



INTERSTATE 59 HURRICANE EVACUATION CONTRAFLOW TRAFFIC CONTROL STANDARD OPERATING PROCEDURES (SOP)



CONTRAFLOW TRAFFIC CONTROL IMPLEMENTING PROCEDURES

I. Purpose

The Mississippi Department of Transportation has developed these Standard Operating Procedures (SOP), hereafter referred to as the Traffic Control SOP, for the express purpose of establishing a structure whereby activation of the I-59 Contraflow procedures can be systematically implemented when specifically directed to do so by the Governor. This SOP is in support of the *State Hurricane Evacuation Plan for Implementing Interstate 59 Contraflow Operations* (Tab 1 to Appendix B, Hurricane Hazard Specific Annex of the Mississippi Emergency Operations Plan, Volume II of the Comprehensive Emergency Management Plan), and only addresses the transportation and traffic control operational aspects of the I-59 Contraflow (lane reversal) evacuation operations pursuant to §33-15-14 (2)(a)(i) of the Mississippi Code of 1972, Annotated.

MDOT will be prepared to immediately implement this SOP upon encountering the conditions and thresholds described within the Plan and when authorized and directed to do so by the Governor of the State of Mississippi.

II. Traffic Control Implementing Procedures

- A. A significant amount of additional traffic control devices and considerable manpower resources will be required to successfully implement Contraflow procedures. These procedures will focus on detailing the traffic control measures and the staffing requirements required by MDOT and other supporting agencies to implement the plan for implementing either of the following contraflow options:

1. LOUISIANA CONTRAFLOW (OPTION 1)

If the State of Louisiana implements contraflow, but does not require Mississippi to do the same, the Louisiana Department of Transportation and Development will notify MDOT of their plans to contraflow in Louisiana. MDOT's response would be to implement Option 1 - Louisiana Contraflow. This contraflow operation is the responsibility of MDOT and involves placement of barricades to effect closure of the I-59 southbound lanes at the Louisiana state line and uncovering I-59 traffic control signs. Traffic control diagrams for Louisiana Contraflow can be seen in Appendix G.

a. Southbound Lane Closure at Louisiana State Line

District 6, Pearl River Maintenance Crew personnel will place barricades across I-59 at Exit 4 (MS 43) to prevent any I-59 southbound traffic from traveling further. The I-59 southbound entrance ramp at Exit 1 will also be barricaded to prevent traffic from entering I-59 southbound at this location. DOT officers will be stationed at both Exit 4 and Exit 1 to provide traffic control.

b. Traffic Control Signs

Traffic Engineering Division personnel will uncover previously erected signs along I-59 from its junction with I-20 to the Louisiana state line. This work entails the use of bucket trucks capable of reaching the signs. The signs purpose is to alert the traveling public that I-59 southbound is closed, so many miles ahead, at the Louisiana state line.

c. Manpower Requirements

The following MDOT personnel from Jackson and Hattiesburg will comprise the manpower necessary for Option 1 operations: (Note that MDOT staff that respond to Option 1 may also have to respond to Options 2 or 3, if implemented. MDOT employees will need to be prepared for up to 24 hours at their respective positions. Preparations for this time should include; food that does not need preparation, water, clothing and rain-suits, flashlights, personal items, medication and other supplies that might be deemed appropriate.)

- (1) Traffic Engineering Division will provide eight (8) sign crew personnel.
- (2) Law Enforcement Division will provide four (4) DOT officers.
- (3) District 6, Pearl River Maintenance Yard, will provide four (4) personnel.
- (4) Six (6) MDOT Supervisory personnel, five from the District(s) and one from MDOT Law Enforcement will be on duty at the Area Emergency Operations Center (AEOC), located at the District 6 office in Hattiesburg.

