Training Annex

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This Annex Suggests General Considerations and Best Practices for Developing Training Programs for Personnel

ARE YOU READY?

- Are personnel trained how to protect their personal safety?
- Are all personnel trained to respond to emergency situations likely to occur?
- Are training exercises and drills conducted regularly?
- Are certain personnel cross-trained to perform other tasks?
- How many personnel trained in Incident Command System (ICS)?
- Does the training program allow for a flexible, scalable response to address emergencies within the facility as well as regional disasters?

Basic Steps When Writing and Implementing a Training Program

- 1. Conduct Preparation and Identify Training Goals based on a complete Risk Assessment
- 2. Draft Training Program(s) and Materials with Stakeholder Input
- 3. Schedule Trainings and Subsequent Evaluations
- 4. Consider Supplementary Training Opportunities including those provided by groups outside your facility (ex: ICS, Haz Mat awareness, etc.).

Training personnel includes teaching standard operating procedures as well as how to respond to emergency situations. It is important to have a process in place and train personnel to respond to emergencies quickly and efficiently. Additional training for specific tasks will be necessary for some positions. Writing training programs and practicing those procedures will increase the likelihood that personnel will safely manage an incident.

Training is an iterative process: Educate personnel on proper procedures. Then practice the plan with a drill or exercise. Evaluate how the plan worked. Go back, and improve the training material if needed. It is essential that adequate training be provided to personnel for *what is expected* in an emergency. Ultimately, the facility administration, owner and management are responsible for providing adequate training.

1. Conduct Preparation and Identify Training Goals based on a complete Risk Assessment.

Facility Contingency Planners (FCPs) and/or stakeholders need to identify and evaluate the facility's current training programs. Do the current training materials address current needs as revealed by recent Risk Assessment? Were outside entities (Fire, State EM Agency) included in the Risk Assessment team to ensure considerations outside the scope of your facility's expectations?

The following pages offer a variety of options to consider for inclusion in the training program.

- □ Can the following fundamental assumptions be made?
 - □ Basic safety training is provided for personnel
 - □ Additional training is necessary for personnel responding to emergencies outside the normal scope of safety and job responsibility
 - Evaluation of the training drills and exercises will indicate where the program improvements can be made
- □ Assemble the planning team, stakeholders and collaborators to help determine necessary elements of a training program and develop materials (see page 3).
- □ Identify which personnel, or job descriptions, need to be trained and cross-trained for additional tasks and responsibilities in emergency situations.

2. Draft the Training Program(s) and Materials with Stakeholder Input

After the preparation phase (1) draft or edit the training program, (2) monitor the progress of writing the training program and (3) develop a system for application of the program. Best practice information for the following topics is provided beginning page 3.

- General Training Considerations
- Training Elements for all Personnel and Volunteers
- □ Training Elements for Personnel with Specific Responsibilities in Emergency Response
- □ Training Methods and Techniques
- □ Monitor the Drafting and Implementation of the Training Program(s)
- Disaster Training Supplement

3. Schedule Training and Subsequent Evaluations

- □ Train personnel on the standard operating procedures matching the job description
- □ Train personnel for responding to emergency situations.
- □ Schedule regular safety training events for all personnel and all additional tasks.
- □ Conduct post-event evaluations of drills and tabletops as appropriate, and modify the program as needed.

□ As a facility and personnel become familiar with their plans, practice and improve their abilities, consider more complex training scenarios. See the Disaster Exercise Supplement on pg 10 of this document.

4. Consider Supplementary Training Opportunities including those provided by groups outside your facility (ex: ICS, HAZMAT awareness or response, technical animal rescue, etc.).

References to training courses and other materials that may be useful when developing the training program can be found beginning page 31.

The following considerations are good business practices that may be helpful for developing the training program. Training needs will vary depending on the size of the facility, number of personnel and species of animals.

Stakeholders and Experts to Consult on Training Objectives for the Facility Stakeholders can assist in drafting a robust training program. When developing training program, collaborate with stakeholders to learn any necessary local, state, or federal requirements. The stakeholder team should determine who is ultimately responsible for developing the training program and its individual elements.

- □ Who are the potential stakeholders to assist with training evaluation and development?
 - Management and owners
 - □ Local jurisdictional representation from law enforcement, fire, emergency management
 - □ Regulatory agencies
 - □ American Disabilities (ADA) representative
 - □ American Red Cross
 - Professional training companies
 - Wildlife Facility Professional Organizations (e.g. Association of Zoos and Aquariums, Exotic Wildlife Association)
 - □ Veterinarians, State animal health officials, USDA/APHIS and other animal care professionals
 - □ Wildlife transporters (International Fund for Animal Welfare, Code 3 Associates)

General Training Considerations

Emergencies can last for days, weeks or evolve into months. They can occur during the day or night, on weekdays or weekends, on special holidays or when hosting a private event. Being prepared requires that all personnel be trained how to perform their job safely, plus how to respond to an emergency situation at inopportune times. General considerations include:

- □ Ensure that all personnel can access written or electronic safety training materials and protocols.
- □ Provide adequate safety training for all personnel, frequent vendors and contractors.

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- □ Provide adequate cross-training to assure coverage of critical responsibilities during absences and instances of limited staffing.
- □ Revise procedures and conduct additional training as new equipment, personnel, materials or processes are introduced.
- □ Maintain training records for all personnel and volunteers. Documentation is extremely important. See <u>Administration Annex</u>.

Training Elements for all Personnel and Volunteers

- □ Are all personnel and volunteers trained on proper <u>safety procedures</u> such as the following (if applicable)?
 - □ Identifying a dangerous situation
 - □ Emergency contact numbers
 - □ Modes of communication
 - □ Use of a phone tree system
 - Use of exit doors

- □ Severe weather-related protocols
- □ Assisting a lost child
- Use of equipment
- □ Storage of supplies
- □ Are personnel trained on standard <u>emergency procedures</u> such as the following?
 - □ Reporting an emergency
 - Use of alarm systems
 - □ Emergency code system
 - □ Fire extinguisher
 - □ Evacuation routes from buildings
- □ Evacuation routes from facility
- □ Fire drills
- □ Chain of command hierarchy
- □ Responding to all clear
- □ Are personnel trained to prioritize tasks when multiple emergencies occur simultaneously?
- □ Are personnel aware that a short-term emergency response could escalate to a long-term disaster response?

Training Elements for Personnel with Specific Responsibilities in Emergency Response

In addition to the basic training that is provided to all personnel, additional training will be necessary for select personnel to respond to specific issues. Consider the following:

- □ Hazardous materials. See *Facility Operations Annex*.
- □ Zoonotic diseases. See *Emergency Animal Care Annex.*
- □ Animal care beyond the scope of day-to day procedures. See *Emergency Animal Care* <u>Annex.</u>
- □ Emergency Response Team. See <u>Administration Annex.</u>
- □ Specific veterinary responses (e.g., triage, weapons or dart team training). See *Emergency* <u>Animal Care Annex.</u>
- □ Personal protective equipment use and 'fit testing' of PPE, if warranted. See *Emergency* <u>Animal Care Annex.</u>

- Responding to local, regional or national infrastructure emergencies such as power failures, loss of water supply, compromised animal habitat and fallen trees. See <u>Facility</u> <u>Operations Annex.</u>
- □ Setting up a temporary administrative hub. See <u>Administration Annex.</u>
- □ Reporting an incident to the public. See *Communications Annex.*
- □ Backing up animal information. See *Data Management Annex.*
- □ Evacuation of animals See <u>Animal Transportation/Evacuation Annex</u>

Training Methods and Techniques

Effective training programs educate and instruct personnel on what is expected of them on a daily basis. Good training also prepares personnel for responding to an emergency event as well as for multiple situations occurring at the same time. Exercises and drills develop 'muscle memory' so people are able to response quickly and efficiently. In addition to instructional materials and manuals, consider developing and adding exercises and drills to the program.

