

**Sanoca Rural Fire District, Inc.**  
**STANDARD OPERATING PROCEDURES**

**Emergency Operations**

**Fire Company Operations**

**Subject: Highway Incident Safety**

**Revised: April 05, 2003**

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**PURPOSE**

To provide incident responders with a uniform guide for safe operations at incidents occurring on the highway system.

To serve as guideline for decision making and can be modified by the incident responders as necessary to address existing incident conditions.

**POLICY**

It shall be the policy of the Sanoca Fire Department to respond to and operate on all highway incidents in a safe manner.

To utilize all safety equipment available to us to provide protection for emergency personnel as well as the public.

To provide a safe environment on all highway incidents for emergency personnel to operate.

**PROCEDURES**

**A. Response**

Emergency responders need to operate safely, making every effort to minimize the risk of injury to themselves and those who use the highway system.

Responders operating in the emergency mode need to operate warning devices and follow the guidelines specific to their standard operating procedures.

Median strip crossovers marked "Authorized Vehicles Only" shall be used for turning around and crossing to the other travel lanes ONLY when emergency vehicles can complete the turn without obstructing the flow of traffic in either travel direction or all movement has stopped. Under no circumstances shall crossovers be utilized for routine (non-emergency) changes in travel direction.

Use of U-turn access points in medians on limited access highways is extremely hazardous and shall be utilized only when the situation is necessary for immediate lifesaving measures.

Response on access ramps shall be in the normal direction of travel, unless the incident commander on the scene can confirm that oncoming traffic has been stopped and no civilian vehicles will be encountered on the ramp.

Shoulder lanes will be used ONLY by emergency vehicles/apparatus. Emergency

support vehicles are authorized to use the shoulder lanes only when directed or authorized to do so by the incident commander.

## **B. Arrival**

The first emergency responder arriving to the scene of any highway incident will assume the role of incident commander. The individual assuming that role is subject to change as additional responders arrive at the scene.

If traffic control assistance is required at an incident scene, the Incident Commander should coordinate with the Police Agency responsible for assistance with traffic control. If NC DOT is going to be needed, give Communications a brief description of what will be needed and have them contact NC DOT.

Standard practice will be to position response vehicles in such a manner as to ensure a safe work area. This may be difficult to accomplish at incidents on secondary and one-lane roads. Position emergency response vehicles in such a manner as to provide the safest area possible.

## **C. Parking of Response Vehicles**

Providing a safe incident scene for emergency responders is a priority at every emergency incident. However, consideration must be given to keeping as many traffic lanes open as possible. Except for those vehicles needed in the operation and those used as a shield for the incident scene, other response vehicles should be parked together ("staging area"). As a matter of routine, the parking of response vehicles should be on one side of the roadway. Parking should be on either the shoulder or median area, if one exists, but not both. Parking response vehicles completely out of available travel lanes greatly assists in the movement of traffic. If not needed to illuminate the scene, drivers should remember to turn vehicle headlights off when parked at incidents.

The proper spotting and placement of emergency apparatus is the joint responsibility of the driver and incident commander. The proper positioning of emergency response vehicles at the scene of an incident assures other responding resources of easy access, a safe working area and helps to contribute to an effective overall operation. The safety of everyone on the scene is foremost while they are operating, both in emergency and non-emergency situations.

## **D. On Scene Actions**

An incident safety zone shall be established, allowing fire and rescue units to position in close proximity of the incident. The responding fire apparatus should be placed some distance from the incident, making use of it as a safety shield blocking only those travel lanes necessary. In the event that a motorist enters the incident safety zone, the fire apparatus will act as barrier; and, in the unlikely event that the fire apparatus is moved upon impact, it will travel away from the incident safety zone.

Before exiting any emergency response vehicle at an incident, personnel should check to ensure that traffic has stopped to avoid the possibility of being struck by a passing vehicle. Personnel should remember to look down to ensure debris on the roadway will not become an obstacle, resulting in a personal injury. All members shall be in appropriate clothing or traffic vests as the

situation indicates.

As soon as possible, the initial responding unit should position traffic control devices. Traffic cones assist in channeling traffic away from an incident. Traffic control devices shall be used whenever responding vehicles are parked on or near any road surface. Placement of traffic control devices shall begin closest to the incident, working toward on-coming traffic. Taking into consideration the possibility of hazardous materials, traffic control devices shall be placed diagonally across the roadway and around the incident.

When placing traffic control devices, care should be exercised to avoid being struck by on-coming traffic.

The speed of traffic and travel distance must be considered when establishing an incident safety zone. The following chart provides an example of how traffic control devices are to be placed.

Posted Speed Limit	Distance
35 MPH	100 FT
45 MPH	150 FT
55 MPH	200 FT
Greater than 55 MPH	250 FT Plus

#### **E. Emergency Vehicle Visibility at Night**

Glare vision and recovery is the amount of time required to recover from the effects of glare once a light source passes through the eye. It takes at least 6 seconds, going from light to dark and 3 seconds from dark to light for vision to recover.

At 50 miles per hour, the distance traveled during a second is approximately 75 feet. Thus, in six seconds, the vehicle has traveled 450 feet before the driver has fully regained night vision. This is extremely important to remember when operating on roadways at night.

The headlights on stopped vehicles can temporarily blind motorists that are approaching an incident scene. Drivers of on-coming vehicles will experience the problem of glare recovery. This essentially means individuals are driving by the emergency scene blind. The wearing of protective clothing and/or traffic vests will not help this "blinded" motorist see emergency responders standing in the roadway. Studies show that at two and one-half car lengths away from a vehicle with its headlights on, the opposing driver is completely blinded.

Low beam headlights can be used to light an emergency scene using care as to light only the immediate area. Complacency at an incident scene can be hazardous.

Scene lighting must be positioned so it does not interfere with the visibility of traffic flowing by the scene. The glare from scene lighting can have the same effect as headlights.

#### **F. Clearing Traffic Lanes**

When outside of a vehicle on a major roadway, both civilian and emergency responders are in an extremely dangerous environment. Therefore, it is imperative to take every precaution to protect all responders and those involved at incident scenes. Although positioning emergency response vehicles to serve as a shield for work areas is a prudent practice, we must remember that reducing and/or shutting down traffic lanes creates other problems and safety concerns. Therefore, it is critical when operational phases are

completed that emergency response vehicles be repositioned to allow traffic to flow on as many open lanes as possible.

Remember that unnecessarily closing or keeping traffic lanes closed greatly increases the risk of a secondary incident occurring in the resulting traffic backup. Five minutes of stopped traffic will cause a 15 minute delay in travel time.

Management of incidents on the interstate system and local roadways requires the expertise and resources of emergency responders, as defined. While the safety of emergency services personnel is of paramount concern for the incident commander, the flow of traffic must be taken into consideration at all times. The closing of roadways disrupts traffic throughout the area as well as having a significant impact on businesses throughout the region.

Keeping the safety of all personnel in mind, and coordinating the needs with other emergency services, the incident commander should begin to open any closed lanes as soon as practical.