

AGC Houston
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA



Quality People. Quality Projects.

Guidelines for Creation of Emergency Preparedness Plan®

Created By:

AGC Houston Safety Committee

TYPES OF EMERGENCY EVENTS

The following natural and man-made emergencies could impact our business. More detail on each of the events listed below is in this plan.

Inclement Weather	Workplace Disturbance
Hurricanes	Workplace Violence
Severe Weather	Terrorist Act
Tornados	Bomb Threat
Floods	Civil Disturbance
Tropical Storm	Fire
Snow/ Ice Storm	Earth Quake

BUSINESS CONTINUITY OVERVIEW CHECKLIST

- Identify critical operations for survival and recovery
- Identify suppliers, shippers, resources and other business that interact with your company on a daily basis
- Decide who should participate in assembling your emergency plan
- Define crisis management procedures and individual responsibilities in advance
- Communicate with client, building tenants or other neighboring business
- Update plan annually

EMERGENCY PLANNING TEAM

The following people will participate in emergency planning and crisis management.

Name:		Title:	<input type="checkbox"/> First Aid/CPR	<input type="checkbox"/> Communications
Phone:			<input type="checkbox"/> Driver	<input type="checkbox"/> Other
Name:		Title:	<input type="checkbox"/> First Aid/CPR	<input type="checkbox"/> Communications
Phone:			<input type="checkbox"/> Driver	<input type="checkbox"/> Other
Name:		Title:	<input type="checkbox"/> First Aid/CPR	<input type="checkbox"/> Communications
Phone:			<input type="checkbox"/> Driver	<input type="checkbox"/> Other
Name:		Title:	<input type="checkbox"/> First Aid/CPR	<input type="checkbox"/> Communications
Phone:			<input type="checkbox"/> Driver	<input type="checkbox"/> Other
Name:		Title:	<input type="checkbox"/> First Aid/CPR	<input type="checkbox"/> Communications
Phone:			<input type="checkbox"/> Driver	<input type="checkbox"/> Other

BUSINESS CONTINUITY SECTION RECOVERY LOCATION

Save a blank version so you can make additional copies as needed.

Provide information on your recovery location(s), that is, where you will conduct business operations during and following an emergency event. It could be at an alternate site, at a similar business through a mutual aid agreement, or if you are location dependent, at your primary place of business.

Alert employees – Notify employees of the incident, its impact, and how they should proceed.

Type of Emergency:

<input type="checkbox"/> Hurricane <input type="checkbox"/> Severe Weather <input type="checkbox"/> Tornados <input type="checkbox"/> Tropical Storm/Flood	<input type="checkbox"/> Flood <input type="checkbox"/> Snow Storm <input type="checkbox"/> Workplace Violence <input type="checkbox"/> Civil Disturbance	<input type="checkbox"/> Terrorist Act <input type="checkbox"/> Bomb Threat <input type="checkbox"/> Fire <input type="checkbox"/> Earth Quake	<input type="checkbox"/> Other Explain:
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Recovery Location: <i>(Include street address, city, state, zip code)</i>			
Building Owner/Manager:			
Phone:		Alternate Phone:	
Notes:		E-mail:	
Primary Contact:			
Phone:		Alternate Phone:	
Notes:		E-mail:	
Secondary Contact:			
Phone:		Alternate Phone:	
Notes:		E-mail:	

KEY CONTACT INFORMATION

Save a blank version so you can make additional copies as needed.

Type:

<input type="checkbox"/> Administration <input type="checkbox"/> Building Manager <input type="checkbox"/> Building Owner <input type="checkbox"/> Contractor <input type="checkbox"/> Customer/Client <input type="checkbox"/> Fire Department <input type="checkbox"/> Policy Dept. (Non-emergency)	<input type="checkbox"/> Utility Company (electrical, gas, etc) <input type="checkbox"/> Hospital <input type="checkbox"/> Insurance Agent/Broker <input type="checkbox"/> Insurance Company (Claims Reporting) <input type="checkbox"/> Local Media <input type="checkbox"/> Legal Advisor <input type="checkbox"/> Other Explain:
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Business Name:			
Account Number:			
Materials/Service Provided:			
Street Address:			
City, State, Zip:			
Company/Service Phone (main):			
Website Address:			
Contacts			
Primary Contact:		Title:	
Phone:		Mobile:	
Notes:		Fax:	
E-mail:			
Alternate Contact:		Title:	
Phone:		Mobile:	
Notes:		Fax:	
E-mail:			
Recovery Notes:			

CRISIS COMMUNICATION TEAM

The following people from neighboring businesses and our building management will participate in our emergency planning team.

Name:		Company:	
Title:		Phone:	
Name:		Company:	
Title:		Phone:	
Name:		Company:	
Title:		Phone:	
Name:		Company:	
Title:		Phone:	

OUR CRITICAL OPERATIONS

The following is a prioritized list of our critical operations, staff and procedures we need to recover from a disaster.

