

Division of Marine Science Stennis Space Center, MS

Hurricane and Tropical Storm Management Plan

May 16, 2024 Rev. 2

Prepared by Peter Sciarabba, DMS Facility Manager

Table of Contents

Introduction	3
Definition and Description of Hurricane Condition Levels	5
Communications	
Online Resources	12
NASA Stennis Space Center Hurricane Guide (2019)	13
Essential Personnel	15

Introduction

In the event that severe tropical weather threatens Stennis Space Center (SSC) or the surrounding area, all possible precautions are to be taken to safeguard personnel, equipment and resources. This plan is intended to provide the guidance necessary prior, during and following tropical weather threats that will help DMS personnel accomplish the above objectives while providing for Division needs and ensuring the necessary coordination with other activities and agencies on site. Other forms of destructive weather include severe tornadic breakouts, severe thunderstorm activity, or winter storms with freezing and destructive winds. In these cases, as well as other emergencies, communication procedures as outlined below may apply.

NASA's Emergency Operations Center (EOC) and the Center Directorate have the overall responsibility for setting the conditions of readiness for anticipated tropical weather, or other severe weather incidents that may impact Stennis Space Center. NASA has responsibility for closing SSC due to impending weather, recovery operations during and following destructive weather, and declaring the site open for normal operations once the weather has passed. While SSC is closed, gate security will admit only essential personnel (as designated by DMS). Any other employee or student will not be allowed on site for any reason (such as stopping by the office/laboratory or simply driving through as a short cut). Keep in mind that Stennis is NOT a shelter for employees, their families and pets, or local citizens. <u>SSC Condition Status takes precedence over any</u> status/condition provided by USM (Hattiesburg or Gulf Coast teaching sites). This means that if Stennis is closed, Security will NOT allow USM employees on site even if USM declares that they are open for normal operations. That being said, employees should monitor both agencies for reports and information regarding severe weather and preparations. More recently, USM has differentiated campuses by location (Hattiesburg and coastal campuses of Stennis, GCRL, and Long Beach), and will refer to them in any closure or severe weather statements (ie, Eagle Alerts). It is important to pay attention to exactly which locations will be closed. In the event classes are canceled, that should generally apply to all locations.

The above does not preclude DMS or USM from taking earlier precautions should this be deemed prudent. Such a decision is the responsibility of the Division Chair or in his/her absence the senior faculty member present. On a biannual basis (pre-hurricane season and in August when new students arrive for Fall semester), DMS Administration will update the list of contact information for all employees, including home addresses, cell phone numbers, and emergency contacts. Faculty who manages laboratories/shops in Bldg. 1022 and 1029 should have mission/research-specific plans for each Condition Status as defined by NASA/SSC. If additional resources are required beyond what is provided by DMS and SSC (ie, building generators), faculty need to request assistance at the beginning of hurricane season (May). If faculty are not present during severe weather, an employee (technician, post-doc, or student) of their laboratory should be prepared to handle all necessary preparations. A representative from DMS will attend all Emergency Council meetings and distribute important information. It is important to emphasize that precautions must be undertaken in sufficient time to both provide for an orderly shutdown of the DMS, as well as the dismissal of personnel with sufficient time to implement their personal destructive weather preparations.

For information purposes: Stennis Space Center is at an elevation of approximately 41'. Storage of boats, watercraft, equipment chemicals and vehicles should be safe from tidal flooding during a storm.

Definition and Description of Hurricane Condition Levels

Note: Condition Status Levels are defined by NASA/Stennis Space Center and are <u>inverse</u> from the numbering scheme used elsewhere by USM.

<u>Condition V:</u> SSC is open for normal business and is unaffected by major/severe weather.

<u>Condition IV (72 Hours)</u>: Status is declared when the National Weather Service warns that destructive force winds (>58mph) are expected to reach the Mississippi Gulf Coast <u>within 72 hours</u>. SSC Emergency Council will commence with daily meetings (nominally at 12 noon). All personnel should review their personal preparedness plan, home preparations, and stay alert to potential evacuation recommendations.

