Guidance for Planning, Conducting and Evaluating Transportation Emergency Preparedness Tabletops, Drills and Exercises

Prepared for the Department of Energy Office of Transportation and Emergency Management
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INTRODUCTION/PURPOSE/ASSUMPTIONS

This guidebook and accompanying support materials presented in this manual was developed to assist local, state, tribal and federal agencies in conducting emergency preparedness tabletops, drills and exercises for transportation emergencies. It provides basic instructions on all aspects of event preparation, and describes how to use the other materials in this transportation emergency preparedness package. Used properly, this manual should enhance emergency preparedness by enabling communities to practice and demonstrate their ability to respond to a transportation emergency. The accident scenarios provided with this manual may be expanded/contracted to demonstrate some or all aspects of a response by one or more agencies.

It is also the Department of Energy’s (DOE) intent that implementation of this Transportation Emergency Preparedness Tabletop, Drill and Exercise Program will help encourage and strengthen a positive working relationship between the various agencies in communities and states who would respond to a radiological transportation emergency.

SCOPE

This guidebook and support material applies to emergency preparedness tabletops, drills and exercises involving the transport of radioactive material.

TERMS AND DEFINITIONS

A1 - the maximum activity of special form Class 7 (radioactive) material permitted in a Type A package.

A2 - the maximum activity of normal Class 7 (radioactive) material, other than special form, Low Specific Activity or Surface Contaminated Objects, permitted in a Type A package. These values are either listed in §173.435 or derived in accordance with the procedure prescribed in §173.433.

Becquerels (abbrev. Bqs) - standard international unit to measure radioactivity (1 disintegration per second).

Controller - a person who is responsible for the safe and effective conduct of the event. Controllers play an active role in the event by providing data to players. Controllers may prompt or initiate certain player actions to ensure event continuity. Controllers are the only non-players who are authorized to provide information or direction to the players. Controllers are also responsible for evaluating and critiquing a drill or exercise. These persons are usually selected based on their experience or specific expertise and are knowledgeable of the functional areas they are evaluating, and should have been trained on the proper way to control drills/exercises. Controllers should attend all required briefings on the actions they are expected to take to ensure a specific event transpires as planned. Controllers should wear a standard identification device, such as a colored hat or arm band.
Control Cell · a person or group of persons who role-play agencies or people that would normally interface with participants. Control cells typically interface with participants via telephone, rather than face-to-face. Players may be given a “Control Cell Telephone Directory” to use so that no calls are actually made to agencies or persons who are not participating in a drill or exercise. Depending on the scope of your drill or exercise, a control cell may consist of one person role-playing many agencies (i.e., many agencies may be listed on the Control Cell Directory, all with the same phone number for one role-player), or many persons role-playing many agencies. Role-players who interact with players face-to-face (i.e., at an incident scene) are not generally considered part of a control cell.

Curie (abbrev. Ci) · a unit to measure radioactivity (3.7x10¹⁰ disintegrations per second).

Drill · an event designed to develop, test and maintain skills in a particular operation. Drills are frequently limited in scope, and a drill is often a component of an exercise. Players respond to an accident scenario as they would in an actual emergency. Drills may be used as training events, in which controllers provide on-the-spot training as players take action, or as evaluated events.

Excepted Packaging · Used to transport lower concentrates of radioactivity than those transported in Type A packages.

Evaluation · a determination of player strengths and areas needing improvement based on the evaluation criteria for each tabletop, drill or exercise objective. Using the objective evaluation checklists (see definition below), controllers determine whether each objective was “met”, “not met”, or “partially met”. Based on these findings, controllers then weigh the importance of each objective and make a final determination on whether player performance during the drill or exercise was, overall, adequate or inadequate.

Event · a tabletop, drill or exercise. For brevity, this term will be used generically throughout this document to refer to any/all of the three.

Exercise · an event that tests the integrated capability and a major portion of the basic elements existing within emergency preparedness plans and organizations. In exercises, players respond to an accident scenario as they would in an actual emergency. Objectives are usually comprehensive (but not necessarily all-encompassing) in scope. Exercises are evaluated events only. Controllers do not provide training to players during the event. All major improvement items identified as a result should be corrected.

Extent of Play · the exact extent to which an event objective should be demonstrated during an event, as determined by the event’s designers (usually a committee). The extent of play is detailed beneath each objective in the scenario manual.

Fissile Material · plutonium-238, plutonium-239, plutonium-241, uranium-233, uranium-235, or any combination of these radionuclides.

Highway Route Controlled Quantity · a quantity within a single package which exceeds:
1. 3,000 times the A1 value of the radionuclides as specified in §173.435 for special form Class 7 (radioactive) material;
2. 3,000 times the A2 value of the radionuclides as specified in §173.435 for special form Class 7 (radioactive) material;
3. 1000 TBq (27,000 Ci) whichever is least.
**Improvement Item** - a finding citing deviations or concerns regarding some aspect of player response, facilities or equipment. An improvement item by itself does not necessarily degrade the adequate demonstration of an objective standard, but the emergency response would be more effective if corrective measures were taken.

**Industrial Packages** - Must be highly durable, have tight seals, and act as shields to prevent exposure to handlers and drivers.

**Low Specific Activity (LSA)** - material in which the radioactivity is distributed uniformly and in which the estimated concentration per gram does not exceed limiting specifications.

**Non-participants** - persons outside the scope of drill/exercise play who will continue to perform their normal, routine duties as though the event were not in progress. Such routines include activities necessary for continued safe operation of organizations/agencies. Efforts should be made to minimize the impact of the event on the non-participants and to limit the interface between responders and those individuals.

**Objective** - a standard or desired response by which controllers gauge satisfactory performance. Objectives should give a broad indication of what event responders should demonstrate. Objectives (and evaluation checklists) for the transportation emergency scenarios provided in this package were obtained from the Federal Emergency Management Agency’s Hazardous Materials Exercise Evaluation Methodology (FEMA HM-EEM) manual, as listed in the references section of this guidebook.

**Objective Evaluation Checklists** - a set of criteria used to evaluate player performance for a particular objective. Although not all checklist criteria for a given objective are “weighted” the same in the final analysis, each criterion should be a measurable standard which helps an controller determine whether an objective has been met. All of the objective evaluation checklists used for these scenario packages come from FEMA-HM-EEM, as listed in the references section of this guidebook.

**Observer** - a person who serves no evaluation, control or participatory function in a drill or exercise. These persons are typically “VIPs” from various agencies and organizations interested in watching the event. Observers should not communicate directly with players. They are, however, responsible for reporting to controllers any condition they believe has or may have the potential to compromise the safe conduct of the event. The number of observers in an event should be held to a minimum and all should be preapproved by the Lead Controller. Observers should wear a standard identification device different from controllers.

**Overpack** - an enclosure that is used by a single consignor to provide protection or convenience in handling of a package or to consolidate two or more packages.

**Player** - a person who has an assigned role during an emergency and who has been predetermined to participate in a tabletop, drill or exercise. Players should respond to emergency situations as they would during an actual emergency (unless they are briefed otherwise before the drill begins, or unless they are directed to do otherwise by an controller) to control and mitigate the simulated emergency and ensure the health and safety of the public and the environment. Players are expected to obtain information through established emergency information channels and use their own judgment in determining response actions.
Prompt · the act of an controller providing information to a player that he/she did not “earn”, or take initiative on his/her own to obtain through normal channels methods. An example of a prompt is if an controller tells a player that all radiation readings at the incident scene are at background levels, even though the player has not taken the necessary surveying actions to make that determination.

Role-Players · persons who are privy to scenario information and interact/provide data to players to simulate individuals or agencies that are not participating in a tabletop, drill or exercise.

Salvage Drum · (sometimes incorrectly referred to as an “overpack”) this typically refers to a metal or plastic removable head recovery drum, designed to fit over damaged, defective or leaking containers (including 55-gallon containers) which have been temporarily “patched”.

Salvage Packaging · a special packaging into which damaged, defective or leaking hazardous materials packages, or hazardous materials that have spilled or leaked are placed for purposes of transport for recovery or disposal.

Shadow Force · a backup crew of workers (i.e., Fire Dept., Police, EMS) that handles normal and/or emergency business while the on-shift crew participates in a drill/exercise.

Spent Nuclear Fuel · fuel that has been withdrawn from a nuclear reactor following irradiation.

Strength · a finding that indicates players performed beyond normal expectations as defined by practices and procedures.

Surface Contaminated Object (SCO) · an object that is not itself radioactive but which has Class 7 (radioactive) material distributed on any of its surfaces.

Tabletop · key players from participating agencies/organizations gather in a face-to-face (round-table) setting and talk through expected actions for an emergency scenario. Tabletops are typically informal and are led by one moderator who facilitates discussion among participants.

