State of Queensland

Chemical/HazMat Plan

A functional plan of the State of Queensland Multi-Agency Response Plan to Chemical, Biological, Radiological incidents.
## Table of contents

**Part 1**  
Introduction ........................................................................ 1  
Authority to Plan .................................................................... 1  
Responsible Agency ................................................................ 1  
Objective of the Plan .............................................................. 2  

**Part 2**  
Application of the Plan ........................................................ 3  
Establishing the Operational Context ...................................... 3  
Chemical/HazMat Materials Defined ....................................... 3  
Chemical/HazMat Incident – Control and Coordination .......... 3  
Emergency Response ............................................................. 3  

**Part 3**  
Management Structure ........................................................ 4  

**Part 4**  
Overview of Agency Responsibilities ................................... 4  
Agency Responsibilities ......................................................... 4  
Queensland Fire and Rescue Service (QFRS) ......................... 4  
Queensland Police Service (QPS) ............................................ 5  
Queensland Ambulance Service (QAS) ................................. 6  
Queensland Health (QHealth) .................................................. 6  
Environmental Protection Agency (EPA) ............................... 6  
Department of Primary Industries and Fisheries (DPI&F) :7  
Department of Natural Resources and Mines (DNR&MI) :7  
Fire Authorities ..................................................................... 7  

**Part 5**  
Operational Site Control ....................................................... 8  
HazMat Control Zones ......................................................... 8  
Hot Zone .................................................................................. 8  
Warm Zone .............................................................................. 8  
Cold Zone ................................................................................ 9  
Inner Cordon ........................................................................... 9  
Outer Cordon .......................................................................... 9  
Conceptual layout of Chem/HazMat Zones ......................... 10  
Securing and Controlling the Hazard Release ...................... 11  
Decontamination Processes .................................................... 11  
Decontamination agents ....................................................... 11  
Decontamination objectives ................................................... 12  
Referral for off-site decontamination ..................................... 12  

**Part 6**  
Community Protection Strategies ....................................... 13  
Industry – Community off-site Emergency Plans ................. 13  
Evacuation ............................................................................ 13  
Evacuation Logistics and Control .......................................... 13  
Alternative to Evacuation – Shelter in Place ....................... 13  
Testing for Residual Hazard concentrations ......................... 14  
Off-site Casualty Management ............................................. 14  

**Part 7**  
Recovery and monitoring .................................................... 15  

**Part 8**  
Chemical/HazMat Plan – Review and Maintenance .............. 15  

**Part 9**  
Definitions ............................................................................ 16
Part 1

Introduction
An incident involving the release or potential release of hazardous materials is defined collectively by type as a HazMat Incident.

The term ‘HazMat’ is an acronym used to describe hazardous materials in the context of emergency response. The release or threatened release of hazardous materials may have the potential to cause harm to persons, property or the environment.

This Plan is designed to facilitate effective and systematic coordination of non-terrorist/criminal instigated Chemical/HazMat Incidents. The Plan follows an agreed set of protocols and procedures that are designed to provide an efficient multi-agency emergency response to these incidents.

Discrete arrangements for the planning for Response to and Recovery from Chemical / HazMat emergency Incidents are covered in the Plan. The effective control and coordination of response and recovery during such incidents is central to the Plan’s objectives. The immediate site processes required for the initial recovery from a Chemical/ HazMat Incident are included in the Plan.

Authority to Plan
This Plan is prepared under the direction of the Commissioner of the Queensland Fire and Rescue Service (QFRS) in consultation with stakeholder agencies listed at the front of the plan. It covers the broad range of conceivable Chemical / HazMat Incidents, which may threaten the safety of persons, property or the environment.

The plan is a functional plan of the State CBR Plan.

The State Chemical/HazMat plan is designed as a complementary document and is compatible with the emergency response plans of the other signatory agencies and the State Counter Disaster Plan. This means that depending on the nature of the incident any or all of the agencies plans can be invoked simultaneously or concurrently to suit a particular focus task within the overall operational response.

Responsible Agency
The Queensland Fire and Rescue Service is the responsible agency for operations management and maintenance of the Chemical/HazMat Plan.

