Safe Working On Roads Standard Operating Procedures

THE NEW SOUTH WALES GOVERNMENT

Safe Working on Roads SOPs

Prepared by

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Safe Working on Roads SOPs

Introduction

An integral part of the responsibilities of the NSW Rural Fire Service (NSW RFS) is to ensure the safety of NSW RFS personnel and other persons in the vicinity whilst undertaking activities.

The following Standard Operating Procedures have been developed to assist in the protection of RFS personnel and other persons on or adjacent to roadways during "**Non-Emergency Operations**" and "**Emergency Operations**".

Traffic Warning Signs

"Traffic Hazard Ahead" sign is for any non-emergency operation or emergency operation, which may cause a traffic hazard.

"Smoke Hazard Ahead" sign is for a hazard reduction or fire, where smoke may be or become a hazard.

Traffic Cones

Standard (450 to 500mm high) should be used for low-speed urban and rural road applications and **Large** (over 700mm high) should be used for freeways and other high-speed road applications to delineate the "work area" on or near the roadway.

It is recommended that a NSW Rural Fire Service appliance carries one "Traffic Hazard Ahead" sign plus three standard and three large traffic cones.

It is recommended that "Smoke Hazard Ahead" signs are available from Brigade Stations, Group Officers and/or Fire Control Centres

Safe Working on Roads SOPs

Definitions

Appliance	A firefighting appliance with visible and audible warning devices. e.g. a tanker.
Closure of Streets and Public Places	A Deputy Captain or higher rank, present at a fire, incident or other emergency may, when necessary, close or partially close a street or public place to vehicular and/or pedestrian traffic with such other persons as the Officer thinks necessary (not just members of the RFS) and may, where reasonably necessary, sensibly and safely regulate the flow of traffic to ensure the effective exercise of the functions conferred by the *Rural Fires Act 1997.*
Hydrant Marker	A blue marker fixed to the road to one side of the centre line or a white or yellow triangle or arrow painted onto the road surface generally used in village, urban and industrial areas.
Incident Controller	The Officer responsible under the principles of the Incident Control System for overall management, control and strategic direction of an incident or operation.
Observer	Firefighter, wearing safety tabard, with the specific task of constantly monitoring traffic and advising the crew of approaching vehicles.
Officer in Charge	The officer with the responsibility to command a Brigade.
Persons in the Vicinity	Casualties, good samaritans, witnesses, other emergency service personnel, vehicular traffic, cyclists, pedestrians and people in the immediate area or likely to be affected by the incident.
Traffic Controller	Firefighter or other person, wearing NSW RFS PPC, instructed by Deputy Captain or higher rank to stop or safely regulate the flow of traffic around or past a fire, incident or other emergency Officer authorised under the *Rural Fires Act 1997*.
Work Area	The immediate area of the operation plus the area in both directions encompassed by the traffic cones and then extending to the traffic warning signs when positioned.
Traffic Control Plan (TCP)	A diagram showing signs and devices arranged to warn traffic and guide it around, past or, if necessary through a work site or temporary hazard. The TCP is to be developed in consultation with, and approved by appropriate authorities local Council, Roads and Maritime Services and/or NSW Police). The TCP must consider traffic flow, vehicle speed regulation, warning devices and personnel
Traffic Management Plan (TMP)	A plan detailing work to be undertaken and describing its impact on public transport and passengers, cyclists, pedestrians, motorists, and commercial operations. It also describes how these impacts are being addressed and may contain detailed TCPs.

Safe Working on Roads SOPs

S.O.P. No. 1

Non-Emergency Operations (Planned)

This SOP covers procedures to be followed when working on or near roadways for planned operations (such as **hazard reductions, hydrant inspections, installing or maintaining hydrant markers, etc.**).

The Incident Controller (IC) is accountable for safety at the non-emergency planned operation and each NSW RFS Officer in Charge (OIC) is responsible for all firefighters under their direct control and other persons in the area.

1. A traffic management plan must be prepared in consultation with the appropriate authority/ies (Fire Control Centre, Council, Roads and Maritime Services and/or NSW Police) for planned operations and will include:
    (a) Analysis of the risks and hazards and planned implementation of controls.
    (b) Duration of operation.
    (c) Notification requirements for the public.
    (d) Requirements for the number and placement of warnings signs, traffic cones, calming devices or similar.
    (e) The level of training and authorisation required for personnel performing traffic control duties.
    (f) Authorisation by the appropriate authority with responsibility for the roadway and the Incident Controller.

2. A safety briefing must be delivered to all participants involved in the operation prior to commencing duties.

3. Bush fire personal protective equipment (PPE) is to worn when working on or near roadways.

4. All visual warning devices fitted to the appliances (red and blue emergency beacons and hazard warning lights) shall be operating when working on or near roadways.

