

5. Traffic Crashes

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5.1 Introduction

Incident management includes the process of coordinating the activities of response agencies at an incident site so that the problem is resolved as effectively as possible and with minimum effect on people, property and the environment.

Officers are in charge of a traffic crash site and are responsible for the coordination of the various emergency services attending the crash.

The Queensland Fire and Emergency Services is responsible for the retrieval of persons trapped in vehicles and any fire control at an accident while the Queensland Ambulance Service is responsible for the on-site patient care and subsequent transportation of casualties.

5.2 Attending and investigating traffic crashes

Officers are not necessarily advised about all traffic crashes. Traffic crashes must be reported to the Service in the circumstances outlined in:

- (i) s. 93(4): 'Duties of a driver involved in a crash-stopping and providing information' of the TO(RUM)A; and
- (ii) s. 34: 'Duty to notify accidents to police' of the MAIA.

Regardless of whether a traffic crash is required to be reported or not, a person may choose to report a traffic crash.

Power to investigate traffic crashes

An officer's investigative powers will vary depending on the particulars of the traffic crash.

In addition to an officer's general investigative powers, they may, make any reasonably necessary inquiries, investigations, inspections, examinations or tests to obtain information related to a relevant vehicle incident (see s. 56: 'Additional power of inquiry for relevant vehicle incidents' of the PPRA).

5.2.1 Attendance at a traffic crash

When a member is advised of a traffic crash, and it is suspected that one or more of the following criteria exist:

- (i) death or injury to a person (personal injury requiring treatment by a paramedic, nurse or doctor);
- (ii) suspected involvement of alcohol or drugs;
- (iii) a driver is refusing to provide their required details;
- (iv) a hazardous environment or threat to public safety exists, including heavy traffic congestion (e.g. fuel spill, fallen power lines);
- (v) a person with an impairment or disability requires police assistance; or
- (vi) the public interest suggests the traffic crash should be attended and/or investigated, for example:
 - (a) the crash results from dangerous operation of a motor vehicle or hooning;
 - (b) when significant damage is caused to public infrastructure such as bridges; or
 - (c) where the offender and/or vehicle can be readily located and evidence obtained,

an officer is to be tasked to attend the traffic crash.

Officers and shift supervisors are to use discretion when determining whether police attend or investigate a crash in the public interest.

Officers who attend a traffic crash, but are not required to report or investigate the incident, are to ensure sufficient details are recorded in their patrol log or occurrence sheet for any future reference (see also 'Service entry of public reportable traffic crashes' of s. 5.2.2: 'Reporting and investigating traffic crashes' of this chapter).

Non-attendance at a traffic crash

Where it is determined that the traffic crash does not require police attendance (e.g. no injuries or hazardous environment), the member receiving the information should advise the person involved in the crash to:

- (i) exchange information with other persons involved in the traffic crash (see s. 93 of the TO(RUM)A);
- (ii) arrange for the movement of the vehicles involved in the traffic crash; and
- (iii) where required, refer the member of the public to the options for reporting the traffic crash to the Service (see 'Public reporting of traffic crashes' of s. 5.2.2 of this chapter).

Moving vehicles

Members should advise a caller not to move a vehicle if:

- (i) there are exceptional circumstances surrounding the traffic crash, e.g. unreasonable risk to the safety of the public as a result of the positioning of the vehicles;
- (ii) there is a suspicion of the involvement of drugs, alcohol or criminal negligence (e.g. dangerous operation of a motor vehicle);
- (iii) there is a risk of further damage to property or vehicles; or
- (iv) the vehicle is unable to be immediately moved due to the size of the vehicle and/or spillage.

Where the involved vehicles are not required to remain in their post-crash position, the person should be advised to move the vehicles to reduce traffic congestion.

5.2.2 Reporting and investigating traffic crashes

Reporting and investigating traffic crashes by officers

Officers receiving a report of a traffic crash are to report and investigate traffic crashes which involve:

- (i) death or injury to a person (personal injury requiring treatment by a paramedic, nurse or doctor);
- (ii) suspected involvement of alcohol or drugs;
- (iii) a driver who has failed or is refusing to provide their required details; or
- (iv) other specific aspects which indicate the traffic crash should be attended and/or investigated in the public interest, for example:
 - (a) the crash resulted from dangerous operation of a motor vehicle or hooning; or
 - (b) when significant damage is caused to public infrastructure such as bridges.

Officers and shift supervisors are to apply their discretion when determining whether police investigate a crash in the public interest.

All traffic crashes involving Service vehicles are to be investigated in accordance with s. 5.13: 'Investigation of traffic crashes involving Service vehicles' of this chapter.

Where a member of the public reports a traffic crash directly to Policelink (see 'Public reporting of traffic crashes' of this section), the crash will not be further investigated, unless the criteria in this section above exist.

Where a traffic crash is later identified as a crash which is to be investigated by an officer (e.g. a person involved in the crash later requires medical treatment), the investigating officer (IO) is to:

- (i) contact Policelink to change the occurrence type by submitting a Policelink Intranet Reporting supplementary report to amend the occurrence from a Traffic crash – public report [1464] to a Traffic crash – with injury [1410]; and
- (ii) report and investigate the traffic crash in accordance with this chapter.

ORDER

Where an officer is advised of a reportable traffic crash in accordance with this section, the officer is to ensure the traffic crash is recorded and investigated as completely as possible (see also ss. 5.6.2: 'Responsibilities of officers in charge of stations and establishments' and 5.6.3: 'Processing of traffic crash occurrences' of this chapter).

Public reporting of traffic crashes

Members of the public are able to report a non-injury traffic crash to the Service by:

- (i) submitting a 'Minor traffic crash report (public)' available on the QPS Internet;
- (ii) submitting a report through the 'Policelink' smart-phone application (using the 'MyCrash' function);
- (iii) telephoning Policelink on 131444; or
- (iv) attending a station to make a report in person.

Public reported non-injury traffic crashes will not be further investigated by officers unless specific circumstances exist (see subsection 'Reporting and investigating traffic crashes by officers' of this section).

When Policelink receives a public-reported traffic crash, a 'Traffic crash – public reported [1464]' QPRIME occurrence number will be generated and provided to the person within twenty-four hours of the report being submitted, subject to operational priorities.

Service entry of public reported traffic crashes

Where:

- (i) an officer attends a traffic crash, but is not otherwise required to report or investigate the incident; or
- (ii) a member of the public attends a station to report a non-injury traffic crash,

the member should advise the involved person that the traffic crash does not meet the requirements of a reportable crash and explain that the crash can be reported electronically or by telephone to Policelink.

Where it is more appropriate for a member to report a traffic crash on behalf of a member of the public, for example:

- (i) client service reasons; or
- (ii) where an involved person has a disability or other circumstances preventing them from submitting their own report to Policelink,

the member may assist by recording the crash through the 'Minor traffic crash report (public)' portal available on the Service Intranet on behalf of the person.

Members should advise the person that:

- (i) the non-injury traffic crash will not be further investigated by the Service unless specific circumstances exist; and
- (ii) limited information regarding the crash will be recorded by the Service and the involved person should make their own record of the crash, including involved vehicles and drivers etc.

5.2.3 Members receiving notice of a traffic crash under the provisions of the Motor Accident Insurance Act

Where a traffic crash has not previously been reported to the Service in accordance with s. 93(4): 'Duties of a driver involved in a crash-stopping and providing information' of the TO(RUM)A, a person may report a motor vehicle accident under s. 34: 'Duty to notify accidents to police' of the MAIA, by giving a completed 'Report of traffic incident to police' (available from the Motor Accident Insurance Commission website) to the Service.

Members receiving a 'Report of Traffic Incident to Police' and any attachments ('s. 34 notice') are to treat the notice as a report of a traffic crash.

OICs who receive s. 34 notices should assign the notice to an officer for investigation and reporting in accordance with s. 5.5: 'Duties of officers investigating a traffic crash' and s. 5.6: 'Traffic crash occurrences' of this chapter. Any s. 34 notice should be scanned into the relevant QPRIME occurrence and filed at the owning station.

Where an officer determines that the crash has been previously reported to police, any additional information provided in the s. 34 notice should be entered into the relevant QPRIME occurrence.

In cases where the receipt of a s. 34 notice indicates that an offence under ss. 92: 'Duties and liabilities of drivers involved in road incidents' or 93 of the TO(RUM)A may have been committed, officers should consider commencing a prosecution for the appropriate offence.

In all cases, the officer investigating the crash should provide the QPRIME occurrence number to the person lodging the s. 34 notice.

5.3 Duties of first response officers at traffic crashes

Consistent with and in addition to the provisions of Chapter 2: 'Investigative Process' of the OPM, officers should:

- (i) neutralise any danger to casualties, emergency workers or the public if they are able to, bearing in mind that dangers such as gas leaks, fallen electricity cables and chemical spills must be attended to by the appropriate emergency service, e.g. Gas Examiner, Queensland Fire and Emergency Services (QFES), electricity authority;
- (ii) ensure thorough searches to locate persons killed or injured in the crash have been or are being conducted. If QFES officers are at the scene, request confirmation from the senior QFES officer that primary and secondary searches of the vehicles and surrounding area have been or are being conducted. Officers should assist in conducting searches when requested;
- (iii) if medical personnel are not at the scene, render assistance to the injured;
- (iv) assess the situation and determine if additional Service resources or ambulance, fire units, etc., are required. RDO or patrol group inspectors should be advised of crashes that cause significant traffic flow disruption;
- (v) depending on the type of crash, ascertain and relay the following information to the appropriate emergency service in cases where support is required at the traffic crash scene:
 - (a) the nature of the crash and the need for the emergency service;
 - (b) exact location of the crash/spillage including cross streets;
 - (c) accessibility to crash;
 - (d) proximity of spillage to water, if known;

- (e) the number of persons injured, the nature of the injuries, and whether a person is trapped within a vehicle;
 - (f) the type of fire or spillage. If a chemical spill occurs, whether the substance spilt is toxic, injurious or dangerous. (see s. 5.4: 'Duties at traffic crashes involving hazardous materials' of this chapter);
 - (g) whether there is a need for specialist recovery or rescue equipment; and
 - (h) any other details that may assist with emergency service response e.g. gas leaks, fallen electricity cables, etc.;
- (vi) preserve the scene and record evidence utilising available Service resources, including portable recording devices;
- (vii) provide assistance to other emergency service officers, as required;
- (viii) direct or divert traffic as necessary (see ss. 59, 124 and 125 of the PPRA). This may involve activating regional traffic management plans in the case of crashes resulting in significant traffic flow disruptions;
- (ix) comply with s. 8.5.14: 'Fatal traffic crashes' of the OPM when appropriate; and
- (x) ascertain whether the vehicles involved may be moved to minimise disruption to traffic, consistent with the investigation requirements (see s. 5.5: 'Duties of officers investigating a traffic crash' of this chapter).