TeraBecquerels (abbrev. TBqs) · 1 x 1012 Becquerels

Training · during a tabletop or drill, training is considered information provided to players by controllers to help players perform actions they are unfamiliar with.

Transuranic Waste (TRU Waste) · Waste material contaminated with U-233 (and its daughter products), certain isotopes of plutonium, and nuclides with atomic number greater than 92 (uranium).

Type A Packages · Must meet the requirements for strong tight containers and must be capable of preventing spills and leaks under normal driving conditions. Most low-level radioactive waste is shipped by truck in Type A and strong tight containers.

Type B Packages · Are designed for radioactive materials with a higher level of radioactivity. They must meet all Type A standards and must be able to withstand a severe accident with no loss of shielding and no release of radioactive materials.
ABOUT THE MATERIALS INCLUDED IN THIS MANUAL

In addition to this guide, there are three other sections included in this manual, as described below.

**Seven Scenario Packages**
Each scenario is a “generic” fill-in-the-blank scenario package designed to be tailored to meet your specific requirements. The scenario accidents involve different types of waste that may be transported to and from DOE facilities. Five of the packages listed below are designed to be run as drills, one is designed as a tabletop, and one is designed as an exercise, as follows:

1. Low Specific Activity (LSA) with a radiological release (drill)
2. Low Specific Activity (LSA) without a radiological release (drill)
3. Spent Nuclear Fuel (drill)
4. Environmental Samples (drill)
5. Radiography Sources (exercise)
6. Transuranic (TRU) Waste (drill)
7. TRU Waste (tabletop)

All scenario packages contain specific instructions explaining how to modify sections to fit your particular needs. These instruction pages consist of a scenario-specific checklist of items that should be reviewed and completed, as applicable, in preparation for a given drill. Immediately following the checklist is a safety plan (for all scenarios except the tabletop event) that should be completed to ensure your drill/exercise is conducted safely. Once you have completed the checklist and safety plan, these pages should be removed from the remainder of the scenario package. However, they should be kept as part of your records.

**Medical/Module Messages**
This section is a compilation of 43 patient vital signs/data for a variety of injuries and illness which can be inserted/substituted into the medical section of your manual if you desire. The seriousness of the simulated injuries/illnesses range from mild to moderate to severe.

**Evaluation Checklists**
These criteria are designed to be used by your drill/exercise controllers to determine performance strengths and/or improvement items. The criteria were developed from FEMAHM-EEM, as well as FEMA Radiological Emergency Plans ( REP) 5, 14 and 15. Instructions on how to use the objectives and evaluation criteria are provided later in this guide.
WHAT TO DO BEFORE YOU CONDUCT A TABLETOP, DRILL, OR EXERCISE

Before you can use the materials in this package to conduct a tabletop, drill or exercise, you will need to do the following things:

- Determine scope and participation
- Determine objectives and extent of play
- Plan and schedule your event
- Choose and modify a scenario package to fit your needs
- Develop a safety plan
- Develop a media plan
- Coordinate administration/logistics

Each of these topics are discussed below.

DETERMINING SCOPE AND PARTICIPATION

Before anything goes on paper, you (the lead developer or the planning organization, if there is one) need to decide what you intend to accomplish in this event. These “big picture” decisions will help you decide who will participate in your tabletop, drill or exercise. Some of the factors to be considered in making this determination are:

- What will the event cost to plan, conduct and evaluate, and what are the financial obligations of the participating organizations?
- What aspects of the expected response have responders practiced before, and what are the known weaknesses and strengths of responders?
- Is the intent to train players or evaluate the response?

For example, if there are inter-agency disconnects that need to be dealt with, you may choose to conduct a tabletop, where representatives of involved agencies verbally discuss in a round-table setting how they should and do respond to transportation events. Tabletops are naturally less expensive than drills and exercises, and will allow you to tackle potential procedural and communications issues.

If you are able to obtain sufficient field participation, you may choose to conduct a drill rather than a tabletop. Whereas tabletops generally provide an overview of emergency response activities, in a drill format you could focus on smaller components of emergency response. For instance, you could use a drill to focus on your initial response capabilities, such as inter-agency communications, response time, and/or establishing an incident command post. In this case, you would simply terminate the drill shortly after units are notified and arrive on scene. On the other hand, you may want to concentrate on emergency activities that take place after an incident command post has been established, such as the ability to monitor for radiological hazards. In this instance, you could choose to simulate the communications aspects of the drill and begin the drill by informing dispatchers that they have been notified of a transportation accident involving radiological material. Or, if
you are not interested in performing radiological monitoring and only want to practice your communications ability, you could conduct a limited scope drill where no emergency response vehicles are actually dispatched and the drill ends when dispatchers notify units to respond to a particular accident location.

Still another option would be to conduct one scenario using both tabletop and drill settings, all on the same day. For example, you may choose to address objectives such as initial notifications in a tabletop setting during a morning session, and address field response objectives at an actual incident scene using a drill setting after lunch.

Tabletop and drill settings are often used to conduct player training, whereas exercises are primarily used for evaluations. Depending on the scope of the event, tabletops (especially) and drills (sometimes), are used for “on-the-spot” training. This type of training is conducted by the drill controllers (or by the moderator in the case of a tabletop) who can call a “time-out” after observing a player action that could be improved/enhanced and then briefly discuss the proper response with players. If you decide to use an event for training purposes, you should also determine the extent of training that will take place. If the participants are weak in many response areas, you can direct controllers to coach players heavily. If participants are generally well trained, you may direct controllers to provide “on-the-spot” training only if a response is unusually poor.

Evaluated exercises are usually conducted to test all major aspects of transportation emergency response. Exercises are typically the most time-consuming and expensive events to conduct.

What you decide will define both the scope and the level of participation of the event. If a particular organization must be involved in a drill to make it successful, but you are not interested in evaluating their particular part of the response, you can choose to simulate that particular group via role players (see Terms and Definitions). Only those organizations who you want to receive training or to be evaluated need to actually participate.

After you determine the scope of your event, each organization/agency who will play should identify an individual who is responsible for helping plan and develop the tabletop, drill or exercise. These individuals should do the following:

- Resolve conflicts identified during the scheduling process
- Concur on the event’s scope, objectives and extent of play
- Commit organizational resources to assist in the development, conduct, response and critique of the event
- Monitor potential programmatic impacts from the development process and resolve difficulties

Once you have determined the scope and level of participation for your tabletop, drill or exercise, you can begin tailoring your objectives and extent of play.
DETERMINING OBJECTIVES AND EXTENT OF PLAY

Tabletop, drill and exercise-specific objectives are used to establish the scope you and/or your planning committee have already decided on. These objectives also specify the emergency response functions to be demonstrated, spell-out the extent of organization/personnel participation, and identify the breadth and depth of event activities to be accomplished or simulated. Typically, not all emergency management program elements are demonstrated in a single tabletop, drill or exercise. Instead, a systematic approach should be used to determine what needs to be demonstrated.

If multiple organizations are involved, emphasis should be placed on participation and coordination among the participating organizations agencies to demonstrate integrated response capabilities. If play is required by organizations that are not participating, you may want to note in the extent of play for applicable objectives that those organizations will be simulated via control cell or role-players at the scene.

The “generic” scenarios contain selected objectives that were drawn from a comprehensive bank of objectives and evaluation criteria checklists that may be used to evaluate transportation emergency preparedness. The bank of objectives and evaluation criteria are all contained in a separate section in this manual (Evaluation Checklist Section). Each objective in the “bank” has a specific number that does not change when used in a given scenario package, regardless of its sequential order. For instance, one scenario package may use Objectives 1, 2, 6 and 10 from the bank of objectives, while another may use Objectives 1, 2, 5, 7 and 9. These objectives, contained in FEMA guidance document HM-EEM, were developed based on the guidance contained in NRT-1, Hazardous Materials Emergency Planning Guide. Beneath each objective is an “extent of play” which defines what actions should be performed by players to meet the objective. Each objective must be attainable and measurable. The evaluation criteria you select (from the Evaluation Checklist Section of this manual) for your scenario should match the objectives in your scenario, and will define how each of the objectives should be measured by event controllers.

For your tabletop, drill or exercise, you should add or remove objectives and modify the extents of play for each to fit your particular scope and needs. If you need to develop new objectives (i.e., to test an agreement/understanding document or procedure specific to your scenario, or to evaluate lessons-learned from past events and/or actual events), you may use the following guidelines:

- The new objective should be developed before modifying your scenario to ensure that the scope of the event matches your extent of play.
- The objective should be specific, realistic and results-oriented.
- The objective should be worded clearly to reduce the possibility of misinterpretation by participants.
The objective should be measurable. If appropriate evaluation criteria cannot be derived from a technically based document, then develop new criteria to support the objective. The new criteria should meet the following parameters:

- Criteria should be created as definitive subsets of the objective to assist in the determination of whether the objective was met.
- Criteria should be specific, realistic, results-oriented, and measurable.
- When possible, criteria generated should be justified by technical documentation.