The US Department of Homeland Security has developed a nomenclature and system for training and exercises, based on a step by step process of building emergency response capabilities. This system, called the Homeland Security Exercise and Evaluation Program (HSEEP), may be a bit complex for many facilities, but some of the basic tenants of HSEEP can be of value in designing training and exercise programs. It is also important for facility management to at least have a cursory knowledge of HSEEP if they will be participating in exercises sponsored by local or state emergency management authorities. The types of exercises/training defined by HSEEP include:

- 1. Seminars: Sessions to provide background skills necessary for planning and response
- 2. Workshops: Sessions designed to facilitate plan development
- 3. Tabletop exercises: Discussion based exercises in which a plan is tested
- 4. Drills: Limited exercises in which a specific skill or portion of a plan is tested under actual response conditions.
- 5. Functional exercises: Also called command post exercises, functional exercises are set in field conditions, but test the ability to command and to interface with other response agencies.
- 6. Full scale exercises: Test the entire plan under field conditions including command and tactical response elements.

Strategic exercise plans:

Each facility should develop an exercise strategies that will help them develop plans, test components of the plan, and even test the entire plan. Exercise strategies should follow a step by step process in exercise complexity. Holding a full-scale exercise when the plan has just

been completed is probably not realistic. Holding a tabletop exercise, followed by drills, a functional exercise, and finally a full-scale exercise might be a more sound strategy.

Evaluators:

Every exercise should have designated evaluators and the evaluation strategies should be developed as the exercise is developed. Evaluators should understand the exercise goals and be briefed on how to determine if those goals were met effectively.

Seminars and workshops:

Seminars and workshops are most valuable for helping to convey specific skill sets and to support the process of developing plans. These tools are relatively flexible. Planning workshops can be a simple as formal group discussions about "how would we" in relation to various scenarios and assignments.

Table-top Exercises

Key elements of a Tabletop Exercise:

1. Chronology - Tabletops test a plan that is in place or recently created. **Participants must be familiar with the plan.** Such exercises must include *appropriate chronological requirements and limitations* as in an actual event. Sitting down and discussing what to do or creating checklists of what to do should occur in workshop sessions and are not a "Tabletop" exercise. The exercise can be more real-time or may use "compressed" time in which, for example, the first 48 hours of the incident is exercised in 8 hours. The exercise planning team should allow appropriate time to address each exercise goal before moving on to the next inject of information or leap forward in time.

2. Injects - The Leader of the Tabletop training *should divulge various information the situation, referred to as injects, at appropriate times in the exercise.* Ideally, as members learn how to perform a Tabletop, the members of the tabletop team will not only consider their assigned task, but learn to also make contingency plans in case their first choice becomes inappropriate or impossible, just as in an actual event.

- Ex: As part of a tabletop exercise, the Facilities manager is assigned to delineate an escape route for flooding. The next inject, however, may indicate that a bridge used in the escape route is now washed out.
- Ex 2: The Curator is assigned to execute the plan to evacuate a tigress. An Inject reports that she has given birth to 3 premature cubs and may still be in labor. Another inject might be that the first choice transporter's own house has been flooded and will unable to assist with the move.
- □ Ex 3: After planning and storing sufficient fuel for facility generators for the anticipated duration, an inject might be that the local EMS commandeers most of the fuel for the human hospital (as actually occurred at a zoo in the aftermath of Hurricane Katrina).

Different emergency and disaster scenarios can be adapted into table-top exercises to test plans.¹ They can be developed for both short-term emergencies that cause temporary disruption, and also for long-term disaster scenarios, which may result in long-term evacuations or change-of-business plans.

The basic steps include:

- Participants should include relevant personnel and other stakeholders if applicable (e.g. a disaster table top could include first responders, etc)
- □ Meet in a conference room setting
- □ A scenario is developed ahead of time by a small group that will test the facility or community plan.
- Discuss individual and group responsibilities and interactions.
- □ Participants may be broken out into sub-groups to discuss particular issues or tasks.
- □ Injects (see examples above) are provided by the leader (often termed the controller). New tasks may be assigned and plans adjusted accordingly.
- □ At the end of the exercise, there is an immediate participant evaluation, called a "Hotwash" discussion
- □ A more complete thoughtful evaluation is performed afterwards (ideally in writing) and discussed with the participants.
- □ Evaluate and adapt the plan and training program, based on the exercise

Examples of <u>short-term</u> emergency scenarios adaptable for a tabletop include:

- □ Rapidly controlled onsite fire
- □ Post-animal escape
- □ Blizzard causing closure of the facility for a day or two
- □ Flash flooding

Examples of <u>long-term</u> emergency situations for discussion include:

- □ A highly infectious disease outbreak
- \Box A flood
- An earthquake, resulting in loss of electricity, potable water or waste disposal for weeks

Develop scenarios for table-tops that are personalized for the facility and its environment based directly on the Risk Assessment. The facility may choose to expand the table-tops to include more complex scenarios. For example: 'a fire drill without water pressure in any of the metropolitan fire hydrants' or 'animal escape with multiple fence breaches due to down trees' or 'a herd escape due to a significant breach of multiple hoof stock pens at once with only one dart rifle.' Multiple problems will definitely occur in disasters. It is important to recognize that

¹ See <u>http://.training.fema.gov/emiweb/downloads/is139unit5.doc</u> for detailed information on conducting effective tabletop exercises.

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in long-term situations, there may be limited local infrastructure support and little to no outside assistance. Emergency management will be focused on human needs leaving the facility to care for the animals and personnel sheltering-in-place. See Disaster Exercise Supplement on page 10 for additional information and in-depth examples.

Drills (walk through and operational)

The next evolution for emergency training moves personnel and response teams out of the conference room setting. Drills are activities that take place on-grounds and are hands-on tests of one or more response elements of the overall plan. Consider doing as unexpected or "surprise" training for part of the staff, just as a USDA/APHIS or other inspector might show up. Does the facility occasionally have stairways cluttered preventing rapid human evacuation, or are rifles or other immobilization equipment missing from the prescribed storage safe because they were not replaced after target practice? If there are specific things staff often fails to do (that may only be important in an emergency), schedule a surprise event that can serve as a teachable moment.

The basic steps include:

- Participants should include emergency management team and response teams as appropriate.
- □ Chose a specific location and a specific scenario
- □ Physically walk through the exercise or actually perform the task. Simulate designated emergency responsibilities and functions
- □ Ask personnel to identify any potential hazards they encounter during drills such as cluttered stairways, debris, or locked doors
- □ Evaluate the drill
- □ Evaluate and adapt the training program, based on the exercise
- □ Reinforce proper procedures

Functional Exercises

Functional exercises are the next step. They are considerably more involved by requiring additional preparation time and collaboration with first responders. These types of experiences are the best preparation for responding to a disaster. Also called "command post exercises", functional exercises allow the facility to set up a command post, interact with local emergency response agencies, receive information from the field, and make real-time decisions as they would in an actual emergency.

Full-scale Exercises represent complete implementation of a plan with all (or at least many) of the personnel and responders that would be engaged in a real incident. A full scale exercise could also engage local emergency management and community first response agencies.

□ When designing full-scale exercises, include multiple challenges and issues that will involve all departments that would be active in a real emergency. Some response elements may

need to be simulated. Use the Risk Assessment to develop personalized situations. For example:

- □ A hurricane causing infrastructure destruction and the loss of all power to the facility.
- A flood warning necessitates the need to evacuate animal from certain areas of the zoo. Some animal movements could be actual, but some may need to be simulated.
- □ A full scale animal escape exercise might involve:
 - Command team and zoo management
 - Any appropriate personnel and volunteers.
 - Chemical capture team and firearms team, as appropriate.
 - Animals, (Typically staff in costume or some other decoy to play the role of the animal).²
 - Jurisdictional responders.
- Simulate a shelter-in-place incident for the animals, personnel remaining on grounds, and/or any guests/visitors who might be sheltered. For more information on shelter-in-place, see <u>Administration Annex</u>. For animal sheltering-in-place, see <u>Emergency Animal Care Annex</u>.
- □ For a drill or exercise, post notices at entrances to notify public if necessary, and/or conduct after hours to avoid unnecessarily alarming the public. Staff family members, volunteers, Docents, etc. can be recruited to act as "the public" including some that are "problem uncooperative individuals" or physical victims that staff don't expect with injury make-up or other props to recreate potential additional complications.
- □ As with table-top exercises, any drill, functional, or full-scale exercise should have a report completed afterwards to evaluate the exercise, point out successes and challenges and the next steps for modifying personnel training. As above, evaluation ideally involves two parts, the "Hotwash" immediately after the exercise and a follow-up evaluation after participants have time to think about it more before their input.