Traffic crashes resulting in significant traffic flow disruptions

In addition to the above procedures, where a traffic crash results in a significant traffic flow disruption, first response officers should:

- (i) in accordance with any regional/district traffic management plan, consider implementing a multi-agency response utilising an appropriate DTMR traffic management centre or local government office to assist with the quick clearance of the crash and to minimise traffic flow disruptions;
- (ii) when a multi-agency response is considered necessary, contact the appropriate police communications centre to arrange for the required assistance;

In remote areas where police radio communications may not be readily available, the officer should contact an appropriate traffic management centre or local government office direct (see SMCD).

Upon receiving such requests for assistance, the manager of the traffic management centre will assess and determine what assistance can be provided to police; and

- (iii) provide regular sit-reps to the appropriate police communication centre.

5.4 Duties at traffic crashes involving hazardous materials

Vehicles transporting hazardous materials generally display an Emergency Information Panel (EIP). that shows the following information:

- (i) the correct shipping name for the product being transported;
- (ii) the United Nations number;
- (iii) the Hazchem Code;
- (iv) '000', Police or Fire Brigade;
- (v) Class label and Subsidiary Risk Label; and
- (vi) a 24-hour emergency information service contact telephone number.

The Hazchem Code is an alpha-numeric code and provides an 'initial response action guide' for first responders at an incident (see Appendix 17.4: 'Hazchem Interpretation Aid' of the OPM).

At traffic crashes where there is a danger from gases, liquids, chemicals, explosives and/or fire, first response officers should attempt to locate the EIP on any vehicles involved or a transport manifest held in the driver's compartment (normally on the inside of the driver's door) to ascertain the name of the hazardous substance. If the hazardous substance cannot be identified the code '4WE' is used.

Additional information and officer's responsibilities are contained in s. 17.3.14: 'Hazardous materials' of the OPM.

ORDER

Officers are not to move into any situation where a potential danger exists which would render such officer liable to harm by skin absorption, inhalation or ingestion of a dangerous substance.

Additional duties

Officers, after evaluating the potential threat of dangerous goods should, in addition to the procedures outlined in s. 5.3: 'Duties of first response officers at traffic crashes' of this Manual:

- (i) if necessary and practicable, establish a cordon around the crash scene;
- (ii) position themselves 'up-wind' of dangerous gases;
- (iii) divert traffic from the danger area (see s. 59 of the PPRA);
- (iv) evacuate all persons in danger, and if necessary, arrange for a commissioned officer to invoke the provisions of the *Public Safety Preservation Act* where applicable;
- (v) if the spillage is recoverable, or its effects can be minimised, request that suitable equipment and personnel be sent to the scene urgently;
- (vi) prohibit smoking, eating and drinking in close proximity to the crash; and
- (vii) if necessary, establish a command post.

5.5 Duties of officers investigating a traffic crash

Consistent with the provisions of Chapter 2: 'Investigative Process' of the OPM, officers who investigate a traffic crash should:

- (i) obtain statements from any witnesses to the crash;
- (ii) preserve the scene in accordance with Service policy;
- (iii) record the details of the traffic crash in their official police notebook (a 'Traffic crash aide-memoire' is available from the RP&RSC webpage on the Service Intranet) and/or QLITE device. Details may include:
 - (a) all persons and vehicles directly involved in the crash and any other person who may be able to assist in the subsequent investigation;
 - (b) the damage to the vehicle(s) involved in the traffic crash, the general condition of the vehicle(s) and the position of the hand brake and gear lever;
 - (c) the position of all relevant items of evidence (location of bodies, vehicles, tyre marks, scratch marks, gouge marks, debris on the roadway, including oil stains, water, broken glass, blood stains, etc.) to assist in identifying the impact point of the collision;
 - (d) other scene evidence such as traffic lights, signs, road markings, skid marks, etc., by sketch plan; and
 - (e) if the vehicles have been moved after the traffic crash, the reason for moving and by whom, the exact original positions of impact and where the vehicle came to rest immediately after impact;
- (iv) where a person has suffered injuries in the crash:
 - (a) requiring transportation to hospital; and
 - (b) the FCU or a scenes of crime officer is not attending the scene,

ensure suitable digital photographs or video recordings are taken of the scene showing the involved vehicles'/pedestrians'/cyclists' final positions following the crash;

(v) if considered necessary, obtain assistance from additional officers by making a request through the relevant police communications centre;

(vi) where the traffic crash involves a bus or a heavy vehicle (see s. 6: 'Meaning of heavy vehicle' of the Heavy Vehicle National Law (Queensland)) which:

- (a) results in a fatality or serious injury; or
- (b) may have been caused by a mechanical defect,

ensure a transport inspector from the DTMR (see SMCD) is advised of the incident. Generally, transport inspectors will not attend an incident scene unless:

- (a) the investigating officer (IO) at the scene ascertains vital evidence may be lost or the incident is of such a serious nature to warrant attendance at the scene by transport inspectors; and
- (b) upon arrival at an incident scene, transport inspectors will make a determination as to whether the vehicle can be successfully examined at the scene or should be removed to a holding yard.

Transport inspectors are available during business hours and inspections are normally conducted in a holding yard on a stable surface;

- (vii) where a heavy vehicle is involved in a traffic crash, examine the driver's work diary to establish whether the provisions of the *Heavy Vehicle National Law Act* and Heavy Vehicle (Fatigue Management) National Regulation have been complied with;
- (viii) inspect the general mechanical condition of the vehicle and if it is suspected there may be a mechanical defect or a claim of mechanical malfunction, arrange for the vehicle to be mechanically inspected (see s. 5.14: 'Vehicle mechanical inspections' of this chapter);
- (ix) in cases where a tyre defect is alleged to have caused or contributed to the crash:
- (a) arrange for a tyre examination by an officer who has completed a tyre examination course (conducted by a national tyre and rubber company) (see s. 5.14: 'Vehicle mechanical inspections' of this chapter); and
 - (b) advise the examiner of the circumstances of the crash prior to such examination;
- (x) require the driver of any motor vehicle involved in a traffic crash to provide a specimen of breath for a breath test. Where a blood specimen is obtained from a driver involved in a traffic crash which results in a person being seriously injured or killed, the specimen of blood is also be tested for the presence of drugs in accordance with the relevant provisions of the TO(RUM)A and Chapter 7: 'Drink and Drug Driving' of this Manual;
- (xi) in cases where a vehicle involved in a traffic crash requires towing (or seized and towed away) from the scene by the authority of an IO or other officer, the provisions of s. 13.1.1: 'Towing of motor vehicles following a traffic crash' of the OPM apply;
- (xii) where the traffic crash is such that a FCU or a trained investigator has been requested to attend the scene (see s. 5.9: 'Investigation of major incidents by Forensic Crash Unit' of this Manual), treat the matter as a criminal investigation and apply the appropriate provisions of the PPRA (i.e. Chapter 15, Part 3: 'Safeguards ensuring rights of and fairness to persons questioned for indictable offences') when interviewing persons involved in the crash prior to the arrival of a trained investigator; and
- (xiii) where the traffic crash has resulted in serious injury or death to any person, contact should be made with DTMR on phone 131 940 within 24 hours of the accident to ascertain if any DTMR-owned video / camera monitoring devices were operating in the area at the time of the crash and to lawfully obtain a copy of any relevant images or recordings by completing DTMR Corporate Form F4961: 'Request for Information'. Officers obtaining video evidence are to ensure a QP 0880: 'Section 95 certificate (statements contained in a document or thing produced by device or process)' is completed accordingly (see s. 2.4.11: 'Video and photographic evidence recorded during the commission of offence' of this manual).

5.6 Traffic crash occurrences

Release of traffic crash information

Members are to be aware that information contained within QPRIME traffic crash occurrences is transmitted daily to CITEC Confirm for provision on payment to external organisations and members of the public.

Members are to ensure information contained in traffic crash occurrences is correct. Where information is not to be publicly released, officers are to request an authorised officer to apply a QPRIME Access Control List on the information (see s. 5.13: 'Investigation of traffic crashes involving Service vehicles' of this chapter).

Traffic crash information is to be released in accordance with s. 5.6.5: 'Requests for information related to traffic crashes' of the MSM.

5.6.1 Duties of investigating officer to record information

Service entry of public reportable traffic crashes

Members reporting a non-injury traffic crash, which would otherwise be reported on-line or by telephone to Policelink, are to create a 'Traffic crash – public report [1464]' QPRIME occurrence through the Policelink Internet Reporting facility. No further investigation is required in relation to the crash (see s. 5.2.2: 'Reporting and investigating traffic crashes' of this chapter).