**EXAMPLE**

Not included among the 16 objectives in FEMA guidance document HM-EEM is an objective designed to evaluate drill/exercise safety to determine ways that safety performance could be improved. We highly encourage the incorporation of this objective and associated criteria (which also serves as our example) into your drill/exercise scenario package.

“The drill/exercise will be planned and conducted in a manner that promotes safety and adheres to all safety policies and postures.”

No technical documentation is available to support this objective. However, the criteria shown below are specific, realistic, results oriented, and measurable as definitive subsets of the objective.

1. Planning included adequate and appropriate independent safety reviews of all scenario details/manual(s) and materials, and the development of safety measures, particularly in the area of “prop scene” simulations and actual demonstrations of equipment in the field (ambulance, EMS, protective action implementation, etc.).
2. All briefings (player and controller) included details on all safety measures, responsibilities, precautions and limitations in effect for the drill/exercise.
3. Controllers took immediate action(s) to stop any unsafe or potentially unsafe action in progress.
4. Safety controllers with authority and responsibility to stop unsafe actions were in place.

Once you have determined all of your objectives and their respective extents of play, you are ready to begin planning and scheduling your event.

**PLANNING AND SCHEDULING**

The extent of play you decide on during the objective determination/development process directly affects the amount of planning required to put on a successful tabletop, drill or exercise. For exercises, a planning committee is recommended to ensure proper preparation. The planning committee should consist of a single senior-level individual who is responsible for the overall design, development, control, training and/or evaluation of the event, as well as representatives from each participating organization. One planner may represent several organizations, depending on the size of the event. All members should be familiar with emergency plans and procedures in their areas of technical expertise.
Members of the committee may be assigned to work groups (if necessary) and will be responsible for identifying players and controllers for their organization. They may also be responsible for such things as:

- Choosing an incident scene
- Modifying (to the extent necessary) the scenario manual
- Developing safety, security and media plans, as applicable
- Handling logistics and administrative details
- Coordinating controller training and briefings
- Scheduling and conducting player briefings
- Reviewing the final package for overall completeness and accuracy

Some of these items are covered in more detail later in this guide.

Drill and exercise planners should allow adequate time for the effective preparation and review of the event package. For a large-scale evaluated exercise, it is recommended that the date and scope of the exercise be established about one year in advance. The exercise date, as well as the controller and player briefing and debriefing dates/locations, are published in Section 4.0 of the scenario package. Setting a date well in advance of the event allows adequate time for all participating organizations to verify plans and procedures, commit sufficient participants and resources (such as players and controllers), and identify and schedule various support activities (including training and drilling) prior to the evaluation.

The “Administration and Logistics Planning” section outlines the different types of activities this committee will need to schedule/plan. Also, a sample activity schedule/log is provided as Attachment A to this guide. Attachment A is a generic, expandable schedule/activity log.

**CHOOSING AND MODIFYING A SCENARIO**

Of the seven generic scenario packages listed in this guide, you should choose the scenario that is both realistic and suits your needs.

Concerning realism, if you are conducting a drill for a transportation corridor where the only possible scenario that could happen is an emergency involving low level nuclear waste being transported to a compaction facility, you shouldn’t choose a scenario package for a train derailment involving a Type B cask.

However, if you have more options (i.e., if both low-level and high-level waste are transported through your area), you may choose a drill that allows you the best opportunity to demonstrate the objectives you have chosen. For example, if one of your objectives is to test the ability of responders to track radioactive contamination and five of the generic scenarios provided could happen in your area, you might want to choose the scenario where the most radioactive contamination is released to the environment.
If you select a scenario package that needs only minor modifications (i.e., the scope, objectives and extents of play suit your needs), reference the checklist at the front of the scenario for directions on how to modify it (fill in the blanks) to make the scenario specific to your area.

However, if you determine that moderate or significant changes need to be made to suit your needs (i.e., you want to add or subtract medical injuries, change objectives, or modify the public information section, etc.), additional guidance is provided below to assist you.

**HOW TO DELETE OR ADD MEDICAL INJURIES**

Four of the seven scenario packages in this manual already have medical components included in them. If you decide to add a medical section, delete a medical section, or change a medical section in a scenario package, follow the instructions below as they pertain to your scenario needs.

**Deleting Medical Injuries**

- Find the section in the scenario package entitled “Medical Data” (which contains the medical messages), and remove this section. (The medical section is the last section in each scenario package.)
- Turn to Objective 14 in Section 3 of your scenario package. If you want to delete the extent of play pertaining to an injury, find the boxed-in paragraph pertaining to a medical injury and delete it (you could either remove it electronically and reprint that section, or strike it out with a pen and use the hard copy provided).
- Turn to Section 7 in your scenario package. If you want to delete the medical scenario, find the boxed-in paragraph pertaining to a medical injury and delete it (you could either remove it electronically and reprint that section, or strike it out with a pen and use the hard copy provided).
- Turn to Section 8 of your scenario package and check this section to see if any changes need to be made to the messages. Any references to medical injuries will be in boxed paragraphs for easy identification and deletion.
- Turn to Section 12 of your scenario package and check this section to see if any changes need to be made to the props or to the drawing to make the scenario package consistent.
- Turn to Section 13 of your scenario and check this section to ensure that no changes need to be made to the simulations. For example, references to simulating the transport of victims to a hospital should be deleted.
- If you only want to delete part of the medical injuries in your scenario, delete only those portions you don’t want and then modify, rather than delete, the applicable portions of Section 7 (narrative and timeline), Section 8, Messages, Section 3 (objective 14 and extent of play), Section 12 (props/drawings) and Section 13 (simulations) to match your scenario.
Adding Medical Injuries

- Use the existing “Medical Data” (which contains the medical messages), or use an injury from the Medical/Module Section of the Drill and Exercise Manual (43 to select from) and add it to your package, or create one using the medical section from another scenario as a model. If you decide to create a new injury, keep in mind that the injury or illness you choose should fit your scenario. For example, you shouldn’t select a burn injury if there is no fire in your scenario. Also, be sure to modify the medical summary at the beginning of the medical section to reflect your changes.

- Turn to Section 3 of your scenario package, find Objective 14 and add an extent of play pertaining to an injury using the medical extent of play from another scenario as a model.

- Turn to Section 7 in your scenario package and modify the narrative summary and timeline to reflect your changes. You may want to use the medical section from another scenario as a model.

- Turn to Section 8 of your scenario package and insert data concerning injuries/victims on those messages describing conditions at the incident scene, as appropriate. Use a scenario package that already contains injuries as a model.

- Turn to Section 12 of your scenario package and check this section to see if any changes need to be made to the props or to the drawing to make the scenario package consistent.

- Turn to Section 13 of your scenario and check this section to ensure that no changes need to be made to the simulations. For example, if actual transport of a victim role-player to a hospital will be simulated, you should state it in this section.

- Turn to Section 15 and add necessary descriptions and messages to meet objectives.

Replacing Medical Injuries

- If you want to substitute different injuries for the ones already in your scenario package, select the injuries/illnesses you want from the Medical Message Index in this manual and replace the medical messages in the scenario package (in Section 15, “Medical Data”) with the one(s) you selected. Keep in mind that the injury or illness you choose should fit your scenario. For example, you shouldn’t select a burn injury if there is no fire in your scenario. Also, be sure to modify the medical summary at the beginning of the medical section to reflect your changes.

- Turn to Section 7 in your scenario package and modify the narrative summary and timeline to reflect your changes. You may want to use the medical section from another scenario as a model.
Turn to Section 8 of your scenario package and modify data concerning injuries/victims on those messages describing conditions at the incident scene, as appropriate. All information pertaining to medical injuries is contained in boxes for easy identification.

Turn to Section 12 of your scenario package and check this section to see if any changes need to be made to the props or to the drawing to make the scenario package consistent.

Turn to Section 13 of your scenario and check this section to ensure that no changes need to be made to the simulations. For example, if actual transport of a victim role-player to a hospital will be simulated, you should state it in this section.

**HOW TO DELETE OR ADD PUBLIC INFORMATION ACTIVITIES**

Some of the scenario packages already have public information activities included. If you want to add to, subtract from, or change the Public Information section of your scenario package, follow the instructions below as they pertain to your scenario needs.

**Deleting Public Information Activities**

- If you want to delete all public information activities, replace the entire Public Information section of your scenario package with the words “There are no public information activities for this drill.” Then delete Objective 8, including the extent of play, from Section 3 of the scenario package.