Monitor the Drafting and Implementation of the Training Program

FCPs should monitor the progress of writing the training program and any relevant training materials.

- □ Assign specific tasks to ensure completion of the training program.
- □ For effective follow up, establish a time table chart or checklist to complete the various elements of the training program and the responsible person(s) or group.
- □ Make the training program available to personnel.

² AZA requires two animal escape drills per year for Accreditation.

In conclusion, training, drills and full-scale exercises increase the likelihood of successful and safe outcomes, and will reduce potential risks. Training is an ongoing process. To effectively implement the facility's plans, consider the following:

- □ Adapt the new-hire orientation program to include safety protocol training and an awareness level orientation to the facility contingency plan.
- □ A training program should train personnel on *their specific roles and responsibilities* in different scenarios.
- □ Schedule regular facility-wide training for all safety protocols and the use of safety equipment.
- □ Plan and schedule regular table-top drills, walk-through drills and functional drills.
- □ Collaborate with local jurisdictions to consider scheduling a full-scale exercise.
- □ Meet with personnel after exercises, drills and an actual event.
- □ Evaluate if the training adequately prepared personnel for appropriate responses.
- Develop lessons learned based on the training drills and exercises.
- □ Modify training programs based on evaluations and lessons learned.

Disaster Exercise Supplement Tools for Development of Disaster Table-top Exercises

Background

Emergency incidents can range from an isolated situation confined to a zoological facility that lasts an hour with complete resolution without harm to people, animals, or infrastructure. At the opposite extreme, a emergency incident may involve the community or the entire region, cause tremendous damage, and involve State and Presidential Disaster Declarations. Emergency response training must accommodate that immediate response for unanticipated episodic emergency events such as tornados, flash flooding, controlled fire and individual animal escape as well as preparations for a major disaster.

The disaster training table-top templates below are generally based on actual historical events. The template includes pre-disaster activities and preparations to support the facility for an absolute minimum of 72 hours, which according to FEMA and Emergency Medical Services should be enough for self-sufficiency. However, actual response to real disasters often requires much longer time management. For example, Katrina resulted in two months of post-hurricane flooding including road closures, electrical, sewage and water service disruption. In a major disaster, a facility cannot rely on local emergency managers to assist as they will be focusing on human needs.

Disaster response trainings can take several hours or potentially be spread out over days. In a disaster table-top exercise, the operational sequence of events is intended to mirror

chronological events in a catastrophic disaster, which can unfold over days, and sometimes over weeks. Basics of tabletop exercises can be found in Training Methods and Techniques section above. It is important to remember that table tops, drills or exercises, especially complex ones, should only be attempted when personnel know the plan. This tests their ability to follow the plan as they have been trained. These examples are the most applicable for larger facilities, but smaller facilities will see scalable elements they can use in designing their own complex tabletops.

Tabletops are a Beginning of Disaster Preparedness

The exercise template provides a skeleton and a starting place, but as in real situations unknowns occur. The leaders of the exercise are expected to inject additional challenges unique to the facility and scenario. An initial table top exercise might exercise the plan in a somewhat uncomplicated scenario. With increased proficiency, the facility might then address a more complex scenario. It's usually best not to exercise a worst-case or "doomsday" scenario on a first effort.

The exercise planning team should create a **near complete table-top plan**—with injects before the training begins. While some basic information should be shared ahead of time, critical information should be released to participants at the appropriate time within the training event through "injects" to replicate an eruption of challenges that could arise in an actual disaster. Additional challenges may be identified and discussed by any participant to enhance the training effectiveness (e.g., the current transport vehicles have mechanical problems and are currently in the shop at the time of the exercise).

To reiterate:

As stated above, the general goal of a tabletop exercise is not only to practice the plan already in place. That's only a good first step. One of the most important concepts for any tabletop exercise is for the Incident Commander to pose the Injects and or Situation Reports that are may stress the facility's existing plan. In fact, the some Injects could pose issues that the facility planning team might not have considered. The participants may need to use flexibility in implementing those existing plans. In all likelihood, you will have to do so in a disaster.

Additional injects could include non-functioning fire hydrants, inoperable transport vehicles, or pregnant animals that cannot be moved. What happens if key personnel are injured? Who takes over their tasks? What if there are insufficient anesthetics/sedatives?

If conditions at the facility the day of the Tabletop exercise interfere with the existing plan, they should not be 'glossed' over. The staff should be forced to create alternative plans to deal with the existing deviation.

Multi-day Disaster Training Templates

Disaster training can be designed to address extended periods of institutional disability or anticipated disasters with preparation lead time. Injects are listed in Daily Situation Reports. Like an emergency drill, which must be initiated and completed within a realistic time frame, a disaster table-top will have time limitations. Disaster tabletops could play out over a supposed period of days or even weeks, but often time compression will be used to allow for manageable play. A disaster table-top exercise can be performed "real time" as it would unfold chronologically with:

- (1) At least one Daily Situation Report³ per day at a morning leadership meeting.
- (2) Assignments given to appropriate personnel to be accomplished prior to the next Daily Situation Report.
- (3) Disaster progression prediction updates.
- (4) Unexpected new challenges, or injects, identified by either the leadership or exercise leaders.

Alternatively and most commonly for training purposes, periodic situation reports can also be provided sequentially over several hours of a whole day. The key is to provide sufficient time between situation reports for personnel to complete assignments from the previous report before moving on. The table-top exercises at an institution may run faster as personnel become better prepared, and if Memorandum of Understandings (MOUs) and Mutual Aid Agreements (MAAs) with vendors, sister institutions and transporters are in place.

When possible, involve the same outside agencies in the exercise that would be involved in an actual disaster. Generally, local Emergency Management, law enforcement, state veterinarians, U.S. Department of Agriculture – Animal Care (USDA-APHIS), FEMA and animal transporters are eager to participate. Most federal agencies have experience with table-top exercises and can be excellent resources for training operations. REMEMBER if any 'walk throughs' or actual exercises involve some of these partners being on the facility grounds, make sure that the outside world is aware it is only an exercise. Posting signs that an exercise is in progress is suggested.

Written Reports

Written reports from the FIC and exercise leaders concerning assignments should be submitted at the beginning of the next Situation Report meeting. Following the completion of every training exercise, two types of follow-up evaluations should occur. First, a discussion immediately at the completion of the exercise should occur to get the immediate impressions of the participants concerning the training. Sufficient time for what is often referred to as a "Hotwash" should be factored into the training schedule.

³ A Situation report is a recurring report that is designed to update a particular occurrence or event. The Situation Report (or Sitrep) should be used in actual incidents as well as training tabletops, exercises and drills to simulate an actual incident and response.

Second, a specified time should be allowed for more contemplative and retrospection of the in the form of written After Action Reports (AAR). They should be submitted by all leaders (potentially all participants). See the Homeland Security Exercise and Evaluation Program (HSEEP) AAR template resource listed in the References section at the end of this annex. The template is only a suggested format but two criteria should be considered. Every criticism submitted should be accompanied by a specific suggestion for improvement/resolution of the challenge. Second, templates should be set up along Incident Command Structure to facilitate integration with State EMS/Fire Service/FEMA disaster response.

Make the exercise challenging, but not overwhelming on the first attempt. Working thru the challenges will improve performance and build confidence for responding to an actual disaster. This is an exercise! Mistakes are expected, if not encouraged, as a learning experience.

The following example can be scaled; it is not only for a larger facility. How could this exercise be adapted to a smaller one, where there are fewer people? What positions in a smaller facility will need to shoulder additional responsibilities?

Template 1

Advance Warning Regional Flood

Historical flooding events have been one of the most common disaster scenarios. Very few locations are exempt from flood risk. Swift-water flooding requires another level of expertise and is not addressed in this table-top template. If a facility is located near moving water and anticipates swift-water inundation, it should seek additional training for disaster management personnel, which is available throughout the nation (ex: Swift Water Rescue/Swift Water Animal Rescue Certification).

