

Emergency Response Plan: To be Used in the Event of an Emergency or Disaster, for the Japanese Institute of Anatolian Archaeology and the Kaman-Kalehöyük Archaeological Museum

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INTRODUCTION

The Japanese Institute of Anatolian Archaeology conservation department has been presented with the task of developing an emergency response plan, in an effort to prepare the Institute for the event of a possible emergency or disaster. The purpose of such a plan is to provide staff at the JIAA and the Kaman-Kalehöyük Archaeological Museum ready access to available emergency resources and to outline a plan of action based upon the emergency scenarios categorized in the 2010 JIAA Emergency Preparedness: risk assessment.

Plan Definition And Responsibilities

What is an emergency plan? An emergency plan establishes a chain of command, coordinates all emergency personnel, prioritizes assets, defines appropriate response procedures for any type of emergency, and provides essential information on facilities and resources.

Parties responsible for executing the plan in the event of an emergency:

- At the Museum, the Turkish Ministry of Culture (MCT) will be responsible.
- At the Institute, the Japanese Institute of Anatolian Archaeology (JIAA) will be responsible.

Institution Priorities

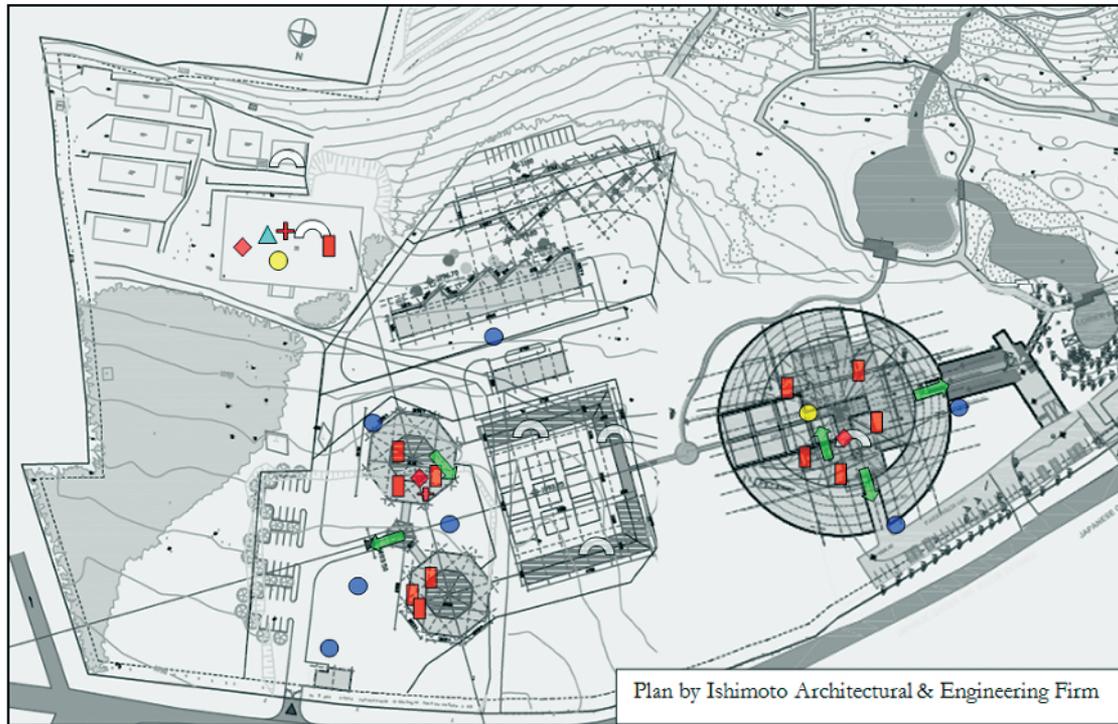
The order in which affected information, artifacts, and materials are salvaged will depend upon the value and importance assigned to them. Cultural institutions often rank their response priorities in the order of most vulnerable to least vulnerable material in terms of their degradation processes. In this scenario, plant and botanical material (including any information on paper) would come first on this list, followed by leather and skin, bone, antler, horn, teeth, shell. Next would come non-glazed ceramics, followed by glazed ceramics and glass, as well as untreated metal. Conserved metal and lithics would rank as objects that are least vulnerable and can therefore be left un-moved or un-treated longest in an emergency. However, each institution will have its own unique priority set. At the JIAA, archival information such as paper, photographic, and digital records, rank highest, followed by organic materials, registered artifacts, and so on.