5. Appliances are to be safely positioned and operated in accordance with the plan.

6. Radio communication is to be maintained throughout the operation, both at the operation and with FireCom.

Safe Working on Roads SOPs

S.O.P. No. 2

Non-Emergency Operations (Unplanned)

This SOP covers procedures to be followed when working on or near roadways for un-planned operations (such as **filling tanker from hydrant, mechanical breakdown, reversing appliance etc.**).

The Incident Controller is accountable for safety at the non-emergency un-planned operation and each NSW RFS Officer in Charge (OIC) is responsible for all firefighters under their direct control and other persons in the area.

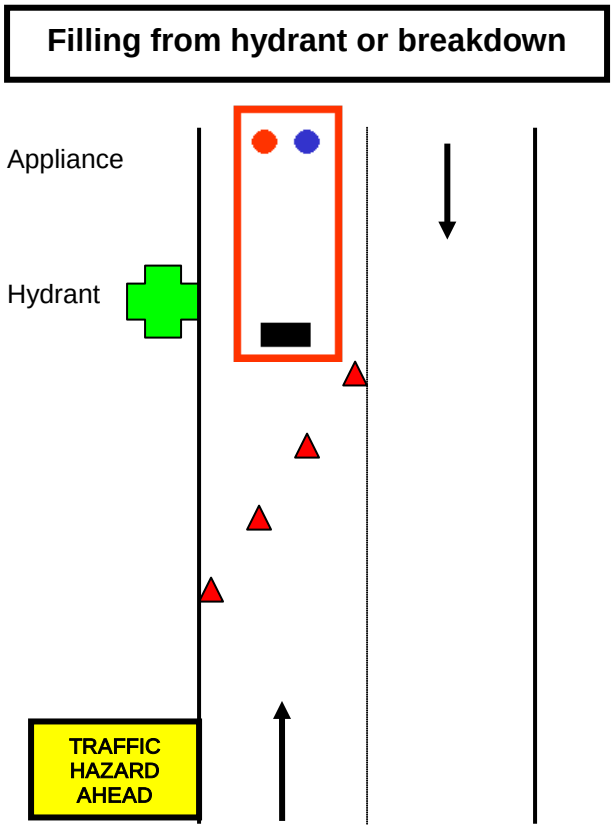
1. Traffic management shall be considered by the OIC for un-planned operations and will include:
    (a) Analysis of the risks and hazards and implementation of controls.
    (b) Additional precautions required where operations are near a curve or crest in the road.
    (c) Implementation of controls will be dependant upon priorities and crew numbers.
    (d) Use of available traffic cones and traffic warning sign/s appropriately placed.
    (e) A safety briefing to all participants.
2. A safety briefing must be delivered to all participants involved in the operation prior to commencing duties
3. Reversing shall be carried out with a guide, at the front or rear of the appliance, advising the driver when there is sufficient time and space to complete the manoeuvre, preferably without stopping any traffic and without placing the appliance, crew or others at risk. The guide must always be visible to the driver, if not, the appliance must stop.
4. Bush fire personal protective equipment (PPE) is to worn when working on or near roadways.
5. All visual warning devices fitted to the appliances (red and blue emergency beacons and hazard warning lights) shall be operating when working on or near roadways.
6. Appliance/s are to be appropriately and safely positioned and operated.
7. Radio communication is to be maintained throughout the operation, both at the operation and with FireCom.
8. See attached diagrams for recommended traffic management arrangements.

Recommended Spacing for Traffic Cones and Traffic Warning Signs

Speed Limit (kph)	Ideal Taper Length for Cones (metres)	Minimum Spacing Between Traffic Cones (metres)	Distance of Traffic Warning Sign from Appliance (metres)
Up to 60	30	4	120
60-80	140	9	160
80-100	180	12	200
100-110	200	15	220

Non-Emergency Operations (unplanned)

