

# FIRE & EMS OPERATIONS DURING HAZARDOUS WEATHER CONDITIONS

Department of Emergency Services  
St. Mary's County Fireboard Association  
St. Mary's County Rescue Association



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## **Purpose**

The purpose of this policy to provide general operating guidelines for responses during inclement weather or other high call volume periods. The primary objectives are to protect responders from unnecessary risks during adverse conditions and to help maintain an operationally manageable number of responses.

## **Introduction**

One of the most difficult decisions in these types of weather events is the determination to delay or halt emergency response. It is the culture and nature of the Fire & EMS Service to go into any storm or adverse conditions in order to save the lives of those they serve, even if it means sacrificing themselves.

However, responding at the height of a major storm risks the safety of the FIRE & EMS personnel, the emergency services infrastructure critical for sustaining long-term response and recovery efforts, and even the near- and long-term safety of citizens they mean to protect.

## **Scope**

This Policy shall be applicable to all Volunteer Fire Departments and Volunteer Rescue Squads personnel operating within the St. Mary's County.

When developing a specific department policy/procedure, all departments should use the NIMS model for incident command including the use of incident action plans (IAP), which will ensure proper documentation is done as the event occurs, greatly easing the post-storm recovery process, including gaining federal reimbursement in the event the incident is declared a federal disaster.

## **Authorities and References**

The parts of this Plan are developed under the provisions of the following authorities. Amendments and changes thereto may cause changes to this Plan.

1. Legal Authority
  - a. Local
    - i. St. Mary's County Resolution 75-59, Civil Defense and Disaster Preparedness Agency, St. Mary's County.
    - ii. Article 16A, Annotated Code of Maryland (Maryland Emergency Management & Civil Defense Act).
    - iii. Promulgation Statement, Board of Commissioners for St. Mary's County endorsing the St. Mary's County Emergency Operations Plan and directing compliance.
  - b. State of Maryland
    - i. Annual appropriations act of the state legislature.
    - ii. Annotated Code of Maryland, Article 16A.
    - iii. Annotated Code of Maryland, Article 41.
    - iv. Annotated Code of Maryland, Article 65.
    - v. State of Maryland Emergency Operations Plan, 1991 and subsequent revisions, Executive Order 01.01.1991.02.

c. Federal

- i. Public Law 93-288, Disaster Relief Act, 1974.
- ii. Part 205, Title 44, U.S. Code of Federal Regulations.
- iii. Federal Radiological Emergency Response Plan.
- iv. National Response Framework (and included Authorities and References Appendix 3).
- v. SLG 101, as amended.
- vi. Federal – 44 Code of Federal Regulations (CFR) Part 302.
- vii. Federal – 42 Code of Federal Regulations (CFR) Public Health.
- viii. Presidential Decisions Directive 39, June 1995.
- ix. Presidential Decisions Directive 62.
- x. Presidential Decisions Directive 63.
- xi. United States Code, 18 USC 2332a, Weapons of Mass Destruction.
- xii. United States Code, 18 USC 175-178, Biological Weapons Anti- Terrorism Act.
- xiii. United States Code, 18 USC 371-373, Conspiracy.
- xiv. United States Code, 18 USC 871-879, Extortion and Threats.
- xv. United States Code, 18 USC 1365, Tampering with Consumer Products.

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## **Guideline**

The following pre-determined levels of response shall be utilized to modify emergency operations during Hazardous conditions. Additional modifications may be made by the Emergency Operations Center as conditions warrant

### **Ceasing All Fire & EMS Operations**

If conditions pose too high of a risk for responders, it may be necessary to suspend all emergency response to a specific area or to the county at large. These conditions may include, but are not limited to, hurricane force winds (sustained 50 mph or greater), wide spread icing of roads, wide spread violence, blizzards, etc.

Only the St. Mary's County Emergency Operations Center has the authority to make this decision.

The following guidelines shall be utilized to activate or cancel "CEASING ALL OPERATIONS":