PREPARATION

Anticipating Emergencies

The better we are prepared for an emergency, the faster and more effective our response will be. Planning for emergencies begins with an assessment of potential risks imposed on the safety of people, artifacts and information, taking into account pre-

SITE PLAN



Meeting point	●	Emergency supply kit	◆	Keys	▲	First aid kit	+
Exit route	➔	Telephone	⌒	Fire extinguisher	■	Water vane	●

Solid color = second floor; transparent color = ground floor

vious incidents and the statistical likelihood an event will occur again. According to the Emergency Preparedness: risk assessment written by Sofia Lo Bianco, the most probable risks at the Japanese Institute and Archaeological Museum are:

1. *Physical damage*
2. *Exposure to water*
3. *Fire damage*
4. *Theft*
5. *Biological outbreak or infestation*
6. *Danger to health and safety*

Each area of the collection should have a copy of the plan readily available. Preparation for minor emergencies may be minimal with relatively short response and recovery time, but major emergencies will often require extensive planning, assembly of

team members, decision-making and adjustments to the plan as the exact nature of the emergency becomes clearer. Staff and outside consultants may be called in to assist in an emergency, depending on the risk factors and types of damage involved.

Establishing A Team Of Emergency Response Personnel

In order for the response plan to succeed a team of individuals charged with overseeing the response must be established. Ideally, one team would exist at the Institute, and another at the Museum. A chain of command has been developed from the response personnel list, as well as a notification flowchart, with the JIAA security personnel working as a communication hub. A location will be chosen – for example, the Dig House – where team members can convene

Position	Responsibility	Name and contact information
Director	Approves emergency program policy, appoints EPM, EPC, and EPTs	Dr. Sachihiro Omura ____-____-____
Emergency Preparedness Manager (EPM)	Works with director to appoint EPC, EPTs, organizes staff drills, holds post-event review meetings	Dr. Kimiyoshi Matsumura ____-____-____
Emergency Preparedness Committee (EPC)	Oversees departmental teams and team leaders, cultivates relationships with outside resources, identifies potential hazards, implements preventive / preparedness measures	Dr. Kimiyoshi Matsumura ____-____-____ Deniz Erbişim ____-____-____
Emergency Preparedness Teams (EPTs)	Submit reports on vulnerability/asset assessment and response procedures to their EPC Team Leader	Team Leaders
<ul style="list-style-type: none"> ▪ Safety & security team 	Responds to events involving illness, injury, and theft, Communicates with outside resources	Deniz Erbişim ____-____-____
<ul style="list-style-type: none"> ▪ Artifacts team 	Responds to events involving risk or damage to artifacts and materials excavated from KL, BK, and YH	Field Conservator ____-____-____
<ul style="list-style-type: none"> ▪ Building and maintenance team 	Responds to events involving risk or damage to buildings	Zuften Öztürk ____-____-____
<ul style="list-style-type: none"> ▪ Information team 	Responds to events involving risk or damage to information, overseeing the Archive, the Library and Administration & records	Dr. Masako Omura ____-____-____ Librarian ____-____-____

Table 1 Response personnel – Japanese Institute for Anatolian Archaeology

and begin their response preparations. *Table 1* provides a list of response team members, their responsibilities, and contact information.

Training

Ideally, JIAA and Museum staff should have the opportunity to practice using the methods of recovery outlined in this plan. A simple way to test the JIAA team's response time would be to run a Notification drill. Using the Notification Flowchart, a chosen team member should be selected to start the drill by calling Security, who will call the Director, and so forth. The team may then convene at the Meeting Point to discuss what aspects of the drill were successful, and what aspects need improvement. Ideally, the Emergency Response Team should also receive training in fire safety and water salvage. This

type of hands-on training would require consultation with emergency professionals and / or a preventive conservator with experience in emergency salvage.

Access

The locations of telephones, keys, *et. cetera* have been highlighted on the Emergency Response site map. Ideally, there should also be a ready means of accessing storage units, including those that have been sealed with wire and a lead seal.

Supplies

Emergency supply kits should be established in each major area of the Institute, including the Research Building, the Museum, the Dig House, Old Storage

Depot, and new Storage Depots. A regular inventory check of these supply kits will be necessary to keep them stocked and ready for an emergency. *Table 2* provides a list of emergency supplies that will be needed:

<ul style="list-style-type: none"> • Keys, openers for sheds and cases • Maps of areas (posted in key locations as well as in Response Plan) • Carts, buckets, baskets to hold and carry artifacts and supplies • Hard hats, boots, gloves* • Distilled or deionized water • Extension cords • Fans, portable dehumidifier, heat gun • Plastic (polyethylene) sheeting, non PVC Ziploc bags, polyethylene boxes 	<ul style="list-style-type: none"> • Mylar or polyester film • Waxed paper / freezer paper • Labeling supplies • Soft bristle brushes • Sponges, clean towels, paper towels, dry blotting materials • Absorbent sheets and snakes, silica gel packs • Dust and particle masks; respirators with organic filters • Chemical neutralization and absorption kits • Photo Flo
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Table 2 EMERGENCY SUPPLY LIST

