

**THE BELOW IS A SAMPLE AND SHOULD BE REVIEWED AND REVISED TO FIT WITH YOUR OPERATIONS AND IF APPLICABLE REVIEWED BY YOUR LEGAL COUNSEL PRIOR TO IMPLEMENTATION. THIS SAMPLE DOES NOT INCLUDE ALL EMERGENCIES, YOU SHOULD INCLUDE GUIDANCE FOR ALL YOUR EXPOSURES. REVISE THE SAMPLE AS NEEDED TO BEST FIT YOUR EXPOSURES.**

**A formal plan should be developed and distributed to all employees. Personnel will have homes, family, and property of their own to consider. They must be made aware of their work-related duties and responsibilities so that they plan accordingly.**

***Blue Text such as this- is intended as instructional and for you to edit, remove, revise, etc as needed to best fit your operations and plans.***

**SEVERE WEATHER EMERGENCY ACTION PROGRAM**

**Effective Date: Review/Revision Date:**

Employees are our most valuable asset. The goal of our program is to keep your safe.  You can help us:

* To save lives and to reduce the risk of life-altering injuries within the workforce.
* To protect our organization’s human and financial resources.
* To guard against potential company and personal liabilities.

This policy is mandated and supported by the management of:

Company Name

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

President/CEO/Management Signature Date

*(Sample acknowledgement to be kept in employee’s personnel file):*

I have read and understand my obligations as listed above. Further, I understand that failure to abide by this agreement may result in suspension, termination and/or disciplinary action.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Employee Signature Date

**Company Information & Important Contacts**

|  |  |  |  |
| --- | --- | --- | --- |
| **Company Contact Name**  | **Title/Responsibility**  | **Cell #** | **Email** |
|  |  |  |  |

*\*\*Add as many cells as necessary for individuals on who to contact for emergencies and/or who are responsible for to perform duties for safe shut down and/or evacuation. A Coordinator should be named that is responsible for maintaining and leading the plan and provides training as necessary for the company. Drills should be regularly conducted and documented. Recovery Team Members should include people qualified to repair electrical, mechanical, plumbing and fire protection systems, as well as general maintenance people for cleanup. Assign a recovery team leader who should make sure the team has cleanup supplies and necessary replacement parts and equipment.*

|  |  |  |
| --- | --- | --- |
| **Emergency Contact Name**  | **Title/Responsibility**  | **Phone #** |
|  |  |  |

*\*\*Add as many cells as necessary to include emergency numbers/contacts for fire, police, other emergency responders/facilities (ie local clinic, hospital, etc), towing companies, US Coast Guard, etc.*

*\*\*If applicable to your operations or location(s), include radio stations or websites that may also provide useful information/updates, such as:* [*www.noaa.org*](http://www.noaa.org) *and* [*www.weather.com*](http://www.weather.com) *and* [*www.fema.gov*](http://www.fema.gov) *and any state/local alert systems*

**Flooding**

Important Terms

* Watch = Be Aware.Conditions are right for flooding to occur in your area.
* Warning = "Take Action!"Flooding is either happening or will happen shortly.

During flash flood watches or warnings staff should relocate to XXX.

Vehicles, equipment, etc during watches or warnings should be relocated to XXX.

General Prep

* Build or restock your emergency preparedness kit. Include a flashlight, batteries, cash, and first aid supplies.
* Secure The Premises
	+ Move computers, copiers, printers, etc away from large windows.
	+ Cover and elevate inventory if applicable.
	+ Anchor large equipment, cabinets and shelves to walls or floor.
	+ Move or store equipment, furniture and valuable files on the upper level of multistory buildings OR place equipment, furniture and valuable files on concrete blocks at least 12 inches above projected flood elevations.
	+ Cover doors and windows.
* Avoid Walking or Driving Through Flood Waters
	+ Just 6 inches of moving water can knock you down & 2 feet of water can sweep a vehicle away.
	+ If floodwaters rise around your car but the water is not moving, abandon the car and move to higher ground. Do not leave the car and enter moving water.
	+ Avoid staying or parking along streams, rivers, and creeks during heavy rainfall. These areas can flood quickly and with little warning.
	+ Watch for flooding on bridges and low points in the road.
	+ Stay off bridges or roads under water, as suddenly either can be washed out.
	+ Keep out of storm drains, irrigation ditches, dry washes or other waterways.

Flash Flood Warnings

* If there is a chance of flash flooding, move immediately to higher ground.
	+ If evacuating relocate to XXX (take attendance) and await further instruction from emergency personnel or your organization contact(s): XXX
* You may have only seconds. Do not attempt to cross a flooding stream on foot where water is above your knees.
* If you are driving, don’t try to drive through water of unknown depth.
* If your vehicle stalls, abandon it immediately and seek higher ground.
* Rapid rising water may sweep the vehicle and its occupants away.
* Keep away from floodwaters near culverts and storm drains.
* Be especially cautious at night when it is harder to recognize flood danger.
* When you are out of immediate danger, tune in to area radio and television stations and NOAA weather radio for additional information as conditions change and new reports are received.

Flood Watch

* Turn on your TV/radio to receive the latest weather updates and emergency instructions.
* Know where to go. You may need to reach higher ground quickly and on foot.
	+ If evacuating relocate to XXX (take attendance) and await further instruction from emergency personnel or your organization contact(s): XXX
* Bring in outdoor furniture, equipment, etc or anchor anything that cannot be inside.
* Move important indoor items to the highest possible floor to help protect from flood damage.
* Disconnect electrical appliances and do not touch electrical equipment if you are wet or standing in water as you could be electrocuted.
* If instructed, turn off your gas and electricity at the main switch or valve to help prevent fires and explosions.