- Communicate SSC and USM status updates to faculty, staff, and students through email and /or text.
- Communicate SSC status updates with University leadership (see contact information on table 1.4)
- Secure loose material in outdoor areas that could become an airborne hazard. Dispose of unnecessary items in either the dumpsters near 1022 and 1029 (miscellaneous debris) or bring to landfill/recycling area on site (wood and metal). Loose material that cannot be disposed of or removed should be secured in place (ratchet straps, other heavy items, etc).
- DMS facility manager should verify the building generators' operational status, including making sure that the fuel tanks are more than 3/4 full (refueling may require an SR that includes fuel cost and labor overtime).
- All DMS vehicles are recalled to Stennis. Verify fuel levels and top off if less than ½ tank.
 Make sure forklift propane tanks are full. Ensure portable generators are operational and fueled. If necessary, fill additional gas containers for vehicles and/or generators. Collect extension cords and surge protectors for generator use.
- Facility Manager and/or Key Custodian should confirm with NASA Security (Chenega) that they have the exterior door key to DMS buildings.
- All personnel should back up their files/data (external hard drives, or online (Dropbox, Google Drive, the Cloud), power down and unplug <u>non-essential</u> equipment, instruments, and computers.

- USM iTech recommends everyone backup their computers to Microsoft OneDrive at all times. Here are the instructions: <u>https://support.office.com/en-us/article/back-up-your-documents-pictures-and-desktop-folders-with-onedrive-d61a7930-a6fb-4b95-b28a-6552e77c3057</u>.
- You can also visit the iTech website: <u>https://www.usm.edu/itech/eagle-backup.php</u> or enter a work order for assistance. DMS Technology Committee/Chair should inform Keith Hill and/or David Sliman (USM iTech) of other needs, specifically regarding systems in the datacenter. Generally, these systems are backed up daily and replicated to a secondary site in Oxford MS.
- Everyone is responsible for their personal items/areas: Perishable food items should be removed from all refrigerators and freezers. Unplug all coffee pots, even if they are turned off. Close/latch all office/lab windows and draw the shades.
- Facility manager will inspect rooftops of all buildings to clear tree and dirt debris from drains.
- USM Radios (for use by GCRL and SOSE Emergency Operations personnel) should be charged and radio-checked with the GCRL Director using GC2/channel 13. Owners of DMS Radios: Division Chair, Facility Manager at Stennis, Facility Manager at MRC, Director of MRC.
- Essential Personnel (EP) list will be reviewed and updated if necessary, and the most current copy will be sent to those on the list as well as the SSC Emergency Management Coordinator (see Essential Personnel contact list on pg. 15).

<u>Condition III (48 Hours)</u>: Status is declared when the National Weather Service warns that destructive force winds (>58mph) are expected to reach the Mississippi Gulf Coast <u>within 48 hours</u>. All personnel should be listening for announcements concerning recommended (voluntary) or ordered (mandatory) evacuations from emergency management officials and take appropriate action. Personal preparations at home should be completed.

 Faculty should make preparations to secure data and samples; this includes prioritizing samples for storage (refrigerator, freezer, or room temperature) and ensuring laboratories in Bldg. 1022 are locked. The Radiation Safety Officer will confirm that all radioactive materials are properly secured and will update NASA Industrial Hygiene group of current inventory, if necessary.

- Move computers from exposed offices/laboratories to more secure locations away from windows, cover those items with plastic bags/sheeting, lift power supplies and other electronics off the floor and cover, and consider moving easily damaged equipment and furniture away from windows. Equipment that cannot be moved should be covered w/ plastic bags/sheeting. Even if essential, computers and other electronics (including instruments) should be turned off and unplugged in case of a power surge or lack of power altogether. Back-up of all essential data/records should be completed. Laptops and external hard drives should be secured, either in offices/laboratories or on your person at home.
- In Bldg. 1029, all large/heavy equipment in the AC Bay (room 102) will be moved into hallways and shops to prepare for vehicle storage. Rearrangement of large items (AUVs, other equipment) in the High Bay (room 101) may also be required to accommodate boats and trucks.
- Contact students (international) that may have transportation challenges and ensure they can get out of harm's way and offer assistance.