Recording of traffic crashes subject to investigation

Where a crash is to be reported and investigated by an officer (see 'Reporting and investigating traffic crashes by officers' of s. 5.2.2: 'Reporting and investigating traffic crashes' of this chapter), officers should:

- (i) record all relevant information, including a sketch plan, in their official police notebook and/or QLiTE device, making reference to the 'Traffic crash aide-memoire' (available on the RP&RSC webpage on the Service Intranet);
- (ii) ensure all available information is entered on the relevant QPRIME occurrence as soon as possible. In every case the following items need to be recorded on QPRIME prior to the completion of the shift during which the crash was reported:
 - (a) create a QPRIME occurrence and initial report task;

- (b) link the occurrence address;
- (c) add and complete an MVC Occurrence Report with narrative;
- (d) link reporting officer;
- (e) link reporting station; and
- (f) complete the initial report task; and

(iii) where a crash occurs in which a person is fatally injured or a fatal injury is considered reasonably likely, in addition to (ii) above, ensure the following items are recorded on the relevant QPRIME occurrence prior to the completion of the shift during which the crash was reported:

- (a) add major occurrence flag to occurrence;
- (b) link all involved drivers, riders and pedestrians;
- (c) link all deceased person/s;
- (d) link all injured persons;
- (e) add and complete a Person MVC Report for each:
 - deceased person;
 - injured person; and
 - driver, rider and pedestrian;
- (f) link all involved vehicles;
- (g) add and complete a Vehicle MVC Report; and
- (h) send SEMS message and QPS Sudden Death Notification workflow,

(see s. 8.5.14: 'Fatal traffic crashes' of the OPM).

Where the identity of the victim is unknown, the person should be linked with the sex field only on QPRIME. Unknown fields should not be completed;

(iv) excluding fatal traffic crashes, if it is not possible to enter any further details during the same shift as the crash is reported, ensure any remaining details or information is entered on to the occurrence within 48 hours where possible and in all cases within seven days of ascertaining such information; and

(v) in the event a crash is reported at a station or establishment, query QPRIME to ascertain whether the crash has been previously reported at another station or establishment. If the crash has been previously reported the record of that crash is to be modified by entering any additional information which is available.

Traffic crash sketch plans

Officers furnishing traffic crash occurrences are to ensure a plan of the crash location, not necessarily to scale, is completed and uploaded as an external document into the relevant QPRIME occurrence. To assist, a QP 0952: 'Traffic crash sketch plan' may be utilised for this purpose. Once the plan of the crash location or QP 0952 has been uploaded into the QPRIME occurrence, the original document should be disposed.

Where a plan may be required as a superior court exhibit, it should be prepared to scale.

5.6.2 Responsibilities of officers in charge of stations and establishments

The OICs of stations or establishments are responsible for traffic crash records which are generated as a result of traffic crashes occurring within their area of responsibility.

ORDER

The OICs of stations and establishments are to ensure that:

- (i) where required by subsection 'Reporting an investigating traffic crashes by officers' of s. 5.2.2: 'Reporting and investigating traffic crashes' of this chapter:
 - (a) traffic crashes reported to officers under their control are thoroughly investigated in accordance with Service policy and procedures; and
 - (b) unless specific reasons preclude it, enforcement action is taken where an offence is identified during a traffic crash investigation (see s. 5.7: 'Enforcement action following traffic crashes' of this chapter);
- (ii) all particulars have been entered on QPRIME within the time frames outlined in s. 5.6.1: 'Duties of investigating officer to record information' of this chapter;
- (iii) investigations into traffic crashes are finalised as early as possible;
- (iv) QPRIME tasks detailed to their station or establishment are dealt with expeditiously; and

(v) QPRIME tasks originating from their station or establishment are dealt with promptly by liaising with the OIC of the station or establishment to which the QPRIME task has been detailed.

5.6.3 Processing of traffic crash occurrences

The OICs of stations and establishments are responsible for the assessment and management of all traffic crash occurrences which are generated as a result of traffic crashes occurring within their divisions irrespective of where the crash is reported.

ORDER

When a traffic crash is reported to police, the OIC of the owning station or establishment (see SMCD) is to:

- (i) assess and monitor all correspondence associated with the crash;
- (ii) ensure a copy of the QP 0952: 'Traffic crash sketch plan' has been uploaded as an external document into the QPRIME occurrence; and
- (iii) ensure the traffic crash occurrence is finalised on QPRIME when:
 - (a) no further police action needs to be undertaken;
 - (b) any infringement notice issued has been finalised; or
 - (c) any prosecution commenced as a result of the traffic crash has been finalised and the 28 day appeal period has expired.

If the investigation relates to a fatal traffic crash, any documents in relation to the fatal traffic crash are to be filed with the Coroners Court of Queensland (see SMCD).

When a traffic crash is reported at a station or establishment other than the station or establishment in the division in which the crash occurred, the OIC of that station or establishment is to:

- (i) ensure all necessary inquiries are completed within the division and that the available particulars are entered on QPRIME;
- (ii) ensure a copy of the QP 0952: 'Traffic crash sketch plan' has been uploaded as an external document into the QPRIME occurrence; and
- (iii) ensure the relevant QPRIME investigation task is completed and the owning station is advised by a QPRIME FYI task (as appropriate).

5.7 Enforcement action following traffic crashes

ORDER

Where the investigation of a traffic crash identifies an offence has been committed, unless precluded by ss. 3.4.2: 'The decision to institute proceedings' or 3.4.3: 'Factors to consider when deciding to prosecute' of the OPM, officers are to commence enforcement action against the relevant person.

Where an officer has completed an investigation and is:

- (i) of the opinion:
 - (a) there is insufficient evidence to support any prosecution action; or
 - (b) an offence can be proved; however, it may not be in the public interest to commence proceedings. The officer is to update the relevant QPRIME occurrence, including particulars of the offending conduct, results of any investigation and the reasons why proceedings should not be commenced; or
- (ii) seeking advice as to the type of enforcement action to be taken, including the offence/s committed,

the officer is to submit a QPRIME task to their superintendent of traffic (SOT) (see Delegation D 25.2) or OIC or an officer nominated in writing by the OIC seeking a determination.

Commencing enforcement action

Where, following the investigation of a traffic crash an offence has been identified, officers may commence enforcement by:

- (i) issuing an infringement notice to the offender (see s. 5.7.1: 'Issuing of infringement notices for traffic crash investigations' of this chapter);
- (ii) issuing a notice to appear (NTA) to the offender. A NTA for an offence under the TO(RUM)A or Regulations may be served by registered mail (see s. 3.5.3: 'Proceedings by way of notice to appear' of the OPM);
- (iii) arresting the offender (see s. 3.5.10: 'Making an arrest' of the OPM); or

(iv) in exceptional circumstances only, by issuing a complaint and summons (see s. 3.5.4: 'Proceedings by way of complaint and summons' of the OPM).

All actions in relation to investigating and commencing enforcement action following a traffic crash should be recorded in the relevant QPRIME occurrence.

No further action

Where there is insufficient evidence to successfully prosecute an offender, or it is not in the public interest to commence proceedings (see ss. 3.4.2 and 3.4.3 of the OPM), the relevant QPRIME occurrence should be endorsed accordingly. The SOT should send a FYI task within the QPRIME occurrence to the OIC of the owning station or establishment.

The OIC of the owning station or establishment should:

- (i) ensure the decision to take no further action is recorded within the relevant QPRIME occurrence; and
- (ii) finalise the relevant QPRIME occurrence.

If the investigation relates to a fatal traffic crash, the documents are to be filed with the Coroners Court of Queensland (see SMCD).

Duties of superintendent of traffic

A superintendent of traffic (SOT) is to ensure appropriate action is taken following a traffic crash investigation.

When making a determination with respect to any action following a traffic crash, a SOT is to:

- (i) review all available information about the traffic crash, including:
 - (a) the relevant QPRIME occurrence;
 - (b) any relevant notes made in the investigating officer's (IO) notebook; and
 - (c) any statements which were taken in respect of the traffic crash;
- (ii) determine:
 - (a) whether it is in the public's interest to commence a prosecution following the traffic crash; and
 - (b) the appropriate offence for which a prosecution should be commenced; and
- (iii) decide whether sufficient evidence has been obtained to support the prosecution of the offence.

Where a SOT has reviewed a traffic crash and determined:

- (i) insufficient evidence has been obtained to support the commencement of a prosecution, advise the IO what additional inquiries should be made prior to further considering the commencement of a prosecution; or
- (ii) the matter has been fully investigated:
 - (a) advise the IO of the appropriate offence and means of commencing a prosecution; or
 - (b) there is insufficient evidence to support any prosecution action, advise the IO that no further action should be taken,

the SOT should update the relevant QPRIME task outlining the action to be taken.

Restrictions on superintendent of traffic

A superintendent of traffic (SOT) in respect of traffic crash investigations is not to be the IO unless a SOT is not reasonably accessible (e.g. at remote one-person stations).

5.7.1 Issuing of infringement notices for traffic crash investigations

Where completed investigations into a traffic crash have identified sufficient evidence to prove the commission of an offence, an officer should consider issuing an infringement notice if:

- (i) the offence indicated is one for which an infringement notice may be issued (see s. 8.3: 'Offences for which infringement notices may be issued' of this Manual);
- (ii) the infringement notice will be issued within 8 months of the traffic crash (s. 8.6: 'Manner of issuing infringement notices' of this Manual and s. 13.15: 'Issue of infringement notices generally' of the OPM)
- (iii) a supervising officer has not directed action to be commenced by another means; and
- (iv) the crash:
 - (a) was not a fatal crash; or
 - (b) did not result in a life-threatening injury or the hospitalisation of any person involved.

In all other cases, a prosecution should be commenced by issuing a NTA, arrest or by issuing a complaint and summons.

Where an investigating officer (IO) is satisfied the issuing of an infringement notice to a person involved in a traffic crash is appropriate, the officer should do so in accordance with s. 8.6: 'Manner of issuing infringement notices'. Further information to be recorded on the rear of the station/establishment copy of the PT56: 'infringement notice' or in the 'Notes and photos' entry screen of a QNotice eTicket includes:

- (i) the relevant QPRIME occurrence number;
- (ii) the name/s of all officers assisting in the investigation;
- (iii) the notebook number and page number/s of any relevant notes considered when deciding to issue the infringement notice; and
- (iv) reference to any statements or other material considered, which are not recorded in the relevant QPRIME occurrence, when deciding to issue the infringement notice and the location of those statements or other material.