- (5) The MDOT Transportation Emergency Coordinator (EC), one (1), will be located in the State Emergency Operations Center (SEOC) in Jackson to coordinate Louisiana Contraflow operations with the Mississippi Emergency Management Agency.
- (6) Option 1 will require MDOT Traffic Engineering Division, Law Enforcement Division and District 6 personnel enough response time to mobilize personnel and uncover or erect traffic control signs / devices. A minimum advance notice of three (3) hours is needed from Louisiana in order for MDOT to implement Option 1. (This time frame begins when the Louisiana Department of Transportation and Development contacts MDOT that they intend to implement Louisiana Contraflow.)

d. Traffic Command and Control

- (1) For Option 1 (Louisiana Contraflow) operations the AEOC will be located at the MDOT District 6 office in Hattiesburg. Since only MDOT will have response duties, the MDOT Contraflow Supervisor will assume operational command and control during this response. The physical address for this location is 6356 Highway 49 North, Laboratory Building, Hattiesburg, 39401. Phone numbers are (601) 544-6511 through 6514.
- (2) The Area Emergency Operations Center (AEOC) will coordinate emergency response activities with the State EOC (SEOC) in Jackson. Coordination of the overall State emergency response activities will occur at the SEOC.

2. MISSISSIPPI CONTRAFLOW (OPTIONS 2 or 3)

Upon request from the Governor of the State of Louisiana to the Mississippi Governor for assistance with New Orleans hurricane evacuation, the Governor of Mississippi will implement either Mississippi Contraflow Options 2 or 3. These operations will require MDOT to fully implement I-59 contraflow in Mississippi. Mississippi Contraflow operations will go no further than Hattiesburg, MS. Traffic control diagrams for Mississippi Contraflow can be seen in Appendix G.

a. Beginning and Ending Termini

- (1) The State of Louisiana will initiate the contraflow operations. The beginning termini will be located in Louisiana at the I-10 / I-510 junction (Exit 246) south of its intersection with I-59 and I-12. Louisiana will assist traffic flow into Mississippi by managing traffic flow during the contraflow operations as follows:
 - (a) Louisiana will limit I-10 east evacuation traffic into Mississippi during contraflow operations as storm conditions in Mississippi dictate.
 - (b) Wide, over-weight and HAZMAT cargo vehicles will be parked in Louisiana and denied access to the contra flowed evacuation route.
 - (c) Louisiana's Pearl River crossover near I-59 Exit 11 will be used to facilitate the equalization of traffic loading on both sides of the Interstate heading into Mississippi.
- (2) The ending termini for Option 2 will be located in Mississippi at I-59 mile marker 21, just south of Poplarville, Mississippi. For Option 3 the ending termini will be located at I-59 mile marker 55, just south of Hattiesburg, Mississippi.

b. Intermediate Crossover (Option 3 ONLY)

- (1) One (1) Intermediate Crossover will be positioned at the following location: six miles south of Poplarville at mile marker 21.
- (2) Traffic control devices and staffing will be required at the intermediate crossover in order to aid in the safe operation of the crossover during plan operation.

c. Interchanges

Eleven (11) interchanges are located along I-59 from the Louisiana state line to the city limits of Hattiesburg within the limits of the Contraflow Plan. Eight (8) of these will be classified as SERVICE, three (3) will be classified as NON-SERVICE and two (2) are

listed as Southbound Lane Terminations depending on which Option is implemented. Additional traffic control devices and/or staffing will be required for these locations in order to aid in the safe functioning of these interchanges during plan operation. To aid in the identification of the I-59 interchanges, a strip map of I-59 has been modified and included in this plan as Appendix D. The design of specific I-59 interchanges is found in Appendix G. (The consideration to close all exits from the state line to mile marker 21 exists with Option 2.)

d. Manpower Requirements

The design of the ending termini, intermediate crossover and I-59 interchanges has been presented in this document. These designs specified the staffing requirements for each, which will be summarized in the following two sub-sections. (Note that employees will need to be prepared for up to 24 hours at their respective positions. Preparations for this time should include; food that does not need preparation, water, clothing and rain-suits, flashlights, personal items, medication and other supplies that might be deemed appropriate.) A summary of the contraflow staffing requirements is found in Appendix F.