<u>Condition II (24 Hours)</u>: Status is declared when the National Weather Service warns that destructive force winds (>58mph) are expected to reach the Mississippi Gulf Coast <u>within 24 hours</u>. Non-essential personnel will be dismissed, and essential personnel soon after the checklist below is complete. SSC may begin to implement changes in traffic patterns. Contra-flow traffic patterns may also begin along Interstates 10, 12, and 59 (see "Online Resources" on pg.12 for links to MDOT and LA DOTD websites). All personnel should be listening to local radio and television stations (pgs. 10-11) for announcements of evacuation. Mandatory and/or recommended evacuations of surrounding areas are likely and affected personnel should take appropriate action. Local shelters in Hancock County will be prepared for occupancy (for addresses and information, link on pg.12).

- Follow up with the students that have transportation challenges and check on their status and possible needs.
- USM/DMS vehicles and vessels will be moved into Building 1029 (AC bay and High Bay).
- Forklift will be moved to welding area on the southeast side of 1029, against exterior doors to machine shop (if it does not fit indoors).
- All laboratories, offices, and storage rooms in ALL buildings should be locked (if required).
 Confirm that ALL exterior doors to buildings are locked.

<u>Condition I (12 Hours)</u>: Status is declared when the National Weather Service warns that destructive force winds (>58mph) are expected to reach the Mississippi Gulf Coast <u>within 12 hours</u>. Local hurricane shelters are open. All personnel should have completed or instituted their own destructive weather plans by this time. Only essential personnel (as designated by DMS) will be allowed to access the site. If the weather is extreme and/or SSC is in the direct path of a major hurricane, the EOC may decide that SSC will close to ALL personnel regardless of essential status.

Post Storm: SSC will remain closed as long as the site is located within a National Weather Service Tropical Storm or Hurricane Warning area. While SSC is closed, gate security will admit only "essential personnel" as pre-determined by the company and the necessity of having a qualified employee onsite during an emergency. After the National Weather Service warnings are lifted, SSC Emergency Operations Coordinator will decide to re-open the site based on local area damage, conditions, and damage at SSC. To obtain information about re-opening of the site and return to work, please monitor your USM email for site status of both USM Campuses and SSC. You may also call the SSC Emergency Operations Center at 228-688-3777, check the on your phone, or visit the SSC Emergency Management public website at sscsos.com. While coordinating with NASA, the Division Chair may ask selected personnel to assist in damage assessment prior to SSC being opened by NASA. Other than those exceptions requested by the Division Chair, DMS personnel are not to report back to work. Once NASA declares the SSC site open, DMS personnel will report to work, initiate any necessary corrective actions, and re-establish normal routine operations. Vehicles and vessels will remain in building 1029 until the person(s) responsible for them returns to site. Personnel who cannot return in a timely manner are to notify DMS office personnel and their immediate/direct supervisor.

Communications

Please use the resources below to monitor local weather conditions, as well as SSC Site Status. Any personnel who evacuate the area should leave a forwarding address and contact information with the administrative staff, at extensions 8-7097 or 8-3177. This information is in addition to the Emergency Contact List that will be updated biannually. If no forwarding information is provided, it is assumed that personnel have decided to shelter in place at their home address. If your return to SSC is delayed for any reason (flooding, road closures, transportation delays, damage to vehicles, etc.), you should contact the Division as soon as practical.

University of Southern Mississippi Information:

Please sign up for the <u>Eagle Alert</u> system and check in yearly to confirm current information. It will notify you via phone call, email, and/or text for any weather warnings, campus closings, and/or other emergencies. In all USM communications, DMS is considered part of "USM Coastal Operations", and/or part of the "coastal campus network". Should you see any of those phrases, the statement DOES apply to DMS at Stennis.

Alternate: USM official emergency update site: <u>http://southernmiss.info/</u>. This website may be slower to update and will not be the most accurate, up-to-date location for information. Your best option is to sign up for Eagle Alert.

Call the Division's main line at 228-688-3177 post-storm to check in and receive information regarding DMS. Also, check your USM email daily for updates from the School Director and/or Division Chair. For further information regarding personal evacuation and preparedness plans, please see <u>Marine Science's severe weather website</u> (website updates forthcoming).

Information may also be posted on the University's social media accounts on Facebook and Twitter. The School of Ocean Science and Engineering and GCRL also have social media pages that may provide more local information, rather than information from Hattiesburg.