1. The Emergency Operations Center (EOC) has been activated and all requests to Cease Operations shall be directed to the Fire/EMS representative in the EOC or the EOC Director.
2. Once request is made or EOC Director is getting information that Ceasing Operations will be needed the following will be initiated:
  - 2.1. Fire, EMS, Law Enforcement and EOC Director will have discussion regarding the request, and if needed will determine the start time to implement and estimated/proposed time to return to normal operations.
    - 2.1.1. The Jurisdictional Medical Director will be involved in all discussions and final decisions.
  - 2.2. MIEMSS will be notified of all decisions by the EOC representative for the Rescue Association or the Jurisdictional Medical Director
  - 2.3. The Fire and EMS representative(s) in the EOC will also notify all Chiefs
  - 2.4. A paramedic will be utilized in the Emergency Communications Center in assisting Public Safety Dispatcher assistance. Dispatch will relay all requests for service to the paramedic which will prioritize these requests for response when conditions permit. Per EMD recommendations.
  - 2.5. The Emergency Communications Center will notify all departments by means of All Channel alert tone, and announcement, that the Cease All Operations is in effect and time; and if it is either county-wide or for specified areas. An advisory text message shall also be sent for notification purposes. It will also be sent to "INFO" text group.
  - 2.6. The Emergency Operations Center will issue media releases to advise the public that when certain weather conditions occur related to a hurricane, Fire/EMS services will cease (*be specific as to what those conditions are*).
  - 2.7. This guideline does not prohibit a responder from suspending an individual response due to safety concerns.

2.10 The same procedures shall be utilized to discontinue the Cease All Operations.

### 3. Mutual Aid Requests

3.1. Stations going out of service for Mutual Aid to surrounding Counties or any Mutual Aid will have a Chief Officer call into the EOC Fire or EOC EMS representatives and make notification.

### 4. Radio Communications

4.1. During periods of high call volume, the Emergency Communications Center (ECC) may become overwhelmed with 911 calls and radio traffic, requiring the need to limit responders to essential emergency traffic only.

4.2. When this happens ECC will notify units that ECC is in Code Red. During this time all radio traffic, requests for information, and phone calls shall be limited to essential emergency traffic only.

## Resuming Operations After the Hurricane

1.1. Operating companies must notify dispatch and other responding companies of all hazardous conditions they encounter including high water, road damage or blockage, etc. The First Due Company will keep a log of all calls to include the following; 5-digit address, time of arrival and time cleared, and description.

1.2. Departments shall conduct an immediate survey to give the Emergency Operations Center assessment of the following:

#### 1.2.1. Personnel

1.2.1.1. Does any member require medical assistance?

1.2.1.2. Is there adequate staffing?

1.2.1.3. Are there any other personnel problems?

1.2.1.4. Is all Equipment Operational

#### 1.2.2. Station

1.2.2.1.1. Is the station operational?

1.2.2.1.2. Are there any repairs that must be make?

1.3. Any hazards exist in or immediately adjacent to the station?

1.3.1. What significant repairs must be made?

1.4 Departments may be asked by Emergency Operations Center to conduct a neighborhood survey immediately surrounding the station (that which can be observed from the station property) and report conditions to command.

1.5 Companies are to conduct a "windshield survey" of their first-due area, including all target hazards identified in the preseason planning, and report conditions to command so they may get a full assessment of the incident and deploy resources in an efficient manner to where they are most needed.

1.6 While life-saving assistance remains the top priority, a search of predetermined target occupancies will be conducted as soon as possible.

1.7 Due to the lack of communications (*communications is unavailable due to catastrophic emergency*)

, the chief or company officer may have to determine the company's need to self-dispatch based on the situation at hand. When self-dispatched it will be the responsibility of the department to provide all pertinent call information to the Emergency Communications Center

- Chief and company officers will establish and strictly enforce periodic rehabilitation times for fire/EMS personnel, as well as a relief program for all members.
- Additional health and safety considerations include:
  - Ensure all exposures to personnel are properly documented.
  - Provide vaccinations as necessary.
  - Provide post-storm follow-up care as needed.

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## Annex A - Snow Emergency Plan

The Maryland State Police declares snow emergencies with input from MD State Highway Administration. Once a snow emergency is declared, the law requires certain precautions.

- Prohibited parking on the roads and streets designated as snow emergency routes
- The use of snow tires/chains (most cars now use all weather tires, so changing to "snow" tires is unnecessary.
- Once an emergency is in effect, all requirements are in effect until lifted.
- A Snow Emergency Plan is put into effect by county. Certain exceptions can occur while a snow emergency plan is in effect. A specific route(s) can be lifted and the remainders of the roads in the county still remain under the Snow Emergency Plan.

### **Dispatching when Snow Emergency Plan is declared:**

- When the snow emergency plan goes into effect in St. Mary's County a fire company will be dispatched with an ambulance on all ambulance calls.
- The unit from the fire department will respond with the ambulance unless the call is for a CPR or NOT BREATHING, in which case the fire units will respond immediately to the scene.
- All units have the normal 5-minute response time before additional units will be dispatched.
- When the snow emergency plan is lifted a fire company will only be dispatched upon request by the ambulance.