If a PT56 is issued after the creation of the relevant QPRIME occurrence, the occurrence number should be recorded in the appropriate section at the bottom of the notice instead of the rear of the pink copy.

If an IO from a station or establishment other than the 'owning station' (see SMD) completes a traffic crash investigation, where appropriate that officer may consider issuing an infringement notice directly to the offender.

Who may issue an infringement notice

The following officers may issue an infringement notice at the conclusion of a traffic crash investigation:

- (i) an IO;
- (ii) an authorised officer; or
- (iii) Superintendent of Traffic.

An authorised officer is the OIC of a station or establishment, or an officer nominated in writing by the OIC.

First year constables are to be under the direct supervision of a qualified field training officer when issuing an infringement notice.

Issuing infringement notice by mail

Where an infringement notice cannot be issued in person to the person involved in the traffic crash, IO are to forward a QPRIME task to an authorised officer to:

- (i) confirm that the crash is appropriate to be dealt with in such a manner; and
- (ii) determine the appropriate offence for which an infringement notice should be issued.

Where the authorised officer decides that an infringement notice should be issued to a person involved in the traffic crash, the IO is to:

- (i) complete a PT56: 'Infringement notice', a QNotice eTicket is not to be used; and
- (ii) prepare a suitable letter to accompany the PT56 signed by the authorised officer.

After the PT56 and accompanying letter are signed, the issuing officer is to ensure:

- (i) the infringement type and notice number are recorded in the relevant QPRIME occurrence;
- (ii) the PT56 accompanying letter is uploaded into the occurrence;
- (iii) an FYI task is sent to the owning station advising of the issue of the infringement notice; and
- (iv) the PT56 and accompanying letter are sent to the alleged offender by regular mail.

Duties of an authorised officer

After an authorised officer has reviewed a reported traffic crash and is satisfied the issue of an infringement notice to a person involved in a traffic crash is appropriate, the authorised officer should:

- (i) ensure the IO undertakes the duties outlined in this section;
- (ii) check the accuracy and completeness of the PT56; and
- (iii) sign the accompanying letter.

Duties of officers in charge of owning stations

The OICs of owning stations who receive a QPRIME FYI task in relation to a traffic crash where an infringement notice was issued are to ensure periodic checks are conducted on the offender's traffic history on QPRIME to establish whether the infringement notice has been paid or otherwise finalised. Upon payment or other finalisation of the infringement notice, the OIC is to finalise the QPRIME traffic crash occurrence.

5.8 Injurious matter on roadways

Officers who establish that a contributing factor to a traffic crash was that some injurious matter was on the roadway should:

- (i) endeavour to identify the person responsible for placing the matter on the roadway;
- (ii) note the position, area and type of matter;
- (iii) note any claims by drivers of the vehicles involved as to the effect the matter had on the crash;
- (iv) note identifying numbers, signs or marks on any article which may be associated with the injurious matter or the receptacle from which the matter may have fallen;
- (v) in the case of spillage:
 - (a) note the type and size of the spill;
 - (b) ascertain where the spillage commenced and finished; and
 - (c) in cases of hazardous chemical spillages (see s. 5.4: 'Duties at crashes involving hazardous materials' of this chapter and Chapter 17: 'Major Incidents' of the OPM).

Where injurious matter has been deposited on the roadway as a result of a traffic crash, the officer assigned to investigate such crash should ensure that all reasonable measures are taken for the protection of road users and that the appropriate agency is advised to attend the scene.

In some cases the placing or dropping of injurious matter on a road may constitute an offence against local laws or s. 137: 'Injurious matters on roads' of the TO(RUM)A.

5.9 Investigation of major incidents by Forensic Crash Unit

Permanent and part-time FCU exist throughout Queensland at various locations.

Role of Forensic Crash Unit

The role and functions of the FCU, RP&RSC are outlined on the unit's webpage on the Service Intranet.

In areas where there is no permanent FCU, some officers have been trained in incident investigation techniques (trained investigators). Trained investigators are available to provide some of the services that are provided by a FCU.

Attendance of Forensic Crash Unit at incidents

A FCU officer or trained investigator should be requested to attend:

- (i) serious road incidents involving:
 - (a) the death of any person;
 - (b) serious injury to any person; or
 - (c) evidence of criminal negligence on the part of any person, including incidents occurring:
 - at an intersection controlled by traffic lights and a driver involved has apparently disobeyed a red traffic light;
 - at an intersection controlled by a 'Stop' sign or a 'Give Way' sign and a vehicle involved has apparently entered the intersection at considerable speed;
 - as an apparent result of excessive speed;
 - as an apparent result of one or more of the vehicles involved being on the incorrect side of the road at the time of impact; or
 - where there are apparently multiple traffic breaches of life endangering offences on the part of one or more persons;
- (ii) incidents involving multiple vehicles and/or people or where the incident is a major transport incident;
- (iii) complex road incidents, where the investigation is considered to be beyond the normal investigative capabilities of officers attending the scene;
- (iv) a rail related incident involving the death of any person, after consultation between the senior officer and forensic officer and it is determined the rail related death is not the result of a suicide. See also s. 17.3.4: 'Rail incidents' of the OPM;
- (v) in circumstances where a person has been killed or there is a likelihood of death resulting from injuries received due to:

- (a) a notifiable workplace incident (including a work-related recreational water activity incident) (see s. 35: 'What is a notifiable incident' of the *Work Health and Safety Act*);
- (b) a dangerous electrical event (see s. 12: 'Meaning of dangerous electrical event' of the *Electrical Safety Act (ESA)*) at workplaces or residences;
- (see also s. 8.5.6: 'Fatal workplace or electrical incidents' of the OPM)
- (c) a serious electrical incident (see s. 11: 'Meaning of serious electrical incident' of the ESA) at workplaces or residences;
- (d) an aircraft incident (commercial or non-commercial); or
- (vi) for any other reason where skills or expertise of the FCU or trained investigator are required.

An officer at the scene of an incident who requests the services of a FCU officer or trained investigator is to ensure the requirements of s. 2.4.6: 'Preservation of scenes' of the OPM are observed and the primary investigation is conducted in accordance with s. 2.5: 'Investigations' of the OPM. In addition, the officer is to ensure that:

- (i) vehicles involved in a road incident are not moved without the authority of the FCU officer or trained investigator investigating the incident; and
- (ii) where appropriate, drivers of vehicles involved in an incident are subjected to roadside breath tests for alcohol and/or steps are taken to obtain blood specimens for analysis.

Call out procedure

The first response officer/police forward commander/investigating officer should advise their:

- (i) RDO;
- (ii) DDO; or
- (iii) patrol group inspector,

who will assess the situation. If it is considered that the attendance of specialist support is necessary, the RDO, DDO or patrol group inspector should ensure that the request is transmitted to the:

- (i) Duty Officer, Brisbane Police Communications Centre (PCC) (in their area of responsibility);
- (ii) OIC of the relevant PCC (in their area of responsibility); or
- (iii) OIC of the station or establishment where the incident occurred in places where a PCC does not exist,

who will ensure that the OIC of the relevant specialist support area is contacted and notified of the request and the particulars of the incident.

The OICs of regions are to ensure that regional instructions for the call out of specialist support are developed and maintained in their region.

Responsibility for investigation

On arrival at the scene of the incident, FCU officers or trained investigators assume responsibility for the conduct of the investigation unless:

- (i) their attendance was requested for a specific purpose (i.e. to undertake a collision analysis/scene reconstruction, take photographs, prepare a forensic map or provide lighting); or
- (ii) the FCU officer or trained investigator attending the incident scene forms the opinion that the matter is one not requiring further attention by an FCU officer or trained investigator and has advised:
 - (a) the first response officer who requested the attendance of an FCU officer or trained investigator;
 - (b) the shift supervisor or RDO or DDO through whom the attendance of an FCU officer or trained investigator was requested; and
 - (c) in cases where the request was made through the Duty Officer, Brisbane PCC, the Duty Officer,

where the responsibility for the investigation will remain with the first response officer originally detailed to investigate the matter.

The responsibilities detailed in s. 8.4.3: 'Responsibilities of investigating officers' of the OPM remain with the first response officer originally detailed to investigate the matter.

ORDER

Where the FCU or a trained investigator assumes responsibility for an investigation of an incident in a region, and significant resources are required in order to conduct the investigation beyond the capacity of the FCU (e.g. 'hit and run' incidents), that region is to provide all reasonable assistance to the FCU including the provision of appropriate resources for the investigation.

Cost recovery

In the Brisbane metropolitan area, the costs associated with the attendance of the FCU, will be met by the FCU, Brisbane, RP&RSC.

If the FCU, Brisbane are requested to provide services to a region, the region will be liable for the costs of the provision of the service, which may include overtime, travelling allowance, and court attendance costs.

5.9.1 Vetting of collision analysis evidence by Senior Collision Analyst, Forensic Crash Unit, Brisbane

Expert evidence can be presented in court by traffic accident investigators trained in preparing basic collision analysis and speed estimations, based on physical evidence obtained from the scene of a crash.

Due to the specialist nature of such evidence, it is essential that quality control measures are in place to ensure that the credibility of such evidence is maintained.

Only officers who have successfully completed the Advanced Crash Investigation Course or Collision Analysis Course are qualified to provide expert evidence relating to basic collision analysis and speed estimations based on physical evidence at the scene of a crash.

All such specialist evidence is to be vetted by the Senior Collision Analyst, FCU, Brisbane (SCA), prior to being included in a brief of evidence or a report to a Coroner.

Qualified officers are to forward a report to the SCA, containing all evidence relating to reconstruction of traffic crashes prior to its presentation in court. This report should include:

- (i) a brief summary of the crash under investigation;
- (ii) all mathematical calculations used to arrive at the conclusion; and
- (iii) methodology used in the preparation of the report.