NASA Stennis Space Center Information:

Download the FREE NASA Safe App:

Android/Google Play https://play.google.com/store/apps/details?id=com.cutcom.apparmor.nasa&hl=en&gl=US

Apple <u>https://apps.apple.com/ph/app/nasa-safe/id1635210233</u>

You can turn off the notifications but still use the app to monitor SSC Site Status. You may also call the Site Status phone line at 228-688-3777 to hear a recorded message, or visit the public-facing website for Stennis Emergency Operations at <u>http://sscsos.com</u>.

Check your USM email for information regarding operations at Stennis from the DMS Facility Manager and/or Division Chair.

Mississippi/Gulf Coast Radio Stations:

90.3 FM, Biloxi – MPB/NPR

- 93.7 FM, Biloxi Magic 93.7, Continuous Soft Rock
- 94.5 FM, Gulfport JZ94.5, Urban Contemporary
- 95.3 FM, Gulfport Gorilla, Today's Hits
- 97.9 FM, Saucier CPR, Rock/Alternative
- 99.1 FM, Pascagoula K99, Today's Best Country
- 102.3 FM, Gulfport/Biloxi Coast 102, Greatest Hits of All Time
- 103.1 FM, Ocean Springs Coast SuperTalk, Local News/Events
- 104.9 FM, Moss Point News Radio
- 105.9 FM, Pascagoula/Biloxi The Monkey, Today's Hits
- 107.1 FM, Gulfport/Biloxi K Love, Contemporary Christian

107.9 FM, Bay St. Louis to Pascagoula - Kicker 108, Country
1490 AM, Biloxi – The Possum, Classic Country
Mississippi/Gulf Coast Television Stations:
Hattiesburg- WDAM (NBC, ABC) Ch.7; wdam.com
Biloxi - WLOX (ABC, CBS) Ch.13; wlox.com

Gulfport - WXXV (FOX, NBC) Ch.25; wxxv25.com

New Orleans/North Shore Louisiana Radio Stations:

- 90.7 FM, WWOZ Jazz and Blues
- 94.7 FM, Lacombe LA The Lake, Current Hits
- 95.7 FM, the Bayou Classic Rock
- 97.1 FM, B97 All the Hits
- 99.5 FM, WRNO News and Talk
- 101.1 FM, WNOE Country
- 101.9 FM, Magic Adult Contemporary
- 105.3 FM, WWL News, Talk, and Sports Leader
- 106.1 FM, Nash Icon Country
- 870 AM, WWL News, Talk, and Sports Leader

New Orleans/North Shore Louisiana Television Stations:

- WWL (CBS) Ch.4; wwltv.com
- WDSU (NBC) Ch.6; wdsu.com
- WVUE (FOX) Ch.8; fox8live.com
- WGNO (ABC) Ch.26; wgno.com

Online Resources

Many of the websites listed below also have social networking sites on Facebook, Twitter, and/or Instagram. They may also have apps for Android and Apple cell phones and tablets. Please access each website to find more information and links to these applications. In many cases, information will be released via apps and social networking before the websites can be updated, so it is highly recommended to download the app or follow the agency on social media.

National Resources:

<u>Ready.gov</u> - Plan ahead for disasters, including hurricanes, tornados, and flooding.

National Hurricane Center – NOAA/NWS website for Hurricane forecast and tracking

<u>Weather Underground: Tropics</u> - Includes storm tracking, satellite animations, and "spaghetti models" of possible tracks of the storm/hurricane

State of MS:

Mississippi Emergency Management Agency - 2022 MSEMA Hurricane Guide (pdf)

Hancock County Emergency Management Agency – Includes listing of local shelters

Pearl River County EOC

<u>MS Dept of Transportation: Hurricanes</u> – Traveling in MS before, during, and after a storm. Includes traffic/Contraflow patterns <u>2022 Guide (pdf)</u>

NOAA Extreme Weather Info for MS (pdf)

State of LA:

Louisiana Emergency Planning - LA Emergency website, 2016 Guide (pdf) (most recent)

LA Dept of Transportation - Current Traffic/road conditions and closures

NWS New Orleans - Weather Forecast office for New Orleans/Baton Rouge/Slidell

NWS Southern Region Tropical webpage

NOAA Extreme Weather Info for LA (pdf)