The Plan recognises the threat specific planning arrangements and jurisdiction of responsible State agencies where they apply during a Chemical/ HazMat operation, including:

- The emergency powers afforded to the police under the Public Safety Preservation Act, 1986.
- The powers afforded to the police under the Police Powers and Responsibilities Act, 2000.
- The Queensland Health Disaster Plan Queensland Health (QHealth).
- The Queensland Health Biological Incident Disaster Plan.
- The Queensland Ambulance Service Act, 1991
- Emergency powers and procedural arrangements of Radiation Health under the Radiation Safety Act, 1999 – Queensland Health (QHealth) and the Queensland Health – Plan for Emergency Response during Radiological Incidents.
- Queensland Veterinary Emergency Plan – Department of Primary Industries and Fisheries (DPI&F).
- Emergency powers and procedural arrangements of the Environmental Protection Agency (EPA).
- Emergency powers and procedural arrangements of the Chief Inspector of Explosives under the Explosives Act, 1999 – Department of Natural Resources and Mines (DNR&M).
- Emergency powers and procedural arrangements of the Chief Gas Examiner under the Gas Act, 1965.
Objective of the Plan
The objective of the Plan is to maximise multi-agency response preparedness for the management of incidents involving chemical/hazardous materials. The Plan includes arrangements for transition to the State CBR Plan. This will occur when the release of chemical, biological, radiological, incendiary or explosive is known or suspected to be terrorist or criminally instigated.

The objective of the Plan is further defined within the ambit of the responsibilities and resources of each of the contributory agencies.
Part 2

Application of the Plan
Chemical/HazMat incidents occur across the full spectrum of the community. Chemical/HazMat incidents may involve the manufacture, storage, handling or transport of hazardous materials.

A chemical/HazMat incident may have the potential to produce cascading off-site effects, which may threaten persons, property or the environment.

In cases of incidents involving deliberate origins, the QPS will decide whether the incident warrants a declaration requiring the incident be coordinated under the State CBR Plan. In such cases the Chemical/HazMat Plan becomes subordinate to the State CBR Plan and is used only in the direct management of the Chemical/HazMat component of the incident.

Establishing the Operational Context

Chemical / HazMat Materials Defined
For the purposes of the Plan, Chemical/HazMat materials are described in terms of chemicals, biological and radiological substances. It is important to note that such materials may have multiple properties that are within the jurisdiction of, or require expert advice or management from, more than one agency.

Chemical/HazMat Incident – Control and Coordination

Emergency Response
Emergency Response may involve an incident of accidental or criminal origins but does not constitute an incident as described under the National Counter Terrorist Plan (NCTP).

During a HazMat emergency response:
- QFRS is the lead agency.
- QPS is the coordinating agency and is responsible for overall control of the incident.
- QAS, in consultation with the Police Forward Commander, Fire Controller and QHealth is responsible for the management and transport of casualties.
- Other emergency services and agencies provide support including advice as requested by the QPS Forward Commander in consultation with the Fire Controller and QAS Commander.

It may be determined during the course of the incident that the threat from the hazard warrants a declaration of an emergency situation under the provisions of the Public Safety Preservation Act, 1986 (PSPA). A declaration of an emergency situation can only be made by a QPS Commissioned Officer.
Part 3

Management Structure
The overall strategy for preparedness for combat management of a major Chemical/HazMat incident is based upon the approval of the Chemical/HazMat Plan through consultation and assent of the parties.

Part 4

Overview of Agency Responsibilities

Agency Responsibilities
Clarification of legislative responsibilities and agency response roles is critical in the determination of management responsibilities for Chemical/HazMat Incidents. These roles are determined by responsibilities as lead agency or capability to provide combat or advice and or other support.

Each agency has specific roles during the management of a Chemical/HazMat incident and is responsible for the safety, protection, training and management of its own personnel and resources. Where possible, training should be conducted jointly with all participating agencies.

Queensland Fire and Rescue Service (QFRS)
The QFRS provides a combat and preventative service in respect to incidents or potential incidents involving chemicals. The facility of Chemical/HazMat Control and combat may be extended to cover hazardous materials other than chemicals where the responsible agency has requested assistance. In such cases where the QFRS has the capability, assistance will only be given within the established safety protocols of HazMat operational procedures.

Section 8 B (a) and (c) (ii) of the Fire and Rescue Service Act, 1990 states the responsibilities of the QFRS as:

- Protection of persons, property and the environment from fire and hazardous materials emergencies, and
- To provide an advisory service, and undertake other measures to promote safety and other procedures if a fire or hazardous materials emergency happens.

The objectives for the QFRS at a Chemical/HazMat incident are:

- To act as the Chemical/HazMat combat agency.
- Identify, contain and mitigate the hazard.
Identify Chemical/HazMat operating zones for the safety of personnel including those of other agencies.