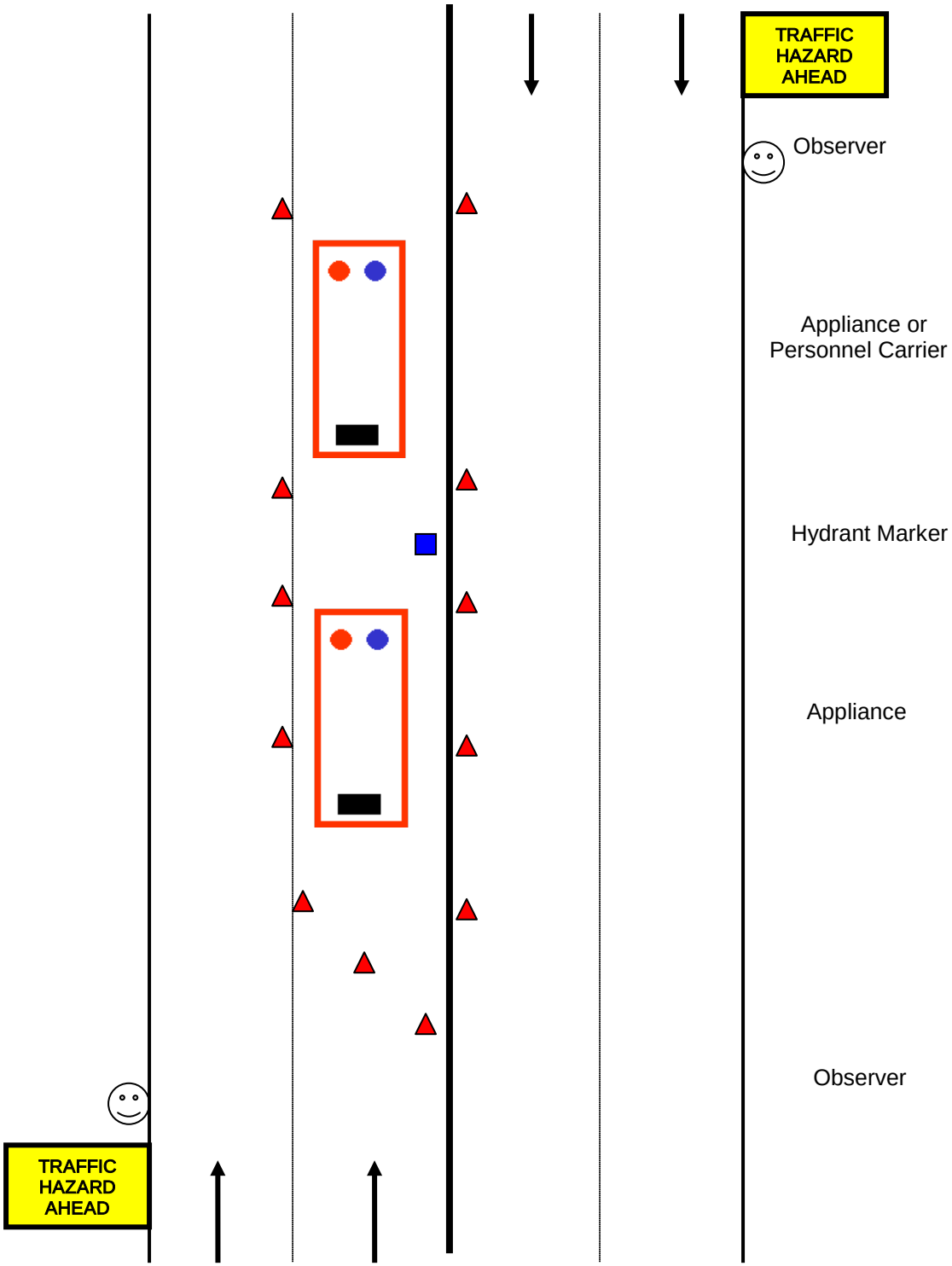
Recommended Traffic Management



Non-Emergency Operations

Recommended Traffic Management

Installation or maintenance of hydrant markers on four lane road with speed limit 70 kph or less



Safe Working on Roads SOPs

S.O.P. No. 3

Emergency Operations

This SOP covers procedures to be followed when working on or near roadways for a fire, incident or other emergency (such as **bush fire, structure fire, motor vehicle fire, imminent danger arising out of a fire, motor vehicle accident, fuel spillage, fallen tree, power lines down, etc.**).

The Incident Controller is accountable for safety at the emergency operation. If the Police are present, they are responsible for the overall coordination of the wider incident ground, generally in consultation with the Senior Officer of the combat agency having jurisdiction for the fire, incident or emergency. In the absence of the Police or the combat agency with jurisdiction, the RFS Officer in Charge (OIC) is responsible for the overall incident ground.

The NSW RFS OIC is responsible for all firefighters under their direct control and other persons in the area.

1. Incident management shall be considered by the OIC for emergency operations and will include:
    (a) Analysis of the risks and hazards and implementation of controls.
    (b) Priorities
    (c) Traffic management which may include closing or partially closing a road in one or both directions and safely regulating the flow of traffic if necessary. (Refer to Definitions "Closure of Streets and Public Places" and "Traffic Controller".) In the absence of appropriate traffic warning signs and cones it may be necessary, in the interest of safety, to close the road using the appliance until the required resources become available.
    (d) Additional precautions required where operations are near a curve or crest in the road or where visibility is otherwise obscured.
    (e) Implementation of controls will be dependant upon priorities, number of appliances, crew numbers and other emergency service personnel and vehicles.
    (f) Use of available traffic cones and traffic warning sign/s appropriately placed.
    (g) An operational briefing including safety to all participants.
2. Bush fire personal protective equipment (PPE) is to worn when working on or near roadways.
3. All visual warning devices fitted to the appliances (red and blue emergency beacons and hazard warning lights) shall be operating when working on or near roadways.
4. Appliance/s are to be appropriately and safely positioned and operated taking the situation into account (such as the type of incident, hazards, protection and safety of crew and public, terrain and weather conditions).
5. Radio communication is to be maintained throughout the operation, both at the operation and with FireCom. The OIC is to ensure that a detailed SitRep is provided to FireCom including the requirement for other Services.
6. See attached diagrams for recommended traffic management arrangements.