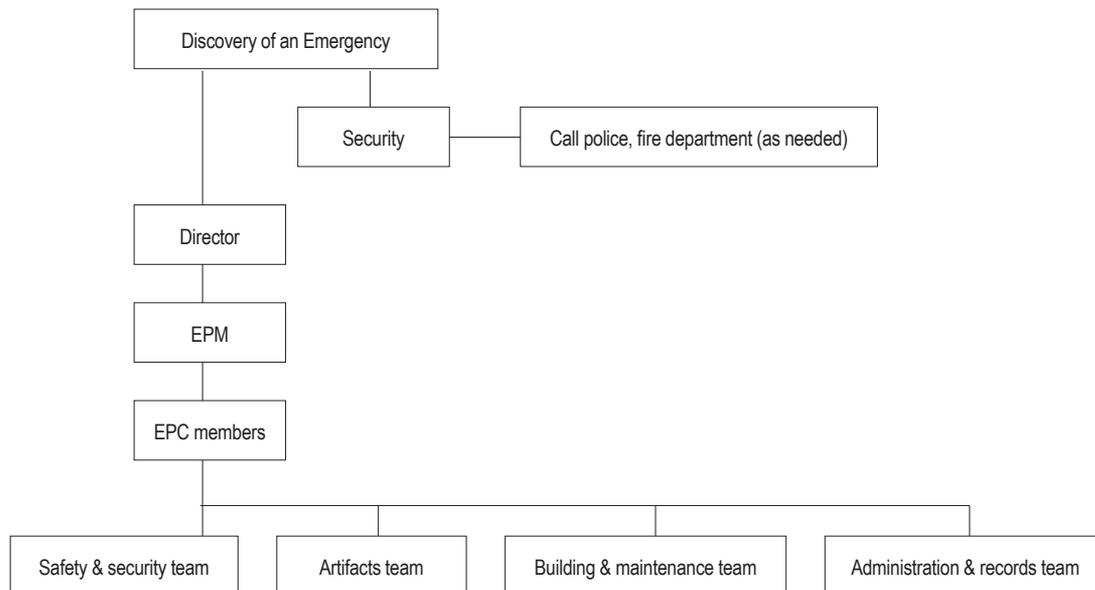
DISCOVERY

Communication Plan

FIRST ON THE SCENE

If you are the first to arrive at the scene of an emergency, follow the NOTIFICATION FLOWCHART

- Call JIAA security - ____-____-____
- Security / dispatch will call the Director and any necessary emergency personnel; if security cannot be reached, call the Director directly
- The Director calls the Emergency Prepared Manager who will assess the situation and call EPC leaders and any other necessary outside resources; if the Director cannot be reached, call the EPM directly



Team Assembly

The emergency preparedness teams (EPTs) will assemble at the dig house living room, which has direct telephone, internet, and television access.

DISCOVERY OF:

1. BROKEN OBJECTS

Major Large area, many objects affected; building structural failure	Minor If only a few objects are affected and in small area
<ol style="list-style-type: none"> 1. Call _____ - _____ - _____ – identify yourself & your location – tell Security to contact Director and EPM 2. Do not move any objects unless they are in immediate danger; if safe to do so, remain in area until Artifacts EPT arrives 	<ol style="list-style-type: none"> 1. Call _____ - _____ - _____ – identify yourself & your location – tell Security to contact Director and EPM 2. Do not move any objects unless they are in immediate danger; if safe to do so, remain in area until Artifacts EPT arrives

2. WATER DAMAGE

Major If large area, many objects are affected	Minor If water has not yet affected objects or only a small part of one area
<ol style="list-style-type: none"> 1. IF there is personal danger, evacuate immediately 2. Call _____ - _____ - _____ – identify yourself & your location – tell Security to contact Director and EPM, & fire department 3. If you can do it safely, try to identify the source of the water 4. Do not move any objects unless they are in immediate danger; if safe to do so, remain in area until Buildings and Artifacts teams as well as necessary Outside Resources arrive 	<ol style="list-style-type: none"> 1. Call _____ - _____ - _____ – identify yourself & your location – tell Security to contact Director and EPM 2. Try to determine the source of the water; try to contain the water 3. Do not move any objects unless they are in immediate danger; if safe to do so, remain in area until Buildings and Artifacts teams arrive

3. SMOKE AND FIRE – Considerations:

Major If fire alarm or sprinklers start, or if fire cannot be extinguished	Minor If fire is small and contained, and no alarm or sprinklers have started
<ol style="list-style-type: none"> 1. Evacuate area immediately; do not allow fire to get between you and the exit, do not open hot doors 2. Pull the nearest fire alarm 3. Once in a safe area, call _____ - _____ - _____ – identify yourself & your location – tell to them call the Fire Department and the Director 4. Do not move any objects unless they are in immediate danger; Remain clear of the area until Fire Department declares the area safe 	<ol style="list-style-type: none"> 1. Call _____ - _____ - _____ – identify yourself & your location – tell Security to contact Director and EPM 2. Do not move any objects unless they are in immediate danger; If safe to do so, and if you have experience using a fire extinguisher, try to extinguish the fire, but NEVER do so alone; Disconnect electrical equipment; Shut down all hazardous operations 3. If safe to do so, remain in area until Artifacts EPT arrives