(1) Mississippi Department of Transportation

- (a) MDOT personnel, including maintenance, construction, law enforcement and administrative staff will be required at the ending termini, intermediate crossover, interchanges and command / control locations to ensure that the required traffic control devices are in place and in good working order throughout the duration of the contraflow operation. (Note that although the predicted duration of this operation is twelve hours or less, the possibility that the evacuation could exceed that estimate would require the dedication of MDOT personnel to accommodate 24-hour coverage.)
- (b) MDOT Traffic Engineering Division and District Maintenance / Construction personnel (labeled on diagrams as MDOT) will be required to staff the following locations:
 - 1. Ten (10) to uncover in-place signs

2. Sixteen (16) will staff eight Service Interchanges
 3. Nine (9) will staff three Non-Service Interchanges
 4. Five (5) at the Ending Termini
 5. Four (4) will staff the Intermediate Crossover
 6. Ten (10) will staff five Emergency Vehicle Crossings
 7. Sixteen (16) will transport and place Variable Message Signs & Arrow Boards
 8. Six (6) additional personnel will staff those unusually designed interchanges
- (c) MDOT Law Enforcement officers (labeled on diagrams as DOT) will be required to staff the following locations:
1. Thirty-two (32) will staff eight Service Interchanges
 2. Five (5) will staff three Non-Service Interchanges
 3. Three (3) will staff one Intermediate Crossover
 4. Two (2) at the Ending Termini
 5. One (1) at the Scales
 6. One (1) at the beginning termini in Louisiana to coordinate traffic control and to implement termination of the contraflow operations when ordered
 7. One (1)-DOT supervisor at a minimum will be required to support field operations

8. Ten (10) additional DOT officers will be on standby in the area to provide assistance, where needed

(d) Six (6) Supervisory personnel, five from the District 6 and one from MDOT Law Enforcement will be on duty at the Area Emergency Operations Center (AEOC) in Hattiesburg, during Mississippi Contraflow operations.

(e) One (1) Transportation Emergency Coordinator (EC) will be located in the State Emergency Operations Center (SEOC) in Jackson per 12-hour shift to coordinate Mississippi Contraflow operations with the Mississippi Emergency Management Agency. Additional personnel from the MDOT emergency coordination staff will be available to assist, if needed.

(2) Mississippi Department of Public Safety

(a) The Mississippi Highway Patrol (MHP) will provide 2-uniformed Troopers per ten-mile increment of Contraflow to support ESF-16 requirements and respond to emergencies that occur along and on the Contraflow route. Eight other uniformed Troopers will be on standby per 12-shift to assist and provide support as needed.

(b) DPS will provide Troopers from Districts 2 through 5 to support Contraflow measures on I-59 and U.S. 11, and reserve Troopers from the Southern Region (Districts 6 through 9) to provide traffic control for intra-state evacuation requirements. This will provide sufficient Troopers throughout the State to maintain law enforcement and support Contraflow requirements.

e. Timeframe by Louisiana Notifying Intent to Contraflow

(1) A minimum advance notice of four (4) hours is needed from Louisiana in order for Mississippi to implement the Mississippi Contraflow. This time frame begins after the Governor of Mississippi, or official designee notifies MDOT to implement Mississippi Contraflow. If it is necessary to immediately implement either Option 2 or 3

without Option 1, then a total of seven (7) hours advance notice will be necessary.

f. Traffic Control Device Requirements

- (1) MDOT District 6 personnel will be assigned specific Variable Message Sign (VMS) and Arrow Board placement responsibilities.
- (2) VMSs will be placed along the I-59 corridor to advise the evacuating public of the contraflow operations. The design of the ending termini, crossovers and interchanges will require different types of traffic control devices, i.e. both VMS and Arrow Board.
- (3) "Secondary traffic locations" outside of the actual Contraflow Plan limits have been identified for the placement of VMS. These VMSs would be placed in advance of the actual contraflow limits notifying the traveling public of the existence and enactment of the plan. This would allow the traveling public to select an alternate route to reach their destination prior to encountering the contraflow operation. The placement of VMSs would be on I-20 east and west of its junction with I-59, US 98 east and west of Hattiesburg, US 49 north and south of Hattiesburg and I-10 west at the Louisiana state line. Additional MDOT employees will be required to monitor the operation of these Variable Message Signs (VMS).