Recommended Spacing for Traffic Cones and Traffic Warning Signs

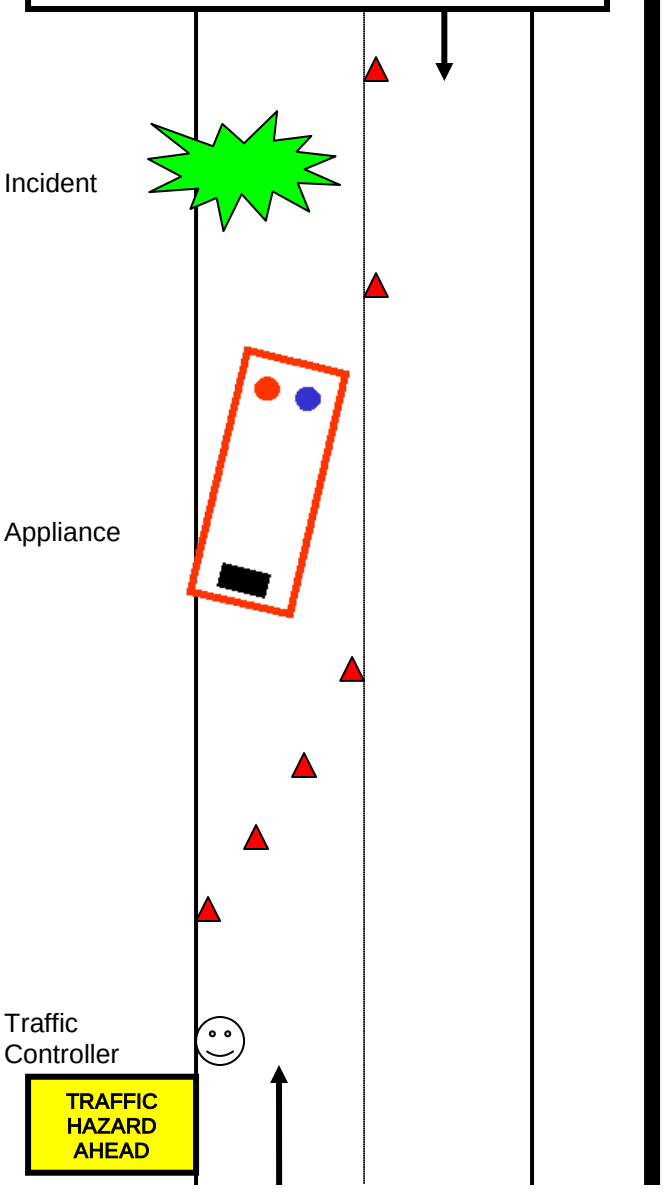
Speed Limit (kph)	Ideal Taper Length for Cones (metres)	Minimum Spacing Between Traffic Cones (metres)	Distance of Traffic Warning Sign from Appliance (metres)
Up to 60	30	4	120
60-80	140	9	160
80-100	180	12	200
100-110	200	15	220