<u>Operation</u>	<u>Staff in Charge</u>	<u>Action Plan/Execution</u>
Employee Relations		Update website and Communicate with leadership/employees with information critical to business operations as it relates to the disaster and subsequent recovery
Operations & Technology		Communicate with building and vendor contacts regarding information critical to business operations as it relates to the disaster and subsequent recovery
Media & Public Relations		Communicate all official company statements to the media/contracted owners before, during and after a disaster

EVACUATION PLAN

*Practice evacuation procedures at least **two (2)** times a year.*

Warning System General Alarm – Fire, Flood, Tornado, Chemical, Terror

Leave building **If a partial or complete building evacuation is required, employees will quickly move to their pre-planned meeting points out of doors. Conduct a roll call and report missing employees (and visitors).**

- Do not use the elevator.
- Check the bathrooms for other staff and guests.
- Exits are clearly marked.

Shelter-in-place **A severe thunderstorm, tornado or terrorist incident may dictate that employees seek safety in interior sections of the facility.**

Assembly site:			
Site Manager:		Alternate Site Manager:	
Responsibilities			
Safety Director/Responsible for issuing the all clear			

COMMUNICATIONS

In the event of a disaster we will communicate with employees in the following way:

<input type="checkbox"/> Website:		<input type="checkbox"/> Email:	
<input type="checkbox"/> Phone:		<input type="checkbox"/> Text Message:	

Emergency Protocol

- In the event of a weather event such as a hurricane, a generator may be needed in the event of a long term power outage. Preparations and negotiations should begin one week out from projected landfall.
- Once the decision to evacuate the building has been made, the technology coordinator will be responsible for communicating the directive as to when the phone system should be transferred to the answering service.
- An Emergency Desk Manual will be placed in the Employee Handbook that includes scripts for communicating evacuation protocol to staff and guests, staff contact information, instructions for transferring phones to answering service in an emergency situation.
- Keep cell phones fully charged.

NETWORK SECURITY

To protect our computer hardware, you should:

- Make a copy of all designated critical records (designated by whom?)
- Move computers to desk level in the event of flooding to the first floor
- Secure the building

To protect your computer software, you should:

- Make a copy of critical records and store off site

If our computers are destroyed, we will use back-up computers at the following location:

- INTERNET SERVICE PROVIDER/OFFSITE JOB LOCATION?

RECORDS BACK-UP

(WHOM?) is responsible for backing up our critical records including payroll and accounting systems. Back-up records including a copy of this plan, site maps, insurance policies, bank account records and computer back ups are stored onsite in a secure location. Daily backup media that contain data from the last two weeks of business are held in a secure location off site. Most recent daily media are kept by (WHOM?) in a secure location off site.

If accounting and payroll records are destroyed, continuity will be handled in the following ways:

- ◆ Backup payroll records are stored electronically at (?)
- ◆ Accounting records will be restored from (?), contact (?)
- ◆ Other shared files and mydocument files can be restored from backup tapes, contact (INTERNET/WEBSITE PROVIDER?)

Item:			
Type:	<input type="checkbox"/> Computer Hardware <input type="checkbox"/> Computer Software		
Status:	<input type="checkbox"/> Currently In Use <input type="checkbox"/> Will Lease/Buy For Recovery Location		
Title And Version/Model Number: <i>(Enter "Unknown" if hardware/software is to be leased/bought for recovery location)</i>			
Serial/Customer Number		Registered User Name:	
Purchase/Lease Price: \$		Purchase/Lease Date:	
Quantity (equipment) or Number Of Licenses (software)			
License Numbers:			

HURRICANE PREPARATION PLAN

The following precautions and procedures will be reviewed and readied when the National Weather Service has issued a Hurricane Watch for the Project area. Those precautions and procedures not already completed will be implemented when a Hurricane Warning has been issued.

- Use a video camera and/or a camera and several rolls of film to document the condition of the entire Project area, inside and outside. This will aid in documenting damages after the storm and show the precautions taken to prevent damage.
- Update the emergency phone list of all Staff and Subcontractor Supervisors. This list should be distributed to all Project Contractors and to Subs should have available a list of home phone numbers for their employees.
- Make arrangements for extra plywood to cover windows and other openings.
- Secure trailers with 3/8" wire rope in at least three places along trailer. Use 55 gallon drums filled with concrete or tie-down anchors. Board up all windows to trailers.
- Locate portable generators to be readily available for use if night work is anticipated. Also make arrangements for a large capacity water pump.
- Make sure that all vehicles and equipment on the site is full of fuel. Fill all safety cans on the job.
- If possible, move all job files into a safe area - inside project on a second floor area stairwell.
- Band all loose materials on the job with metal straps. Secure banded materials to floors and columns.
- Broom clean entire project inside of building and outside.
- Remove all trash from jobsite prior to storm, enclose or secure in a dumpster if removal is not possible.
- Secure extra polyethylene for use after the storm.
- Secure emergency plans from local Fire Department, Civil Defense or any other agency. Review the plan along with these precautions and procedures with the Safety Office, Staff and all Subcontractors.
- Cancel any scheduled deliveries that would create additional items to secure.
- Check First Aid supplies.
- Check with Crane manufacturer and/or Rental Company for specific details on Hurricane Procedures.
- Secure un-poured decks with additional rebar, beams, etc. being careful not to overload the shoring. It may be better to remove formwork rather than trying to secure it.