## Annex B – Tropical Storms / Hurricanes

The Saffir-Simpson Hurricane Wind Scale is a 1 to 5 rating based on a hurricane's sustained wind speed. This scale estimates potential property damage. Hurricanes reaching Category 3 and higher are considered major hurricanes because of their potential for significant loss of life and damage. Category 1 and 2 storms are still dangerous, however, and require preventative measures. In the western North Pacific, the term "super typhoon" is used for tropical cyclones with sustained winds exceeding 150 mph.

Category	Sustained Winds	Types of Damage Due to Hurricane Winds
1	74-95 mph 64-82 kt 119-153 km/h	<b>Very dangerous winds will produce some damage:</b> Well-constructed frame homes could have damage to roof, shingles, vinyl siding and gutters. Large branches of trees will snap and shallowly rooted trees may be toppled. Extensive damage to power lines and poles likely will result in power outages that could last a few to several days.
2	96-110 mph 83-95 kt 154-177 km/h	<b>Extremely dangerous winds will cause extensive damage:</b> Well-constructed frame homes could sustain major roof and siding damage. Many shallowly rooted trees will be snapped or uprooted and block numerous roads. Near-total power loss is expected with outages that could last from several days to weeks.
3 (major)	111-129 mph 96-112 kt 178-208 km/h	<b>Devastating damage will occur:</b> Well-built framed homes may incur major damage or removal of roof decking and gable ends. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes.
4 (major)	130-156 mph 113-136 kt 209-251 km/h	<b>Catastrophic damage will occur:</b> Well-built framed homes can sustain severe damage with loss of most of the roof structure and/or some exterior walls. Most trees will be snapped or uprooted and power poles downed. Fallen trees and power poles will isolate residential areas. Power outages will last weeks to possibly months. Most of the area will be uninhabitable for weeks or months.
5 (major)	157 mph or higher 137 kt or higher 252 km/h or higher	<b>Catastrophic damage will occur:</b> A high percentage of framed homes will be destroyed, with total roof failure and wall collapse. Fallen trees and power poles will isolate residential areas. Power outages will last for weeks to possibly months. Most of the area will be uninhabitable for weeks or months.

### Hurricane Watch: Hurricane may become a threat within 36 hours

- Fire Departments and Rescue Squads command and general staff should develop and implement an incident action planning process.

### Hurricane Warning: Hurricane is expected to hit within 24 hours

**Additional Model Policy for Hurricane Warnings:** Chief and company officers are to use their discretion when responding, mindful of the safety of fire/EMS personnel as their top priority.

### Hurricane Operations

To provide Fire/EMS response until the last possible moment, when storm conditions dictate that operations cease, the department will need to make a conscious and calculated decision that considers the realization that some apparatus and equipment may be vulnerable to the storm effects and may be damaged or lost.

**Appendix C: Wind Restriction Policy – Thomas Johnson Bridge**

Debel L. Hirthen, Jr. Governor  
Michael S. Steele, Jr. Governor



Robert H. Dunagan, Secretary  
Jodi J. Pedersen, Administrator

Maryland Department of Transportation

138 Defense Highway  
Annapolis, Maryland 21401

January 31, 2005

**MEMORANDUM**

**TO:**  Greg Hicks  
Director, Office of Traffic and Safety

**FROM:**  Gregory D. Welles  
District Engineer

**SUBJECT:** Wind Restriction Policy

I am pleased to inform you that we have completed the development of the Wind Restriction Policy for the Thomas Johnson Bridge for use during hurricane events. A copy of the completed policy is attached.

The attached policy was developed in cooperation with the local Maryland State Police, St. Mary's and Calvert Sheriff's Office, representatives from PAX River Naval Air Station and local Emergency Management personnel. Representatives from OOTS and Chart also contributed to this effort.

If you should have any questions, please feel free to call me at 410-841-5450 or 800-331-5603.

cc: Tommy Swann  
Kimberly Tran

My telephone number/toll-free number is 410-841-1300 or 1-800-331-5603  
Maryland Relay Service for Impaired Hearing or Speech 1-800-735-2258 Statewide Toll Free

Wind Restriction Policy  
For the Thomas Johnson Bridge  
During a Hurricane

Effective February 1, 2005

**PURPOSE:**

- A. To establish a policy for the operation of the Thomas Johnson bridge during hurricane events.
- B. The Thomas Johnson is equipped with an anemometer that will be monitored at least on the hour and half hour once sustained wind speeds of 30 miles per hour have been recorded during a hurricane. If a decision is made to close the bridge to traffic, the wind speed will then be continuously monitored. During a hurricane the following procedures will be implemented to prevent accidents and avoid potentially hazardous driving conditions for certain vehicles

**PROCEDURE:**

- A. The State Highway Administration will establish a SOP for detour routes and the placement of PCMS (portable changeable message signs) as well as the messages to be displayed during each phase of this procedure.