Emergency Operations

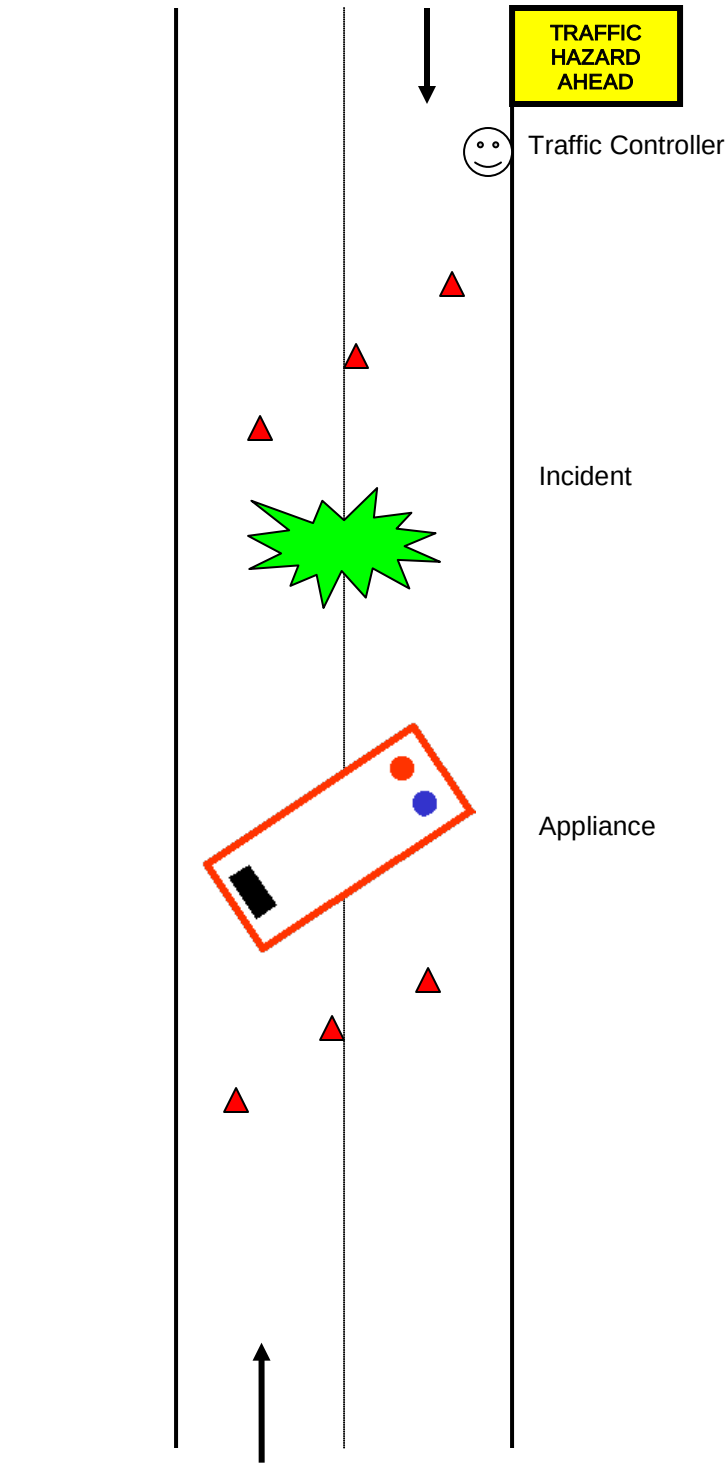
Recommended Traffic Management

Emergency Incident on two lane road affecting one lane in one direction.
One Appliance
TRAFFIC STOPPED IN ONE DIRECTION

REGULATE FLOW OF TRAFFIC IN ONE AVAILABLE LANE WHEN SUFFICIENT RESOURCES AVAILABLE
Note: A second appliance should be considered to allow traffic regulation from both directions, or consider road closure if traffic volume does not allow safe passing