Hurricane Precautions for Construction Sites

Site

The construction site must be prepared to withstand hurricane winds. This will require securing all items on the grounds and inside the buildings. Construction trailers may also require relocation to more secured and protected locations.

Scaffoldings

Scaffoldings need to be inspected and all possible projectiles removed. The following must be ensured:

- 1) All framing members are secured.
- 2) All boards and planks are removed to secure locations
- 3) All portable equipment are removed to secure locations

Towers Cranes

Based upon information gathered from contractors and the crane operators' union in Florida the precautions taken to counter the effect of hurricane winds on construction cranes are based upon the manufacturer guidelines. These guidelines are standard and do not at any time require the dismantling of the crane but requires items one and two below. The other items are added per the assessment of the Building and Land Regulation Administration.

- 1) Secure crane tower to the highest floor that is structurally sound.
- 2) Release crane swing brake to allow arm to rotate to the position of least resistance to the wind.
- 3) Secure cab and windows.
- 4) Relocate to the ground level (or protected areas of elevated floors) any objects not secured (bolted) to the crane e.g. Weights, slings, buckets, portable equipment, loose lumber.

SEVERE WEATHER ACTION PLAN

SEVERE WEATHER PREPARATION

- Ensure trailers are properly anchored and tied-down.
- Monitor the Weather Alert Radio and/or the Internet Weather Warning Alerts on the Internet.
- When possible, avoid storing materials or tools in low areas, beneath pipe chases and other floor openings or near window openings. Keep materials that are light in weight and/or large in surface area secured when not in use and don't shake out more material than can be used during the shift and re secured if necessary.
- Be careful not to provide covers that may fill with water that can collapse the support structure or burst releasing a massive "water bomb."

SEVERE WEATHER SAFETY PROCEDURES

When severe weather approaches:

- Secure all unnecessary materials and tools.
- Check the security of fencing, or other material that can catch wind and take flight.
- Securely cover and/or place on dunnage those materials that are susceptible to moisture damage.
- Prepare to protect electrical tools and cords from water.

Notes

- High winds often precede the rain from a thunderstorm by 15 or more minutes. A sudden change in wind direction as a thunderstorm approaches may be a signal that a down draft or "micro-burst" is about to hit.

-Wind loading on cranes can significantly increase the total applied load, especially with regard to side loading. The weight and surface area of loads should be considered as wind speeds increase. Heavier loads with small surface area (example: bundle of rebar) can be safely hoisted in higher winds than light loads with large surface area (example: concrete wall form). Verify the maximum safe wind speeds for crane operation provided by the crane manufacturer (see owner's/operator's manual) and ensure they are not exceeded. Swing locks should generally be left off allowing the crane to freely weather vane (wind vane) when there are no obstructions. The crane owner and manufacturer should determine the best configuration and wind precautions for each crane.

-The thunder from lightning travels at approximately 1000 feet per second. As lightning approaches, monitor the lightning to sound thunder interval and estimate the distance away.
Example: Lightning to Thunder = 25 seconds. 25 seconds divided by 5 seconds per mile = 5 miles.

Weather Alert Levels:

The following Alert Levels and actions are provided only as recommended guidelines that may need to be modified to be project specific, situation specific and/or to comply with Project Specific Safety Requirements or for fast moving storms.

- YELLOW ALERT: The approach of severe weather is known from visual observations and/or electronic notification. Employees are made aware of the potential for severe weather in the near future. Check items that could be water damaged or wind-blown for security and protection.
- ORANGE ALERT: When lightning occurs within five miles (25 second flash to sound interval), when signs of a down draft are noted or a tornado warning is issued. All outside, non-critical activities (a concrete pour in progress might be an example of a critical activity) should be suspended, personnel not engaged in outside critical activities should seek safe cover inside a building or in a vehicle (a large tree is not a safe cover). Equipment and materials should be secured.
- RED ALERT: When lightning occurs within one mile (five second flash to sound interval) or high winds start. All employees who have not already done so, should seek safe shelter inside a building or in a vehicle. Employees should avoid using phones and stay away from windows and metal poles and towers while lightning is near. Stay away from windows during periods of high wind. When a tornado approaches, seek cover in a strong structure or low place such as a ditch. As much as possible, avoid areas with windows, piles of debris or unsecured materials.

POST-SEVERE WEATHER PROCEDURES (AFTER THE STORM)

Employees should not return to routine activities until winds have abated and the flash to sound interval exceeds 25 seconds (approximately five miles). Beware of dangers created by rain and winds including wet and slippery floors, or compromised excavation slopes and/or protection systems.

Look for signs of wind damage such as fencing blown down or debris in public areas, and look for wet items that got wet and need to be dried before water damage occurs. An assessment for long term moisture damage from rain water should be made. Areas and items found to be wet or damp and susceptible to mold development should be thoroughly dried or removed as soon as possible.