Flood Warning

* Move immediately to higher ground or stay on high ground.
* Evacuate if directed.
	+ If evacuating relocate to XXX (take attendance) and await further instruction from emergency personnel or your organization contact(s): XXX
* Be aware of areas where floodwaters have receded and watch out for debris. Floodwaters often erode roads and walkways.
* Do not attempt to drive through areas that are still flooded.
* Avoid standing water as it may be electrically charged from underground or downed power lines.
* Photograph damage to your property, equipment, autos, etc for insurance purposes.

**Earthquake**

If evacuating relocate to XXX (take attendance) and await further instruction from emergency personnel or your organization contact(s): XXX

While indoors before an earthquake:

* Take Cover: Under sturdy furniture or Against an inside wall.
* Drop to the floor on your hands and knees then protect your head and neck with your hands and arms.
* Brace yourself against a portion of the furniture you are underneath or wall you are next to. Stay away from outside walls, shelving/cabinets, or items that are elevated and not anchored down as best as practical.
* Always try to stay away from windows or glass.
* Stay in your cover area until the shaking stops.
* After the shaking, check yourself over for injury. Assist others if able to do so. Be wary and move carefully while watching out for hazards
	+ If you must leave the building, leave after the shaking stops and use the stairs, preferably the interior fire stairs. Do not use elevators.
* Be on the lookout for fires. Smell for smoke, look for smoke, and look for flames.

While outdoors before an earthquake:

* Stay outside.
* Move away from buildings, trees, streetlights, and overhead lines. Many injuries occur within 10 feet of the entrance to buildings from falling debris:
	+ The taller the building, tree, pole, etc the further you should be (your distance away should be greater than its length). If that isn’t achievable, move as far away as practical.
* Try to avoid other hazards such as vehicles and signs.
* Move to a clear area as best as practical.
* Crouch down and cover your head.

*\*\*If applicable to your operations or location(s), plan should cover for confined spaces, public/civil disturbances, vapor releases, chemical/hazmat spills, workplace violence (terrorism, bioterrorism, chemical or radiological terrorism, etc)*

**Tornado**

A tornado is a tube of spinning air that forms from a thunderstorm and touches the ground. Heavy rains, lightning, flash flooding and hail are possible.

Tornado Prep- What to Do Before

* Our Shelter Location(s) are located at XXX.
	+ *Plan ahead by finding a sturdy building to shelter in before a tornado watch or warning.*
	+ *Find a safe room built to withstand high winds. The next best protection is a small room with no windows on the lowest level of a sturdy building.*
		- *Mobile, manufactured, trailer homes and recreational vehicles (RVs) are not safe in high wind events.*
* Practice Tornado Drills- practice moving quickly to the Shelter Locations
* Gather Emergency Supplies - food, water, and medicine.
	+ Organize supplies into a Go-Kit and a Stay-Kit
		- Go-Kit: at least three days of supplies that you can carry with you, includes backup batteries and chargers for devices.
		- Stay- Kit: at least two weeks of supplies.
	+ Keep important papers/records safe and easy to access (hard copies or securely backed up).

Tornado Warning- What to Do During

* Warnings are issued when a tornado is near- take immediate action!
* Relocate to the Shelter Location- Complete evacuation well before the arrival of tropical force winds.
	+ If not possible, seek inside shelter below ground level if possible or go to the innermost small room away from outside walls, doors and windows on the lowest level of your structure.
		- Mobile homes and portable buildings are extremely unsafe during a tornado.
	+ If you are outside, seek cover in a ditch or other low spot.
	+ After getting to shelter, use your arms to protect your head and neck.

After The Tornado – Tornado Recovery

* If evacuated, delay return until authorized by XXX (take attendance) or when recommended by local authorities.
	+ Telephone services within the evacuation zone may be overloaded or non-existent for an extended period of time. Listen to radio or television for information concerning returning.
* If you are trapped, try to cover your mouth with a cloth or mask to avoid breathing dust.
	+ Try to send a text, bang on a pipe or wall, or use a whistle instead of shouting.
* Structural damage to buildings or damaged foundations.
	+ Establish a procedure for removing storm or related debris.
	+ Temporarily repair any holes or damage to the building or roof if it is safe to do so.
* Assess damaged contents to see what can be salvaged and prioritize repair or replacement.
	+ Critical production equipment and valuable stock required to restore production.
	+ All mechanical equipment and systems should be checked for leaks and damage, and cleaned and dried, as needed.
	+ Completion of temporary repairs so people can access the building safely.
* Look for safety hazards, including downed power lines, exposed electrical wires and leaking gas.
	+ Treat all downed lines as live wires and do not touch them. Report the fallen power lines to your local power company or police.
	+ If power is out, use flashlights or battery powered lanterns to reduce fire risk.
* Impaired fire protection equipment, security alarms and sprinkler systems and notify the fire department if any of those systems will be out of service.
* The water supply should be checked for possible contamination.
	+ Do not use water until safe: Use your emergency supply or boil water before drinking until officials declare the water safe. Check with you local health department or emergency management agency regarding water purification procedures. Report broken water or sewer mains to proper authorities.
* Provide first aid as needed.
	+ Do not attempt to move a person with a back or neck injury unless they are in immediate danger.
	+ Seek immediate medical assistance.

**Hurricane**

Even the smallest marine facility operation has numerous tasks and precautions that must be taken in preparation of a hurricane. The extent of the tasks and the number of personnel available will determine the amount of time required to complete the preparation. However, 72 hours is probably the minimal time allowable in most instances to undertake action.

The U.S. Coast Guard uses 5 hurricane conditions, to determine plans and actions. The Saffir/Simpson Scale is similar:

* HURCON 5 = Hurricane Storm force winds (>156 mph) expected within 96 hours
* HURCON 4 = Hurricane Storm force winds (130-156 mph) expected within 72 hours
* HURCON 3 = Hurricane Storm force winds (111-129 mph) expected within 48 hours.
* HURCON 2 = Hurricane Storm force winds (96-110 mph) expected within 24 hours.
* HURCON 1 = Hurricane Storm force winds (74-95 mph) expected within 12 hours.