- If you chose a scenario that has more public information activities than you need, simply delete the portions you don’t want to use, then check the extent of play under Objective 8 from Section 3 of the scenario package to ensure it matches your modifications.

- In either case, be sure to check Section 12, Props and Drawings, and Section 13, Simulations, in the scenario package to ensure your scenario is consistent throughout. For example, if the scenario you chose has simulations or props for the media at the scene, you will need to delete those portions that no longer apply to your scenario.

**Adding Public Information Activities**

- If you want to add public information activities to a scenario that does not have any activities, or if you like the public information activities in other drill scenario packages better than those included in the scenario you want to use, copy the Public Information section from a scenario package that already has the level of public information activities you desire. You should also copy Objective 8, including the extent of play, from Section 3 of the scenario package you like, and include it in your package.
If you chose a scenario that has a limited amount of public information activities and you decide to increase the scope of your public information, expand by using activities from other scenario packages. The Environmental Samples scenario package, which is designed to be run as an exercise, has the most comprehensive public information section of all the scenario packages included in this manual.

In either case, be sure to check Section 12, Props and Drawings, and Section 13, Simulations, in the scenario package to ensure your scenario is consistent throughout. For example, if you want to have media role-players, you may want to add “home video camera” to your list of props.

MAKING “SIGNIFICANT” MODIFICATIONS

Making significant changes to the scenario package, such as to the narrative section (Section 7) of the manual, is not recommended because scenario information often overlaps in many sections of a manual, and one minor change can affect many other sections. There is not a step-by-step formula for making significant modifications. If you must make significant modifications, copying from the other scenario packages in this manual that have activities you want to include in your chosen scenario package is the best and easiest way.

Changing technical information in the manual, such as radiological data, is also highly discouraged. If you do make changes to technical information, be sure to have the data reviewed by an expert to ensure your modification is not unrealistic or impossible.

If you are comfortable with scenario development, some significant changes may be beneficial, particularly if it promotes realism. For example, involving local hospitals in drills and exercises could benefit EMS and hospital personnel, particularly if it required the hospitals to make preparations for contaminated injured people. Another example of a beneficial change would be to involve actual media organizations at the incident scenes or in EOC press conferences. Both of these changes would likely require modifications in multiple sections of the scenario manual, as well as additional planning and coordination. However, as your organization continues to improve in responding to transportation emergencies, such additions may provide useful and challenging.

No matter what modification you make, be sure to read the entire scenario package after you finish making your change to be sure you eliminate inconsistencies caused by your change.
DEVELOPING A SAFETY PLAN

Safety is the most important element of planning and conducting a drill or exercise. Over the years there have been numerous senseless incidents where event participants were injured or killed due to poor safety planning. To ensure the safety of all participants, as well as the general public and the environment, a safety plan, which establishes precautions and limitations necessary for the safe conduct of the event, should always be developed by the committee.

Because a safety plan should be made for every drill/exercise, a safety plan/checklist is included as part of each scenario package. This safety plan/checklist should be completed in the days or weeks prior to conduct of the drill/exercise. The safety plan/checklist is written as a generic sample that can be used without change, or modified as necessary to fit your area and scenario as applicable. The section of the safety plan entitled “Site Specific Hazards”, in particular, is one section that should be reviewed for possible modifications. Also, the section of the safety plan entitled “Event Activity Boundaries and Off-Limit Areas” should be considered for the possible inclusion of information about areas at the incident scene that are off-limits to players.

Off-limits areas should be one of the primary considerations in choosing an incident scene. The incident scene must be somewhere on the route that the shipper would take when hauling hazardous materials. Except for that constraint, however, the planning committee may use its discretion in determining where to hold the event. Preferably, the incident scene should be away from high traffic areas and, if possible, at a location where a large number of participants and their vehicles can safely be staged off the road. Blocking off public streets should be a last resort and should only be done for the purpose of participant safety. Somewhere near the incident scene location (but far enough away that the scene location is not obvious to players who drive up) should be a safe, adequate area for controllers and observers to park. The planning committee should also scout out potential hazards at each incident scene location they consider, such as wooded areas, uncut fields, marshy areas, train tracks, and streets. Areas with serious hazards or potential hazards should be designated as off-limits and may be noted as such on the incident scene map and possibly in the extent of play for applicable objectives in the scenario package. At the very least, off-limit areas should be discussed in controller briefings to ensure controllers are able to prevent players from entering potentially hazardous areas.

While it is the responsibility of each controller and player to adhere to all established safety rules and practices and watch for unsafe situations, it is wise to appoint a Drill/Exercise Safety Lead, whose sole responsibility is safety oversight during the event.
DEVELOPING A MEDIA PLAN

Depending on your scenario, you may want to develop a media plan to ensure coordinated, efficient media relations. Media relations during transportation emergency preparedness events are important because incident scenes are usually in public places and transportation of hazardous materials over public domain can be a volatile issue. At one extreme, failure to notify the media that an event will be held could result in a misperception that public officials are engaged in secretive activities and trigger negative commentary about the transportation of hazardous materials in the community. At the other end of the spectrum, media inclusion could result in positive publicity about emergency preparedness for potential hazardous materials accidents. Taking the time to prepare a plan can: (1) help broaden public/media understanding of transportation emergency preparedness; (2) reduce uncertainties; (3) minimize liabilities; and (4) enhance coordination and operation relationships with the media. This plan should be developed early in the planning process to ensure coordination with interested authorities/officials/media.

Developing an actual plan may not be necessary, but, as a minimum, the items considered in a media plan should be encompassed by your scenario’s “participation”, “extent of play”, and “public information” sections, as applicable.

Regardless of the level of media involvement you desire, the planning committee should designate someone as an official Drill Information Contact Point. This person should be capable of responding to actual inquiries from the general public and/or media about the tabletop, drill or exercise prior to, during and after the event.

Unlike the safety plan/checklist, a media plan/checklist is not applicable for all drills and exercises and is therefore not included as part of the scenario checklist materials at the front of each scenario package. However, for your reference and use as needed, a media plan/checklist has been included as Attachment B in this guidebook.

ADMINISTRATION/LOGISTICS PLANNING

All successful tabletops, drills and exercises require careful administrative and logistical planning. A detailed schedule, which the Drill/Exercise Lead would use to track scheduled and actual completion dates, is recommended for large events. Target dates identified in your safety and media plans, as applicable, should be included in your comprehensive planning schedule.

Even if your drill/exercise may not require detailed administrative planning, it is recommended that you review Attachment A to help ensure you identify everything you need to do to have a successful drill or exercise.
HOW TO CONDUCT A TABLETOP, DRILL, OR EXERCISE

Once you have completed all of your planning activities and are ready to conduct the tabletop, drill or exercise, you must first brief all of your controllers and players to ensure that all participants understand the ground rules.

CONTROLLER BRIEFING

For larger events, a core group of “lead” controllers, each of whom should be assigned responsibility over certain player functions or incident scenes, should be briefed prior to the inclusive briefing of all controllers. The lead controller briefing should cover the entire scenario and anticipated responder actions, the location and assignments of each controller (including role-players), communications arrangements, administrative and logistical details, an in-depth presentation of safety and security issues, and an in-depth discussion of each controller’s specific assignment. The details for controlling complex or sensitive parts of the event should also be presented.

About one week or so later, an “all controller” briefing should be held. This briefing should consist of a brief (no more than 30 minutes) overview of the scenario, followed by break-out sessions where each lead controller gives specific controller assignments and an in-depth review of all scenario aspects that pertain to his/her controllers. Observers may also attend this briefing to ensure compliance with safety and security precautions and other rules of event conduct.

For smaller events, only one briefing for all controllers is necessary, and break-out sessions probably will not be warranted. To ensure that controllers do not participate in drills/exercises without first having attended the necessary briefings, controller attendance at these sessions should be documented (see Attachment I in this guide for a sample roster).

Following are some of the topics that should be discussed during the controller briefing:

- Safety and scenario security precautions
- Ground rules/rules of conduct
- Drill protocol
- Scenario review
- Prompting
- Simulated activities
- Scene walk-downs (only for applicable controllers)
- Control cell/role-players

Attachment C in this guide is a generic controller briefing outline that you could adapt for your event.
PLAYER BRIEFING

Player briefings are intended to cover only the information players need or would be expected to know before a drill/exercise begins. Player briefings shall not include any information related to the scenario. Players should only be briefed on the following topics.

- Rules of conduct
- Scope of the event
- Objectives/extent of play (objectives/extent of play that could give away parts of a scenario should be disseminated to players using more generic phrasing/language)
- Initial conditions
- Safety and security precautions
- Approved simulations (strive for realism where possible)
- Methods for identifying various event participants (i.e., controller hats or arm-bands)
- Special administrative, logistical or communications arrangements in effect during the event

Players may be issued a small packet of information at the briefing that includes the scope of the drill, the date (but not usually the time) the drill will occur, participating agencies, a generic set of objectives, rules of conduct, actions that can be simulated, and a Player Evaluation Form. If some agencies are being simulated by a control cell or role-players, players should be informed of this and should be given a control cell telephone directory to ensure that calls to agencies are made to role-players and not to actual agencies.