4. THEFT – Call Security at _____ - _____ - _____ – identify yourself & your location – then immediately call the Director, who will determine the next steps; begin the documentation process

5.a. BIOLOGICAL – Mold

Major If mold is damp and growing, the RH is above 60%, and is found on more than 20 items	Minor If mold is dry and inactive, the RH is below 60%, and is found on fewer than 20 items
<ol style="list-style-type: none"> 1. If you have serious mold allergies, leave the area immediately 2. Call _____ - _____ - _____ identify yourself & your location – tell Security to contact Director and EPM 3. Do not move any objects unless they are in immediate danger; if safe to do so, remain in area until Artifacts EPT arrives 	<ol style="list-style-type: none"> 1. If you have serious mold allergies, leave the area immediately 2. Call _____ - _____ - _____ identify yourself & your location – tell Security to contact Director and EPM 3. Do not move any objects unless they are in immediate danger; if safe to do so, remain in area until Artifacts EPT arrives

5.b. BIOLOGICAL – Pest Infestation

Major If several live insects are found & source cannot be located, if more than one area is affected, if new damage from pests has occurred	Minor If evidence is localized and no live pests are found
<ol style="list-style-type: none"> 1. Contact the Director and EPM 2. Isolate problem and seal in plastic sheeting 3. Save a specimen for identification tests 4. Do not disturb the surrounding area – staff and pest experts will need to assess the problem 	<ol style="list-style-type: none"> 1. Contact the Director and EPM 2. Isolate problem and seal in plastic sheeting 3. Save a specimen for identification tests 4. Do not disturb the surrounding area – staff and pest experts will need to assess the problem

6. HEALTH AND SAFETY CONCERN –

Considerations:

- Phones are located in the new Institute storage units, the dig house, the dining hall, the men's dormitory, and museum offices

Major	Minor
<ol style="list-style-type: none"> 1. If an individual is sick or injured, call Kaman Hospital / <i>Kaman Hastanesi</i> _____ - _____ - _____ for care instructions or take them immediately to the hospital (Ambulance / <i>Ambulans</i> 112). If trained, administer CPR if person is not breathing. 	<ol style="list-style-type: none"> 1. Call Kaman Hospital / <i>Kaman Hastanesi</i> _____ - _____ - _____ for care instructions

CHEMICAL SPILL – Considerations:

Major Over 5 liters spilled	Minor Less than 5 liters spilled
<ol style="list-style-type: none"> 1. Evacuate the area immediately; control nearby sources of ignition while wearing personal protective equipment (gloves, long-sleeved shirt, closed-toed shoes); call for outside help 	<ol style="list-style-type: none"> 2. While wearing personal protective equipment (gloves, long-sleeved shirt, closed-toed shoes), use absorption spill kit to clean the spill UNLESS it is an acid or base, in which case a neutralization kit should be used

ASSESSMENT

Assess the safety of affected buildings and grounds first. If necessary, contact outside authorities. Once these areas have been deemed safe, staff will assemble and begin an assessment of the situation and its impact on artifacts and information at the Institute and Museum.

It is important during this step to keep a log of all activities and to DOCUMENT all affected areas and objects.

Each location containing artifacts and/or information should be assessed, keeping in mind potential risks (see 2010 Risk Assessment). *Table 3* provides an outline of considerations (often referred to as a “site survey”) that should be made during the assessment.

Table 3 Site survey

LOCATION	SIZE OF THE EMERGENCY, OBJECTS INVOLVED	STAFF NEEDED	SUPPLIES NEEDED	ORDER OF ACTIONS
<i>Example</i>	<i>Major water infiltration, metal artifacts immersed in water</i>	<i>EPM, EPC, PT Artifacts, Bldgs. & Maintenance</i>	<i>Fans, portable de-humidifiers, HOBO loggers, absorbent materials...</i>	<i>1. Call Security 2. Remove objects from water 3. Gather supplies 4. Move objects to Institute bldg.</i>
Museum				
Old Storage Depot				
JIAA research bldgs.				
New institute storage bldgs.				
KL, BK, and YH storage				

Table 4 provides an outline of considerations that should be made before an object or group of objects is handled or relocated:

Table 4 Object assessment checklist

OBJECT	DOCUMENTED?	EXTENT OF DAMAGE	WHERE WILL IT BE STORED?	ACTION TAKEN
<i>Example</i>	<i>Yes, photographed in situ</i>	<i>Ex. beginning to corrode...</i>	<i>JIAA Bldg.</i>	<i>Examined & stabilized by conservator</i>
				Et. Cetera...

RESPONSE AND RECOVERY

GENERAL CONSIDERATIONS

The following steps should be carried out in conjunction with the damage- and materials- specific procedures listed below. Always remember to DOCUMENT any damage before moving objects. Move items only after a place has been prepared to receive them.