Hurricane Prep: Long-Term Prep- to be implemented well before a wind storm is approaching.

* Create a plan that include a process and individuals to contact if a watch is issued outside of working hours/days.
	+ The process should also include a designate individual to field any employee calls at the property and jobsites
* Inspecting roof-mounted signs, equipment, guy wires and supports to verify they are anchored and in good repair.
* Buildings
	+ Ensure that roofing and siding are adequately attached to building frame.
	+ Ensure flashing and coping is adequately in place to prevent wind and water intrusion.
	+ Ensure shingles are securely attached to prevent tear away and structure damage.
	+ To help prevent roof failure, ensure gable ends of structures are attached to the roof truss using bracing
	+ Fasteners should be spaced more closely at roof panel edges.
	+ Ensure building corners are covered with a secured metal cap or molding.
	+ Secure loose rain gutters and downspouts and clear any clogged areas or debris
	+ Establishing a system to protect all windows and building openings (shutters, plywood, etc.).
		- Repairing or replacing any weak or damaged windows, door hinges and latches.
	+ Have garage door or shop door evaluated and reinforced.
	+ Install wind retrofit hardware and door reinforcements.
* Outdoors
	+ Remove trees that are in striking distance of property.
	+ Secure and anchor all storage sheds and outbuildings.
	+ Keep an inventory of outside equipment and materials that will need to be secured. This may include propane tanks and other hazardous materials, such as gas cylinders and flammable liquid drums.
		- For equipment and materials that cannot be placed in a secure location, ensure the equipment is secured and anchored in a suitable location using straps, cables, and anchors.
		- Make sure propane tanks and gas cylinders are secure and ready to withstand large amounts of water and wind.
* Having generators or other means of emergency power available and testing this equipment periodically.
* Establish an emergency response team and assemble necessary supplies and equipment at a central, secure location. Inspect these supplies each year before hurricane season. Examples of supplies and equipment to have available include:
	+ Portable pumps and hoses
	+ Mops and squeegees
	+ Emergency lighting
	+ Sand and sandbags
	+ Shovels and axes
	+ Tarpaulins/plastic sheeting
	+ Lumber and nails
	+ Power and manual tools
	+ Building diagrams/schematics
	+ Ropes/fasteners
* Identify a safe place to store vehicles and mobile equipment in advance to help protect them from strong winds and water damage.
* Establish contracts with vendors for critical equipment and machinery restoration as well as building and material cleanup.
* If in a flood zone, take the below steps to help protect the property from water damage:
	+ Create levees or flood walls where possible.
	+ Plan where to place sandbags to divert water away from buildings.
	+ Protect low-lying building entrances/openings.
	+ Do not use basements to store critical business equipment or materials.
	+ Install shut-off valves on sewer and other drainage lines to prevent reverse flow.
	+ Store water damageable materials and stock on pallets or in racks.
	+ Provide flood protection for fire sprinkler pump houses.
* Jobsites
	+ Permanent and temporary drainage systems should be installed, maintained and inspected to help ensure they are free of obstructions in the event of heavy rains or flooding.
	+ Ensure an emergency kit is available at each jobsite.
	+ Ensure there are ample tie downs for all items deployed at each job site.
	+ Ensure all project manager/supervisors have been trained in maintaining a written inventory at the jobsite and what is required to secure equipment. A copy of the inventory should be kept/sent to the home office.
		- Inventory should include the following:
			* Valuable papers/records (hard copy and/or electric)
			* Equipment
			* Hazardous materials, chemicals, wastes, etc
			* Photos each job site before the hurricane & after
			* Record all expenses incurred pre, during, and post Hurricane
* Vehicles
	+ Identify and plan a safe travel route to the Vehicle Relocation Site *(located at: XXX)*

*Select an inland location that*

* + - *Avoids potential storm surge and flood prone areas.*
		- *Is outside the cone of wind impact if practical.*
		- *Is secure and in an open area free of nearby objects that may impact the vehicle such and trees, electrical poles, overhead objects, and potential flying debris*
* Vessels
	+ Use/Refer to Boat Owner Hurricane Worksheet (under the Additional Resources section)
	+ If required for your area, obtain a Reentry Decal
	+ Identify a list of reputable repair facilities to be used if/when needed. Identify preferred facility as XXX
	+ Identify and plan a safe travel route to your Vessel Safey *(located at: XXX)* or Refuge Site *(located at: XXX)*
		- Secure vessel(s) in the marina, if permitted or to take vessel(s) to a previously identified hurricane refuge *(see above)*.
			* Trailerable Vessel(s)
				+ If trailing vessel(s)to the Safety or Refuge site, ensure the tow vehicle(s) & trailer(s) is capable of properly and adequately moving the vessel(s).

Tow vehicle(s) & trailer(s) are periodically inspected for wear and repairs are made.

Light Weight Vessel(s)- prior to securing at the Safety or Refuge site- check with manufacturer regarding releasing about half the air out of the tires, then filling the boat one-third full of water to help hold it down.

* + - * Non-Trailerable Vessel(s) in Dry Storage
				+ Determine a safe dry location and how to arrange for vessel(s) to move there

*Be sure to select a location that accounts for storm surge and where seawalls and docks are sound, mooring bitts and cleats are secure, dock pilings and dolphins are in good condition.*

* + - * Non-Trailerable Vessel(s) in Wet Storage (vessels remaining in marina berth)
				+ Determine which, if any vessel(s) will remain in the marina berth

Ensure there are enough lines to be doubled.

If needed, identify best pilings for securement

Select the strongest, tallest & properly installed pilings

Ensure fenders and chafe protectors are available.

Ensure primary cleats, buffs, bollards, winches and chocks have substantial back plates and adequate bolt sizes (stainless steel)

Ensure there is a battery charging process to ensure full charges and/or obtain backup batteries. Batteries need to run automatic bilge pumps for the duration of the storm.