Actual incidents, such as the Mississippi drainage system flood May 2011, provide excellent learning opportunities for advance warning flooding as do predictable hurricanes like the Katrina event. As early as May 4, 2011 the Mississippi flood surge of up **to 57 feet** above flood stage in southern LA and MS was predicted to occur between May 20 and 23. That lead time provided over two weeks for preparation. Hurricane Katrina was predicted one week ahead of the event. The path for the hurricane's cone of probability was determined to be along the Gulf Coast and within days of landfall the approximation of strength and landfall was closely defined. The scenario below illustrates how the lead time can best be used to mitigate catastrophe.

This is an example of an exercise, using basic Incident Command organization. It is highly recommended that FICs become familiar with the Incident Command system. Training for ICS is available either on-line or in a classroom. For basic information on ICS organization to assist with this sample exercise, the following link may be useful: <u>http://www.usda.gov/documents/ICS100.pdf</u>

No doubt your scenario will differ, because of your construction, animal inventory, etc. Your Assignment List will vary.

Scenario: River Flooding

This scenario is provided **only as an example**, your needs may certainly differ. This scenario is provided so the reader can look at the various steps that may be needed in a large response. It is highly recommended that you develop your scenarios for disaster preparedness with the stakeholders familiar with the ICS system.

Situation Report Day 1

A flood warning has been issued by the Meteorological Service that the river that runs through your facility will crest in five days. It is expected to crest below the lowest portion of facility's property. Regional utility disruptions and road closures are anticipated. Additional precipitation is expected. (Assume that all deliveries will be disrupted or halted.)

Assignment List:

Exercise Controller

• Controls and develops the exercise and distributes injects.

Facility Incident Commander (FIC)

• Lead and conduct the disaster table-top exercise. The idea is that the FIC would lead the exercise as if they were managing the incident.

* Logistics/Acquisitions

Commissary

- Inventory food resources and approximate number of day's reserve.
- Identify food stuffs that must be kept fresh or for which long-term storage is impractical (e.g., koala eucalyptus, live prey/crickets).
- Identify perishable food stuffs that will spoil should a power interruption occur.
- Identify the number of backup generators needed to keep perishables safe.
- Inventory amount of backup fuel stored and calculate average consumption rate.

Operations

Animal Management Curator

- Identify animal enclosures/habitats most at risk for flooding (i.e., lowest points in the facility). Specify whether the entire enclosure is at equal risk or if the animals have access to higher ground areas (e.g., hilly hoofstock pasture or elevated primate yard with night caging below).
- Identify animal species at greatest health risk if the habitat becomes flooded.

- Define the equipment, and its location(s), that is most critical to animal management and life support (e.g., water filtration, electrical chute doors, and waste removal equipment).
- Identify species most likely to escape in a flood (e.g., outdoor crocodilians, tigers in moated enclosures, low hoofstock fences).

Facilities/Maintenance

- Review facility maps that were made using U.S. Geological Survey (USGS) topographical information including entire facility and surrounding watershed.
- Rank specific buildings/facilities/structures by height above potential flood stage.
- Identify most vulnerable components within those structures (e.g., moisture labile equipment, electrical services, and pumps).
- Inventory emergency generators, alternative communications equipment and available vehicles, especially those not routinely or recently used.

Veterinary Medical Operations

- Inventory therapeutic drugs and medical supplies; identify potential shortfalls.
- Inventory all capture/immobilization equipment and pharmaceuticals.
- Determine the number of non-reusable darts and drug volumes that are readily available.
- Identify hard copy records for transfer to off-site relocation, if required.

Administration

Personnel

- Identify interim off-site satellite office.
- Draft various press releases to be finalized as the event progresses.
- Identify personnel to record documentation of all preparation activities.
- Identify key hard copy documents to be relocated, if required.

Information Technology

- Perform additional/redundant backup to be stored offsite, if required.
- Coordinate with facilities concerning alternative electrical sources.

Security

• Communicate Situation Report and contingency plans to any Security Detail and to visitor services, if appropriate.

Situation Report Day 2

Meteorological predictions include continued precipitation and revised high-water crest estimates to <u>definitely include</u> the low lying portions of the facility property. Local roads are open and traffic is clear. All major roadways are still open and traffic volume has increased.

INJECT: The health department issues an advisory that flooding of sewage facilities upstream may have contaminated the public water supply. Potable water supply may be interrupted later this week and electrical service will be shut off to mitigate possible electrocution and electrical equipment damage risk. No exact date/time was provided.

Assignment list: All exercise leaders submit reports from Day 1 assignments

* Facility Incident Commander (FIC)

• Contact State EMS/Mayor/Governor to inform them of plans and request a seat at the Mission Support Team (MST) Daily Situation Report meetings.

Logistics/Acquisitions

• Plan to acquire replacement and contingency resources.

Commissary

- Draft list of non-perishable items that should be ordered immediately.
- Contact commissary suppliers and transporters to secure agreement that they have the inventory and confirm the anticipated delivery dates.
- Identify contact information for at least one alternative food and transportation source.
- Submit list and coordinate with facilities/maintenance concerning critical commissary electrical equipment (e.g., refrigerators, stoves, food processors).
- Inform animal management curatorial personnel in writing of potential shortfalls in perishables and suggest non-perishable alternatives.
- Calculate and submit volume of safe drinking water reserves (bottled) for staff for at least 72 hours. Confirm availability as local retailers may be sold out.

Operations

Animal Management Curator

- Create and submit written plan for animal relocation within facility in areas predicted to flood.
- Identify additional onsite temporary holding locations if additional animals must be relocated.
- Discuss USGS topographic map with animal care personnel regarding relocation or contingency animal holding options.
- List species considered for sheltering-in-place where flooding poses minimal risk (e.g., waterfowl, aquatic mammals, large pastures with high ground and high fences).

- Review list with FIC and emergency leadership and coordinate with facilities/maintenance, to ensure critical functions retain power/resources in animal management areas (e.g., filter pumps, emergency lighting).
- Identify temporary holding or alternative plans for species with escape potential.

Facilities/Maintenance

- Submit written recommendations for location and number of flood water sump pumps.
- Submit calculations for number of sandbags and amount of sand required to mitigate building flooding under current predictions.
- Share and discuss USGS topographic maps with facilities personnel.
- Submit relocation or mitigation plans for critical equipment with potential for flood damage (e.g., remove from basements, unhook electrical service).
- Start, test and evaluate function of emergency equipment, including alternative modes of communication.
- Submit test results and required immediate repairs/modification recommendations.
- Include recommendations for new equipment purchases (e.g., generators, emergency lighting, sump pumps, smart phones).
- Submit calculations for fuel required to run emergency equipment for 72 hours.
- Submit list of fuel storage containers at risk of water inundation.
- Submit list of hazardous materials at risk and specific locations (e.g., radiograph developer/fixer, fertilizer, fuels, large-volume cleaning products).

Veterinary Medical Operations

- Contact State Veterinarian's Office to request a seat at the State MST meetings with State Veterinarian.
- Discuss options for a rapid relocation of animals with State Veterinarian.
- Contact USDA/APHIS concerning expedient health certification/testing, if required.
- Calculate volume and submit list of immobilization pharmaceuticals required for all individual animals identified as potential relocations by animal curatorial personnel.
- Identify and list equipment/supplies required to transport labile medical equipment at risk (e.g., radiograph machine, drug safe).
- Identify hard copy records to coordinate offsite relocation with administration documents.
- Submit request and coordinate contingency electrical/resources for critical systems with facilities and the timeline required to do so (e.g., ultralow freezers, necropsy freezer, bio-sample storage).

* Administration

Personnel

- Submit written statement to inform all personnel of contingency plans and provide opportunity for questions.
- Update Draft public announcement based on expectations.
- Identify containers/equipment required to relocate to offsite location.
- Request residential geographic information from personnel and compare to regional flood predictions.
- Provide list of personnel likely to be personally displaced.
- Submit plan of options for how to assist personnel who may be personally affected both for humanitarian reasons and, ideally, to allow them to continue to work (e.g., bring RV housing to facility property, modify shelter buildings to accommodate overnight residence, identify shelter for pets, if applicable).

Information Technology

• Identify and report IT equipment that may require relocation to prevent water damage.

Security

- Acquire commitments from personnel to serve during the disaster event.
- Contact local law enforcement and local EMS for anticipated evacuation orders.