LARGE-SCALE EMERGENCY

RESPONSE

- Evacuate the building immediately. Do not move injured people unless absolutely necessary
- Attend to injuries: Set up first aid area, administer to first aid and CPR, if necessary; if it is safe to do so, inspect nearby cars and buildings for injured people
- Reassemble staff following initial assessment; follow the chain of command while responding to an emergency; follow the notification flow chart to locate staff if they are not already at the Institute or Museum; organize or assemble teams; supervisors should be responsible for their own areas
- Establish emergency command center at Meeting Point (Dig House)
- Review the situation as a team, and begin to mobilize response
- Protect damaged structures with temporary covers
- Evacuate objects, begin object stabilization, all the while documenting these procedures with photographs, video, and written records.
- Keep a log of all activities and DOCUMENT all affected areas and objects.

RECOVERY

- Maintain staff morale
- Accompany all outside agents, contractors when touring the site
- Maintain the public's goodwill: issue press releases, solicit volunteer help
- Clean buildings and grounds

- Begin building restoration
- Store salvaged artifacts and materials in a safe area away from traffic
- Label all detached parts of an object and keep together
- Contact Head Conservator promptly (even if it is off-season), and if he / she is not immediately available, begin object stabilization (this will make it easier to conserve the objects when it is possible to do so); begin long-term conservation

SMALL-SCALE EMERGENCY

RESPONSE

- Attend to any injuries, administer to first aid and CPR, if necessary
- Assess the damage; contact outside authorities if necessary, turn off utilities (main gas valve, electrical power, and water)
- Review the situation as a team, determine specific recovery needs and goals; use the collections priority list and initial damage assessment to determine order of response
- Protect damaged structures with temporary covers
- Contact Head Conservator promptly (even if it is off-season), and if he / she is not immediately available, evacuate objects, begin object stabilization (this will make it easier to conserve the objects when it is possible to do so).
- Keep a log of all activities and DOCUMENT all affected areas and objects.

RECOVERY

- Store salvaged artifacts and materials in a safe area away from traffic
- Label all detached parts of an object and keep together
- Begin long-term conservation. Conservators will prepare condition reports.
- Begin building restoration, if necessary
- Analyze the incident; update and modify response measures if necessary

Object Priorities

Table 5 provides a list – in order of importance – of material types preserved at the JIAA. Archival materials rank first (1), followed by artifacts and materials in storage (2), library materials (3), and, ranking last, archival documents (4). If time and resources are limited, as they often are during an emergency, high-ranking materials should be salvaged first.

Table 5 PRIORITY OUTLINE

<ol style="list-style-type: none"> 1. Archival materials <ol style="list-style-type: none"> a. Paper b. Photographic c. Electronic media 2. Stored materials <ol style="list-style-type: none"> a. Organic materials <ol style="list-style-type: none"> i) Human skeletons ii) Animal skeletons b. Registered artifacts <ol style="list-style-type: none"> i) Organic artifacts ii) Metal artifacts iii) Glass artifacts 	<ol style="list-style-type: none"> iv) Earthen artifacts v) Stone artifacts c. Unregistered artifacts <ol style="list-style-type: none"> i) Pottery shards ii) Untreated metals d. Unregistered organic materials <ol style="list-style-type: none"> i) Animal bones ii) Carbonized timbers, etc. 3. Library 4. Administrative documents
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Response Instructions By Type Of Damage:

1. BROKEN OBJECTS

Major	Minor
<ol style="list-style-type: none"> 1. DO NOT TOUCH broken object unless it is in danger of falling or receiving further damage 2. Keep broken pieces grouped together in safe, padded containers; clearly LABEL objects and containers before moving 3. Do not attempt to put pieces back together – this will cause more damage; leave all repairs for conservation 4. Document damage before moving the broken objects 	<ol style="list-style-type: none"> 1. Keep broken pieces and detached parts of objects grouped together in safe, padded containers; clearly LABEL objects and containers before moving 2. Do not attempt to put pieces back together – this will cause more damage; leave all repairs for conservation

2. WATER-DAMAGED OBJECTS –

Considerations:

- Time is essential when responding to water damage
- Response timeline:
 - Move first books and paper, iron and corrodible metals, wood and painted surfaces, ceramics, sound and video recordings
 - If objects have been wet for more than 48 hours, the following may be recovered better if kept wet: leather bone, ivory, shell, books, boxes of documents, coated paper, photo-

- graphs stuck together, film-based negatives
- Moldy organic materials must be isolated to prevent contamination of other objects; keep in a cool environment (below 65°F, 40 – 50% RH) and fumigate as soon as possible to stop mold growth
- Reduce humidity of water-damaged area as soon as possible using fans +/- or dehumidifiers
- Architectural materials may require cleaning with disinfectant to prevent mold formation

Major	Minor
1. Sort objects to degree of wetness and whether object should be dried or kept wet 2. Isolate moldy objects by sealing in plastic bags or sheeting 3. Move sensitive objects to work area or conservation labs for drying	1. Move wet objects to conservation lab; begin drying process 2. Monitor affected area for mold