B. Operating Conditions

The following Operating condition levels have been identified to specify what actions MDOT personnel will take when certain external conditions exist. Most of these external conditions are based on Tropical Storm advisories and warnings issued by the National Hurricane Center. These external conditions are also based on whether or not the State of Louisiana orders an evacuation of the Greater New Orleans area. Other conditions may arise which may necessitate placing a certain level into operation. These MDOT operating levels have no relationship with the levels of operations specified in Section IV. D. 1. of the Basic Plan of MEOP. The MDOT operating levels are described below:

1. LEVEL 1 (Hurricane Season)

Operating Level 1 begins at the onset of hurricane season, June 1st through November 30th of each calendar year. Typical day-to-day operations will be maintained and any development of tropical disturbances in the Atlantic

Ocean, Gulf of Mexico or Caribbean Sea will be monitored. Actions during Level 1 include:

- a. Weather information sources (National Hurricane Center advisories) shall be continuously monitored for the development of tropical disturbances and storms.
- b. District and State offices will review personnel assignments with staff and adjustments/updates made as necessary.
- c. All necessary traffic control devices and equipment shall be inventoried to insure that they are placed at their required staging areas and are in proper working order. These traffic control devices and equipment include barricades, cones, signs, trailers, etc.
- d. All permanently mounted and installed signs will be inventoried and inspected, cleaned and/or replaced as necessary.
- e. Electronic components of variable message signs, arrow boards, generators (both portable and stationary) and communications equipment will be periodically checked and routine operational checks performed to assure reliability. Variable message signs and arrow boards called for in this plan must be made available to District 6 at any time during the hurricane season, even if this means pulling them off another job site.
- f. Level 1 status will remain in effect unless the next level is enacted or until the end of the hurricane season.

2. LEVEL 2 (Hurricane Watch)

Operating Level 2 will be enacted anytime the National Hurricane Center declares a Hurricane Watch for any portion of the Louisiana Gulf Coast, Mississippi Gulf Coast, Alabama Gulf Coast or the Florida panhandle. Actions during Level 2 include:

- a. The State EOC (SEOC) in Jackson is activated at State Emergency Operations Level 2 under these conditions and the MDOT Emergency Coordination staff is notified by MEMA to begin SEOC staffing.
- b. Review necessary assets and provisions made to ensure that all equipment and material is in the predetermined staging locations and in good working order.

- c. All supervisors are to review this plan and their specific procedures with employees. Personnel assignments shall be reviewed and adjusted as necessary. Personnel assigned to Level 3 operations should be contacted and informed of the hurricane watch and placed on stand-by.
- d. All equipment and materials are to be loaded and ready for transport to assigned locations. Final operational checks will be preformed. All vehicles are to be fueled and ready for use.
- e. Weather information sources shall be continuously monitored for the further development of hurricane conditions.
- f. Level 2 status will remain in effect until a more critical level is enacted or until the hurricane watch for the Gulf Coast is canceled.

3. LEVEL 3 (Hurricane Warning)

Operating Level 3 will be enacted whenever the National Hurricane Center upgrades a Hurricane Watch to a Hurricane Warning for the Louisiana Gulf Coast, Mississippi Gulf Coast, Alabama Gulf Coast or the Florida panhandle. Actions during Level 3 include:

- a. The State EOC (SEOC) in Jackson is fully activated at State Emergency Operations Level 3 under these conditions and the MDOT Emergency Coordination staff is advised to initiate traffic control monitoring procedures, including input into the Emergency Transportation Information System (ETIS).
- b. The Area Emergency Operations Center (AEOC) at the MDOT District 6 offices in Hattiesburg is activated and partially staffed.
- c. Personnel with Level 4 responsibilities will be notified of the Hurricane Warning and placed on stand-by.
- d. The Governor declares a State of Emergency at this time thus activating his/her emergency powers and authorizing all state operated agencies to implement emergency plans to protect the public and property.
- e. MDOT Emergency Coordination staff will be in contact with District 6 to confer and confirm activation of the AEOC and to check on the status of MDOT personnel and resources.
 - (a) All District storage tanks and vehicles shall be filled and topped off with fuel.