Essential Personnel

USM/DMS Essential Personnel:

Name	Title	Email	Phone
Peter Sciarabba	Facility Manager	Peter.sciarabba@usm.edu	228-688-3504
			Cell: 601-569-4187
Kevin Martin	Senior Marine	Kevin.m.martin@usm.edu	228-688-1384
	Instrumentation		Cell: 610-462-5112
	Specialist		
Jerry Wiggert	Professor	Jerry.wiggert@usm.edu	228-688-3179
			Cell: 985-707-9000
Chris Hayes	Division Chair	Christopher.t.hayes@usm.edu	228-688-3469
			Cell: 203-535-4765
Jamie Davis	Applications	j.davis@usm.edu	228-688-2575
	Programmer		Cell: 228-342-6366

NASA/S3 Emergency Personnel at Stennis:

Name	Title	Email	Phone
Allan Price	Emergency	allan.v.price@nasa.gov	228-688-1202
	Management		
	Coordinator		
Robert Beverly	NASA Emergency	kenneth.e.volante@nasa.gov	228-688-3105
	Management		Cell: 228-344-8296
	Specialist		
Van Ward	NASA Center Chief	lavaniel.s.ward@nasa.gov	228-688-3592
	of Protective		
	Services - Security		
Noe, Michael	Deputy Project	Michael.s.noe@nasa.gov	228-688-3506
	Manager, Chenega		
	Security		
Energy Management	Heat, AC, air	SSC-EMCS@mail.nasa.gov	228-688-3381
Control Systems	handlers		
Office, 24/7			
Emergency Services	Ambulance, Fire,	none	From Cell: 228-
	Security		688-3636
			From Office phone:
			911

<u>USM University Police Department (UPD):</u>

Name	Title	Email	Phone
Rusty Keyes	Chief, Hattiesburg	Rusty.keyes@usm.edu	601-266-4946
			Dispatch: 601-266- 4986
Lisa Carter	Major, Coastal Operations	Lisa.Carter@usm.edu	601-266-5787

USM Leadership:

Name	Title	Email	Phone
Lucas Applewhite	Dir. Facilities	Lucas.applewhite@usm.edu	Gulf Park – 228-
	Planning and		214-3230
	Mngmnt, Coastal		GCRL - 228-818-
	Ops.		8019
Leila Hamdan	Assoc. VP Research,	Leila.hamdan@usm.edu	228-818-8011
	Coastal Operations		
Robert Leaf	Dir. SOSE	Robert.leaf@usm.edu	228-872-4296

2024 Hurricane Guide

Essential information for employees at NASA's Stennis Space Center to navigate the 2024 hurricane season

NASA Stennis WILL NOT

serve as a shelter to any workers or families

(including families of ride-out personnel). Download the Apps

Scan the NASA Safe and SSC Site-Status QR codes to keep emergency plans, maps, weather information, contacts, and other helpful information at your fingertips.

NOTE: All information regarding site status will be distributed through the NASA Safe and Site Status apps, and by email.





Download NASA Safe from the App Store



Download NASA Safe from Google Play

Pred230 i SITE NASA Stennis Space Center 01/ Image: Site Status Stennis Space Center Image: Protective Services Stennis Space normal operations Image: Weather For daily stat should call (3 the NASA/St secwebpub.secwebpu



Download Site Status from the App Store



Download Site Status from Google Play

For Site Status App

Allow Notifications

Did you know? The 2024 Atlantic Hurricane names are Alberto, Beryl, Chris, Debby, Ernesto, Francine, Gordon, Helene, Isaac, Joyce, Kirk, Leslie, Milton, Nadine, Oscar, Patty, Rafael, Sara, Tony, Valerie, and William.

For NASA Safe App

- Allow Notifications
- Choose Stennis Space Center (SSC) from Notification Preferences screen
- Save selections to receive notifications from app
- Allow Location Services while using the app

Know Your Way

Louisiana-Mississippi Interstate Contraflow Plan

To assist Louisiana during mandatory hurricane evacuation, the Mississippi Department of Transportation (MDOT) will implement contraflow (all lanes flow northbound) for both I-59 and I-55 when requested by Louisiana and approved by Mississippi.

