[Exercise Name]

**\*Note: Items highlighted in gray will or may need to be changed to reflect the details of your exercise. Delete this text box before producing and distributing this situation manual.**

Situation Manual

[Date]

[This Situation Manual (SitMan) provides exercise participants with all the necessary tools for their roles in the exercise. Some exercise material is intended for the exclusive use of exercise planners, facilitators and evaluators, but players may view other materials that are necessary to their performance. All exercise participants may view the SitMan].

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# Exercise Overview

| **Exercise Name** | [Insert the formal name of exercise, which should match the name in the document header] |
| --- | --- |
| **Exercise Dates** | [Indicate the start and end dates of the exercise] |
| **Scope** | This exercise is a tabletop exercise, planned for [exercise duration] at [exercise location]. Exercise play is limited to [exercise parameters]. |
| **Mission Area(s)** | [Prevention, Protection, Mitigation, Response and/or Recovery] |
| **Objectives** | [List exercise objectives; see page 2] |
| **Threat or Hazard** | Earthquake |
| **Scenario** | [Insert a brief overview of the exercise scenario, including scenario impacts (2-3 sentences)] |
| **Sponsor** | [Insert the name of the sponsor organization, as well as any grant programs being utilized, if applicable] |
| **Participating Organizations** | [Insert a brief summary of the total number of participants and participation level (e.g., federal, state, local, tribal, non-governmental organizations (NGOs) and/or international agencies). Consider including the full list of participating agencies in Appendix B. Delete Appendix B if not required.] |
| **Point of Contact** | [Insert the name, title, agency, address, phone number and email address of the primary exercise POC (e.g., exercise facilitator)] |

# General Information

## Exercise Objectives

The following exercise objectives in Table 1 describe the expected outcomes for the exercise.

| **Exercise Objectives** |
| --- |
| [Define or refine participants’ roles and responsibilities for managing the consequences of a earthquake incident, which should be reflected in their ***plans, policies and procedures*** and other preparedness elements currently in place or under development] |
| [Build relationships between utilities and stakeholders] |
| [Determine neighboring utility water infrastructure capabilities and needs] |
| [Identify water infrastructure coordination requirements of state agencies operating under the appropriate Emergency Support Functions (ESFs)] |
| [Identify other needed enhancements related to ***training and exercises*** and other preparedness elements currently in place or under development] |
| [Insert objective] |

Table 1. Exercise Objectives

The exercise schedule is in Appendix A.

## Participant Roles and Responsibilities

The term *participant* encompasses many groups of people, not just those playing in the exercise. Groups of participants involved in the exercise (Appendix B), and their respective roles and responsibilities, are as follows:

**Players-** Players are personnel who have an active role in discussing or performing their regular roles and responsibilities during the exercise. Players discuss or initiate actions in response to the simulated emergency.

**Observers-** Observers do not directly participate in the exercise. However, they may support the development of player responses to the situation during the discussion by asking relevant questions or providing subject matter expertise.

**Facilitators-** Facilitators provide situation updates and moderate discussions. They also provide additional information or resolve questions as required. Key Exercise Planning Team members also may assist with facilitation as subject matter experts (SMEs) during the exercise.

**Evaluators-** Evaluators are assigned to observe and document certain objectives during the exercise. Their primary role is to document player discussions, including how and if those discussions conform to plans, policies and procedures.

## Exercise Structure

This exercise will be a multimedia, facilitated exercise. Players will participate in the following [two] scenario modules:

Module 1: [The Earthquake]

Module 2: [The Aftermath]

Each module begins with a multimedia update that summarizes key events occurring within that time period.

The facilitator will guide participants through a discussion period, developed using the scenario modules, to describe their actions, decisions and notifications as necessitated by the change in situation or resource status. Players are encouraged to ask questions of other players. Immediately following the discussion period, the facilitator will lead a “hot wash” session among participants to highlight key elements and develop a list of action items.

## Exercise Guidelines

* This exercise will be held in an open, low-stress, no-fault environment. Varying viewpoints, even disagreements, are expected.
* Respond to the scenario using your knowledge of current plans and capabilities (i.e., you may use only existing assets) and insights derived from your training.
* Decisions are not precedent setting and may not reflect your organization’s final position on a given issue. This exercise is an opportunity to discuss and present multiple options and possible solutions.
* Issue identification is not as valuable as suggestions and recommended actions that could improve [prevention, protection, mitigation, response or recovery] efforts. Problem-solving should be the focus.
* Assume there will be cooperation and support from other responders and agencies.
* The basis for discussion consists of the scenario narrative and modules, your experience, your understanding of your Emergency Response Plan (ERP), your intuition and other utility resources included as part of this material or that you brought with you.
* Treat the scenario as if it will affect your area.