3. SMOKE AND FIRE – Considerations:

- Emergency Response Teams must not enter a building during a fire

Major	Minor
1. Evacuate the area immediately, pull the fire alarm or call _____ - _____ 2. Objects may be wet, broken, hot, or have structural weaknesses as a result of fire; soot and deposits from a fire may include oils, plastics and chemicals that can damage the objects – handle minimally in order not to grind deposits deeper into the objects 3. Extreme structural fire damage requires a systematic approach to extracting pieces of objects from the debris – do not attempt to enter the area or remove the debris unless directed to do so; use gloves to handle fire-damaged material for protection – DO NOT ATTEMPT to separate melted materials 4. Firefighters may be asked to retrieve priority objects in areas not yet on fire 5. After a fire, the area should not be disturbed until photo documentation is made; keep fragments together and identify if possible 6. Separate wet from dry objects	1. During a minor fire, move closest objects away from the fire area 2. Use fire blankets to cover larger objects that can't be moved; cover objects vulnerable to water with plastic sheeting to protect from sprinklers 3. Salvage paper materials and books first 4. Separate wet from dry objects

4. THEFT – After alerting security and the Director, continue documenting any evidence of the theft, do not disturb the area until authorities arrive

5.a. BIOLOGICAL – Mold – Considerations:

- When RH is brought below 60% mold becomes inactive and spores cannot continue to grow
- People should wear protective clothing – respirator, gloves, and goggles – when working in an area affected by mold

Major	Minor
<ol style="list-style-type: none"> 1. Notify conservators immediately; avoid handling objects since doing so can spread mold and embed it in the surface of the object 2. Isolate the contaminated collections area, reduce relative humidity (RH) immediately 3. If RH cannot be reduced, seal objects in plastic bags before moving them to a cool, dry, isolated area 4. Do not return affected objects to collections areas until objects have been treated 	<ol style="list-style-type: none"> 5. Notify conservators immediately; avoid handling objects since doing so can spread mold and embed it in the surface of the object 6. Monitor RH to make sure it stays below 60% 7. Schedule objects for assessment and, if necessary, cleaning

5.b. BIOLOGICAL – Pest Infestation

Major	Minor
Isolate contaminated objects; notify conservators immediately; consult with pest specialists if necessary	Isolate contaminated objects; notify conservators immediately; consult with pest specialists if necessary

6. HEALTH AND SAFETY CONCERN –

Considerations:

- Phones are located in the new Institute storage units, the dig house, the dining hall, the men's dormitory, and museum offices

Major	Minor
<ol style="list-style-type: none"> 1. Attend to injuries / illnesses: Set up first aid area, administer to first aid and CPR, if necessary 2. Call an ambulance (Ambulance / <i>Ambulans</i> 112) or drive immediately to the hospital (Kaman Hospital / <i>Kaman Hastanesi</i> _____ - _____ - _____) 3. For major (over 5 liters) chemical spill, evacuate the area immediately; control nearby sources of ignition while wearing personal protective equipment (gloves, long-sleeved shirt, closed-toed shoes); call for outside help 	<ol style="list-style-type: none"> 4. For advice on how best to attend to specific injury or illness: (Kaman Hospital / <i>Kaman Hastanesi</i> _____ - _____ - _____) 5. For minor (under 5 liters) chemical spill, while wearing personal protective equipment (gloves, long-sleeved shirt, closed-toed shoes), use absorption spill kit to clean the spill UNLESS it is an acid or base, in which case a neutralization kit should be used

Response Instructions By Type Of Material:

1) a. PAPER RECORDS

Handling
<ol style="list-style-type: none"> 1. Do not disturb or separate wet prints or drawings, or contents of wet file boxes 2. Carry paper horizontally on rigid supports or slings; do not put anything in contact with the media (ink, etc.) surface 3. Separate wet and dry materials in carrying boxes 4. Immediately report any active mold to a conservator; isolate moldy materials
Temporary Storage
<ol style="list-style-type: none"> 1. Separate wet and dry materials while they are stored 2. Keep wet <i>coated</i> papers wet until freezing or drying can be done 3. Pack flat sheets in trays, flat boxes or other rigid surface covered with polyethylene sheeting; bundle rolled items loosely and place in boxes lined with plastic sheeting 4. Keep air circulating during storage, monitor humidity and look out for mold – contact the conservator if mold is found on any objects
Initial Stabilization
<ol style="list-style-type: none"> 1. If only a small number of records are affected and if they are minimally wet, air dry, using fans to keep air circulating; do not blow air directly on the papers; using portable dehumidifiers, bring relative humidity down to 50% 2. If records are damp, lay record onto a supported blotting material (paper, un-inked newsprint, paper towels, etc.) and blot as needed; do not blot if ink is water-soluble (if so allow the record to dry with ink facing up); replace blotting materials as they become wet or at least once daily 3. If records are wet or in standing water, PROCEED WITH CAUTION; carefully sponge away any excess water; lift wet sheets of paper by placing a piece of Mylar (polyester) film on top of the document, rubbing slightly, and slowly pulling / peeling up the sheets in a diagonal direction 4. If paper materials are still wet within 48 hours of the incident, keep them wet; records with water-soluble inks or any sign of biological growth should be frozen immediately; interleave (insert freezer or waxed paper) stacked documents as much as possible before freezing 5. Contact the conservator for further instructions