The SCA, should:

- (i) ensure that the investigator has successfully completed the Advanced Crash Investigation Course or Collision Analysis Course;
- (ii) ensure all mathematical calculations have been completed correctly;
- (iii) ensure the methodology used to arrive at the conclusion was correct for the matter under investigation; and
- (iv) provide a statement of verification as to the correctness of the calculations and methodology used in the analysis.

Officers performing duties as shift supervisors or brief managers should not accept briefs of evidence relating to speed estimation or any accident reconstruction unless it is accompanied by a statement of verification from the SCA.

ORDER

Officers submitting a report to a Coroner relating to speed estimation or any accident reconstruction are to attach to the report, a statement of verification from the SCA.

5.9.2 Skid tests conducted to afford evidence

The use of Service vehicles and other vehicles for skid testing is sometimes necessary to obtain expert evidence. Skid tests are only to be undertaken by an accredited traffic accident reconstruction officer or accident investigator.

ORDER

Officers who intend to conduct skid tests are to request authorisation from a forensic crash investigator of the rank of sergeant or above prior to a series of skid tests being conducted. Such request is to include details of:

- (i) the necessity for the tests;
- (ii) time, date and place at which the tests are to be conducted;
- (iii) who is to conduct the tests;
- (iv) the safety precautions to be taken prior to and during the tests; and
- (v) the safety equipment to be utilised during the tests.

After approval to conduct a skid test is given, the officer conducting the test is to ensure that:

- (i) prior to the conducting of the skid test, the vehicle to be used is inspected and the braking system tested;
- (ii) prior to the conducting of the skid test, when a Service vehicle is used, such vehicle is to be inspected prior to the test for physical damage. The Service vehicle is to be returned in a road worthy condition. This may involve the changing of tyres and repairing any damage;
- (iii) the relevant portion of the roadway to be used is secured against the entry of members of the public;

(iv) the tests are conducted in a manner which is appropriate and does not unduly interfere with the safe and effective regulation of traffic; and

(v) simulations are undertaken in a manner which recreates the same section of road camber and surface if the same section of roadway is not able to be used.

5.10 Traffic crashes at railway level crossings and railway bridges

Officers should be mindful that a crash involving a train may involve hazardous material and high voltage electricity.

Officers are to ensure that Queensland Rail (QR) is advised as soon as possible of any crash involving a train or damage which has been caused to railway property (boom gates, control lights, railway lines, railway bridges, etc.) as the result of a traffic crash having regard to the risk of structural damage. In this section, railway property does not include motor vehicles owned by QR.

Officers assigned to investigate a traffic crash involving a train or other vehicles at a railway level crossing should ensure:

- (i) QR is notified of the incident as soon as possible;
- (ii) inquiries are carried out as expeditiously as possible, consistent with the aims of covering all essential aspects of thorough investigation and minimising serious disruption to traffic;
- (iii) the train or the vehicle is removed so that interference to trains running on that line is minimised;
- (iv) if the crash involves an excess dimension vehicle or load and it is suspected that the dimensions of the vehicle or load have contributed to the crash, a transport inspector, DTMR is to be notified with a view to having the vehicle checked for compliance with the relevant permit;
- (v) if circumstances permit, some elements of the investigation, such as interviewing train crew members and establishing the composition of the train, may be deferred, provided that the positions where vehicles and persons involved in the crash have come to rest and the point of impact are accurately recorded; and
- (vi) where it is considered that upgrading of railway equipment at level crossings should be carried out, furnish a report through the normal channels to the Deputy Commissioner's Secretary, QR. This report should be furnished as soon as possible and not rely on the finalisation of the traffic crash investigation. A copy of this report should be scanned into the relevant QPRIME occurrence as an external report.

5.11 Notification of Department of Transport and Main Roads and local authorities

In cases where:

- (i) a traffic crash results in a fatality or serious injury to any person or major damage to property; or
- (ii) a traffic crash other than one referred to in (i) above, and it is considered that any feature or condition of the road or the absence of appropriate warning signs on the road, has been a contributing cause; or
- (iii) a series of traffic crashes at the same scene in circumstances where those crashes would not normally be reported to an engineer, DTMR,

the OIC of the owning station (see SMCD) should furnish a report in relation to the incident(s) to the:

- (i) DTMR; or
- (ii) relevant local government authority engineer,

responsible for the road in question including, if requested the supply of traffic crash information. This report should be furnished as soon as possible and not rely on the finalisation of the crash investigation. A copy of this report should be scanned into the relevant QPRIME occurrence as an external report.

5.12 Emergency rescuer's guides

5.12.1 Safety restraint systems

Modern motor vehicles are fitted with a number of devices to provide additional protection to occupants. Where the various devices are fitted, there will be a warning label fitted to the vehicle, usually in a door opening, dashboard side or on the sun visor.

Normally, electrical cabling for occupant supplementary restraint systems (SRS) will have a yellow covered cover.

Airbags

Passenger vehicles sold in Australia since the mid 1990's have been fitted with airbag SRS, initially as an option and since 2000 as a mandatory requirement under the Australian Design Rules (ADR). New cars are now fitted with multiple airbag SRS, both in compliance with the ADR and for occupant safety, with the vast majority of vehicles containing:

- (i) driver airbag SRS (in the steering wheel);
- (ii) front passenger airbag SRS (usually in the dashboard);
- (iii) thorax airbag SRS for front seat occupants (usually in the side of the seat);
- (iv) curtain airbag SRS for front and rear passengers (usually running above the doors and down the windscreen pillar); and
- (v) driver's knee airbag SRS (under the steering wheel).

The installation of airbag SRS has also started in light and medium trucks, generally consisting of a driver and front passenger airbag SRS in the steering wheel and dashboard.

Airbag SRS are designed to deploy above a set minimum speed and also in a set direction (i.e. front airbag SRS are designed only for a frontal impact, curtain airbag SRS are designed only for a side impact) and may not discharge in a crash. Officers should be careful when attending crashes for airbag SRS devices which have not discharged (see Appendix 5.1: 'Emergency rescuer's guide to cars fitted with Airbag Supplement Restraint Systems (Airbag SRS)').

Officers should be conversant with these guidelines and follow the procedures wherever practicable.

Pyrotechnic seat restraints

In addition to airbag SRS occupant protection devices, an increasing number of vehicles are fitted with pyrotechnic seat restraints, generally on the front seats. In a vehicle fitted with the system, the pyrotechnic seat restraint will be 'fired' when an accident occurs which discharges the airbag SRS. Pyrotechnic seat restraints are fitted on the base of the seat and are attached to the seat belt buckle/anchor and when discharged pull the seat belt clasp closer to its mount, tightening the seat belt.

Whilst pyrotechnic seat restraints would normally be discharged in a serious traffic crash (where an airbag SRS is deployed), there is a risk that a pyrotechnic seat restraint may fail to discharge or suffer a delayed discharge. There is a risk a rescuer may suffer an injury if the system discharges whilst the person is handling the seat belt.

5.12.2 Hybrid electric vehicles

A hybrid electric vehicle uses an electric motor in conjunction with a standard petrol or diesel internal combustion engine to provide propulsion.

Normally, electrical cabling for hybrid electrical supply in a vehicle will have an orange covered cover. Officers are to:

- (i) be aware that hybrid electrical systems operate at very high voltages (650 volts +); and
- (ii) avoid handling all orange coloured components (see Appendix 5.2: 'Emergency response guide to hybrid electric vehicles' of this chapter).

Officers should:

- (i) familiarise themselves with these guidelines; and
- (ii) comply with the provided procedures.

5.12.3 Tyre explosions

Tyre explosions can propel wheel and rim components over considerable distances. For example, tyre explosions on large mining trucks have propelled wheel fragments over 300 metres. Both the force of the explosion and the flying debris can cause property damage, personal injury, or death.

Pyrolysis

When excess heat is developed in, or applied to an inflated tyre, a chemical reaction called pyrolysis can occur, causing a build-up of flammable gases and pressure within the tyre, which may ultimately explode. Pyrolysis related explosions are unpredictable and can occur instantaneously, or several hours after the application of heat to the tyre or rim.

Common causes of tyre explosions include:

- (i) vehicle contact with high voltage overhead power lines;
- (ii) vehicle lightning strikes;
- (iii) welding or heating wheel rim assemblies without removing the tyre;
- (iv) vehicle fires; and
- (v) overheating brake systems.

A tyre explosion can occur where no fire is visible.

Split rim wheel assemblies

Trucks, tractors, off-road vehicles, forklifts and earthmoving machinery often use multiple-piece or split rim wheel assemblies. These wheel assemblies have one or more side rings which support the tyres' bead and serve as a flange and locking system to keep the inflated tyre on the rim. The rim base, side/lock rings and inflated tyre assembly make up the wheel.

Split rim wheel and tyre assemblies can explode if poorly maintained, incorrectly fitted, assembled or disassembled while inflated, or if damaged in traffic crash or other incident. The application of fire or heat build-up within the wheel assembly will add to the overall risk but the rims can be dislodged whilst at or below normal operating temperature.

A number of people have been killed or seriously injured as a result of tyre explosions involving split rim wheel assemblies. In the event of an explosion, these wheels pose the added risk of the rim components separating in the blast.

Officers attending incidents where inflated tyres are damaged or have been exposed to heat in a manner described above, should:

- (i) be mindful of the potential for the tyres to explode;
- (ii) consider the possibility of damage or injury from other objects, glass, gas and fuel sources in the vicinity in the event of an explosion; and
- (iii) advise and seek assistance from the Queensland Fire and Emergency Services.

Further information concerning tyre explosions is available on the internet (see Safety Bulletin No. 47: 'Tyre Fires, Pyrolysis and Explosions' published by the Mines Inspectorate, Resources Safety and Health Queensland).

5.13 Investigation of traffic crashes involving Service vehicles

Investigation of traffic crashes (generally)

For the purpose of this section a minor Service traffic crash means a crash in which:

- (i) the only damage caused is to Service property (includes collision with wildlife);
- (ii) damage is less than \$2500, or some lesser amount established in regional standing orders;
- (iii) no person is injured; and
- (iv) the involved Service vehicle is in a safe condition to drive.