## Exercise Assumptions and Artificialities

In any exercise, assumptions and artificialities may be necessary to complete play in the time allotted and/or account for logistical limitations. Exercise participants should accept that assumptions and artificialities are inherent in any exercise, and should not allow these considerations to negatively impact their participation. During this exercise, the following apply:

* [The exercise is conducted in a no-fault learning environment wherein capabilities, plans, systems and processes will be evaluated.]
* [The exercise scenario is plausible, and events occur as they are presented.]
* [All players receive information at the same time.]

# Module 1: [The Earthquake]

## Scenario

 [June 24, 2017]: [1415 hrs]

[The weather forecast predicts rain, with winds from the west-southwest at 5-10 mph and a high for the day of 70 degrees Fahrenheit. Suddenly, the ground begins to move violently as an earthquake strikes the region. Seismologists at the regional Earthquake Data Center (EDC) measured the earthquake at 6.0 on the Richter scale for 30 to 40 seconds. The EDC relays the earthquake data to the U.S. Geological Survey (USGS). Two sizeable aftershocks, measuring 4.7 and 4.5, take place within the first hour after the initial earthquake and more aftershocks are expected with lessening severity over the next 24 to 48 hours.

Shortly after the earthquake, emergency sirens can be heard all over the city. The media has begun broadcasting breaking news stories across radio, TV and the Internet nationwide. The initial reports are that the earthquake has done serious damage to the area, and the fear is that there will be numerous human casualties. The water and wastewater utility are affected by the quake, and managers respond by checking whether their staff is safe and accounted for. No employees on site are injured, but communication is difficult with people working in the field.]

## Key Issues

* [Emergency response team staff is called in from the city’s utilities department. However, they are quickly overwhelmed by the scale of the incident, and accessing qualified professionals and technicians proves difficult due to limited phone lines and transportation routes.]
* [Sinkholes and large pools of water start to appear as a result of cracked and leaking drinking water distribution pipelines.]
* [Broken sewer lines throughout the city cause sewage to be released into low-lying areas and streets.]
* [Some areas experience electricity outages, but they are not currently wide spread.]

## Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 1. Identify any critical issues, decisions, requirements or questions that should be addressed at this time.

The following questions are provided as suggested subjects that you may wish to address as the discussion progresses. These questions are not meant to constitute a definitive list of concerns to be addressed, nor is there a requirement to address every question.

1. [What, if any, existing earthquake preparedness measures does your utility have in place? For example, what plans do you have for safeguarding supplies and equipment, or obtaining them from outside of the impacted area?]
2. [What further earthquake proofing measures could be implemented?]
3. [What procedures have been developed to assess the situation?]
4. [What are some initial actions that will be taken to support the response?]
5. [How will communications be handled to internal staff, to the public and to officials? How will these procedures be carried out in the event of electricity or phone service interruptions?]
6. [Should the Incident Command System (ICS) be established at the utilities? When should it be established? How does your ICS structure fit into the larger response structure established to manage the earthquake? What are your initial incident objectives? Where will the utilities’ Incident Command Posts be located?]

# Module 2: [The Aftermath]

## Scenario

[June 24, 2017]: [1815 hrs]

[Reports from local emergency personnel are coming in and the operating hospitals, some damaged, have become overwhelmed with citizens seeking medical treatment and looking for family members and friends. The initial reports from hospitals are that at least 150 people have been killed and there are more than 5,000 people with serious or severe injuries. The majority of those killed appear to be victims of a partial collapse of a crowded shopping mall.

There is severe structural damage along two portions of the primary roadways. Damage in the southeast quadrant of the city has blocked all traffic in and out of the city’s main thoroughfare and heavy damage in the northeast section has caused gridlock in the business district. Debris is blocking many of the roads and major highways. Emergency vehicles have to use alternate roadways. Municipal workers living outside of the affected area may not be able to get into the area for days.

Power and phone lines are down and 60 percent of the city is without electricity and phone service, including cell coverage. There are numerous gas leaks and some have caused explosions and fires at locations across the city. Water and sewer lines have broken due to the shaking and leaks that appeared directly after the earthquake worsen as the day goes on. Utility companies predict that damage is extensive, but most is not yet apparent.

City residents are gathering at churches, schools and parking lots seeking food, water and shelter for the evening. They are waiting for instructions on where to go and how to seek help. Local businesses and commercial areas are being looted and police are struggling to keep people out of stores with broken windows and doors. Volunteers begin coming in from across the region wanting to help.