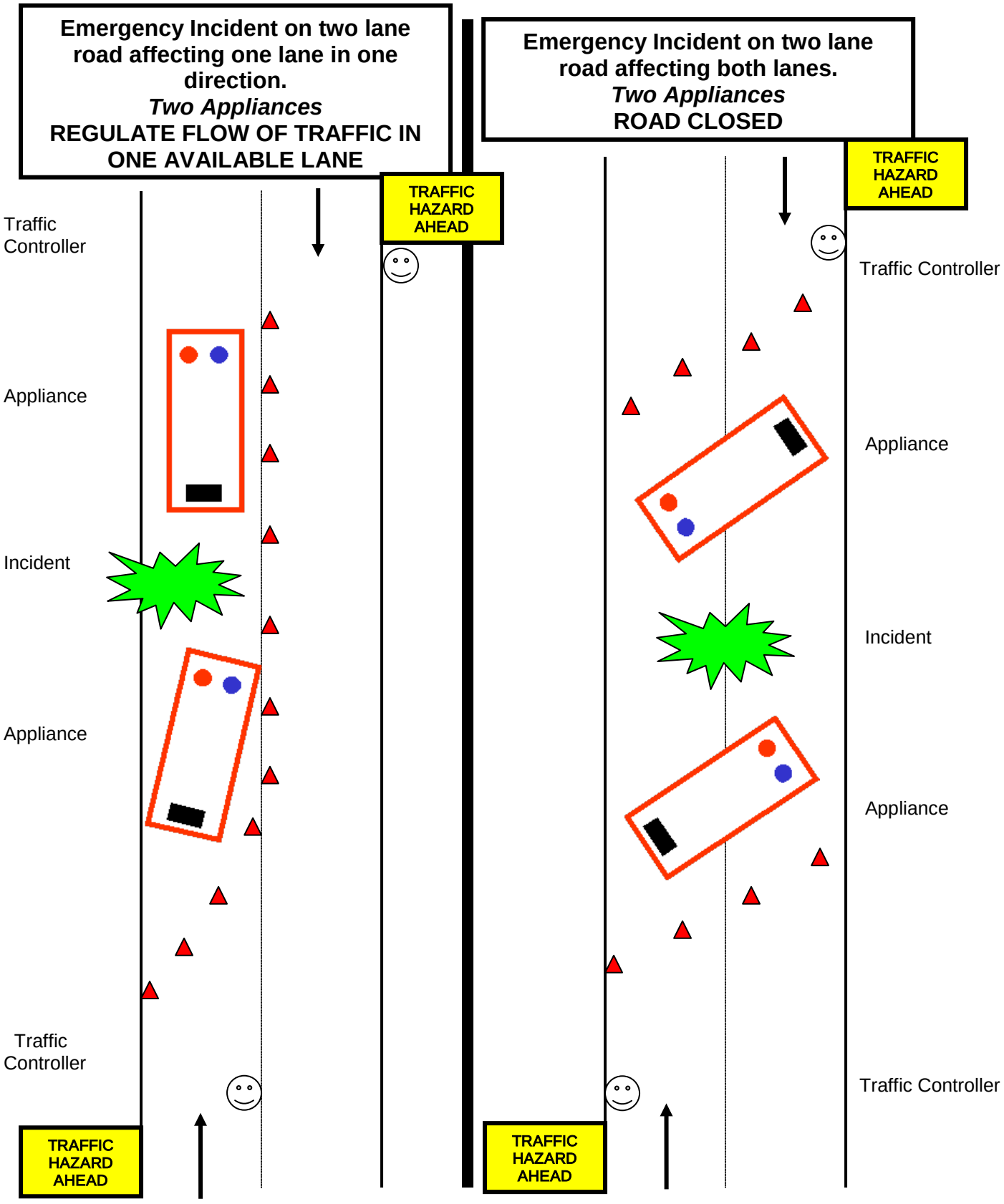


Emergency Incident on two lane road affecting both lanes.
One Appliance
ROAD CLOSED