* + - Specifically identify and assemble needed equipment and supplies. Keep them together and practice the plan to ensure it works before hurricane season.
		- Consolidate all records including insurance policies, a recent photo of your vessel, boat registration, equipment inventory, lease agreement with the marina or storage area, and telephone numbers of appropriate authorities, i.e., harbor master, Coast Guard, insurance agent, National Weather Service, etc., and keep them in your possession as they may needed as part of the return & recovery.
	+ Maintain an inventory of items removed and those left on board. Items of value should be marked so that they can be readily identified.
	+ Create a plan on how valuable equipment/inventory will be removed from the vessel(s) and estimate the time needed for removal and moving to a safe place *(located at XXX).*
	+ Ensure all vessel(s) are in sound condition (hull, deck, hardware, rigging, ground tackle, machinery and electronics).
		- Enhance watertight integrity above & below water line
			* Seal windows, doors and hatches
			* Shut sea cocks and cap off or plug unvalved through-hull fittings such as sink drains
		- Ensure primary cleats, buffs, bollards, winches and chocks have substantial back plates and adequate bolt sizes (stainless steel)
		- Lines
			* Check for chafing of mooring lines.
			* Storm moorings should have doubled lines. The second set of lines should be a size larger than the normal lines, including spring lines at a dock.
			* Backup Materials
				+ Ensure adequate supply of mooring lines, screw anchors, fenders, fender boards, chafing gear, and anchors are available.
	+ Periodically hold drills for all/any of the plans that includes an actual visit to alternate sites

Hurricane Watch

A Hurricane Watch is issued when a tropical cyclone containing winds of 64 kt (74 mph) or higher poses a possible threat, generally within 48 hours. Storm surge, coastal flooding, and/or river flooding.

* Follow plan if watch is issued outside of working hours/days *(see Hurricane Long Term Prep for more details)*
* Monitor forecasts closely to help you know when to act.
* Confirm that your employee contact lists are current.
* Review evacuation plan.
	+ Evacuate all non-essential employees.
* Check emergency supplies.
	+ Turn refrigerator and freezer to coldest settings. Open only when absolutely necessary.
	+ Store drinking water in jugs, bottles, and cooking containers.
* Secure all doors and shutter or board up windows to help protect them from flying debris.
* Clean out floor drains and catch basins and check drainage pumps.
* Fuel vehicles/mobile equipment and them to a safe location.
* Anchor and fill aboveground tanks to capacity with product or water to help keep them secure during the storm.
* Fill emergency generators and fire pump fuel tanks.
* Verify that fire protection equipment is operational.
* Make sure important records are protected – or duplicate them and move them off-site to a safe area.
* Shut down production processes safely and turn off power to noncritical equipment. Critical equipment, such as sump pumps and fire pumps, should remain operational.
* Shut off all flammable liquid, combustible liquid, and gas lines in case a pipe breaks during the storm.
* If evacuating employees, relocate to XXX (take attendance) and await further instruction from emergency personnel or your organization contact(s): XXX
* Tie down sheds, small outbuildings or similar structures that may not be designed for high winds.
* Remove outside antennas.
* Move any items inside that could blow away in a powerful windstorm. Items including yard storage, benches, chairs, plant urns, signs or potted flowers could become flying debris and cause substantial damage during a storm.

Hurricane Warning

A Hurricane Warning is issued when sustained winds of 64 kt (74 mph) or higher associated with a tropical cyclone are expected in 36 hours or less.

* Follow plan if watch is issued outside of working hours/days *(see Hurricane Long Term Prep for more details)*
* If evacuating, relocate to XXX (take attendance) and await further instruction from emergency personnel or your organization contact(s): XXX
	+ Confirm that your employee contact lists are current.
	+ Evacuate all non-essential employees.
* If in a mobile home, trailer, portable building or similar, check tie-downs and evacuate immediately.
* Monitor forecasts closely to help you know when to act. All precautions must be completed immediately.
* Store valuables and important papers in a waterproof container in the highest possible location protected from potential flooding. Duplicate them and move them off-site to a safe area.
* Avoid elevators.
* Prepare for high winds: brace your garage door, lower antennas and be prepared to make repairs.
* Anchor objects outside: awnings, garbage cans, furniture, equipment, and tools or bring them inside.
* Protect windows and other glass: securely board up or shutter large windows and draw curtains, drapes, etc across windows and doors to protect against flying glass.
* If required, move boats and trailers close to building:
	+ (1) Fill boats with water to weigh them down.
	+ (2) Lash securely to trailer and use tie-downs to anchor trailer to the ground or house.
	+ (3) Check mooring lines of boats that must remain in water, then leave them.
* Check emergency supplies.
	+ Turn refrigerator and freezer to coldest settings. Open only when absolutely necessary.
	+ Store drinking water in jugs, bottles, and cooking containers.
* Clean out floor drains and catch basins and check drainage pumps.
* Fuel vehicles/mobile equipment and them to a safe location.
* Anchor and fill aboveground tanks to capacity with product or water to help keep them secure during the storm.
* Fill emergency generators and fire pump fuel tanks.
* Verify that fire protection equipment is operational.
* Shut down production processes safely and turn off power to noncritical equipment. Critical equipment, such as sump pumps and fire pumps, should remain operational.
* Shut off all flammable liquid, combustible liquid, and gas lines in case a pipe breaks during the storm.
* Prepare for storm surge, tornadoes, high winds and flooding:
	+ In a Tornado Warning
		- Seek inside shelter below ground level if possible. Otherwise, go to the innermost small room away from outside walls, doors and windows on the lowest level of your structure. Mobile homes and portable buildings are extremely unsafe during a tornado.
		- If you are outside, seek cover in a ditch or other low spot.
		- Complete evacuation well before the arrival of tropical force winds.
* Evacuate all remaining employees.

Hurricane- Autos-Short- Term Prep- as a Hurricane approaches

Allow adequate time for vehicle relocation, so that there is no driving in extremely severe weather conditions. Ensure there is enough time to return to obey any local mandatory evacuation orders in the area where the vehicle was being relocated from.