To ensure that players are adequately briefed prior to the start of the drill/exercise, attendance at player briefing sessions should be documented (see Attachment I in this guidebook for a sample roster).

Attachments D and G in this guide are a player briefing outline and a typical Player Evaluation Form, respectively.

EVENT SETUP

After controllers and players have been briefed, final preparations are made prior to kickoff of the event. In the hour(s) prior to the event (time allotted depends on how much setup is required), the following actions should be taken.

TABLETOP PREPARATIONS

Because there are no props, simulations or incident scenes and all key players are together in one room, tabletop preparations are minimal. However, place-cards stating each player’s position and organization/agency may be prepared and players may be strategically placed next to or across from each other in a round-table setting to facilitate discussion. Additionally, such tools as transparencies, an overhead projector and extension/power cord, attendance sheets, etc., should be considered and used as appropriate. You may also want to bring applicable procedures and other relevant materials.
DRILL/EXERCISE PREPARATIONS
Before initiating a drill/exercise a number of preparations need to be made. Following is a list of some of the activities that should be done or considered.

- Drill/exercise scene preparation/equipment staging such as:
  - preparation of smoke generators
  - setting up overturned vehicles
  - staging rail cars at a simulated train wreck location
  - spilling or dyeing water
  - moulaging mannequins or role-players
- Controller communication checks (radio and cell phone)
  - lead controller should not start the event until all controllers have checked in
- Safety checks, such as:
  - making a final sweep of incident scenes
  - posting “THIS IS A DRILL” or “DRILL USE ONLY” signs
  - weapons checks
- Time check with the event lead controller (synchronization of watches)

CONDUCTING THE EVENT

CONDUCTING TABLETOPS
Tabletop events are typically guided by a single moderator who may begin with a general overview of how all of the agencies present are linked together in their emergency response. When the moderator senses everyone has a good understanding of how the parts fit together, he/she will then present a scenario situation, giving players their initial conditions and starting a discussion by directing a message to a particular player, such as a simulated 911 “call” to a participating dispatcher. The player who received the first message would then describe his/her response, and other players who would be notified would respond and talk through their response actions. The moderator should use this informal setting as a training opportunity to correct player mistakes or misinformation, point out procedural disconnects and facilitate discussion to prevent players from dwelling too long on certain issues. The moderator should end the tabletop when all objectives have been covered and any issues raised during discussions have been dealt with sufficiently.

CONDUCTING DRILLS/EXERCISES
Unlike tabletop events, drills and exercises should be played out as they would in an actual emergency (“free play”) with as little intervention/interaction by controllers as possible. The one exception to this rule is a drill that is used for on-the-spot training (see Determining
Scope and Participation on page 7). Play is initiated after pre-event announcements are made informing players that an event is about to take place, and after players have been given any initial conditions, such as meteorological data, that they would normally have access to. A message, such as a bystander making a “911” call to a dispatcher, is used to initiate play.

Unless the scope of the drill involves on-the-spot training by controllers, the only times controllers typically talk to players are to:

- **Input a message**

- **Provide information a player would normally have if it weren’t for event simulations**
  
  *Example 1:* “The three rail cars you see on the tracks 100 yards ahead of you are off the tracks, lying on their side by those tall pine trees, and you see heavy black smoke billowing across the tracks and away from you.”
  
  *Example 2:* “The needle on your instrument is pointing here.”

- **Prompt players to stop performing actions that could negatively impact event play, are outside the scope of event play and should be simulated, or that could be negative training for responders. Some of these actions can be anticipated and contingency messages can be developed and added to your scenario manual.**

  *Example 1:* “Your decision-making process has been noted. However, for the purpose of this drill you are directed to stop actions that would result in the evacuation of citizens from their homes.”
  
  *Example 2:* “To prevent negative training DO NOT eat snacks in the immediate vicinity of a possible radiological release.”
  
  *Example 3:* “For the purpose of this drill DO NOT transport the victim to the hospital.”

**Note:** In some instances it is better to turn players into victims to prevent negative training than to prompt them to do the right thing. For instance, if a player doesn’t don his/her respirator correctly (i.e., loose seal) and goes into an area where contamination is simulated to be present, controllers could inject during the decontamination process that the player received a small uptake of contamination.

- **Prompt players to take actions that are necessary to keep the event on the right track so that all objectives can be accomplished.**
  
  *Example:* “For the purpose of this drill, assume the responsibilities of Incident Commander.”
Ask a player to describe how he/she would perform an action that is going to be simulated to ensure he/she has the proper knowledge to perform the task.

*Example:* “Your decision to don protective clothing and respirators has been noted. However, due to the heat we have decided to simulate the wearing of protective equipment and clothing. To ensure that you understand to properly perform this action, please describe to me how you would dress out.”

Stop an unsafe or potentially unsafe action

*Example 1:* “Your decision to monitor in this area has been observed. However, for safety considerations that action will be simulated. Continue monitoring at your present location and I will provide indications as if you were monitoring in that area.”

*Example 2:* “To prevent the possibility that your transmission will be misinterpreted by the public as evidence that an actual event is in progress, begin and end all of your radio and cellular phone transmissions with THIS IS A DRILL.”

Role-play an agency/organization that is not participating in a drill

*Example 1:* If a Radiological Response Team is not participating, one or more controllers may be designated to act out the part of that team, reporting to the Incident Commander after an appropriate amount of time has elapsed since notification.

*Example 2:* If you are conducting a drill that contains objectives on dealing with the media, controllers may be used to simulate news reporters or television crews who arrive at the scene and question various players for information.

Controllers SHOULD NOT ask questions of players that would enhance their knowledge of the scenario or prompt them to perform actions that they should perform but might not have thought of if you hadn’t asked.

*Example:* “Did you report your location to the dispatcher?”

On the other hand, players may ask questions of controllers which controllers may or may not be able to answer. If a player asks for information he/she would normally have in an emergency situation, an controller should provide it. However, if a player asks an controller how he/she should respond to a simulated emergency situation, the controller should not give the player that information, unless it is has been decided that “on-the-spot” player training is acceptable for your event.

Controllers should be careful of saying things that can be overheard by players and might help or affect their response. Controllers should also be careful of where they are positioned. For example, if five controllers are standing beside an isolated stretch of roadway, players might suspect that they are near the incident scene. Finally, controllers should not leave their notes or scenario packages in a location where players can read them. This could compromise the scenario.
Observers should not talk directly to players under ANY circumstances, and they should not stand in an area that is in the way of players or controllers. It is the job of controllers to ensure that observers do not interfere with event play.

**DOCUMENTING PERFORMANCE**
Controllers should document all significant player actions and the time they occurred on a Drill Chronology Form. These logs are used to compile a comprehensive log of significant events and help determine if drill objectives were met. A typical drill chronology log is provided at the end of this guide as Attachment E.

**SUSPENDING AND TERMINATING PLAY**
Drill or exercise play should proceed roughly according to the timeline. However, actual emergencies may arise that require suspending the event. The Event Lead Controller should have predetermined how to handle such situations. The most common way of suspending play is to notify all functional/scene lead controllers and have them direct players and controllers within their purview to suspend play. The scripted suspension message included in your scenario package should be used to ensure that players do not discuss activities related to the event while they wait to resume play. After this is done, the Lead Controller may decide to allow a portion of the players to resume event activities while others remain on hold, or he/she may decide to terminate part or all of the event. For instance, if most or all of the objectives at one area or by one agency have been demonstrated, the Lead Controller may decide to terminate the portion of play most affected by the emergency and simulate that scene or agency with role players. Many factors, including the expected length of time required to deal with the emergency and the number of agencies/players affected by the emergency, may influence his/her decision. After the emergency situation has been dealt with, the decision on when to resume event play must be made by the Lead Controller. He/she can use the message in your scenario package for resuming play, which directs controllers to inform/remind where play was when they stopped and where activities should begin when they resume.

The decision to terminate the event must also be made by the Lead Controller, who should consult with the functional/area lead controllers before making the termination announcement.
HOW TO EVALUATE A TABLETOP, DRILL, OR EXERCISE

In addition to controlling drill or exercise play, controllers are also responsible for documenting and evaluating responder actions. A formal evaluation is prepared after the event is terminated.