The governor of the state learned of the earthquake during a planning committee meeting at the Capitol. The governor returns to her office for the initial briefing on the damage, declares a state of emergency, and immediately contacts FEMA to request a federal Stafford Act Disaster Declaration. The governor is organizing an initial damage assessment and has requested reports from each affected county. National Guard resources have been requested to provide emergency services. Water and wastewater utilities do not have sufficient staffing to handle the large number of repairs currently necessary, and emergency response and management agencies are occupied with more acute life safety emergencies.

The state’s Emergency Management Agency is fully functional and the state Emergency Operations Center (EOC) is activated. An Incident Command System (ICS) has been established by local responders. FEMA regional personnel are working with local emergency management personnel.]

## Key Issues

* [The local water utility, which provides water to about 700,000 residents and up to 1.5 million commuting workers each day, identifies major leaks in two underground concrete water storage reservoirs located in the city. That, combined with localized flooding from broken water and sewer mains, is likely to flood basements and low-level structures. Since the in-city reservoirs contain finished drinking water, the majority of the city will also be without drinking water service, and water pressure will be low in serviceable areas.]
* [The wastewater plant has been shut down for repairs. The treatment process is disrupted due to major structural damage at the Southeast Treatment Plant. This plant handles about 80 percent of the city’s wastewater, which is treated and discharged into a local river. Plant shutdown may cause significant backup and raw sewage spills or force the operators to bypass some or all treatment processes.]
* [Residents with service are concerned about drinking water from the tap and there are complaints about discoloration and floating particles. Residents are exhausted, stressed and worried about where they will find the information they need to ensure their safety.]
* [Several distribution lines are damaged and will require repair and disinfection prior to returning to service. Proximity to sewer line breaks also poses a more extensive contamination concern. Locating some of these breaks may be delayed due to low water pressure.]
* [The rural wastewater treatment plant just outside of the city lost power to automated treatment and pumping systems and is in need of additional generators as well as personnel to run plant operations manually.]

## Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 2. Identify any critical issues, decisions, requirements or questions that should be addressed at this time.

The following questions are provided as suggested subjects that you may wish to address as the discussion progresses. These questions are not meant to constitute a definitive list of concerns to be addressed, nor is there a requirement to address every question.

1. [How do you determine if an advisory or public notification (such as boil water or do not use) needs to be issued for this incident? How would this occur without power and if normal communication media such as TV and radio outlets are unavailable? What alternative resources could be available to issue an advisory?]
2. [What additional resources (e.g., staff, heavy equipment and generators) would the wastewater utility need to prevent additional discharges of raw sewage into receiving waters as well as into residential and commercial districts?]
3. [What process exists to prioritize repairs and drinking water service when supplies, staff and potable water are limited? For instance, will your utility prioritize repairing water lines that provide fire protection services to dense areas or service to critical customers such as hospitals above other water mains?]
4. [How will the utility manage their staff to avoid exhaustion? How will they bring in “reinforcements”?]
5. [What procedures have been developed to address logistical support (i.e., food, shelter and equipment for utility and mutual aid workers) during this incident?]
6. [Security systems at the utility are likely to be compromised or not functioning after an incident such as this. How will the utility ensure the security of its facilities?]

# Appendix A: Exercise Schedule

**Note:** Because this information is updated throughout the exercise planning process, appendices may be developed as stand-alone documents rather than as part of the SitMan.

| Time | Activity |
| --- | --- |
|  | **[Month Day, Year]** |
| 00:00 | Registration |
| 00:00 | Welcome and Opening Remarks |
| 00:00 | Module 1: Discussions  |
| 00:00 | Break |
| 00:00 | Module 2: Discussions |
| 00:00 | Lunch |
| 00:00 | Hot wash |
| 00:00 | Closing Comments |

# Appendix B: Exercise Participants

| Participating Organizations |
| --- |
| **Federal** |
| [Participating organization] |
| [Participating organization] |
| [Participating organization] |
| **State** |
| [Participating organization] |
| [Participating organization] |
| [Participating organization] |
| **[Jurisdiction A]** |
| [Participating organization] |
| [Participating organization] |
| [Participating organization] |
| **[Jurisdiction B]** |
| [Participating organization] |
| [Participating organization] |
| [Participating organization] |

# Appendix C: Relevant Plans

[Insert excerpts from relevant plans, policies or procedures to be tested during the exercise.]

# Appendix D: Acronyms

| Acronym | Term |
| --- | --- |
| DHS | U.S. Department of Homeland Security |
| HSEEP | Homeland Security Exercise and Evaluation Program |
| SitMan | Situation Manual  |
| SME | Subject-Matter Expert  |
| TTX | Tabletop Exercise  |
| [Acronym] | [Term] |
| [Acronym] | [Term] |
| [Acronym] | [Term] |
| [Acronym] | [Term] |
| [Acronym] | [Term] |