* Prepare vehicle(s) for relocation:
	+ Perform a pre-trip inspection on the vehicle and make necessary repairs.
	+ Ensure to maintain full fuel levels in the vehicle during the relocation and after the storm has passed.
	+ Have a basic survival kit in the vehicle.
	+ Remove objects that are not permanent such as antennas, hoses, temp equipment.
	+ Take pictures of the vehicle’s condition.
* Follow the planned safe route to the designated vehicle relocation site located at XXX *(see above in Hurricane Long Term Prep section for additional details)*
* Prepare vehicle(s) for storage at relocation site:
	+ Cover vehicle to prevent water intrusion in the cab area and into electrical components.
	+ Ensure covering is adequately secured to the vehicle to withstand wind forces.
	+ Tape glass windows in the vehicle using masking tape and a crisscross pattern.

Hurricane Prep- Jobsite- Short-Term Plan- as a Hurricane approaches

The following steps should be undertaken as soon as a Hurricane is known to be approaching.

* Postpone delivery of building materials, etc
* Stop all construction activity.
	+ Brace building components per engineering design or recommended manufacturer guidelines.
	+ Anchor roofs, roof panels, etc.
	+ Cover all large open wall openings
* Evacuate all non-essential employees & subcontractors.
	+ Advise subcontractors to await direction regarding return.
* Ensure an emergency kit is available.
* Clean up any construction debris
* Call dumpster and portable toilet companies for pick-up
	+ If unable to have portable toilets picked up, push toilets over and secure them by weighing down interior (ie concrete blocks, sand, etc)
* Ensure written inventory at the jobsite is up to date and a copy has been sent to home office *(see above in Hurricane Long Term Prep section for additional details)*
* Secure and anchor all storage sheds, trailers, outbuildings, equipment, etc
	+ Ensure there are ample tie downs for all items deployed at each job site.
	+ Lower crane booms & stack and pin crane mats
* Turn off electricity and or water as applicable.
* Remove permit box/board all files or paper work from job site in plastic bags to protect against moisture and take to home office or other designated safe place.
* Evacuate all remaining employees & subcontractors.
	+ Advise subcontractors to await direction regarding return.

Hurricane- Vessels- Short- Term Prep- as a Hurricane approaches

The following steps should be undertaken as soon as a Hurricane is known to be approaching. Do not stay aboard any vessel during a hurricane

Each vessel should be reporting status and location to home office at 36 hours out from storm, 24 hours out from storm and again at 12 hours out.

After anchoring or mooring provisions has been completed:

* Remove all moveable equipment such as canvas, sails, dinghies, radios, cushions, biminis and roller furling sails, deck gear, portable gear, radio antennas, outriggers, fighting chairs, deck boxes, boom, dorades, extra halyards, canister rafts, and dinghies.
* Lash down everything that cannot be removed such as tillers, wheels, booms, etc.
* Make sure that you secure all hatches, ports, doors, lazarettes and sailboat rudder.
* Ensure electrical system is cut off *(unless the plan includes leaving the vessel(s) in the water)* and remove the battery to eliminate the risk of fire or other damage.
* Perform a check of the following:
	+ fuel tanks are full
	+ fuel filters are clean
	+ batteries are charged
	+ bilges are clean
	+ cockpit drains are free and clear
	+ fire fighting equipment is in good order
	+ lifesaving equipment is in good condition, in place and readily accessible

Trailerable Vessel(s)

* Follow Trailering Plan to the Safety or Refuge site. *(see above in Hurricane Prep: Long-Term Prep for additional information)*
* Lash vessel(s) to the trailer and place blocks between the frame members and the axle inside each wheel.
	+ Light weight vessels release about half the air out of the tires, then fill the boat one-third full of water to help hold it down. *(see above in Hurricane Prep: Long-Term Prep for additional information)*
* Secure vessel(s) with heavy lines to fixed objects and/or tied down to screw anchors secured in the ground. Optimally try for securement from four directions.

Non-Trailerable Vessel(s) in Dry Storage

* Follow the Non-Trailerable plan to the Dry Location Site *(see above in Hurricane Prep: Long-Term Prep for additional information)*
* Lash the vessel(s) to its cradle with heavy lines and consider, based on the weight of the boat, adding water to the bilge to help hold it down.
* Never leave a boat in davits or on a hydro-lift.

Non-Trailerable Vessel(s) in Wet Storage (vessels remaining in marina berth)

* Follow the Wet Storage Plan *(see above in Hurricane Prep: Long-Term Prep for additional information)*
* Secure the vessel(s)
	+ Assess the attachment of primary cleats, winches and chocks.
	+ Double all lines. Rig crossing spring lines fore and aft. Attach lines high on pilings to allow for tidal rise or surge. Make sure lines will not slip off pilings.
	+ Cover all lines at rough points to prevent chafing (wrap with tape, rags, and rubber hoses, etc). Install fenders to protect the boat from rubbing against the pier, pilings, and other boats. Use chafe protectors at any potential chafe points.
* Ensure batteries are fully charged or use the back up batteries. Cut off all devices consuming electricity except bilge pumps.