To prepare for the evaluation aspect of their job, controllers should:

- Review the scenario objectives and the extent of play for each prior to the event.
- Review appropriate emergency response plans, procedures and checklists.
- Review appropriate plans (e.g., safety, security, communications, logistical) developed for the conduct of the event.
- Attend required training, briefing and debriefing sessions.
- Observe the performance of responders during the event and document their actions using their evaluation modules or checklists.
- Evaluate responder performance and the adequacy of procedures, facilities and equipment based on event-specific evaluation criteria and evaluation checklists.
- Document errors and problem areas in the scenario or conduct of the event.
- Present their evaluations and recommendations in a formal critique.

Documentation of findings is typically done on a Drill Finding Form (see Attachment F). Responder self-critique comments/forms (see Attachment G), which should be given to players during the player debriefing session after the drill/exercise, can also be used for evaluation purposes. When all of the controller and player findings are documented, an assessment of the event is made by comparing player performance against predetermined and documented evaluation criteria. The information from this evaluation and critique process is compiled in a final report, which is then used to make improvements in the emergency process. Preparation of the final report is discussed in the next section.

PREPARING THE FINAL REPORT

When all the event documentation is turned in, the lead controller should compile all of the paperwork and use the following sources of information to prepare the final report:

- Responder self-critique comments/forms
- Event critique comments
- Event evaluation materials completed by controllers
- Findings contained in the post event reports submitted by participating agencies.

A critique/debriefing is conducted immediately after the event in which participants are allowed to discuss their initial impressions/perspectives and raise issues. These critiques are usually conducted at the various drill locations, such as the Incident Command Post, field team locations, etc.

A formal verbal critique is conducted following each event at a common meeting place where all controllers can participate. At this critique, individual observations are gathered
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Transportation Emergency Preparedness
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and objective demonstration/overall performance is discussed. Recommendations for corrective and improvement items may also be discussed. The product of this meeting provides the basis of the final event report.

Following this meeting, a report summarizing overall event performance and significant observations should be drafted. The report format may include an “executive summary”, followed by a detailed account of all objectives and the strengths, deficiencies and improvement items that were noted for each.

An outline of a typical evaluation report is provided as Attachment H to this guidebook.

**FOLLOW-UP/ACTION ITEM CLOSEOUT**

To ensure that important/significant improvement items discovered during the evaluation process are corrected, a tracking system should be implemented. The committee that planned the event should study the improvement items that need to be dealt with and determine the suspected root cause of the problem, as well as a potential solution and timeline for resolution. Once causes and solutions are agreed upon, each participating agency should assign someone who will be responsible for ensuring items/findings pertaining to their organization are resolved. The Lead Controller or other individual designated by the committee should track the overall status of improvement items to final closeout. A method for capturing/tracking improvement item status/resolution, such as a typed list of items or a simple database, should be created.

**REFERENCES**

- NUREG 0654/FEMA-REP-1, Rev. 1, *Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants*
- NUREG/CR 3365, *Report to the NRC on Guidance for Preparing Emergency Preparedness Exercises at Nuclear Generating Stations*
- FEMA-REP-14, *Radiological Emergency Preparedness Exercise Manual*
- FEMA-HM-EEM, *Hazardous Materials Exercise Evaluation Methodology*
- Title 10, *Code of Federal Regulations*, Part 50.47(b)(14) and Part 50, Appendix E
- DOE Order 151.1, *Comprehensive Emergency Management System*
- ANSI/ANS-3.8.4, *Criteria for Maintaining Emergency Response Capability*
Guidance for Planning, Conducting and Evaluating Transportation Emergency Preparedness Tabletops, Drills and Exercises

- SRS Drill/Exercise Objectives and Evaluation Criteria Manual
- **DOE Emergency Management Guide**, “Drill or Exercise Controller/Evaluator Manuals”

**ATTACHMENTS**

- Attachment A Sample Activity Schedule/Log
- Attachment B Media Plan/Checklist
- Attachment C Generic Controller Briefing Format and Instructions
- Attachment D Player Briefing Format
- Attachment E Drill Chronology Log
- Attachment F Drill Finding Record Form
- Attachment G Drill Player Evaluation Form
- Attachment H Event Evaluation Report Format
- Attachment I Tabletop/Drill/Exercise Attendance Roster
- Attachment J Acronym List
ATTACHMENT A

Sample Activity Schedule/Log (1 of 2)
Not all entries on this log are applicable to each event (tabletop, drill or exercise). This activity schedule/log is a list of items to be considered, but actual application is dependent on the type and scope of the particular event being addressed.

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>ASSIGNED TO</th>
<th>DUE DATE</th>
<th>DATE COMPLETED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determine type, scope, and scenario of event</td>
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<tr>
<td>Determine budgetary constraints</td>
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<tr>
<td>Review previous event reports and corrective/improvement actions list</td>
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<tr>
<td>Determine event requirements</td>
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<tr>
<td>Identify participating organizations and extent of play</td>
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<tr>
<td>Determine actions or events to be tested</td>
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<tr>
<td>Determine basic event objectives and modify selected scenario package if necessary</td>
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<tr>
<td>Identify Scenario Committee members</td>
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<tr>
<td>Arrange availability of Committee</td>
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<tr>
<td>Review/modify introduction and scope statements</td>
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<tr>
<td>Review/modify event objectives and evaluation criteria</td>
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<tr>
<td>Review/modify participation section in scenario manual</td>
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<tr>
<td>Identify logistics and time constraints for each event</td>
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<tr>
<td>Determine incident scene and walkdown events</td>
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<tr>
<td>Review/modify scenario and supporting data (if necessary)</td>
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<tr>
<td>Determine Controller Communications and contact numbers</td>
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<tr>
<td>Determine role player needs</td>
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<tr>
<td>Determine special procedures, prop scene setups, etc.</td>
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<tr>
<td>Arrange required access for observers</td>
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<tr>
<td>Arrange for controller identification method [vest, caps]</td>
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<tr>
<td>Schedule pre- and post-event meeting facilities</td>
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<tr>
<td>Controller Briefings</td>
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<tr>
<td>Player Briefings</td>
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<tr>
<td>Observer Briefings</td>
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<tr>
<td>Player Critique</td>
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<tr>
<td>Controller Critique</td>
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<tr>
<td>Verify event dates</td>
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<tr>
<td>Prepare a schedule of pre/post drill activities and include in scenario manual</td>
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<tr>
<td>Identify controller requirements</td>
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<tr>
<td>Arrange for controllers</td>
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<td></td>
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<tr>
<td>Identify players</td>
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<td></td>
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<tr>
<td>Identify all needed emergency facilities</td>
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</tr>
</tbody>
</table>

Event Number:__________ Date to be Conducted:________
ATTACHMENT A

Sample Activity Schedule/Log (2 of 2)

<table>
<thead>
<tr>
<th>Event Number:_________</th>
<th>Date to be Conducted:_______</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ACTIVITY</strong></td>
<td><strong>ASSIGNED TO</strong></td>
</tr>
<tr>
<td>Arrange for use of all emergency facilities</td>
<td></td>
</tr>
<tr>
<td>Make arrangements for transportation needs of controllers</td>
<td></td>
</tr>
<tr>
<td>Make arrangements for controller communication needs (hand-held radios, etc.)</td>
<td></td>
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<tr>
<td>Make arrangements for food and beverages</td>
<td></td>
</tr>
<tr>
<td>Make arrangements for delivery of food and beverages to all areas</td>
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</tr>
<tr>
<td>Determine need for and if needed arrange for tents, seating, drinking water, portable toilets and a sound system</td>
<td></td>
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<tr>
<td>Notify controllers of schedule</td>
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<tr>
<td>Notify management of schedule</td>
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</tr>
<tr>
<td>Verify and/or conduct controller training</td>
<td></td>
</tr>
<tr>
<td>Develop a list of controllers showing position, location, and contact phone number</td>
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<tr>
<td>Develop safety plan and prepare safety precautions</td>
<td></td>
</tr>
<tr>
<td>Develop media plan and if necessary appoint Official Drill Information Contact person</td>
<td></td>
</tr>
<tr>
<td>Modify instructions and ground rules for controllers &amp; players (from scenario package) as necessary</td>
<td></td>
</tr>
<tr>
<td>Develop role-player/control cell phone directory</td>
<td></td>
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<tr>
<td>Obtain props, radios and other necessary equipment</td>
<td></td>
</tr>
<tr>
<td>Complete Event Manual</td>
<td></td>
</tr>
<tr>
<td>Arrange for manual binders, dividers, and reproduction</td>
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<tr>
<td>Reproduce required number of manuals</td>
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<td>Arrange for transport of copies to distribution locations</td>
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<td>Arrange for sufficient copies of the manual</td>
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<tr>
<td>Develop controller and player briefs/packages</td>
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<tr>
<td>Develop controller walk down plan</td>
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<tr>
<td>Distribute copies at controller briefings</td>
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<tr>
<td>Conduct controller briefing. Distribute manuals/packages and IDs</td>
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<tr>
<td>Conduct controller briefing. Distribute manuals/packages and IDs</td>
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<tr>
<td>Conduct controller walk down(s)</td>
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<tr>
<td>Arrange for emergency procedures and forms to be inventoried and deficiencies corrected</td>
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<tr>
<td>Conduct player briefing. Distribute player packages</td>
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<tr>
<td>Complete scene setup</td>
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<tr>
<td>Check communications equipment</td>
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<tr>
<td>Perform final safety checks / time synchronization</td>
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<tr>
<td>Conduct event</td>
<td></td>
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<tr>
<td>Conduct critiques as scheduled</td>
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<tr>
<td>Develop/issue evaluation report</td>
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ATTACHMENT B

Media Plan/Checklist (1 of 2)

Revise the following sections/headers of a media plan based on your specific scenario needs, using the guidance written in each section as an aid.