The aim of investigations into traffic crashes involving Service vehicles is to:

- (i) ensure accountability;
- (ii) promote professional driving behaviour; and
- (iii) maintain public confidence.

All traffic crashes involving Service vehicles are to be investigated.

The nature and scope of any investigation will vary according to the circumstances of the crash but should be reflective of the severity of the crash, the resources of the relevant organisational unit and the aim of investigations into traffic crashes involving Service vehicles.

QPRIME is to be used to record all Service traffic crashes as part of the traffic crash occurrence reporting requirements.

Investigations of traffic crashes involving Service vehicles are to be overseen by:

- (i) the assistant commissioner in charge of the region or command, or a commissioned officer delegated for that purpose, to which the involved vehicle is attached; or
- (ii) in the case of a vehicle not under the control of an assistant commissioner by a commissioned officer delegated for that purpose.

Assistant commissioners in charge of regions and commands should ensure that regional instructions are established within their area of responsibility to provide procedures for the investigation of crashes involving Service vehicles.

Regional instructions should incorporate:

- (i) procedures for determining whether an investigation is to be commenced immediately or at a later convenient time.

Immediate investigation of a traffic crash involving a Service vehicle is warranted when:

- (a) injury is caused to any person;

- (b) the circumstances of the crash indicate that a member of the Service may have committed a driving related offence;
- (c) the crash is connected with a pursuit or urgent duty driving;
- (d) damage to Service property exceeds \$2,500;
- (e) damage is caused to the property of another person or entity; and
- (f) the nature of the crash suggests that an injury to a person may develop as a result of the crash.

It may be appropriate to delay the commencement of an investigation to a later, more convenient, time in the case of minor Service traffic crashes;

(ii) the appropriate time within which an investigation is to be commenced, if not required to be commenced immediately. A delayed investigation should generally be commenced within 24 hours unless exceptional circumstances exist;

(iii) whether the Service vehicle should be left 'in situ' at the scene of the crash until such time as the investigating officer (IO) is able to attend the scene. A vehicle is to be left 'in situ' in crashes where death or serious injury has been caused as a result of the crash or where the circumstances of the crash suggest that a FCU officer or trained investigator should be requested to attend the crash in accordance with s. 5.9: 'Investigation of major incidents by Forensic Crash Unit' of this chapter;

(iv) the nomination of an appropriate IO, having regard to the resources of the region and the location of the crash. It is not necessary that the investigation be conducted by a commissioned officer; however investigations should be carried out, wherever practicable, by officers senior to the driver of the Service vehicle;

(v) where a traffic crash involves a covert Service vehicle, or a vehicle being used at the time for covert purposes, the crash should be investigated by a designated member of the relevant region where the incident occurred;

(vi) processes for notifying the relevant overseeing commissioned officer of the crash;

(vii) instructions as to the type of report forms and formats to be used in particular cases. Traffic crashes involving Service vehicles are to be reported in accordance with s. 5.6: 'Traffic crash occurrences' except in cases of minor Service traffic crashes. In such cases regional instructions may establish alternative reporting requirements, however QPRIME is to be used in all Service traffic crashes, with the relevant information to generate the insurance claim form;

(viii) a timeframe for providing the overseeing commissioned officer with interim and final reports on the investigation;

(ix) a method for placing the crash on the agenda of the relevant significant event review panel as soon as reasonably practicable;

(x) procedures for compliance with:

- (a) s. 1.16: 'Fatalities or serious injuries resulting from incidents involving members (police related incidents)';
- (b) s. 1.4.6: 'Responsibilities of regional duty officer, district duty officer and shift supervisor'; and
- (c) s. 1.18: 'Significant events',

of the OPM; and

(xi) where the traffic crash has resulted in serious injury or death to any person, contact should be made with DTMR on phone 131 940 within 24 hours of the accident to ascertain if any DTMR-owned video / camera monitoring devices were operating in the area at the time of the crash and to lawfully obtain a copy of any relevant images or recordings by completing DTMR Corporate Form F4961: 'Request for Information'. Officers obtaining video evidence are to ensure a QP 0880: 'Section 95 certificate (statements contained in a document or thing produced by device or process)' is completed accordingly (see s. 2.4.11: 'Video and photographic evidence recorded during the commission of offence' of this manual).

Responsibilities of members

Members who are the drivers of Service vehicles that are involved in traffic crashes are to:

- (i) in the case of crashes occurring in areas where a police communication centre exists, advise the relevant police communication centre of the nature and location of the crash as soon as practicable; or
- (ii) in the case of crashes occurring in other locations, advise their supervisor of the nature and location of the crash as soon as practicable.

Members who are the drivers of Service vehicles that are involved in traffic crashes, or a nominated member, are to commence the required QPRIME occurrence in relation to the crash as soon as practicable.

Members who authorise a non-member to drive a Service vehicle that is involved in a traffic crash while under the control of the non-member are to ensure that the crash is reported to a police officer:

- (i) as soon as practicable after the crash has occurred; or
- (ii) as soon as practicable after the member becomes aware of the crash.

To facilitate compliance with this policy, members should advise non-members, at the time that authorisation to drive the Service vehicle is given, of the requirement to report crashes involving Service vehicles. Regardless of any instructions given to a non-member, the member authorising the use of the Service vehicle remains responsible for ensuring that any traffic crash involving the Service vehicle is reported in compliance with this policy.

The requirement to report traffic crashes involving Service vehicles applies regardless of the amount of damage caused or the severity of injury sustained as a result of the crash.

Members who receive advice that a Service vehicle has been involved in a traffic crash are to arrange for a commissioned officer to be notified of the crash.

Responsibilities of investigating officers

Officers who investigate traffic crashes involving Service vehicles are to complete the relevant reports, including the QPRIME occurrence, as described in this section or as established under regional instructions and provide a copy to the relevant overseeing commissioned officer where necessary.

Responsibilities of commissioned officers

Commissioned officers who are notified of traffic crashes involving Service vehicles are to ensure that an investigation of the crash is commenced as soon as reasonably practicable in accordance with regional instructions and the circumstances of the crash.

Commissioned officers who receive reports on traffic crashes involving Service vehicles are to:

- (i) ensure that any disciplinary breaches committed by members are reported in accordance with 'Complaint Management' of the Ethical Standards Command Guidelines; and
- (ii) make recommendations to the relevant assistant commissioner as to any further action which should be taken in respect of the crash.

Investigation of serious traffic crashes

The investigation of crashes involving members resulting in fatalities or serious injuries is outlined in s. 1.16: 'Fatalities or serious injuries resulting from incidents involving members (police related incidents)' of the OPM.

In addition to the requirements of s. 1.18: 'Significant Events' of the OPM, a regional crime coordinator should also be mindful of the policy set out in s. 5.9: 'Investigation of major incidents by Forensic Crash Unit' of this chapter.

Restricting release of traffic crash information in certain instances

Information contained in QPRIME traffic crash occurrences is automatically transferred to CITEC Confirm on a daily basis, usually at 0600 and 0900 hours.

Where a traffic crash involves:

- (i) a covert Service vehicle;
- (ii) a covert officer;
- (iii) a human source and there is a need to restrict the release of identifying information; or
- (iv) an officer or Service vehicle and there are legitimate reasons for restricting the release of information,

and approval is granted by a commissioned officer, a QPRIME Access Control List (ACL) should be placed on the information immediately after data entry is completed.

Where access to a QPRIME traffic crash occurrence involving an officer or Service vehicle needs to be restricted, the IO should:

- (i) prior to entering the traffic crash information into QPRIME, contact the Road Crash Data Unit, Police Information Centre, Legal Division and confirm the QPRIME data release times. The occurrence should be entered when data will not be transferred to CITEC Confirm;
- (ii) request the QPS ACL Manager or approved QPS OSC or CIC ACL Manager to place an ACL on the information to be restricted. Only the details of the officer, human source or Service vehicle and the relevant reports should be restricted;
- (iii) include the details of the commissioned officer who authorised the use of the ACL to restrict the information in the relevant QPRIME occurrence.

The commissioned officer authorising the restriction of the traffic crash information should make a record in their official diary of the traffic crash and the reasons the information is to be restricted.

5.14 Vehicle mechanical inspections

Forensic vehicle inspectors (FVI) attached to the Vehicle Inspection Unit (VIU), Scientific Section, Forensic Services Group undertake mechanical, identification and other inspections of all classes of motor vehicles throughout Queensland.

FVI hold engineering (mechanical) or equivalent qualifications; have wide automotive backgrounds supported by various specialist training courses and are accepted as expert witnesses by courts at all levels, with their expertise acknowledged by prosecutors and defence.

The evidence of FVI has been accepted as credible and impartial by the courts, defence and prosecution lawyers. Every effort is to be made to maintain this level of credibility and impartiality.

FVI should not be involved in aspects of an investigation other than the inspection of vehicles (e.g. FVI should not initiate prosecutions in respect of vehicles they have inspected).

5.14.1 Circumstances where an inspection may be warranted

The inspection of vehicles involves significant cost and resources and should only be requested when it appears likely that mechanical failure of a vehicle contributed to or caused an incident. Investigating officers of traffic crash related offences/incidents are to attempt to negate a defence of mechanical failure through questioning, and electronic footage sourced from CCTV, dashcam, body worn cameras, or Polair before requesting a mechanical or other inspection of a vehicle involved for the purpose of obtaining expert evidence

An inspection of a vehicle may be warranted when:

- (i) the vehicle is involved in a fatal or life-threatening injury road crash and an examination of a vehicle is required to support or negate any defence that may be raised in relation to a criminal or traffic charge or during a coronial inquest;
- (ii) an examination is required by the Forensic Crash Unit to support a collision analysis;
- (iii) the vehicle is involved in any incident where mechanical failure or tyre failure is alleged; and the incident relates to the dangerous operation of a motor vehicle, life imprisonment offence, or it is in the public interest as determined by the OIC Vehicle Inspection Unit (VIU);
- (iv) the vehicle is the subject of a defective vehicle notice and is involved in an incident which relates to an offence which carries life imprisonment, or it is in the public interest as determined by the OIC VIU;
- (v) a motor vehicle is involved in the commission of a serious crime such as a homicide, arson, armed robbery, or drug trafficking in circumstances where mechanical condition is relevant, reporting on the operation of any mechanised concealed compartment is required, or a mechanical defence may be alleged; or
- (vi) the vehicle has suspected altered identification details i.e. VIN, engine number, compliance and body identification plates/labels.