After the Hurricane – General Hurricane Recovery

* If evacuated, delay return until authorized by XXX (take attendance) or when recommended by local authorities.
	+ Telephone services within the evacuation zone may be overloaded or non-existent for an extended period of time. Listen to radio or television for information concerning returning.
	+ Take a head count of employees.
* Recovery Team Leader(s) and Team will assess, complete and/or repair the following:
	+ Photograph and/or record a video of any damage.
	+ Safety hazards, including downed power lines, exposed electrical wires and leaking gas.
		- Require strict precautionary measures for any cutting or welding, including a formal hot work permit system such as found in NFPA 51B, Standard for Fire Prevention During Welding, Cutting, and Other Hot Work.
			* Eliminate any unnecessary ignition sources and enforce no smoking regulations.
		- Treat all downed lines as live wires and do not touch them. Report the fallen power lines to your local power company or police. Stay inside your car if a wire is touching it and wait for help to arrive.
		- An electrician has checked, thoroughly dried and tested all systems and equipment before energizing electrical circuits.
			* Avoid using candles as a light source. Use flashlights or lanterns.
	+ Structural damage to buildings or damaged foundations.
		- Establish a procedure for removing storm- or reconstruction-related debris.
		- Temporarily repair any holes or damage to the building or roof if it is safe to do so.
	+ Assess damaged contents to see what can be salvaged and prioritize repair or replacement.
		- Critical production equipment and valuable stock required to restore production.
		- All mechanical equipment and systems should be checked for leaks and damage, and cleaned and dried, as needed.
		- Completion of temporary repairs so people can access the building safely.
	+ Impaired fire protection equipment, security alarms and sprinkler systems and notify the fire department if any of those systems will be out of service.
	+ The water supply should be checked for possible contamination.
		- Do not use water until safe: Use your emergency supply or boil water before drinking until officials declare the water safe. Check with you local health department or emergency management agency regarding water purification procedures. Report broken water or sewer mains to proper authorities.

After the Hurricane – Vessel Hurricane Recovery

* If evacuated, delay return until authorized by XXX (take attendance) or when recommended by local authorities.
* Do not move vessel(s) unless authorized by XXX and safe to do so.
* Check of the vessel(s) should be made as soon as practicable to determine its condition and security.
	+ Damages
		- Report any theft, vandalism or damages (non-storm related) to XXX and local law enforcement (ensure a copy of the report is obtained when available).
		- If vessel appears unrepairable, contact Insurance company (at XXX) for further direction.
			* Be prepared to have the hull removed from navigable waters to a yard or storage facility. Save as much equipment from the vessel as possible.
		- If vessel appears repairable, contact Insurance company (at XXX) for further direction.
			* Be prepared to have vessel(s) quickly moved to a repair yard

*See above in Hurricane- Long Term Prep for additional details*

* + Modify vessel(s) mooring if needed so that lines will not be cut by others attempting to navigate past you.
* Assess surrounding areas around vessel(s) and tow for debris or other snags that will impede vessel movement.
* Conduct a pre-voyage equipment check including visual check of the vessel’s navigation lights and all antennas.
* Conduct a steering gear/wheel was check prior to releasing the lines to shore.

After the Hurricane – Jobsite Hurricane Recovery

* Delay return until authorized by XXX (take attendance) or when recommended by local authorities.
* Management/Supervisors/Recovery Team Lead shall inspect the jobsite(s) and declare if safe for return. No one shall enter any job sites, building, etc until all buildings/structures, electrical systems & water sources are deemed safe.
	+ All needed repairs and/or clean up should be prioritized & started
	+ All equipment/tools/etc should be returned to their proper places
	+ Move to jobsite- necessary equipment, supplies, etc (ie pumps, generators)
	+ Restock all hurricane supplies/kits

**Jobsites - Thunderstorms, Lightning and Hail**

Prior Prep

* Install lightning protection systems composed of lightning rods, main conductors, bonds and grounds before inclement weather is forecasted.
	+ Conduct regularly checks ensure functionality.
* UL-listed surge arrestors should be installed on electrical panels and data lines.

Weather Approaching

* Discontinue crane lifts and other similar safety-sensitive job tasks
* Relocate vehicles and equipment to protected areas if possible, *(see Hurricane Long Term & Short Term Prep sections for additional information)*
* Unplug unused equipment and appliances until the storm passes.
* Secure materials & equipment and place tarps over piles of dirt or other loose materials.

**Jobsites - Drought and Heat**

* Comply with any state or municipal ordinances regarding water conservation.
* Ensure cooling stations and watering breaks are available and encouraged.
* Ensure proper clothing is being worn.
* **D**edicated fire watch and ensure fire extinguisher is in the in proximity of any hot work areas.
	+ Complete an end-of-day fire watch for at least one hour.

**Jobsites – Ice and Snow**

* Understand roof and floor load capacities and monitor snow accumulation.
	+ Identify and remove ice or snowbanks that may exist overhead.
		- Limit workers when possible from accessing roofs to remove snow/ice.
* Keep the job site free of snow and ice; all walkways should be clear and treated.
* Store equipment in heated areas. Install air monitoring devices if equipment is to be operated in enclosed areas.
* Heat and insulate water lines to help prevent freezing and bursting of the pipes.
* Ensure proper use, maintenance and inspection of temporary heating devices. Maintain proper clearance zones and develop fuel storage plans.
* Ensure proper clothing and footwear are being worn.
* Work zone traffic- ensure traffic controls are visible and appropriately placed.

**Wildfire**

Important Terms

* Direct flames: Typically coming from a wildfire or a neighboring structure.
* Radiant heat: Typically coming from nearby burning objects.
* Flying embers: Embers can be particularly destructive – capable of igniting up to a mile away.
* Vegetation:
	+ Vertical Spacing= Trim tree branches up to at least 6 feet from the ground. Increase vertical space between shrubs and trees to prevent fire from climbing. Use a formula for vertical spacing: Multiply shrub height by 3 for clearance. At least 10 feet should separate planting on flat to mild slip (<20%)
	+ Horizontal Spacing= at least 30 feet of distance between plantings on moderate to steep slope (>40%).
* Watches, Warnings and Ratings

*Your area may use the NWS or Forest Service Ratings or a combination of both. Be sure to know what is used in your area when creating your plan and in reviewing the below sections.*