**Purpose/Objectives**

The purpose of your media plan should be stated here. The goal or purpose of your media plan could vary from alleviating public concern, rumor or inconvenience to building public trust in your community’s hazardous materials emergency response program. Several possible goals are listed below.

- Ensure that the public and media are aware of the planned event and no unwarranted concerns are generated as a result of the event planning or conduct.
- Provide the public and media with an understanding of your agency’s, community’s and/or state’s commitment to ensuring public health and safety in the event of a hazardous materials/transportation emergency.
- Provide the local media an opportunity to observe and report on the activities leading up to and during conduct of a transportation emergency preparedness event.

**Audiences**

This portion of the plan should identify what specific groups are the audience for the media plan. Some of the possible audiences are listed below.

- General public located in the geographic area of the event.
- Community leaders and decision makers within those areas that will potentially be impacted by the event scenario, including those leaders who would have reason to comment publicly on an emergency event.
- Print and broadcast media in the local area, including newspapers, local TV and cable stations and local radio stations.
- Nonparticipating agencies who would normally respond to such an emergency.
ATTACHMENT B

Media Plan/Checklist (2 of 2)

Messages
This portion of the plan should identify what information the audience needs to know, such as:

- Date and time
- Purpose
- Participating agencies

Actions
This portion of the plan should identify actions to be taken to get the messages to the audiences, such as:

_____ Producing a media kit (should detail what will be included in the kit [i.e. press releases, photos, maps, hazardous materials information, etc.] and when it will be completed)

_____ Producing Public Service Announcements (PSAs) to be run in the media (should detail what will be included in the PSAs [i.e., radio and video, etc.] and when they will be completed)

_____ Identifying who and how the information will be disseminated (i.e., brief elected leaders, providing media opportunities for reports, etc.)
ATTACHMENT C

Generic Controller Briefing Format and Instructions (1 of 7)

The complexity of controller briefings is dependent on the type and scope of the drill or exercise.

1. Controller Briefings

   a. General Information

   - Controller packages. (Each controller should receive a copy of the scenario package and any other information that may be relevant to him/her, such as a briefing outline if he/she is a Functional Lead Controller and is expected to provide a detailed briefing of a functional area during a break-out session.)
   - Controller assignments and reporting chains. (Refer to controller list in Section 6 of scenario package.)
   - Controller communications equipment and contact numbers. (Refer to assignment sheet in Section 6 of scenario package.)
   - Logistical information (transportation, meals, restrooms, coffee, smoking areas, etc.). List below:

   ________________________________________________________
   ________________________________________________________
   ________________________________________________________
   ________________________________________________________
   ________________________________________________________
   ________________________________________________________
   ________________________________________________________

   - Dress Code or attire which uniquely identifies the participants (e.g., arm bands, colored caps, etc.). List below:

   ________________________________________________________
   ________________________________________________________
   ________________________________________________________
   ________________________________________________________

   NOTE: In areas where hard-hats are required to be worn for safety concerns, the Drill/exercise Lead Controller shall devise an alternate method to identify controller organization members and observers.
ATTACHMENT C

Generic Controller Briefing Format and Instructions (2 of 7)

- Drill-related activities schedule [drill/exercise reporting time, length of drill/exercise, critiques (location, times, and participants), evaluation reports, etc.]. (Refer to Section 4 in scenario package).

- Good drillsmanship practices; sign-in requirements for all players, controllers and observers, and contingency plans (i.e., actions if players must respond to actual emergencies/alarms, etc.).

Specific requirements:
- Required training ______________________
- Dosimetry use ______________________
- Respirator, protective clothing use ______________________
- Safety rules ______________________
- Identification of applicable plans and implementing procedures. (Make notes below.)

Controller Instructions (Shown below as 2 and 3).
ATTACHMENT C

Generic Controller Briefing Format and Instructions (3 of 7)

b. Scenario Specific Information

- Participating organizations. (Refer to Section 5 in scenario package.)
- Locations or facilities affected. ______________________________
- Objectives and extent of play. (Refer to Section 3 in scenario package.)
- The assumptions and precautions being taken.
- The drill/exercise scenario: (Add brief notes on lines provided as necessary. Refer to Section 7 in scenario package for details.)
- Initiating event(s). _______________________________________
- Expected course of player action and timeline. __________________
- Specific types of messages to be utilized and the trigger points for their issue. _____________________________________________
- Potential problem areas. ___________________________________
- Items of concern ___________________________________________
- Use of data packages (e.g., meteorological, radiological, chemical, medical, etc.). _________________________________
- Permitted simulations and use of role players.
ATTACHMENT C

Generic Controller Briefing Format and Instructions (4 of 7)

2. Controller Instructions

a. Before Drill/Exercise Day (scratch out bullets that are not applicable for your drill/exercise)
   - Ensure you have attended any required training (i.e., Controller Training)
   - Obtain the required training.
   - Attend a pre-drill/exercise controller briefing.
   - Familiarize yourself with the Controller Instructions.
   - Review the scenario information and messages which are applicable to your assignment.
   - Ensure that you understand the scenario, timeline, presentation of information and messages to players, and expected player responses.
   - Familiarize yourself with the drill/exercise objectives and evaluation criteria applicable to your area of control.
   - Familiarize yourself with the procedures applicable to your area of control.
   - Familiarize yourself with the controller organization.

b. Immediately Prior to the Drill/Exercise
   - Arrive at assigned locations 30 minutes prior to facility activation or drill/exercise initiation.
   - Test controller communications link. Synchronize watches and clocks with the Lead Drill/Exercise Controller.
   - Familiarize yourself with your assigned workstation and equipment.
   - Ensure that you are readily identifiable to all the players.
   - Ensure all controllers in your area are familiar with their code of conduct.

c. During Drill/Exercise
   - If needed ensure all players have unique drill/exercise identification.
   - If applicable, brief all players on drill/exercise ground rules and/or initial conditions.
   - Position yourself to maximize your effectiveness in monitoring player actions and issuing messages and/or scenario data.
   - Follow the drill/exercise timeline and provide messages and/or input scenario information as identified in the scenario manual and which are specifically designated for your assigned location. Make sure players fully understand information provided.
   - Question players if it is not clear what actions are being taken.
   - Do not prompt players by providing information early, providing more information than the player has earned, or phrasing sentences, such that, it could cause the player to perform an action.
ATTACHMENT C

Generic Controller Briefing Format and Instructions (5 of 7)

- Do not ad-lib information. If the information is required and not contained in the Drill/Exercise Manual, notify the Facility/Functional Lead Controller and request assistance.
- Allow players to freely perform their functions and demonstrate their skills and knowledge. Immediately notify the Facility/Functional Lead Controller or the Drill/Exercise Lead Controller of free play activity.
- Do not criticize player actions during the drill/exercise.
- Only allow simulations specified by the scenario manual or authorized by the Drill/Exercise Lead Controller. Direct players to describe or explain how tasks which are simulated will be completed.
- If a real emergency occurs or personnel safety and/or security are impacted during drill/exercise play, immediately stop drill/exercise play in your area and notify the Lead Controller.
- Comply with instructions from the Functional/Scene Lead Controller or Drill/Exercise Lead Controller.
- Adhere to public laws including traffic regulations and follow any orders given by law enforcement personnel.
- Controllers are exempted from security or health protection controls required by simulated conditions.
- Take no actions which would reduce the safety of drill/exercise participants or the public.
- Observe player performance, note possible improvement areas and strengths, and develop recommendations for corrective/improvement actions.
  - Use the Drill Chronology Log and Drill Finding Record to document.
- Ensure all drill/exercise participants within your area log in on an attendance sheet.
- Do not leave your assigned post unattended or uncontrolled during drill/exercise play.
- Use the chronology log to detailed notes regarding progress of drill/exercise and response of participants:
  - arrival and departure times of participants
  - times of major activities or milestones
  - problem areas
- Observe player performance, note strengths, deficiencies, and improvement items. Develop recommendations for corrective/improvement actions. Complete Finding Records and Evaluation Forms for each facility or function assigned.
ATTACHMENT C

Generic Controller Briefing Format and Instructions (6 of 7)

d. **Upon Drill/Exercise Termination**
   - Provide copies of Chronology Logs and Drill Finding Record to the Drill/Exercise Lead Controller by the close of business the next business day following the drill/exercise.
   - Provide verbal input at the post-drill/exercise critique.
   - Note player comments.
   - Attend the post-drill/exercise controller debriefing (critique), if applicable.
   - Evaluate emergency response activities, facilities, equipment, procedures, etc. based on criteria provided in the scenario manual. Complete objective evaluation criteria checklist(s) for each facility or function assigned.
   - Provide input to the controller critique and the drill/exercise evaluation report as requested by the Lead Controller.
   - Record critique comments and prepare a written evaluation of the drill/exercise response in your area for the Lead Controller. Use the approved Drill/Exercise Evaluation Report Format.
   - Assist in the development of the drill/exercise evaluation report as requested by the Lead Controller.