Emergency Operations

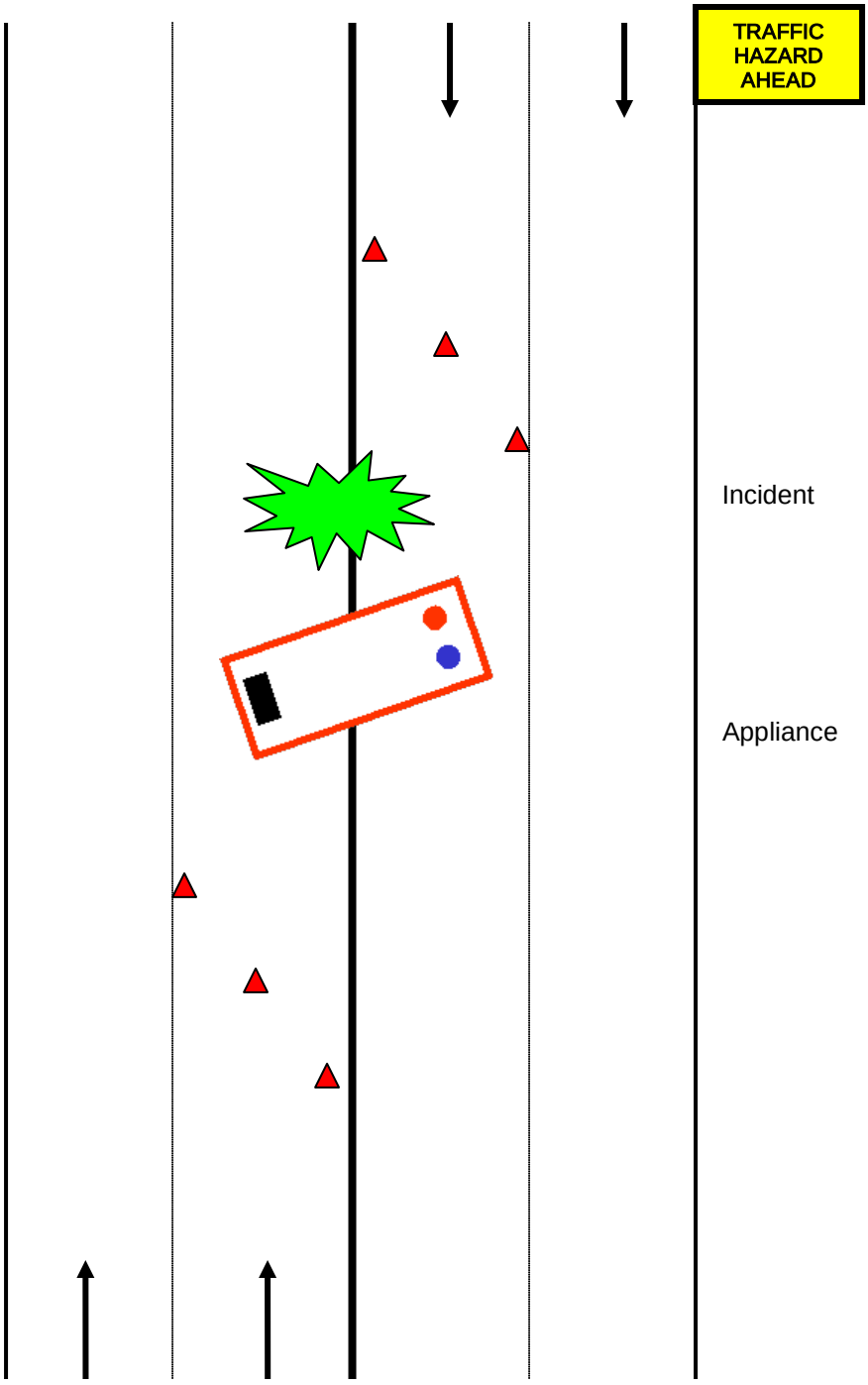
Recommended Traffic Management



Emergency Operations

Recommended Traffic Management

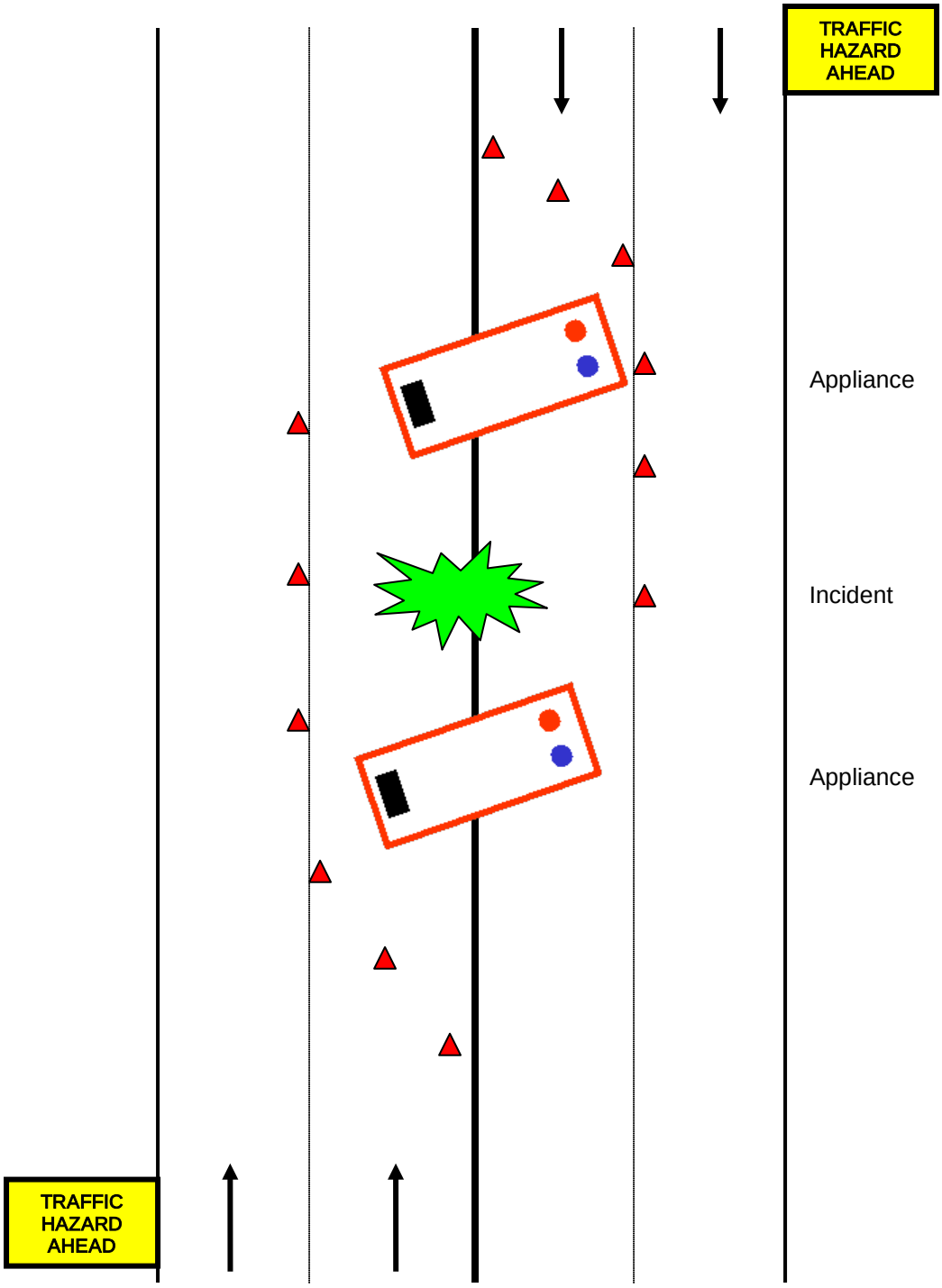
Emergency Incident on multi-lane road affecting two lanes one in each direction.
One Appliance
TRAFFIC REDUCED TO ONE LANE IN EACH DIRECTION
Note: A second appliance should be considered to allow traffic regulation from both directions, or consider road closure if traffic volume does not allow safe passing