Situation Report Day 3

Meteorological predictions continue to decline; predicted water crest expected to be even higher than originally predicted. Flood height expected to include over half of facility property. Several enclosure moats likely to fill. Numerous personnel likely to have personal property flooded and will require time off to evacuate. Regional elementary and high schools will be closed until post-disaster.

INJECT: Two primary roads expected to flood by Day 4 and large highways to be designated unidirectional traffic flow.

Assignment list: All exercise leaders submit reports from Day 2 assignments

✤ <u>FIC</u>

- Confirm dates/times for State and/or Federal MST Daily Situation Report meetings.
- Assign an exercise leader to attend if FIC unable to do so.
- Logistics/Acquisitions

Commissary

- Contact and report on resource providers and transporters to confirm shipments and recheck delivery date and time.
- Provide written list of alternative routes for delivery assuming roads will be altered. The inject altered the original plans.
- Provide plan for relocation of critical commissary equipment or alternative operations.
- Submit alternative options for food storage outside the commissary facility (e.g., alternative refrigeration options, relocation options for dry food).
- Fill freezers with water containers to freeze and provide temporary refrigerant and potable water if access to electricity or water becomes lost.
- Submit list of alternative diets based on non-perishable food items for specific species of concern.

Operations

Animal Management Curator

- Contact animal owners/SSP/TAG managers for animals not owned by the facility.
- Report recommendations/requirements from owners/SSP/TAG managers.
- Submit list of transport equipment required to relocate specific animals out of facility.
- Update and report contacts willing to accept animals.
- Identify specific species/individual animals without temporary housing identified.
- Report species relocation sequence and which animals will be moved today.
- Discuss USGS topographic map with animal care personnel and update flood predictions.
- Report specific species of greatest concern for post-disaster environment. (e.g., mold sensitive species such as penguins, species unable to survive long-term poor water quality).
- Report relocation/management changes for species with escape potential.

Facilities/Maintenance

- Submit cost estimates for specific new equipment acquisitions, extra batteries, extra fuel, etc., and provide additional needs list and identified sources.
- Submit time estimate to fill and install sandbags and building sump pumps.
- Share and discuss USGS topographic maps with facilities personnel regarding new prediction ramifications.
- Submit time estimates for relocation/protection of critical equipment from all buildings.
- Report results of emergency equipment tests and corrective measures.
- Identify sources, cost and earliest delivery date for chemical toilets.

Training Annex

- Contact Army Corps of Engineers for any specific recommendations or planned activity for the facility location.
- Submit written plan for relocation/security for hazardous materials (Haz-Mats) and fuel in potential flood areas (e.g., propane tanks float, ammonium nitrate fertilizer and diesel fuel, etc.).

Veterinary Medical Operations

- Contact outside facility's veterinary services and report availability of additional emergency equipment, immobilization equipment and pharmaceuticals potentially required to evacuate all species.
- Provide written plan for rapid evacuation of animals, including estimated timeline.
- Report USDA/APHIS agreements to assist with expediting health certifications and other documentation required.

Administration

Personnel

- Submit written personnel information statement of current contingency plans.
- Submit cost estimate and sources for alternative housing for personnel (e.g., RV rentals).
- Submit estimate of emergency (non-perishable) human food required for at least 72 hours for on-site personnel and operations in lieu of grocery store closures in local area (e.g., Meals Ready to Eat (MRE), canned food).
- Submit plan to assist personnel with child care so they may continue to work in lieu of all school closures and day care (e.g., education department personnel, facilities).
- Set up emergency volunteer criteria and evaluation of specific skill sets required (e.g., nurses/paramedic docents, child care professionals, water rescue certifications).
- Present plans for overtime and payroll continuity in event of administrative relocation to ensure personnel can pay their own bills.
- Determine if the creation of an offsite administrative hub is appropriate as the facility becomes more compromised.

Security

- Acquire commitments from staff to serve during the disaster event.
- Report results of local law enforcement contact and recommendations.
- Identify at least two escape/transport routes and re-entry roadways still open.

Situation Report Day 4

Army Corps of Engineers announce diversion of flood water crest that will increase flood level in the facility to include three-fourths of property and likely to severely flood many buildings including Administration and Veterinary Hospital, all moats and near the top of the perimeter fence around hoofstock holding areas. Flood water is predicted to require up to two weeks for a return to normal water table. Only a few storage buildings and parking lots will remain above flood level.

INJECT: A mandatory human evacuation has been issued for the local region, all major roads are unidirectional evacuation routes and electricity and public water supply will be turned off starting tomorrow and may be off for up to a week.

Assignment list: All exercise leaders submit reports from Day 3 assignments

✤ <u>FIC</u>

- Secure egress/ingress waiver from EMS/law enforcement to allow necessary personnel to cross barriers for work.
- Inform EMS/law enforcement of the number and names of the individuals sheltering-in-place.
- Provide EMS/law enforcement a list of animals to remain on site including the human health risks (carnivores/venomous/primates) should entry to facility be required.
- Prepare written statement to members of support groups/board members/donors.
- Consider specific donation requests for public dissemination.
- Attend or send designee to MST Daily Situation Report meeting.
- Assign an exercise leader to attend if FIC unable to do so.

Logistics/Acquisitions

Commissary

- Report on resources already delivered and those not yet delivered.
- Provide best estimate of next potential delivery and critical supply shortages.
- Report status of equipment and commissary relocation/contingency for continuity of operations.
- Report needs alteration based on animals to be relocated out of facility.

Operations

Animal Management Curator

- Submit list of animals already, or to be, relocated ASAP.
- Estimate time line for animal relocations and which animals will be moved today.

- Update and report contacts willing to accept animals.
- Identify specific species/individual animals without temporary housing identified.
- Discuss USGS topographic map with animal care personnel and update flood predictions.
- Report relocation/management changes for species with escape potential.

Facilities/Maintenance

- Submit request for additional resources required to fill and place sandbags and protective equipment.
- Confirm acquisition of previously described equipment and supplies.
- Provide updated list of additional resources identified since last Situation Report.
- Submit updated time estimate to fill and install sandbags and building sump pumps.
- Share and discuss USGS topographic maps with facilities personnel regarding new prediction ramifications.
- Report information conveyed from Army Corps of Engineers and specific recommendations.
- Report final results of emergency equipment tests and corrective measures.
- Submit written plan for relocation/security for Haz-Mats and fuel.

Veterinary Medical Operations

- Report predicted timeline for removal of remaining animals requiring relocation.
- Report currently hospitalized animals requiring special management.
- Identify by name and location potential outside veterinary assistance.
- Report on any loans requesting emergency veterinary equipment and immobilization resources.
- Report instructions/information conveyed from State Veterinarian and USDA/APHIS representatives.
- If pets of those personnel sheltering-in-place will be housed on site, identify potential quarantine options (#1 reason people refuse to evacuate).

* Administration

Business Personnel

 Access and test the remote payroll and accounting system set up in advance of the training event. If it does not exist, submit proposal for institution of an alternate (offsite?) system.

Personnel

- Report planned location for temporary housing, chemical toilets and any modifications required (e.g., rental RV temporary setup such as parking lot).
- Submit order request for emergency food and water with specific volumes and storage location.
- Discuss plan to assist personnel with child care (e.g., education department personnel, possible sites).
- Submit emergency volunteer management plan and descriptions of skill sets.
- Confirm payroll continuity plan.

Security

• Present modification options to secure facility from human entry in light of fence and perimeter compromise.

This scenario was designed to run for 4 days. The tabletop itself could be run the first thing each morning, with updates being given each morning, with participants given the day to identify and complete their tasks. As with all tabletops or other exercises, conduct a Hotwash and After Action Report to identify what worked, and what didn't so appropriate plan updates can be made.

Template 2

Explosion

An explosion occurring on the grounds of a zoological facility, regardless of its cause, could cause tremendous injury to visitors, staff and animals. Serious infrastructure damage could take days or months to repair. In addition, this scenario has a greater likelihood that there is human injury involved in the event. This will complicate a response.

The scenario that is proposed below differs from Template 1 Advance Warning Regional Flood in a key aspect. An explosion allows NO time for preparation. While the flooding became worse for the fictitious zoo over a 4 day period, this exercise is designed to test the immediate response of the facility to the incident.