Circumstances when a vehicle will not generally be inspected

A vehicle will not generally be inspected by a FVI in situations where:

- (i) there is no indication that mechanical failure contributed to an incident that does not involve a death or serious injury;
- (ii) continuity cannot be proven, where the vehicle has not been seized immediately after the incident and where such a period of time has elapsed, that any inspection of the vehicle would offer little or no probative value;
- (iii) there are no suspects or charges laid with the exception of coronial matters;
- (iv) the matter involves minor traffic offences;
- (v) the vehicle is in the possession of the owner or the owner's agent;
- (vi) it is a unit involved in a traffic incident and the driver is not subject to prosecution with the exception of coronial matters involving extenuating circumstances after justification has been provided to the OIC VIU for consideration;
- (vii) the vehicle cannot be safely inspected; or
- (viii) the vehicle's mechanical condition has been compromised prior to VIU attendance.

5.14.2 Airbag control modules

Vehicle airbag control module (ACM) downloads and analysis are performed by the Forensic Crash Unit (FCU) and this should be conducted in-situ. Investigators should direct all enquires to their local FCU office.

In circumstances where in-situ downloads are not practicable due to extensive electrical damage or remote location, VIU are able to assist in the removal of ACM's after the investigating officer has obtained approval from the FCU. Seizure and transporting of ACM's remains the responsibility of the investigating officer.

5.14.3 Vehicle Inspection Unit call-out procedure, court attendance and cost recovery

To obtain the assistance of a forensic vehicle inspector (FVI) from the Vehicle Inspection Unit (VIU), Scientific Section, officers should:

(i) for routine requests:

- (a) complete a QP 1011: 'Vehicle inspection request' and save the completed request in the Reports tab of the relevant QPRIME occurrence;
- (b) create a property examination task in the relevant QPRIME occurrence, include any additional information in a supplementary report and submit the task:
 - for mechanical examination, to the VIU [ORG Unit 0911]
 - for identification examinations, to the Vehicle Identification Unit [5259] and;
- (c) comply with any regional instructions for requesting mechanical inspections; and
- (d) ensure the keys and fob are with all vehicles.

(ii) for urgent requests:

- (a) during normal working hours:
 - telephone the OIC VIU; and
 - complete a QP 1011 and send a task in QPRIME to the VIU [ORG Unit 0911] as confirmation of the request as outlined in points (i) and (ii) of this section; and
- (b) outside normal working hours:
 - contact the Inspector, Scientific Section; and
 - complete a QP 1011 and send a task in QPRIME to the VIU [ORG Unit 0911] as confirmation of the request as outlined in points (i) and (ii) of this section.

The attendance of FVI after hours is at the discretion of the Inspector, Scientific Section and is funded by Forensic Services Group.

The identification of burnt-out vehicles remains the responsibility of the investigating officer. VIU can provide advice on the location of vehicle identifiers, however, will not examine burnt out vehicles unless identifiers have been obliterated.

Inspection request cancellation

When a tasked mechanical inspection is no longer required, the requesting officer should cancel or close the QPRIME Task and advise the OIC VIU by phone, published on the VIU webpage of the Service intranet, or via email to the 'Vehicle Inspection Unit (Alderley)'.

Attendance at scene of incident

Generally, FVIs are not to attend at incident sites unless:

- (i) the investigating officer (IO) at the scene ascertains that vital evidence may be lost or the incident is of such a serious nature that involves heavy vehicles and warrants attendance at the scene by FVIs; and
- (ii) upon arrival at an incident scene, FVIs will make a determination as to whether the vehicle can be successfully examined at the scene, or such vehicle should be removed to a holding yard.

Court attendance

Court advice should be provided by the IO at the first available opportunity to the OIC, VIU by email or sending a QPRIME task from the relevant occurrence to [Org Unit 0911] or by email to the FVI involved. A FVI is to give evidence via audio visual link or audio link unless a court or application from a party to the proceeding directs otherwise (see s. 39PB: 'Expert witness to give evidence by audio visual link or audio link' of the *Evidence Act*).

Cost recovery

Generally, the costs associated with carrying out vehicle inspections are funded by Forensic Services Group.

Any travelling allowance or overtime incurred as a consequence of FVIs attending court to give evidence is charged to the relevant region.

5.14.4 Storage of vehicles awaiting inspection

Vehicles awaiting inspection:

- (i) should be stored:
 - (a) at a readily accessible approved holding yard;

(b) on a covered, hard, all-weather surface with sufficient clear space around the vehicle (minimum 1.5m); and

(c) in a space clear of animal faeces and contaminants; and

(ii) must have the vehicle's ignition key with the vehicle.

Whenever possible, where more than one vehicle is to be inspected as the result of a traffic crash, the vehicles should be stored in the same holding yard.

5.15 Indictable and simple offence charges against drivers involved in traffic crashes

A driver involved in a traffic crash may be charged with simple and indictable offences as a result of the incident. Where a person is charged with multiple offences, indictable offences should be dealt with before the finalisation of simple offences.

5.15.1 Adjournment of simple offences pending indictable offence result

Where a driver of a motor vehicle involved in a crash has been charged with a simple offence, including an offence under s. 79: 'Vehicle offences involving liquor or other drugs' of the TO(RUM)A and:

(i) indictable offences have also been laid; or

(ii) further investigations have indicated that indictable offences may be laid,

from the same incident, the investigating officer is to advise the prosecutor of the pending or proposed indictable charges prior to the charged person's next appearance.

Where the prosecutor is advised that indictable charges have been laid, or may be laid against the charged person, the prosecutor is to arrange for the charge for the simple offence to be adjourned until after the:

(i) finalisation of any investigation; and

(ii) completion of all proceedings for the indictable offence.

5.15.2 Upon finalisation of an indictable offence

Where a Judge's remarks are available

Where an indictable offence is finalised, and the person has been charged with an adjourned simple offence, the investigating officer (IO) is to obtain a copy of the Judge's remarks.

The IO is to deliver a copy of the Judge's remarks to the police prosecutor for the simple offence.

Where a Judge's remarks are not available

If a copy of the Judge's remarks is not available, the IO is to:

(i) obtain advice from the crown prosecutor as to whether the allegations which constitute the simple offence were taken into account during sentencing for the indictable offence; and

(ii) advise the police prosecutor handling the simple offence of the results of such inquiries.

Continuation of simple offence from same incident

Where a person has been sentenced for an indictable offence arising from a crash and the person has also been charged with a simple offence, including an offence under s. 79: 'Vehicle offences involving liquor or other drugs' of the TO(RUM)A, from the same incident, if the Judge's remarks:

(i) indicate the allegations constituting the simple offence were taken into account during sentencing, the police prosecutor is to arrange for the simple offence charge(s) to be withdrawn; or

(ii) do not indicate the allegations constituting the simple offence were taken into account during sentencing, the police prosecutor is to proceed with the simple offence charge(s).

When an accused is acquitted of an indictable offence and the simple offence is still outstanding, the police prosecutor is to proceed with the simple offence charge(s).

Conflict of information regarding the Judge's remarks

When a police prosecutor proceeding with a simple offence charge, receives advice from the defence that the allegations constituting the simple offence were taken into consideration by the Judge during sentencing for an indictable offence arising from the same incident, which is not indicated by the Judge's remarks, the prosecutor is to contact the crown prosecutor to ascertain whether the simple offences were taken into account during the sentencing of the accused.

If the simple offences were taken into account by the Judge, the police prosecutor is to arrange for the simple offences to be withdrawn.

If the simple offences were not taken into account by the Judge, the police prosecutor is to proceed with the simple offence charges.

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Appendix 5.1 Emergency Rescuer's Guide to Cars Fitted with Airbag Supplemental Restraint Systems (Airbag SRS)

(s. 5.12.1)

How an airbag SRS works

An airbag supplementary restraint system (SRS) may be an electrical or mechanical type, with some or all of the following elements;

- The airbag SRS module – includes an inflator, an airbag, and a trim cover
- The electronic diagnostic module – monitors the airbag SRS electrical system for faults and disables the system when certain faults are detected
- Crash sensors – detect sudden deceleration. Internal sensors are integral with the airbag SRS module, resulting in a self-contained system. External sensors are located elsewhere on the vehicle.
- A back-up power supply – provides power to the system in case the battery is damaged before the crash sensors operate.

The driver-side airbag SRS module is located in the hub of the steering wheel. The passenger-side airbag SRS module is in the dashboard above the glove compartment. Side-impact airbag SRS modules (if the vehicle is so equipped) are fitted in the roof rail (curtain airbags) and/or the side of the seat (thorax airbags).

An airbag SRS is designed to deploy in moderate to major crashes, depending on the 'targeted direction' of the airbag SRS. Frontal airbags will only inflate when a vehicle is struck from the front, and curtain/thorax airbags only will work in a side impact ('T-bone' type accident). Due to this, a vehicle may be involved in a crash and several airbag SRS devices may not be activated.

The following four steps show how the airbag SRS works:

- (i) In an impact, sensor(s) in the vehicle detect the sudden deceleration. When the sensor(s) close, electricity flows to the inflator and causes ignition of the gas generator.
 - (ii) The gas generator then rapidly burns in the metal chamber. The rapid burning produces inert gases and small amounts of dust. The inert gases and dust are cooled and filtered, during inflation of the airbag.
 - (iii) The inflating airbag splits open the trim cover. The airbag then rapidly unfolds and inflates to protect the occupant.
- NOTE: Steps 1-3 take place in a fraction of a second.
- (iv) After inflation, the gas is vented through openings or open weave areas in the airbag. Airbags deflate at once and may be pushed aside for occupant removal.