Emergency Operations

Recommended Traffic Management

Emergency Incident on multi-lane road affecting two lanes one in each direction.
Two Appliances
TRAFFIC REDUCED TO ONE LANE IN EACH DIRECTION

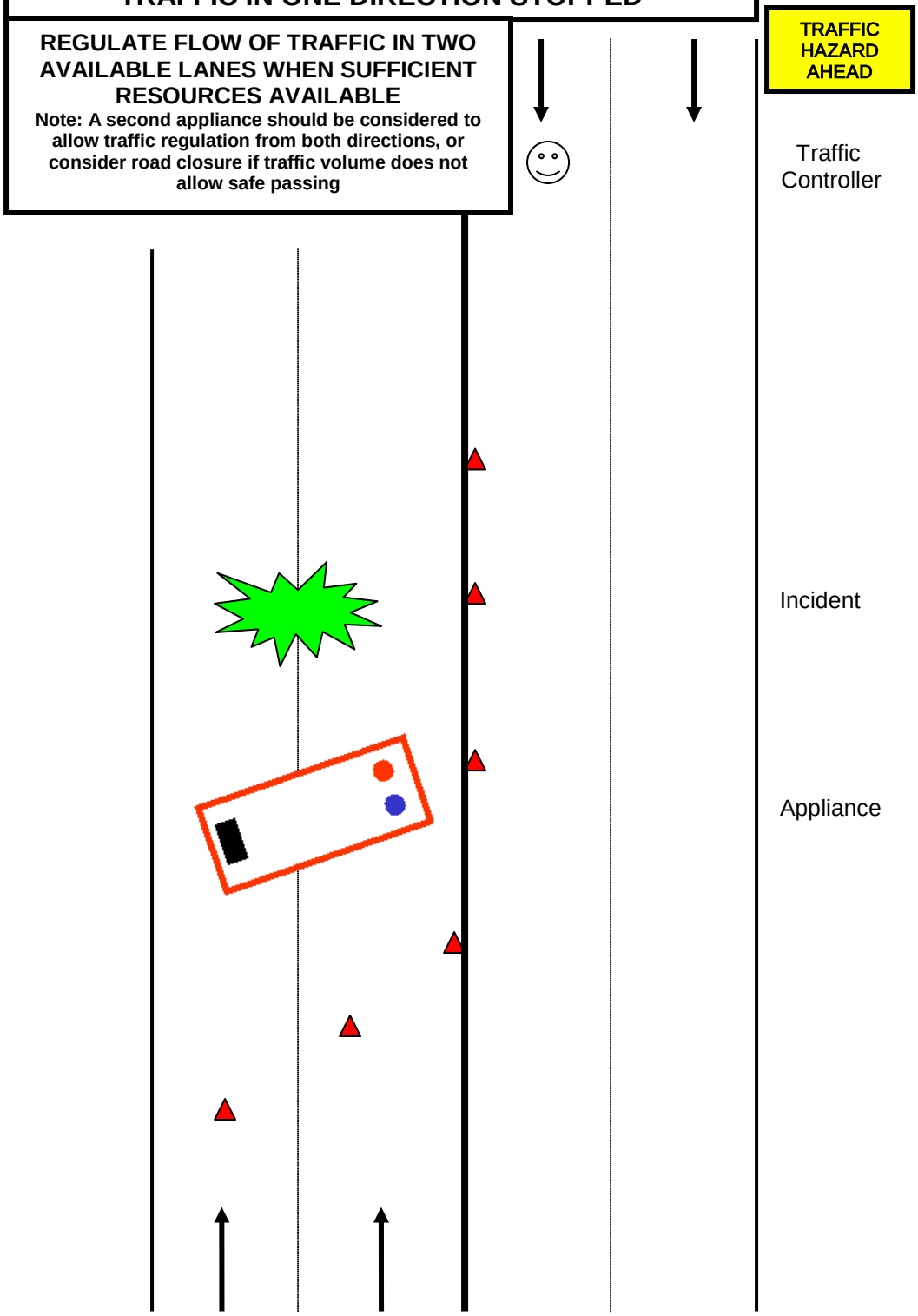


Emergency Operations

Recommended Traffic Management

Emergency Incident on multi-lane road affecting two lanes in one direction.
One Appliance
TRAFFIC IN ONE DIRECTION STOPPED

REGULATE FLOW OF TRAFFIC IN TWO AVAILABLE LANES WHEN SUFFICIENT RESOURCES AVAILABLE
Note: A second appliance should be considered to allow traffic regulation from both directions, or consider road closure if traffic volume does not allow safe passing



Emergency Operations

Recommended Traffic Management

Emergency Incident on multi-lane road affecting two lanes in one direction.
Two Appliances
REGULATE FLOW OF TRAFFIC IN TWO AVAILABLE LANES