* + Fire Weather Watch — The NWS issues when potentially dangerous fire weather conditions are possible over the next 12 to 72 hours
	+ Fire Weather/Red Flag Warning — The NWS issues when fire danger exists and weather patterns that support wildfires are either occurring or expected to occur within 24 hours.
	+ Evacuation Notice — If the danger is imminent, a fire is nearby and it is important to leave the area.
	+ National Fire Danger Rating System
		- Low- fuels do not ignite easily from small embers, but a more intense heat source, such as lightning, may start fires in duff or dry rotten wood. Fires in open, dry grasslands may easily burn, but most wood fires will spread slowly, creeping or smoldering. Control of fires is generally easy.
		- Moderate- fires can start from most accidental causes, but the number of fire starts is usually pretty low. If a fire does start in an open, dry grassland, it will burn and spread quickly on windy days. Most wood fires will spread slowly to moderately. Fires are still not likely to become serious and are often easy to control.
		- High- fires can start easily from most causes and small fuels (such as grasses and needles) will ignite readily. Unattended campfires and brush fires are likely to escape. Fires will spread easily, with some areas of high-intensity burning on slopes or concentrated fuels. Fires can become serious and difficult to control.
		- Very High- fires will start easily from most causes. The fires will spread rapidly and have a quick increase in intensity, right after ignition. Small fires can quickly become large fires and exhibit extreme fire intensity, such as long-distance spotting and fire whirls. These fires can be difficult to control and will often become much larger and longer-lasting fires.
		- Extreme- fires of all types start quickly and burn intensely. All fires are potentially serious and can spread very quickly with intense burning. Small fires become big fires much faster than at the "very high" level. Spot fires are probable, with long-distance spotting likely. These fires are very difficult to fight and may become very dangerous and often last for several days.

Evacuation

* If evacuating relocate to XXX (take attendance) and await further instruction from emergency personnel or your organization contact(s): XXX
	+ Confirm that your employee contact lists are current.
* If evacuation to the above location is not possible, Text SHELTER + your ZIP code (e.g., SHELTER 20472) to 43362 (4FEMA) to find the nearest shelter

Long-Term Prep- to be implemented before wildfires are approaching.

* Consider purchasing supplies such as N95 respirator masks, a portable air cleaner, and replacement filters for the HVAC system and/or portable air cleaner.
	+ Portable air cleaners should be equipped with high efficiency HEPA filters and be adequate for the room size.
* Store important papers/records in a fireproof & waterproof box. Duplicate them and move them off-site to a safe area.
* Complete a risk assessment for each facility/location:
	+ Create a plan on how valuable equipment/inventory will be removed from the facility/location and estimate the time needed for removal and moving to a safe place or another facility/location(s).
		- Maintain an inventory of valuables removed and those that must remain behind. Valuables as applicable, should be marked so that they can be readily identified.
	+ Identify and Create Defensible Space Zones

*crucial for your property’s wildfire safety as it’s the buffer zone between your property and the surrounding wildland area. This space is key to slowing or stopping wildfire spread and protecting your property from embers, flames, or heat. It also gives firefighters a safer area to defend your property.*

***CHECK YOUR STATE AND/OR LOCAL ORDINANCES AS IT MAY DIFFER FROM THE BELOW, which is based on NFPA guidance.***

* + - Zone 1*-* minimum 30-foot space. Clear combustible materials; replace flammable vegetation; prune branches and shrubs to create 15 feet of space from the structure, from the ground, and between trees.
		- Zone 2- 30-100 feet out. Replace flammable vegetation, create “fuel breaks” such as driveways and gravel walkways; prune trees limbs 6 to 10 feet from the ground.
		- Zone 3- 00-200 feet out. Remove underbrush and thin vegetation, ensure that wood (ie fire wood, pallets, etc) is placed at least 100 feet away from structure, and keep tall trees from creating touching canopies.
	+ Roofs
		- Identify covering(s) *composite, metal, clay or tile are better to resist fires vs wood or shingle roofs.*
		- Ember Sealing-close off gaps under roof tiles and shingles to block wind driven embers.
		- Regularly clear leaves, pine needles, etc from roofs to lessen ignition materials
	+ Gutters
		- Keep gutters free from plant debris to prevent ember ignition.
		- Add a noncombustible metal drip edge to protect the roof’s edge from ember exposure.
		- Use noncombustible gutter covers to keep out debris and reduce maintenance.
	+ Windows
		- Install 1/16-inch to 1/8-inch noncombustible, corrosion-resistant metal mesh over vents to block embers. Avoid fiberglass or plastic meshes.
		- Fit dual-paned windows with at least one tempered glass layer to withstand fire-induced breakage.
		- Add screens to all operable windows to catch embers and reduce heat.
	+ Exterior Walls/Siding
		- Identify siding material(s) *stucco, fiber cement, specially treated wood are better to resist fires*
			* *Note if siding does not extend from foundation to roofline*
	+ Parking/Driveways and Access Roads
		- Keep a minimum of 10 feet of vegetation clearance on either side of driveways and access roads.
		- Ensure gates open inward and are wide enough for emergency vehicles, and keep overhead branches trimmed.
	+ Identify unique features, such as solar panels, propane tank/systems, heating oil tank system, etc.
		- If propane tank or systems are present, assign responsibility of turning off valves and removing tanks (if possible)
	+ Identify a clean room to be used in the event evacuation is not possible.
		- The clean room should have as few windows, doors, and other openings as possible. A portable air cleaner should be available for the room.
* Employee Training
	+ Hold regular training for new and existing employees, including remote employees and subcontractors as applicable.
		- All personnel should be aware of the emergency action plan and assigned responsibilities.
		- Ensure all can operate and replace filters for any portable air cleaners.
		- Ensure all know how to properly inspect and wear N95 masks.
* Vehicles
	+ Maintain vehicles so that chains or other metal parts are not dragging or can create sparks when driving.
		- Also ensure tires are inflated the proper pressures.
		- Ensure brake pads do not wear too thin
	+ Identify and plan a safe travel route to the Vehicle Relocation Site *(located at: XXX)*

*Select an inland location that*

* + - *Avoids potential storm surge and flood prone areas.*
		- *Is outside the cone of wind impact if practical.*
		- *Is secure and in an open area free of nearby objects that may impact the vehicle such and trees, electrical poles, overhead objects, and potential flying debris*