Airbag SRS chemicals

Rescuers should not be overly concerned about the possibility of contact with any airbag SRS chemicals. The two generator in common use are sodium azide and nitrocellulose. Prior to deployment of the airbag SRS, gas generator are extremely well sealed within a strong metal container.

Early airbag SRS devices were generally fitted with sodium azide gas generators. Sodium azide in its solid state is toxic. However due to the strong metal container, contact with it is extremely unlikely for rescue workers. Newer airbag SRS devices will use different chemicals which are not toxic.

As in all other rescue operations, rescuers should wear gloves and eye protection. After handling a deployed airbag, rescuers should avoid rubbing their eyes, eating or smoking until they wash their hands with mild soap and water.

Once the airbag SRS has deployed, the vehicle interior may briefly appear to contain 'smoke'. This 'smoke' is actually a powdery residue that will settle on the surface of deployed airbag(s) and the vehicle interior. The powdery residue is corn starch or talcum powder, which is used to lubricate the airbag as it deploys. The residue may also contain sodium compounds, mostly sodium carbonates (e.g. baking soda), and the interior air may contain small amounts of carbon monoxide. All of these are by-products of the general combustion. There might also be a very small amount of sodium hydroxide that may be irritating to the skin and eyes.

How to identify a vehicle fitted with an airbag SRS

A number of vehicles manufactured after the early 1990's and all passenger cars sold in Australia after 2000 are fitted with airbag SRS devices. Airbag SRS devices are also now available in some light and medium trucks. To identify a vehicle fitted with an airbag SRS, begin by checking for a 'SRS' or 'Airbag' moulded on the trim cover of the steering wheel hub and on the dashboard on the passenger's side, or a cloth tag on airbag equipped seats. Side airbags are not always visually identifiable. There may also be a label or placard fitted to the following:

- underside of the bonnet
- sun visor(s)

- inside of the glove box
- driver-side windscreen pillar
- driver-side or passenger-side 'B' pillar
- driver-side door
- lower corner of the windscreen.

How to de-activate an airbag SRS

Different types and models of airbag SRS have different methods of de-activation, with the vast majority using a 'back-up' power system. When responding to an incident where all airbag SRS devices have not been discharged, officers should:

(i) disconnect the power supply from the ignition by:

(a) turning the vehicle's ignition key to 'off'; or

(b) in vehicles with a 'proximity key' system (where the key doesn't have to be placed into a switch):

- turn the power to 'off' by the button on the dash; and
- physically remove the 'proximity key' at least 5 metres from the vehicle;

(ii) disconnect the car battery by physically cutting or removing the negative battery cable (black cable) and then the positive battery cable (red cable) from the battery will begin the de-activation period for the back-up power supply. De-activation time for the back-up power supply may take a period of time ranging from seconds to minutes, depending on the system.

Simply turning the ignition switch to 'OFF' may not de-activate the airbag SRS. The airbag SRS deployment mechanism may operate independently of the ignition switch. However, most systems will have a 'safing' sensor which offers additional security against inadvertent deployment of the airbag.

Vehicle fire

When dealing with a vehicle fire, use standard fire extinguishing procedures first. Use any type of fire-fighting agent, including water. The gas generator is sealed in a watertight container.

In the rare case of an interior occupant compartment fire, the airbag SRS module is designed to self-deploy if its internal temperature reaches approximately 175°C. The inflator will remain intact and operate normally. Airbag SRS modules will not explode.

Rescue with undeployed airbag SRS

An airbag SRS will deploy only in moderate to major crashes in the direction the airbag SRS is designed to operate. For this reason, it is likely that you will be involved in a rescue from a vehicle with an airbag SRS that did not deploy.

An airbag SRS is unlikely to deploy during a rescue. On some vehicles there are two sensors which must close at the same time; therefore it is unlikely that rescue operations will result in a deployment. On many vehicles, the diagnostic module will also disable the airbag SRS if it detects crash sensor circuit 'shorts' that exist for ten seconds while the ignition is 'ON'.

If the vehicle has been identified as having an airbag SRS the rescue steps are as follows:

(i) if possible, de-activate the airbag SRS. When fully de-activated (including waiting for any specified de-activation period), rescue operations can be carried out as normal;

(ii) if the airbag SRS cannot be deactivated, disconnect the power supply (see 'How to de-activate an airbag SRS' of this guide) and commence rescue operations by moving the seat of a stabilised occupant back as far as possible or lower the seat back;

(iii) It is important to appreciate the following during rescue operations with an airbag SRS that has not deployed and has not been de-activated:

(a) perform rescue efforts from the side of the vehicle and away from the potential deployment path of the airbag;

(b) keep your body or objects/tools off the airbag SRS trim cover and away from the front of an undeployed airbag;

(c) DO NOT apply sharp blows to the steering column or dashboard if a vehicle is fitted with internal crash sensors, that is, a self-contained system in the steering wheel;

(d) DO NOT cut into the vehicle structure containing the airbag SRS (unless unavoidable);

(e) DO NOT apply heat near the SRS module, as this could cause the inflator to deploy; and

(f) If the vehicle is fitted with side airbags, avoid sharp blows to the door, seat or B-pillar areas.

Rescue with deployed airbag SRS

If the airbag SRS has deployed, use normal rescue procedures and equipment. Do not delay rescue. There are no hazardous medical consequences for an occupant or rescue personnel from a deployed airbag SRS.

Wear the same gloves and eye protection that rescuers would normally wear. Protective equipment will guard against possible skin or eye irritation from the powdery airbag residue. Whether gloves are worn or not, wash your hands with mild soap and water after handling a deployed airbag.

Be aware of hot metal parts underneath the deployed airbag fabric. These components are located inside the steering wheel hub or behind the dashboard when there is a deployed passenger-side airbag SRS. These components are somewhat out of the way and should pose no threat.

Push deflated airbag aside for occupant removal. Airbags deflate at once after a deployment. There is no need to cover, remove, or repack the airbag during rescue operations.

Occupants can sustain minor skin redness or abrasions from contact with a deploying airbag, e.g. on the inside of the forearm or on the chin.

Source:

- 'Emergency Rescuer's Guide to Vehicles Fitted with Supplemental Restraint Systems (SRS)' Department of Infrastructure and Transport (Cwth), 2006.
- 'Airbags and Pretensioners Emergency Response Guide' GM Service Technical College, 2007.

Appendix 5.2 Emergency Response Guide to Hybrid Electric Vehicles

(s. 5.12.2)

Hybrid electric vehicles

Hybrid electrical vehicles (HEVs) combine a petrol or diesel internal combustion engine with an electric propulsion/regeneration system. Vehicles are conventional in design except that the electric energy is stored in a sealed nickel metal hydride (NiMH) battery. The battery bank can operate at 300 volts DC and potassium and sodium hydroxide may be used as the electrolyte.

Hazards

Hybrid vehicles may pose a hazard if involved in serious collisions.

Officers are to be aware that:

- (i) the HEV battery system is high voltage (HV) and poses an electrocution hazard (650 volt AC & 300 volt DC); and
- (ii) the HEV electrolyte absorbed in the cell plates is hazardous to human body tissue.

Officers should be aware that:

- (i) the HV battery pack is sealed in a metal case and is rigidly mounted in the vehicle;
- (ii) all HV cables are isolated from the metal chassis of the vehicle;
- (iii) the HV cables are exclusively colour coded bright orange and are routed underneath the vehicle;
- (iv) numerous safeguards have been incorporated into HEVs to ensure that the HV battery pack is protected in an accident; and
- (v) the risks are very low and could occur only after a very serious collision and a combination of highly unlikely events.

Hazard assessment

Officers should:

- (i) on arrival, follow standard operating procedures for vehicle crashes and immobilise and disable the vehicle; and
- (ii) assess the scene and arrange the attendance of QFES if required. QFES are responsible for managing electrolyte leakages.

Officers should be aware that indications of a potentially hazardous site include:

- (i) a severe rear collision of a HEV;
- (ii) loss of petrol or electrolyte from the rear of the HEV; and
- (iii) partially submerged conditions.

Emergency response

When responding to an incident involving a HEV, officers should:

- (i) not assume the HEV is shut off because it is silent;
- (ii) disconnect the power supply from the ignition by:
 - (a) turning the vehicle's ignition key to 'off'; or
 - (b) in vehicles with a proximity key:
 - turn the power to 'off' using the button on the dash; and
 - physically remove the proximity key at least 5 metres from the vehicle; and
- (iii) disconnect the 12-volt car battery by physically cutting or removing the negative battery cable (black cable) and the positive battery cable (red cable) from the battery.

Officers should:

- (i) not disconnect or cut any orange coloured HV electrical cables;
- (ii) be aware that after disabling the vehicle, power is maintained for 90 seconds in the airbag SRS system and 10 minutes in the HV electrical system, and
- (iii) proceed with caution if the disabling steps above cannot be performed as the HV electrical system, SRS or fuel pump may not be disabled.

Fire in the HV battery pack

Officers should be aware that:

- (i) the battery module electrolyte is a caustic alkaline that is damaging to human tissue;
- (ii) the battery module cover should NEVER be breached or removed under any circumstances, including fire. Doing so may result in severe electrical burns, shock or electrocution; and
- (iii) any fire in the battery module should be allowed to burn out. Battery modules burn rapidly and will quickly reduce to ashes except for the metal alloy cell plates.

Spills

Officers should be aware that:

- (i) the electrolyte is absorbed in the battery module cell plates and will not normally leak even if it is cracked; and
- (ii) an extremely catastrophic crash that breaches both the metal case and battery module would be a rare occurrence.

Submersion

Officers should:

- (i) shut off the HEV as outlined above if the HEV is fully or partially submerged.
- (ii) be aware that the HV battery pack is isolated from the chassis and there is no danger of shock by contact with the metal chassis.