1) b. PHOTOGRAPHIC RECORDS

Handling
<ol style="list-style-type: none"> 1. Do not touch the photographic (emulsion) surface, hold by the edges; do not stack anything in contact with a photographic surface 2. Immediately report any active mold to a conservator; isolate moldy materials
Temporary Storage
<ol style="list-style-type: none"> 1. Separate wet and dry materials while they are stored 2. Always lay with emulsion side up 3. Keep air circulating, monitor humidity and look out for mold – contact the conservator if mold is found on any objects 4. Keep wet photographs in containers of fresh cold water until they are either dried or frozen; if allowed to dry in contact with each other, the photographs will stick together
Initial Stabilization
<ol style="list-style-type: none"> 1. Carefully remove photographs or film negatives from their enclosures 2. Place black and white prints in cool water bath (15 - 20°C) for 15 minutes (10 min for color photos, 30 min for film negatives); continue washing film for 10 – 15 minutes if particulates remain on the surface – rinse with Photo Flo if available (1/2 oz. per gallon of water) 3. Air dry emulsion side up on clean absorbent blotters or by hanging on a clothesline; use fans to keep air circulating 4. If air drying is not possible, vacuum freeze drying is recommended 5. Contact the conservator for further instructions

1) c. ELECTRONIC MEDIA

Handling
<ol style="list-style-type: none"> 1. Do not touch film, disc, or CD surfaces, handle the edges only 2. Pack vertically and carry in trays or crates
Temporary Storage
<ol style="list-style-type: none"> 1. Separate wet and dry materials while they are stored 2. Keep objects with their labels /bags / contextualizing information 3. Keep magnetic media away from electrical sources
Initial Stabilization
<ol style="list-style-type: none"> 1. Separate jackets and sleeves from disks and CDs while wearing latex gloves 2. Air dry using fans to keep air circulating; do not blow air directly on the objects; using portable dehumidifiers, bring relative humidity down to 50% 3. If air drying is not possible, freezing is recommended for microfiche 4. Contact the conservator for further instructions

2) a, b, d. BONE, IVORY, ANTLER, SHELL

Handling
<ol style="list-style-type: none"> 1. Provide rigid support for these objects during handling, transport smaller objects in padded trays, baskets, etc. 2. Shells with powdery surfaces will be highly sensitive to water; bone and ivory less so
Temporary Storage
<ol style="list-style-type: none"> 1. Lay objects flat on padded surfaces, provide support for flexible objects 2. Keep objects with their labels /bags / contextualizing information 3. Contact the conservator if mold is found on any objects
Initial Stabilization
<ol style="list-style-type: none"> 1. Keep wet materials wet until controlled (slowed) drying procedures are begun 2. Rinse or sponge stable objects with clear water to remove mud and excess dirt 3. Blot dry any materials that have been wet for only a short time; exchange wet blotting materials for dry at least once daily 4. Air dry SLOWLY, using fans to keep air circulating; do not blow air directly on the objects; using portable dehumidifiers, bring relative humidity down to 50% 5. Contact the conservator for further instructions

2) b, c. METALS

Handling
1. Transport smaller objects in padded trays, baskets, etc.
Temporary Storage
1. Handle metal objects with cotton or latex gloves
2. Place metals on padded surfaces
3. Keep objects with their labels /bags / contextualizing information
Initial Stabilization
1. Unstable metal objects should be dried within 24 hours, if possible, to prevent damage
2. Keep metal artifacts with pseudomorphs, preserved organics, or composite objects (for ex. with wood or ivory handle) wet until controlled (slowed) drying procedures are begun
3. Gently brush off excess mud and dirt using clear water
4. Blot metals dry with a clean, dry cloth; previously treated objects (for ex. with tannic acid or wax) and copper alloys should be packed with silica gel in individual containers in order to prevent damage to the artifacts
5. Air dry, using fans to keep air circulating; place objects on raised screening to distribute airflow; do not blow air directly on the objects; using portable dehumidifiers, bring relative humidity down to 50%, or if possible, down to 30 – 35% (the optimal range for metals)
6. Untreated metals can be dried with moderate heat (32 – 37 degrees C) in an oven or with a hand held heat gun.
7. Contact the conservator for further instructions