This tabletop scenario is best conducted in a single morning: this would give participants a short time to react and report, thereby closely resembling the timing of an actual explosion response. As with any other tabletop exercise, written reports from the FIC and exercise leaders concerning assignments should be submitted at the beginning of the next Situation Report meeting. Situation Reports will need to be generated swiftly, but sufficient time to complete assignments will still be needed before moving to the next level of the exercise. Remember; try to customize it to your facility. In the example below, we complicate the explosion scenario with a seal escape. Tigers might be a more likely animal at your facility.

Because this is a fast-paced disaster, many elements will play out quickly. Situation Reports and new assignments will come in rapid succession. Following every training exercise, two types of follow-up evaluations should occur. First, a discussion immediately at the completion of the training event should occur to get the immediate impressions of the participants concerning the training. Sufficient time for what is often referred to as a "Hotwash" should be factored into the training schedule.

Second, a specified time should be allowed for more contemplative and retrospection of the in the form of written After Action Reports (AAR). They should be submitted by all leaders (potentially all participants). See the HSEEP AAR template resource listed in the References section at the end of this annex. The template is only a suggested format but two criteria should be considered. First, every criticism submitted should be accompanied by a specific suggestion for improvement/resolution of the challenge. Second, templates should be set up along Incident Command Structure to facilitate integration with State EMS/Fire Service/FEMA disaster response.

Remember, these are not master lists of what must be done by your facility; rather, they are lists of tasks that may need to be done to manage a disaster incident. The scenarios that are created for your facility may not be as complex. To have an effective tabletop, the participants must have had training to allow an adequate response. Building more complex scenarios over time will challenge the facility and increase overall preparedness.

Scenario: Explosion

Situation Report Time 0

It is 10:30 on a Tuesday morning during early June. Among the other guests, the facility just welcomed 15 bus loads of children that will be on grounds as part of their end-of-year field trip. The animal caretakers are in the process of their last morning tasks of feeding and cleaning up indoor holding areas after the animals were placed on exhibit. Suddenly, a tremendous explosion occurs. It has occurred in the building that houses the filtering system for the marine mammal exhibit. This building is adjacent to a park-like feature where field trip participants usually assemble. Flames can be seen in the immediate area.

A first question that should be asked is: *What are the most immediate needs?* Break down the exercise in chunks for simulation. These are only suggestions of elements to consider in the exercise. (These tasks are not in particular order of importance.) How would this play out in your facility?

Assignment List:

- Exercise Controller
 - Controls and develops the exercise and distributes injects.

Facility Incident Commander (FIC)

• Lead and conduct the disaster table-top exercise. The idea is that the FIC would lead the exercise as if they were managing the incident.

Logistics/Acquisitions

• Assess what supplies, equip etc required to immediately respond to the scene?

Operations

Animal Management Curator

- Make contact with animal care workers in areas nearest the explosion. This
 may necessitate alternative communication modalities. Account for all
 personnel that are on duty in your department. Identify the curator to liaise
 with incident command as needed.
- Identify any animal care personnel that may have been injured in the blast

Facilities/Maintenance

- Make contact with facilities/maintenance workers in areas nearest the explosion. This may necessitate alternative communication modalities. Account for all personnel that are on duty in your department
- Identify any facilities/Maintenance personnel that may have been injured in the blast
- Identify possible hazardous substances that could be released due to the explosion (i.e. chlorine gases.) Take appropriate precautions.
- Assist with fire suppression
- Identify the point person for facilities/maintenance to be the liaison with first responders
- Identify the facilities/maintenance liaison to Incident command
- Maps; review and determine infrastructure such as steam tunnels, power lines, gas supply lines. Determine what supply lines need to be shut down, etc

Veterinary Medical Operations

- Make contact with veterinary medical staff in areas nearest the explosion. This
 may necessitate alternative communication modalities. Identify those work
 areas nearest the explosion. Account for all personnel that are on duty in your
 department.
- Identify the vet dept staff member to liaise with incident command
- Identify any animal care personnel that may have been injured in the blast

Administration

Business Personnel

- Determine who will liaise with FIC on behalf of the administration (with Press too)
- Identify the Information Officer for the event

Personnel

- Make contact with staff in areas nearest the explosion. This may necessitate alternative communication modalities. Identify those work areas nearest the explosion. Account for all personnel that are on duty in various departments.
- Identify a person to liaise with Incident Command
- Make contact with the facility's School Group Coordinator. Access records: which school groups are visiting the facility on that day? Who is the contact person for each school that was to be on grounds? Contact schools regarding the incident.

Information Technology

- Determine extent of immediate damage to communications infrastructure
- Determine what alternative modes of communication might be needed in the short term

Security

- Immediate situation assessment
- Assure contact with appropriate jurisdictional responders such as police, fire, ambulances
- Secure the scene/crowd control
- Assist jurisdictional responders with access to the scene
- Preserving evidence
- Assist with first aid

Jurisdictional responders

- Fire control: upon arrival, they may take control of the scene
- Ambulance: upon arrival, first aid response and hospital transport
- Police: upon arrival, they may take control of the scene. Also, crowd control, criminal investigation, etc
- If the facility is conducting this as an actual exercise rather than a tabletop, actors may be utilized for institutional First Aid Responders or animal mannequins for Veterinary staff with fake injuries to assist responders in decision making and injury handling.

Training Annex

Situation Report 2

Security arrived quickly on the scene of the explosion. They immediately called 911, and arranged for a staff member to wait at the main entrance for the first responders. Security quickly assessed the scene, and noted about 6 wounded guests at the scene. Jurisdictional responders arrived on the scene within 10 minutes of the call. First responders put out the fire and are transporting the last of the wounded to nearby hospital. The various departments: Animal management, veterinary, facilities, and personnel have accounted for all of their employees.

INJECT: The explosion caused severe damage to the seal pool. Chunks of the pool lip (\sim 2 ft of the pool is above grade) are strewn near the scene, and water is pouring out from the top of the pool. Several of the monk seals have escaped and have made their way toward the park.

Assignment list: All exercise leaders submit situation reports from Time 0 assignments.

Facility Incident Commander (FIC)

• Provides overall Sit Rep and New Injects

✤ Logistics/Acquisitions

- Determine what materials (fencing/gates etc) will be needed to secure the scene and close off (if applicable)
- Provide list of worst case scenario potential given current Sit Rep

• Operations

Animal Management Curator

- Inventory of animals nearest the blast site
- Determine what animal enclosures are adequate for immediate future
- Assist with vet services in setting up triage to stabilize/treat animals as necessary
- Determine temporary housing necessary for any animals displaced due to the explosion
- Determine transportation needs, whether it be across the facility or to neighboring institution
- Assist with animal capture as needed
- Provide list of worst case scenario potential given current Sit Rep

Facilities/Maintenance

- After initial scene is secured, determine damage to buildings and infrastructure
- Provide list of worst case scenario potential given current Sit Rep

Veterinary Medical Operations

• Identify any animals that may have been injured as a result of the blast

- Mobilize animal capture team.
- Triage/stabilize/treat animals as needed
- Provide list of worst case scenario potential given current Sit Rep

Administration

Business Personnel

- Prepare statements for families seeking information, liaise with hospitals, etc
- Provide written Press Release templates and/or verbal statements for PR interviews by Director or designee

Personnel

• With school representatives, determine location of all students: either accounted for, in transit or at hospital, missing

Information Technology

• Update facility website to inform public that facility is closed

Security

- Facility security now assists jurisdictional responders in a secondary role of crowd control, etc
- Direct the zoo evacuation

Jurisdictional responders

- Continue with fire suppression, first aid, hazmat issues and investigations as needed
- Prepare to communicate with zoo staff members about the incident

Situation Report 3

Two hours after the explosion, the wounded humans have all been treated, or transported to hospitals as needed. The seals have all been captured and are in temporary holding area. The immediate scene has been secured. What additional work needs to be done? INJECT: Plumbing equipment was stored in the area of the filtration/pumping explosion. One of the escaped endangered monk seals is pregnant and should not be anesthetized for transport. Water has flooded the Veterinary hospital to 3 inches deep due to the pool leak plus the Fire Dept. water and foam for controlling the remaining fires and cinders.

Logistics/Acquisitions

 Determine what equipment/supplies/construction will be needed for immediate repair/replacement of additional structures found to be compromised.