- A contraflow decision is not automatic and will be used when absolutely necessary. Citizens should not delay evacuation plans in anticipation of contraflow.
- The I-59 contraflow operations will begin in Louisiana, extend into Mississippi, and end just south of Hattiesburg.
- The I-55 contraflow operations will begin in Louisiana, extend into Mississippi, and end just south of Brookhaven.
- Exits within the contraflow sections of the interstate highways will remain open as conditions allow. Law enforcement officers will assist with traffic control.

- Shoulders of both Interstates 59 and 55 should be kept clear for emergency vehicles. Motorists needing to stop should use the next available exit.
- Hancock County residents traveling westbound to Louisiana on I-10 will be routed North onto I-59 at the I-10/I-12 split. Contraflow operations cannot be considered on Highway 49.
- During hurricane evacuations, traffic congestion in the Hattiesburg area can be severe. To reduce area congestion and optimize the flow of traffic, MDOT may restrict or close entrances and exits on U.S. 49 N, I-59 and U.S. 98 W as traffic conditions warrant. These closures may occur with or without contraflow in place.
- Tune in to public broadcasting radio stations for emergency information and road conditions.



Have Your Plan

The Atlantic Ocean hurricane season extends from June 1 through November 30 each year, hitting its peak from mid-August to late October.

NASA Stennis employees are reminded to discuss their evacuation plans with supervisors so they can be contacted after a storm or to acquire their company/agency policy on contacts after a storm.

Download the **NASA Safe and SSC Site-Status apps** to keep emergency plans, maps, weather information, contacts, and other helpful information at your fingertips. All information regarding site status will be distributed through the NASA Safe and Site Status apps, and by email.

To prepare for hurricane season, individuals may contact county/parish offices and identify available shelters. In Mississippi and Louisiana, persons may call 211 for information about health and human services available.

Prepare early and double-check details Everyone is encouraged to double-check details related to a hurricane preparation plan. Public shelters may have changed, and evacuation destinations may not be so easily accessible. Travel could be more difficult, so it is critical to review and check preparation details to ensure they remain viable. Stores and pharmacies might be closed, so residents should plan accordingly.

Check your emergency kit

Individuals are urged to ensure all supplies are current. A good approach is to gather and organize food, water, medicines, and medical supplies into a kit for at home and on the go. A kit for on the go consists of three days of supplies, including backup batteries and chargers for electronic devices (cell phone, CPAP machine, powered wheelchair, etc.). A kit for home consists of enough supplies for two weeks.

Stay informed

Check informational lines and numbers to make sure they are still operable. Use apps, including the FEMA mobile app, and websites to receive the latest information.

National Resource Information

Federal Emergency Management Agency

NOAA National Hurricane Center

www.nhc.noaa.gov nhc.public.affairs@noaa.gov

National Weather Service Forecast Office

New Orleans: <u>www.weather.gov/lix</u>	985-649-0429 or 504-522-7330
Jackson: <u>www.weather.gov/jan</u>	

U.S. Coast Guard – 8th District (Gulf of Mexico region) www.atlanticarea.uscg.mil/Our-Organization/District-8/

Mississippi Resource Information

Mississippi Highway Safety Patrol

www.dps.ms.gov/highway-patrol 601-987-1212

Mississippi Insurance Department

www.mid.ms.gov		800-562-2957
----------------	--	--------------

Mississippi Power

Coast Electric Power

Louisiana Resource Information

Office of Homeland Security and Preparedness

www.gohsep.la.gov www.getagameplan.org 225-925-7500

Louisiana Department of Transportation

wwwsp.dotd.la.gov/Pages/default.aspx 877-4LA-DOTD (452-3683)

Louisiana State Police

www.lsp.org 800-469-4828 *LSP (*577) to report road emergencies

Louisiana Traveler Information

www.511la.org dial 511 in state 888-762-3511 outside state

Louisiana Department of Insurance

Cleco Corporation

Entergy (www.entergy-louisiana.com)

800-ENTERGY (368-3749) Power outages: 800-9OUTAGE (968-8243)

Washington-St. Tammany Electric Cooperative