**Coaction Claims- Report a Loss**

* Check your policy for full instruction and guidance on reporting a claim
* Toll Free: 1-800-774-2755
* Online: https://www.coactionspecialty.com/claims/
* Email: claims@coactionspecialty.com

**ADDITIONAL RESOURCES**

**OSHA RESOURCES**

* <https://www.osha.gov/etools/hurricane>
* <https://www.osha.gov/hurricane/preparedness>

**US Government**

* <https://www.ready.gov/business>
* <https://www.ready.gov/sites/default/files/2020-04/ready_business_hurricane-toolkit.pdf>
* <https://www.ready.gov/wildfires>
* <https://www.airnow.gov/wildfires/>
* <https://www.airnow.gov/wildfires/when-smoke-is-in-the-air/>
* <https://readyforwildfire.org/prepare-for-wildfire/>
* <https://community.fema.gov/ProtectiveActions/s/article/Wildfire>
* <https://www.cdc.gov/wildfires/about/>

**NOAA**

* <https://www.noaa.gov/hurricane-prep>
* <https://www.weather.gov/safety/hurricane>

**National Weather Service**

* Definitions of Weather Watch, Warnings and Advisories <https://www.weather.gov/lwx/WarningsDefined>

**STATE/CITY SPECIFIC RESOURCES**

* **Florida**
	+ <https://www.floridadisaster.biz/>
	+ <https://fhba.com/wp-content/uploads/2016/08/2016-FHBA-Jobsite-Hurricane-Prep-Guidelines.pdf>
	+ Miami-Dade Storm Surge Planning Zones: <https://www.miamidade.gov/global/emergency/hurricane/storm-surge-zones.page>
	+ Palm Beach County- Evacuation and Flood Zone: <https://discover.pbcgov.org/publicsafety/dem/pages/know-your-zone.aspx>
	+ Martin County Storm Surge Evacuation Zones: <https://www.martin.fl.us/EvacuationZones>
	+ Brevard County Evacuation Zone: <https://www.brevardfl.gov/EmergencyManagement/BePrepared/Step3HaveAPlan/Evacuation>
* **Louisiana**
	+ <https://ready.nola.gov/NOLAReady/media/Documents/GOHSEP-EmergencyGuide_English.pdf>
	+ <https://labeoc.org/wp-content/uploads/2023/05/SBA-hazard-checklist_Hurricane_V20_508as.pdf>
	+ <https://labeoc.org/prepare/>
	+ <https://www.opportunitylouisiana.gov/hurricaneresources>
	+ <https://www.atlanticarea.uscg.mil/Portals/7/Seventh_District/airstaBorinquen/docs/HurricanePage/Boat%20Preparations.pdf?ver=2017-06-21-122956-490>
* **Maryland**
	+ <https://health.maryland.gov/Pages/Emergency-Preparedness.aspx>
	+ <https://mdem.maryland.gov/Pages/default.aspx>
* **Massachusetts**
	+ <https://www.mass.gov/stay-aware-be-prepared>
	+ <https://www.mass.gov/be-prepared-for-emergencies>
	+ <https://mass211.org/emergency-disaster>
* **North Carolina**
	+ <https://www.readync.gov/>
	+ <https://www.deq.nc.gov/about/divisions/water-resources/drinking-water/emergency-planning/hurricane-planning>
	+ <https://files.nc.gov/readync/documents/files/HurricaneGuide_2021_ENweb.pdf>
	+ Winter Storm Planning- <https://www.deq.nc.gov/about/divisions/water-resources/drinking-water/emergency-planning/winter-storm-planning>
	+ Specific to New Hanover county: <https://www.nhcgov.com/200/Community>
	+ <https://www.atlanticarea.uscg.mil/Our-Organization/District-5/District-Units/Sector-North-Carolina/Hurricane-Resources/>
* **Virginia**
	+ <https://www.vdh.virginia.gov/emergency-preparedness/>
	+ <https://www.vaemergency.gov/>
	+ <https://www.deq.virginia.gov/our-programs/disaster-preparedness>
	+ <https://virginiabeach.gov/services/emergency-preparedness>
	+ <https://www.arlingtonva.us/Government/Departments/PSCEM/Emergency-Preparedness>

**US COAST GUARD** [**https://www.uscg.mil/Units/Organization/#pa**](https://www.uscg.mil/Units/Organization/#pa)

**ATLANTIC AREA**

* **District 1-Connecticut, Massachusetts, New Hampshire, Northern New Jersey, New York, Rhode Island, Vermont and Maine.**
	+ <https://www.atlanticarea.uscg.mil/Our-Organization/District-1/>
* **District 5- South Caroline to New Jersey (Delaware Bay, Maryland, North Carolina, Virginia)**
	+ <https://www.atlanticarea.uscg.mil/Our-Organization/District-5/>
* **District 7- Florida, Georgia, South Carolina, Puerto Rico**
	+ <https://www.atlanticarea.uscg.mil/Our-Organization/District-7/>
* **District 8- Coastline states- Alabama, Florida panhandle, Louisiana, Mississippi, Texas**
* **District 9- Great Lakes, Sait Lawrence Seaway & surrounding area**
	+ <https://www.atlanticarea.uscg.mil/Our-Organization/District-9/>

**PACIFIC AREA**

* **District 11- Arizona, California, Nevada, Utah**
	+ <https://www.pacificarea.uscg.mil/Our-Organization/District-11/>
* **District 13- Idaho, Montana, Oregon, Washington**
	+ <https://www.pacificarea.uscg.mil/Our-Organization/District-13/>
* **District 14- Hawaiian islands, Guam, American Samoa & activities in Saipan, Singapore & Japan**
	+ <https://www.pacificarea.uscg.mil/Our-Organization/District-14/>
* **District 17- Alaska and the Arctic**
	+ <https://www.pacificarea.uscg.mil/Our-Organization/District-17/>