Operations

Animal Management Curator

- Arrange for the transfer of the seals to a secure spot within the facility for temporary housing. Determine if animals will need to be moved to an off-site location while longer term repairs are being made
- Work with veterinary staff to determine special needs of the pregnant seal for short term housing and transport

Facilities/Maintenance

- Assist with assessment of the pool, animal hospital, etc
- Determine state of all mechanical services, water, electricity, etc.
- Determine the need for auxiliary support such as generators, etc
- Begin to estimate time required to complete repairs so animal holding/transfer plans can be made.

Veterinary Medical Operations

- Assist with animal needs as necessary
- Provide complete medical evaluation of animals involved
- Provide health-related concerns with foam used to extinguish the fires
- Provide list of equipment and Vet Operations impacted by the existing hosp. damage
- Provide list of animals which may require relocation from the Hosp. holding:
- Determine appropriate way to manage/move the pregnant female

Administration

Business Personnel

- Continue to provide updated information to families, media, etc
- Determine financial resources necessary for adequate **immediate** response, i.e. petty cash, credit cards, line of credit, etc

Personnel

- Check in with supervisors to determine changes in staffing needs or temporary duty assignments
- Submit written cost estimate for alternative staffing requirements (additional personnel, overtime required, etc.)

Information Technology

• Ensure communication with stakeholders: activate phone tree to notify employees of change in status

- Assess damage to servers, etc and other data storage devices
- Provide specific alternative options in the event of facility network/server failure

Security

- Continue zoo evacuation and security
- Report injuries and challenges faced during evacuation

Jurisdictional responders

• Include outside responders in "Hotwash" discussions

This scenario was designed to run for approximately 3 hours of rapid decision-making. The tabletop itself could be run the first thing each morning, with updates being given each morning, with participants given the day to identify and complete their tasks. As the facility becomes more and more familiar with the plan and how these exercises work, attempt to play them out in 'real time'; having immediate tasks accomplished within hours rather than days. As with all tabletops or other exercises, conduct a Hotwash and After Action Report to identify what worked, and what didn't so appropriate plan updates can be made.

Disaster Planning Table-top Exercise Recap:

- Additional concerns of personnel will arise and require responses. Encourage personnel to provide solutions rather than focusing on potential problems.
- The above exercises provide a starting place for facilities to consider when developing their own scenarios.
- It is designed as a beginning template only and the facility should expand the training according to its Risk Assessment, species, logistics, and available personnel. Other potential table-top exercises might include:
 - Animal Disease Outbreak
 - What additional challenges should be included? Quarantine considerations, etc
 - What changes need to be made to biosecurity to prevent additional cases, etc?
 - Human Disease Outbreak
 - What happens if an outbreak affects staffing at the facility? Who will cover additional shifts?
 - Marine or river Toxic Chemical/Petroleum Contamination
 - How would this affect potable water, or water needed to maintain aquaria?
 - Nuclear or radiological incident

- Would there be a need to shelter-in-place any quests or visitors? How would that be done?
- Predicted Tsunami
 - There is some time to plan, but not much time, perhaps only hours.. What could be accomplished with a relatively short preparation time?
- Regional uncontrolled fire
 - What evacuation provisions would need to be taken for animals and humans?
- Wild Land/Forest Fires with changing winds that threaten to encircle the area
 - This scenario occurs in and around San Diego and all over CA

Supplemental Training Courses and Resources

Consider Supplementary Training and Opportunities

The following are courses that could be offered or hosted at a facility that would increase the overall preparedness of personnel and volunteers. These are well-known agencies that offer basics at little or no cost, often bringing a trainer to your facility.

- 1. Offer first aid training. (See American Red Cross.)
- 2. Offer Automated external defibrillator training (AED) (See American Red Cross)
- 3. Offer Cardiopulmonary Resuscitation (CPR) training. (See American Red Cross.)
- 4. Offer Disaster Response Training Courses (Local or on-line American Red Cross).
- Offer on-line Incident Command System (ICS) training. (See: http://emilms.fema.gov/IS100b/index.htm.)

Training Opportunities

- American Association of Zoo Keepers (AAZK): On-site zoo/aquarium management programs are held at Michigan State University, George Mason University and Plymouth University (United Kingdom). The courses focus on different management issues, including education to aid scientists working in areas of captive breeding, management of exotic animal species, and wildlife conservation. Visit <u>http://aazk.org/zkcareer/management_programs.php</u> for more information. Another graduate course at Oregon Coast Community College prepares students to work in aquatic animal husbandry at zoos and aquariums as well as related businesses including aquaculture facilities, fish hatcheries, and ornamental fish enterprises. Information on this program can be found at: <u>http://aazk.org/zkcareer/aquarium_marine.php</u>.
- American Red Cross: Offers onsite CPR courses, water safety courses, and more. To find what courses the local chapter offers, visit: <u>http://www.redcross.org/</u>
- Association of Zoos and Aquariums (AZA): These professional training courses are conducted by highly trained aquarium and zoo staff. Courses include captive animal

management and leadership training. The courses can be used toward graduate credit through George Mason University, and AZA gives scholarships for these training programs. For more information and other training opportunities visit: http://aza.org/professional-training/

- Defense Medical Readiness Training Institute: Staffed by professionals from the Army, Navy, and Air Force, this service offers courses in trauma care, burn care, disaster preparedness, humanitarian assistance and more. The courses are offered on site in Fort Sam Houston, Texas and other locations as well. Visit <u>http://www.dmrti.army.mil/index.html</u> for more information.
- Doctoral Degree opportunities in Disaster Preparedness: <u>http://www.training.fema.gov/EMIweb/edu/collegelist/emdoctorlevel/</u>
- FEMA's Center for Domestic Preparedness: The only federally chartered Weapons of Mass Destruction training center, located in Anniston, Alabama. The center offers training in chemical, biological, radiological, nuclear and explosive weapons. State or local emergency responders are completely funded by the Department of Homeland Security to take these courses. For more information, visit: <u>http://cdp.dhs.gov/</u>
- FEMA Emergency Management Institute (EMI)-resident courses: Training for federal, state, local and tribal government officials, volunteer organizations, and public and private sectors to raise awareness about disaster preparedness. The courses range from natural hazards preparedness to technological hazards to professional development and leadership. For more information or to enroll, visit: http://training.fema.gov/EMICourses/EMICourse.asp
- National Alliance for State Animal and Agricultural Emergency Programs (NASAAEP) NASAAEP is an organization dedicated to collecting best practice information on animal disaster preparedness and response. They have an on-line library of training resources, and other materials. For more information about participating NASAAEP and membership information, visit www.nasaaep.org
- Rescue 3 International: Offers onsite courses ranging from water and ice rescue to technical animal rescue. For more information go to http://www.rescue3international.com/R3home.php
- Western Institute for Food Safety and Security (WIFSS): WIFSS offers onsite courses dealing with emergency awareness, preparedness, response, recovery and more. The courses are one day long, and take place at select places around the country. For more information on these classes and other training opportunities visit <u>http://wifss.ucdavis.edu/</u>

Custom On-Site Training Courses

Mark Lloyd, DVM personal on-site training: Dr. Lloyd provides Wildlife Facility Disaster Training including: individualized Facility Evaluation/Inspection, Risk Assessment, Needs List Construction, Training Program and Emergency Agency Consultation. Short didactic courses are available for designated facility Emergency Managers alone providing complete basic knowledge to construct a plan. In addition, the program can be expanded incrementally based on the facility, to provision a complete Written Institutional Plan as final product. Disaster Training Management based on an existing plan and Emergency Agency Liaison Assistance pre and post event can be requested. Dr. Lloyd's background includes terrorist event response, agricultural infectious disease eradication, fire and meteorological event responses, federal team incident command structure, zoological accreditation, petroleum product decontamination, rescue helicopter flight crew ASAT, Swift Water Animal Rescue, CA Fire Service Large Animal Rescue, and multi-species medicine and husbandry. Contact <u>MarkLloydDVM@msn.com</u> or 706-742-7888 for more information, credentials, and scheduling availability.

North American Emergency Management: This company will help create drills and table top exercises for different institutions. It also offers emergency management and emergency response courses. Visit <u>http://www.naem.com/naem/train.html</u> for more information.

