relationships are progressing quickly into formal mutual aid agreements. Citizen inquires for individual and family preparedness information and interest in neighborhood watch and Community Emergency Response Teams has also increased significantly.

Senior elected officials recognized the need for additional equipment and training for the volunteer fire departments and committed to working with the state to acquire these assets.

The City of Readyville and Homestead County were able to support both communities with an effective and efficient response. By bringing in a more diverse representation of the citizens and businesses of Readyville and Homestead County, new partnerships were developed to address unmet needs within and between the two communities. Additions and updates to the communications plan and resource management processes will be incorporated into upcoming planning meetings.



### **ACRONYMS PAGE**

| Acronym or Abbreviation | Definition or Term  |
|-------------------------|---|
| ВТМН                    | Big Tex Memorial Hospital   |
| COG                     | Council of Government   |
| EOP                     | Emergency Operations Plan   |
| HCCC                    | Homestead County Citizen's Consortium   |
| HCISD                   | Homestead County Independent School District  |
| HCPHD                   | Homestead County Public Health Department   |
| HCSO                    | Homestead County Sheriff's Office   |
| MCCT                    | Mobile Communications/Command Trailer   |
| M-E-DD                  | Methyl-Ethyl-DoubleDeath – a deadly chemical used in water purification that is heavier-than-air, but can easily be carried by a light breeze. Exposure to skin and mucosa causes irritation and burning. Inhalation causes difficulty breathing. Ingestion can be fatal. |
| MSEL                    | Master Scenario Events List or Master Sequence of Events List   |
| OEM                     | Office of Emergency Management  |
| RHER                    | Readyville Heavy Equipment Rentals  |
| RPD                     | Readyville Police Department  |
| RPRD                    | Readyville Parks and Recreation Department  |
| RVFD                    | Readyville Volunteer Fire Department  |
| RWTF1                   | Readyville Water Treatment Facility #1  |



### **IMPROVEMENT PLAN**

| Objective                      | Recommendation  | Improvement/ Corrective Action  | Responsible<br>Party/Agency | Projected<br>Completion<br>Date |
|--------------------------------|---|---|-----------------------------|---------------------------------|
| Communications                 | RPD and RVFD radio management teams to develop SOGs and conduct drills                | All emergency response and support agencies cooperatively develop radio communication and interoperability SOGs                             | Readyville Police<br>Dept   | 1-Jun-15                        |
| On-Site Incident<br>Management | Additional training for staff in the MCCT may eliminate some interoperability issues. | Coordinate with COG, HCSO, and RPD to develop and present additional and advanced training on the MCCT radios and interoperability systems. | HCSO                        | 1-Sep-15                        |
| Communications                 | MCCT to be included in upcoming multi-agency exercises                                | Incorporate MCCT deployment into multi-<br>year training and exercise plan  | RPD and HCSO                | 1-Oct-15                        |
|                                |   |   |                             |                                 |

When complete, submit to TDEM Exercise Unit at <a href="mailto:TDEM.Exercises@dps.texas.gov">TDEM.Exercises@dps.texas.gov</a>.