The State Highway Administration (Prince Frederick Shop) will be responsible for monitoring the wind speed at least on the hour and half hour once sustained speeds of 30 miles per hour have been attained during a hurricane. If a decision to close the bridge to traffic, the wind speed will be monitored continuously.

The SHA (Prince Frederick Shop) will notify Calvert EOC, St. Mary's EOC and SHA SOC when the thresholds for each phase have been attained. They will also be responsible for notifying the above when winds subside below the warning level for each phase.

Law-enforcement personnel are not restricted from exercising discretion in handling certain types of vehicles on an individual basis. The safety of motorists and the protection of the facility are the prime objectives.

**B. Phase I Wind Warning During a Hurricane**

(wind speeds 30-39 mph)

When sustained wind speeds reach 30 mph, the Resident Maintenance Engineer (RME) will notify Calvert EOC, St. Mary's EOC and SHA SOC that a wind warning is being implemented and will have PCMS identified in the SOP activated to read "Caution Wind Warning", "Thomas Johnson Bridge".

The RME will attempt to notify the Assistant District Engineer-Maintenance or the District Engineer of the implementation of this phase.

**C. Phase II Wind Restrictions during a Hurricane**

(Wind Speed 40-49 mph)

In the event sustained wind speed exceeds 39 mph, the RME will institute a Wind Restriction. House trailers, empty box trailers or any vehicle that, in the opinion of the law-enforcement personnel, may not cross safely will be prohibited from crossing the bridge.

The RME will notify Calvert County EOC, the St. Mary's EOC and SHA SOC that a Wind Restriction is being implemented and will have the PCMS identified in the SOP activated to read "Bridge Wind Restriction in effect", "No Empty T/T", "Speed 40 MPH".

The RME will attempt to notify the ADE Maintenance and/or the District Engineer of the implementation of this phase.

**D. Phase III**

(Wind speed exceeding 50 mph)

In the event sustained wind speed exceeds 50 mph, the RME will institute Phase III Wind Restrictions. During Phase III Wind Restriction, Law Enforcement Personnel will permit only automobiles, pickup trucks, flatbed trailers, and commercial buses to cross the bridge.

The RME will notify Calvert EOC, St. Mary's EOC and SHA SOC that a Phase III Wind Restriction is being implemented.

The RME will immediately notify the ADE-Maintenance and/or the District Engineer and advise of the present wind conditions and request instructions regarding the continued movement of traffic across the bridge.

If the decision is made to close the bridge to traffic, the RME will immediately notify Calvert EOC, St. Mary's EOC and SHA SOC and will have the PCMS identified in the SOP to read "Bridge Closed", "Use Alt Route".

During a closure, the RME will have the wind speed monitored continuously and will notify Calvert EOC, St. Mary's EOC and SHA SOC when wind speeds subside to a lower phase.

## Wind Warnings and Restrictions

On all **MDTA** bridges, wind warnings and restrictions would be implemented as outlined below \*:

- **Wind Warnings** (sustained wind speeds of **30-39 mph** for a continuous period of 10 mins or more; or wind gusts persistently exceed 30 mph over a period of 15 mins) operators of house trailers, box trailers, motorcycles, vehicles with roof-mount racks containing cargo or any other vehicle that may be subject to high winds are advised to use caution while traveling across the bridge.
- **Limited Wind Restrictions** (sustained wind speeds of **40-49 mph** for a continuous period of 10 mins or more; or wind gusts persistently exceed 40 mph over a period of 15 mins) house trailers, empty box trailers or any vehicle that, in the opinion of law-enforcement personnel, may not safely cross the bridge will be prohibited from traveling the bridge. Motorists who are denied passage will be assisted with safely turning around.
- **Full Wind Restrictions** (sustained wind speeds exceeding **50 mph** for a continuous period of 10 mins or more; or wind gusts persistently exceed 50 mph over a period of 15 mins) only automobiles, pickup trucks, flatbed trailers, commercial buses and heavy-laden tractor/trailers are permitted to cross the bridge. Tractor-box trailer combinations will not be permitted to cross any bridge if the gross weight is less than 64,000 pounds.
- **Traffic Holds/Bridge Closure** (sustained wind speeds exceeding **55 mph** for a continuous period of 10 mins or more; or wind gusts persistently exceed 55 mph over a period of 15 mins) In the event of a sudden increase of sustained wind speeds or wind gusts that could jeopardize life or property, the **MDTA** may elect to discontinue the movement of all traffic across the bridge.