Online Training Opportunities

- FEMA EMI Independent Study Programs: A free distant learning course for the American public. These courses provide training for professionals and volunteers that intend to promote disaster preparedness. Specific Animals in Disaster courses are offered. For more information, including offered courses, visit <u>http://training.fema.gov/IS/crslist.asp</u>
- The Humane Society of the United States; Disaster Animal Response Team (DART) Training: This online training involves introductory courses in the incident command system, emergency management system, emergency animal shelters, responder health and safety and more. For more information see <u>http://www.humanesocietyuniversity.org</u>
- Humanitarian Resource Institute: This institute offers a foreign animal disease online course designed for medical and veterinary professionals. The online courses focus on recognition of foreign animal disease. For more information or to complete the course, visit <u>http://www.humanitarian.net/biodefense/fazdc/fadc1/</u>
- Life Safety Associates: These online programs offer emergency response and safety training for business and industry. The courses include training in written plans, emergency disaster planning, OSHA compliance services and more. For more information visit: <u>http://training.lifesafety.com/</u>
- National Animal Health Emergency Response Corps (NAHERC): These online courses were created by the Center for Food Security and Public Health. The purpose of the training is to increase awareness of bioterrorism, agroterrorism, foreign animal diseases and zoonotic diseases, provide tools on biological risk management and assist local and state governments to prepare for animal emergencies. Over 35,000 people

have been trained by people from the NAHERC. For more information on the courses visit: <u>https://naherc.sws.iastate.edu/</u>

- National Biosecurity Resource Center for Animal Health Emergencies: This center offers a graduate certificate program in homeland security training, including courses in euthanasia and carcass disposal. For more information, visit: <u>http://www.biosecuritycenter.org/article/HLScourses</u>
- United States Department of Agriculture on line Incident Command System Training: A number of ICS courses are available on-line thru the USDA. For more information <u>http://www.usda.gov/wps/portal/usda/usdahome?navid=HOMELANDICSTR&navtype=</u> <u>RT&parentnav=HOMELANDICSC</u>
- University of Wisconsin Disaster Management Center (DMC): The DMC offers selfstudy courses in English and Spanish ranging from disaster preparedness to environmental health management after natural disasters. To see the description of all courses offered visit <u>http://dmc.engr.wisc.edu/Courses/index.lasso</u>

Training Opportunities Available both Online and On-Site

- ASIS International: This corporation offers online, onsite, international, and private training for professionals wanting to have increased security training. ASIS also offers certification programs, including Certified Protection Professional (CPP®), Professional Certified Investigator (PCI®), and Physical Security Professional (PSP®). Visit http://www.asisonline.org/education/index.xml for more information.
- Environmental Technology Online Training and Resources: Online courses ranging from terrorism response to worker safety for disaster response. For more information on the online courses visit: <u>http://www.kirkwood.edu/site/index.php?p=28136</u> for onsite training in much of the United States visit: <u>http://www.kirkwood.edu/site/index.php?d=1094</u>
- Extension Disaster Education Network (EDEN): Animal Agro Security and Emergency Management Course; Offered online or onsite, this course discusses weather and environmental disasters, preparedness and prevention, animal emergency management, and more. Find more information about this course at <u>http://campus.extension.org/</u>
- National Safety Council (NSC): Online and onsite courses ranging from OSHA compliance to workplace safety and first aid are offered. The NSC will come to the institution's site where training is requested. Other training resources are available for purchase as well. For more information, visit: <u>http://www.nsc.org/Pages/Home.aspx</u>

Training Documents/CDs/Books/Videos Available Online

American Association of Zoo Keepers (AAZK) Resources for Crisis Management: The AAZK crisis management CD can be purchased online at <u>http://aazk.org/shop/publications/aazk-crisis-management-cd/</u> It is a compilation of manuscripts and other documents focusing on crisis management in zoos, aquariums and other animal facilities. It is searchable by author and topic.

- American Red Cross: This site offers short videos on disaster preparedness, including creating evacuation plans, preparing emergency kits, preparing emergency contact cards and more. Visit <u>http://www.redcross.org/</u> for more information.
- American Veterinary Medical Association (AVMA) Disaster Preparedness and Response Collections: This site offers a compilation of articles put together by the AVMA regarding animal emergency and response. Topics covered include: disaster response, the veterinarian's role, biosecurity and bioterrorism preparedness, and more. To access the articles visit

http://www.avma.org/avmacollections/disaster/default.asp#1

- Centers for Disease Control and Prevention (CDC): The CDC offers training in bioterrorism and bioterrorism agents, such as smallpox, anthrax, and botulism. This training is in the form of videos, recommended texts, slide shows, journal articles, and some online training. For more information visit <u>http://emergency.cdc.gov/</u> Other training opportunities are available for radiation emergencies, chemical emergencies, and mass casualties. Visit <u>http://emergency.cdc.gov/training/</u> for a full list of training opportunities.
- Disaster Prep 101: The Ultimate Guide to Disaster Preparedness: A training manual that also contains 2 CDs containing over 500 additional books and manuals. The book was put together for preparation of terrorism, natural disasters, family emergencies and networking to help others. For more information or to purchase the book, visit: <u>http://www.disasterprep101.com/</u>
- FEMA's "Are you Ready?": This guide offers information on preparing for floods, tornados, emergency recovery and more. To view the preparation guide, visit <u>http://www.fema.gov/areyouready/index.shtm</u>
- Guidelines for Police Officers When Responding to Emergency Animal Incidents: This document includes information on preparing for the response, approaching an animal, intervening, etc. The document can be found at http://www.nal.usda.gov/awic/newsletters/v11n3/11n3hany.htm
- Institutional Animal Care and Use Committee (IACUC): Disaster planning for an animal facility checklist and narrative can be found at http://www.nal.usda.gov/awic/pubs/IACUC/dis.htm#disa
- National Institute of Occupational Safety and Health (NIOSH) Pocket Guide to Chemical Hazards (NPG): The NPG is intended to provide general industrial hygiene information on hundreds of chemicals for workers, employers, and occupation health professionals. The information found in the NPG is intended to help users recognize and control occupational chemical hazards. To download or order the guide visit http://www.cdc.gov/niosh/npg/.

- Safety Advantage: Video training is offered at its website; the video topics range from incident command response to disaster workers code of safe practices. For access to the videos, visit <u>http://www.safetyadvantage.com/video.htm</u>.
- United States Department of Agriculture, Animal and Plant Health Inspection Service Emergency Preparedness and Response information for foreign animal diseases: This website has access to the "Gray Book," the seventh edition of foreign animal diseases and EPA-acceptable disinfectants for these foreign animal diseases. The website also offers educational training videos on foreign animal diseases. Visit <u>http://www.aphis.usda.gov/emergency_response/tools_train.shtml</u> for more information.
- United States Department of Transportation, Transport Canada, and the Transportation Secretariat of Mexico's Emergency Response Guide (ERG), 2004: This ERG was written for use by all emergency services personnel who respond to transportation incidents involving hazardous materials. It is primarily a guide to assist first responders in quickly identifying the specific or generic classification of the involved materials and protecting themselves and the general public during the incident response phase. An online version is available at http://environmentalchemistry.com/yogi/hazmat/erg/.
- Department of Transportation Emergency Response Guide (ERG), 2008: This is the first update to the ERG since 2004, and it contains the latest dangerous goods lists from the United Nations Recommendations, as well as from other international and national regulations. Copies are available free of charge to emergency departments through each state's emergency coordinator. The guidebook can also be downloaded from http://hazmat.dot.gov/pubs/erg2004/gydebook.htm.
- The University of California Davis Department of Natural Resources Guide to Disaster Preparedness: This document lists useful resources, video tapes and training manuals for disaster preparedness. Visit <u>http://www.vetmed.ucdavis.edu/vetext/DANR/DANRGuide2_88-90Training.pdf</u> for more information.
- The University of Florida: The Disaster Handbook: This online book includes a master guide to preparing for a disaster, web resources, and a link to other books and videos on the subject. Visit <u>http://disaster.ifas.ufl.edu/masterfr.htm</u> for the book and access to other resources.

Training DVD's

Homeland Responder Training Network: Provides DVD training resources intended for law enforcement, fire service, emergency management, security, homeland security, FEMA and military responders. For more information or to purchase the training DVDs visit: <u>http://www.homelandresponder.org/.</u>

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