- (b) Communications equipment will be checked for proper operation and interoperability with other appropriate agencies.
 - f. Weather information sources shall be monitored for the further development of hurricane conditions. The MDOT ECO at the SEOC in Jackson will provide the AEOC with National Hurricane Center bulletins and MEMA Situation Reports.
 - g. Level 3 status will remain in effect unless the next level is enacted or until the hurricane warning for the Gulf Coast is canceled.
- 4. LEVEL 4 (Louisiana Contraflow – Option 1)**
- Operating Level 4 will be enacted when the Louisiana Department of Transportation and Development (LDOTD) contacts MDOT to announce their intent to implement contraflow within Louisiana (Louisiana Contraflow-Option 1) up to the Mississippi state line. MDOT requires a minimum of three (3) hours advance notice prior to Louisiana Contraflow implementation in order to mobilize personnel and equipment, uncover signs and close southbound I-59 at the state line. This time starts when the MDOT Director acknowledges the intent of LDOTD to implement Louisiana Contraflow. Level 4 does not require contraflow operations into Mississippi. Actions during Level 4 include:
- a. The Area Emergency Operations Center (AEOC) is activated with MDOT staff and is located at the MDOT District 6 office, in Hattiesburg.
 - b. All MDOT staff with responsibilities under Level 4 response is notified to report to their assigned duty stations. Personnel with Level 5 responsibilities are placed on stand-by.
 - c. Traffic Engineering Division personnel will uncover previously erected signs along I-59 from its junction with I-20 to the Louisiana state line.
 - d. District 6, Pearl River Maintenance Crew personnel, will place barricades across I-59, Exit 4 (MS 43) to prevent any southbound traffic from traveling further and provide exiting southbound traffic a better access to a state highway. Pearl River Maintenance Crew personnel will also barricade the I-59 southbound entrance ramp at Exit 1 to prevent traffic from accessing I-59 southbound at this location. DOT Law Enforcement will provide traffic control at these exits.

- e. All MDOT vehicles, equipment, variable message signs and arrow boards that have not been pre-positioned in the field shall be moved into their designated positions.
- f. MDOT Contraflow Supervisor at the AEOC will assume command and control over Level 4 operations.
- g. Louisiana Contraflow (Level 4 response) will be implemented per the implementation procedures listed within this section.
- h. Level 4 status will remain in effect until the termination of Louisiana Contraflow operations or the Level 5 condition is enacted.

5. LEVEL 5 (Mississippi Contraflow – Options 2 or 3)

If contraflow into Mississippi (Mississippi Contraflow) is needed, the Governor of Louisiana will contact the Mississippi Governor. The Governor of Mississippi will make the decision to implement contraflow ~~in~~ after consultation with the Directors of the Mississippi Emergency Management Agency (MEMA), MDOT, and the Mississippi Department of Public Safety (MDPS). (Mississippi requires a minimum of four (4) hours advance notice prior to contraflow implementation to mobilize personnel and equipment. This time starts after the decision by the Governor of Mississippi to implement Mississippi Contraflow.) In turn the respective directors would then notify their own agency personnel to proceed with the Contraflow Plan implementation. The MDOT Director will place operating Level 5 into action at this time. Actions during Level 5 include:

- a. The Area Emergency Operations Center (AEOC) is fully activated with MDOT staff. MDOT will dispatch a Liaison Officer (LNO) to MHP Troop J Headquarters on Highway 49 South in Hattiesburg to liaise with the MHP Commander for the duration of Mississippi Contraflow. For Level 5 (Mississippi Contraflow) operations the AEOC remains at the MDOT District 6 office, in Hattiesburg.
- b. All MDOT, with responsibilities under Level 5 response, are notified to report to their assigned duty stations. Replacement personnel and/or additional staff will be notified of the situation and placed on stand-by.
- c. Mississippi Contraflow (Level 5 response) will be implemented per the implementation procedures listed within this section.
- d. The decision what Level 5 operating option to be implemented will be based on the traffic conditions observed by Louisiana officials.

Louisiana State Police, MHSP and DOT Law Enforcement will be in contact to make this decision.

- e. Level 5 status will remain in effect until the termination of contraflow operations. The MDOT Director will make the termination decision based on the status of Louisiana evacuation and traffic congestion information gathered by MDOT field personnel. MDOT decision-makers at the AEOC would then contact their field personnel and notify them of the decision to terminate the contraflow (Level 5) operations.

C. Standing Down Contraflow to Regular Traffic Conditions

1. The decision to terminate Contraflow will be forwarded to the MDOT Contraflow Supervisor at the AEOC by the MDOT ECO at the State EOC.
2. The MDOT Contraflow Supervisor at the AEOC will then immediately notify all MDOT field personnel of the decision to terminate Contraflow and to initiate returning I-59 to “normal” traffic flow pattern.
3. MDOT personnel will restore traffic lanes to normal conditions, replace and return Contraflow signage and VMS’s to their regular assigned locations.
4. Prepare to re-deploy MDOT personnel to their normal duty stations to resume other ESF-1 and ESF-3 hurricane response related functions.