3. **Controller Instructions**

   a. **Before Drill/Exercise Day**
      - Attend a pre-drill/exercise briefing.
      - Familiarize yourself with observer instructions and Rules of Conduct.
      - Review the scenario information that is applicable to your assignment.
      - Ensure that you understand the scenario, timeline, presentation of information and messages to players, and expected player responses.
      - Familiarize yourself with the drill/exercise objectives and evaluation criteria applicable to your assignment.
      - Familiarize yourself with the procedures applicable to your assignment.
      - Familiarize yourself with the controller organization.

   b. **Immediately Prior to the Drill/Exercise:**
      - Arrive at the appropriate facility prior to the initiation of the drill and check in with the Lead Controller of that functional area/scene.
      - Wear the appropriate ID for a Controller (vest, cap etc.).
ATTACHMENT C

Generic Controller Briefing Format and Instructions (7 of 7)

c. **During the Drill/Exercise (Rules of Conduct)**

- Establish a viewing location that will not interfere with player or controller movements or interactions.
- Do not interact directly with the players.
- Minimize interaction with controllers. Do not engage controllers in lengthy discussions. If feasible, reserve all questions until the drill/exercise is completed.
- Comply with instructions provided by the appropriate controller.
- Take no actions that reduce the safety of drill/exercise participants or the public.
- Adhere to public laws including traffic regulations and follow any order given by law enforcement personnel.

d. **Upon Termination of the Drill/exercise**

- Attend the player post-drill critique if applicable to your objectives.
- Attend the controller critique, if applicable.
- Provide comments concerning the drill/exercise to the Lead Controller.
ATTACHMENT D

Player Briefing Format (1 of 1)

Player Briefing

The player briefing may address many topics, depending on the type and scope of the drill/exercise, but the following is the minimum which should be addressed. These items should be written out and may be provided in a player package but this and the complexity of the briefing are dependent on the type and scope of the drill/exercise.

1. The type and scope of the drill/exercise.
2. Participating organizations and their extent of play.
3. An overview of the objectives.
4. Any safety precautions.
5. Activities approved to be simulated or walked-through.
6. Methods for participant (Controller, Player, Observer) and exempted personnel identification.
7. The importance of drillsmanship.
8. The unacceptability of using uncontrolled copies of procedures, checklists, etc.
9. Any special administrative, logistic, or communications arrangements in effect (e.g., use of the alternate facility rather than the primary facility, drill telephone directory, etc.)
10. Schedule, location, and any limitations for the post-drill/exercise player critiques.
11. Player rules of conduct.
ATTACHMENT E

**Drill Chronology Log (1 of 1)**

**Drill Chronology Log**

Drill Controller Name: ____________________________________________

Assigned Location and Function: ____________________________________

Drill Number: __________________________ Date: ______________________

1. Controllers should use this sheet to record important events and comments during the drill.
2. The notes on this sheet should be used when completing the evaluation materials

<table>
<thead>
<tr>
<th>Time</th>
<th>Event / Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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## ATTACHMENT F

### Drill Finding Record Form (1 of 1)

#### Drill Finding Record

**DRILL #_________________________**

Instructions: Review completed evaluation checklists and chronology logs and determine the following for each.

- [ ] Strength  
- [ ] Improvement Item

For improvement item, determine possible root cause from list below:

- [ ] Procedure was not used  
- [ ] Scenario issue
- [ ] Procedure was incorrect  
- [ ] Player performance issue
  
  Name/Position: ________________________

- [ ] Procedure does not include all appropriate steps.  
- [ ] Player not trained
  
  Name/Position: ________________________

- [ ] Equipment, supplies, facilities inadequate  
- [ ] Controller issue
  
  Name/Position: ________________________

- [ ] Procedure does not include all appropriate steps.  
- [ ] Other ________________________

**Specify:** ________________________

**Statement of Issue:** (Please be specific, e.g., names, locations, etc.)

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

**Recommendation(s):**

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

**Controller Information:**

Name: ________________________
Agency: ________________________
Area of Evaluation: ________________________
Telephone #: ________________________
**ATTACHMENT G**

**Drill Player Evaluation Form (1 of 1)**

<table>
<thead>
<tr>
<th>Agency: __________________________</th>
<th>Position: __________________________</th>
</tr>
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<tbody>
<tr>
<td>Name: __________________________</td>
<td>Date: ____________________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
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</thead>
<tbody>
<tr>
<td>1. Have you participated in a drill in this position before?</td>
<td>_____</td>
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<tr>
<td>2. Have you completed any specialized training for the above position?</td>
<td>_____</td>
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<tr>
<td>3. Were the operational procedures/checklists you needed to use accurate and adequate?</td>
<td>_____</td>
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<tr>
<td>4. Was the facility and/or equipment adequate to perform your job?</td>
<td>_____</td>
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<tr>
<td>5. Did the communications system meet your needs?</td>
<td>_____</td>
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<tr>
<td>6. Were the resources you needed to perform the functions of your position available and did you know how to obtain them?</td>
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<tr>
<td>7. Did the scenario allow you to demonstrate fully the functions of your position?</td>
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</table>

Comments: (Please provide for all “No” responses to items 3 - 8)

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**Position: __________________________**

**Date: __________________________**
Event Evaluation Report Format (1 of 1)

1. The Event Report Should Address:
   a. The overall event performance.
   b. Summary of objectives including a statement indicating the adequacy of demonstration.
   c. Major critique information by functional performance for strengths and possible improvement areas.

2. The Event Report Should Contain
   a. Narrative Executive Summary
      A narrative executive summary presenting an overview of the drill/exercise performance. This summary shall include a statement indicating whether or not all of the specified objectives were adequately demonstrated.
   b. Objectives
      The objectives section should provide brief descriptions of the major activities which were met, partially met and/or not met relative to each objective.
   c. Findings Section
      A findings section shall list the major critique information by categories of strengths and improvement items by functional performance areas. Each improvement item should be referenced to a specific objective.

   If any objective was not met, recommendations to resolve the issues could include:
   - Conduct a remedial drill/exercise.
   - Conduct a drill so that (a) specific objective(s) may be demonstrated.
     - The drill should be limited in scope and only involve the players concerned.
     - The drill should be properly documented, per the requirements of any drill.

3. The draft report should be forwarded to appropriate management for comments and concurrence.

4. The final drill/exercise report should be distributed within approximately 30 working days of a drill or exercise to all participating agencies.
**ATTACHMENT I**

**Tabletop/Drill/Exercise Attendance Roster (1 of 1)**

Event Date: ____________ Event Name: ____________________________________

<table>
<thead>
<tr>
<th>Name</th>
<th>Agency</th>
<th>Emergency Position</th>
<th>Phone</th>
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ATTACHMENT J

Acronym List (1 of 1)

This list may be included in your scenario package or passed out as briefing material to help controllers unfamiliar industry acronyms used in the scenario packages.

- **CEDE** - Committed Effective Dose Equivalent
- **DOE** - Department of Energy
- **HAZMAT** - Hazardous Material
- **ICP** - Incident Command Post
- **ICS** - Incident Command System
- **MREM** - Millirem (see REM • 1,000 mrem = 1 rem)
- **RAD** - 1. Radiation Absorbed Dose — a unit used for measuring the amount of radiation any given material absorbs
  2. Abbreviated/slang word meaning radiation or radioactive (i.e., “rad worker” or “rad material”)
- **REM** - Roentgen Equivalent Man (a unit used to measure the effect radiation has on the human body)
- **SCBA** - Self Contained Breathing Apparatus
- **SNF** - Spent Nuclear Fuel
- **SNM** - Special Nuclear Material
- **TEDE** - Total Effective Dose Equivalent
- **TEPP** - Transportation Emergency Preparedness Program