2) b, c. GLASS, CERAMICS & STONE

Handling
1. Transport smaller objects in padded trays, baskets, etc.
2. Use caution in handling ceramics with decorative surfaces and glass with opaque or iridescent surfaces
3. Reconstructed vessels may become unstable at the joins if wet
Temporary Storage
1. Lay objects flat on padded surfaces
2. Keep objects with their labels /bags / contextualizing information
3. Keep objects with surface detail or unstable surfaces, and porous ceramics moist until controlled (slow) drying procedures are begun
4. Keep decorative or iridescent surfaces from touching adjacent artifacts
5. Keep stone objects off the ground; place barrier between stone and metal shelving
Initial Stabilization
1. Sunbaked earth and terra cotta objects should be dried within 24 hours, if possible, to prevent damage
2. Gently brush off excess mud and dirt if it can be easily distinguished from the object
3. Blot dry stable glass and non-porous ceramics with a clean, dry cloth
4. Air dry, using fans to keep air circulating; place objects on raised screening to distribute airflow; do not blow air directly on the objects; using portable dehumidifiers, bring relative humidity down to 50%
5. Contact the conservator for further instructions; generally it is advised to keep wet porous ceramics wet

2) d. CARBONIZED WOOD, PLANT MATERIAL

Handling
1. Support carbonized plant materials from below when lifting; handle with care – wet carbonized materials will be extremely fragile
Temporary Storage
1. Separate wet and dry materials while they are stored
2. Keep objects with their labels /bags / contextualizing information
3. Keep air circulating to allow wet materials to dry
Initial Stabilization
1. Air dry, providing support for the artifact with aluminum foil, using fans to keep air circulating; place objects on raised screening to distribute airflow; do not blow air directly on the objects; using portable dehumidifiers, bring relative humidity down to 50%
2. Contact the conservator for further instructions

3) BOOKS

Handling
1. Do not open or separate wet books or pamphlets; do not close wet books that are open or distorted; do not remove covers
2. Pack books spine down into trays or milk crates to carry
3. Separate wet and dry materials in carrying boxes
4. Immediately report any active mold to a conservator; isolate moldy materials
Temporary Storage
1. Separate wet and dry materials while they are stored
2. Keep wet <i>coated</i> papers wet until freezing or drying can be done
3. Keep air circulating, monitor humidity and look out for mold – contact the conservator if mold is found on any objects
4. Place wet objects on blotters, flat paper towels, or other un-inked absorbent paper
Initial Stabilization
1. Interleave any coated papers to prevent sticking; interleave pages of oversize volumes using blotting sheets or un-inked newsprint that are larger than the book leaf
2. Replace blotting materials as they become wet or at least once daily; make sure interleaving papers do not get stuck to the original paper
3. Air dry (for 100 books or less that are not fully soaked), using fans to keep air circulating; do not blow air directly on the objects; using portable dehumidifiers, bring relative humidity down to 50%
4. If a very large quantity of books are wet and are still wet within 48 hours of the incident, keep them wet; wrap books in plastic and refrigerate or freeze until a conservator can be consulted; closed books that are muddy should be rinsed before freezing
5. Contact the conservator for further instructions

FOLLOW-UP

Analyzing The Incident

Following the occurrence of an emergency or disaster the next will be to analyze the incident. It is important at this point to determine what conditions or events led to the emergency, and what existing risk factors were involved. If changes can be made to decrease the likelihood of these risks impacting the safety of personnel and cultural property, they should be considered. Update preventive measures accordingly.

Practicing The Plan

Ideally, emergency personnel should be allotted a time to practice the response procedures outlined in this plan. A simple way to do this would be to test the notification flowchart, and make sure that there are no breaks in the communication chain. More advanced, but equally important training would include sessions on how to use a fire extinguisher, how to perform CPR, and how to lift fragile materials from standing water. These types of sessions should be conducted by professionals specializing in these areas – firefighters, emergency medical personnel, and conservators with training in object recovery.

Updating The Plan

Emergency contact information – for both JIAA staff and outside resources – change periodically, therefore it is important that this information be updated regularly (*ideally* every season). It is also important to check that emergency response supplies are inventoried regularly, and that emergency equipment – like fire extinguishers – are checked regularly (*ideally* every season) to make sure they are functioning properly.

Monitoring Risks

Remember to keep an eye out for potential hazards that could lead to an event.

CONCLUSION

While it is difficult to imagine the possibility of an emergency or disaster befalling a cultural institution, anticipating these events with an established plan of action will ensure a faster response and more effective recovery of affected finds and information. In order to write a plan an institution must understand what its priorities are – what they would wish most to preserve if artifacts, materials or information were at risk. The establishment of response teams will ensure that each individual on site will know what they must do if an event were to happen. And finally, the continued updating of emergency contact numbers, notification flowchart, and supply inventories is essential for an institution to be effectively prepared for an emergency over the long term.

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<http://web.princeton.edu/sites/ehs/emergency/spills.htm#procedure>

<http://www.getty.edu/conservation/education/teamwork/>

<http://www.fire-extinguisher101.com/>

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