Rescue and decontamination of persons who are not fully ambulant and are known to be contaminated.

Engage with the media in liaison with the Police Forward Commander (PFC).

Additional Responsibilities:
- Establish and maintain hot/warm/cold zones with controlled entry/egress points.
- Maintain appropriate Chemical/HazMat Control Procedures.
- Identify and tag contaminated articles including clothing.
- Decontaminate incident personnel and the public.
- Assist in off-site decontamination where possible.
- Control entry operations within the hot zone such as rescue/identification.
- Provide a Liaison Officer to interact with the Police Forward Command Post.
- Provide Chemical/HazMat assistance to other responding agencies where biological or radiological hazards are present.

The QFRS HazMat function is supported by the Response Advice to Chemical Emergencies (RACE) team. RACE support includes:
- An expert mobile advisory service on and off-site in respect to chemical incidents.
- Specialist training for emergency services for response to Chemical/HazMat Incidents.
- Carrying out on-site tests to determine the type, concentration and distribution of the hazardous substance involved.
- Providing expert advice to the QFRS Controller and QAS Commander and liaison with Health in respect to determining the threat from the particular hazard.

Providing information and advice to the QFRS Controller and the Police Forward Commander (PFC) and the QAS Commander, about Chemical/HazMat implications for management of the incident. This advice may be about the degree of threat from the hazard, the location and dimensions of the spread of the hazard and assistance in establishing Chemical/HazMat Control Zones and Public Protection Strategies.

Sample management that may include retrieval and liaison with QHealth and other agencies.

Queensland Police Service (QPS)
The QPS is responsible under Queensland legislation for security issues for maintaining public order. The QPS also has the power to invoke the provisions of the Public Safety Preservation Act, 1986 (PSPA). The PSPA provides broad additional powers during emergencies.

Where the PSPA has been declared the responsibilities of the QPS are to provide:
- Control and coordination of the incident (includes the on and off-site emergency environment).
- Coordination of the efforts of contributory agencies.
- Securing the incident scene from unauthorised entry or departure.
- Crowd and traffic control.

Additional Police Responsibilities:
- Establish and maintain Police Forward Command Post (PFCP) including the media centre.
- Security support for QAS casualty collection, treatment and transport loading areas.
- Facilitating resource supply through State Crisis Centre (when applicable).
- The rendering safe of explosive devices.
- Establishing registration of evacuees.
- Establishing victim registration/deceased/alive.
Controlling entry/egress points from the cold zone and outer cordon.

- Staging and marshalling areas off-site for supporting agencies and resources.
- Coordination of public protection strategies including evacuation and adjacent refuge.
- Liaison with QFRS/QAS/QH (at on and off-site locations).
- Evidence security – where criminal or negligence origins evident.
- Engaging with the Media in concert with the QFRS Fire Controller.

Queensland Ambulance Service (QAS)
Under the provisions of the Queensland Ambulance Act 1991, the Queensland Ambulance Service (QAS) is responsible for:

- On-site medical care in consultation with Queensland Health i.e. Clinical Coordination Arrangements.
- Establishment of casualty collection, triage, treatment and transport areas.
- Transport patients to appropriate health facilities.

The Prime Objectives for the QAS are to:

- Provide on-site medical care to increase victim survivability and minimise trauma.
- Provide effective triage and transport to hospitals to increase patient survivability.
- Ensure appropriate patient information is relayed to off-site health facilities.

Additional Responsibilities

- Establish and maintain casualty collection, triage and treatment areas.
- Establish and maintain ambulance transport area.
- Establish the casualty collection post adjacent to the decontamination corridor exit (on advice from the QFRS Controller).

- Establish the casualty triage and treatment areas at a distance, which will provide optimum protection to casualties and personnel (on advice from the QFRS Controller).
- Provide a Liaison Officer to the Police Forward Command Post.
- Estimate and obtain on and off-site medical and health resources as required.
- Notify Multi-Casualty Incidents (MCI) to Queensland Health.

Queensland Health (QHealth)
Under the Health Act, 1937 that provide the Minister for Health is provided extensive and wide-ranging powers in the event of a major health issues arising.

QHealth provides:

- Public health advice and direction.
- Advice to the Medical and Ambulance Commanders on the clinical and medical management of casualties.
- Hospital or other health facility based Multi-Casualty response as required.
- On-site medical teams in consultation with the Ambulance Commander.
- Off-site laboratory analysis of hazardous materials, including biological agents.
- Advice on decontamination.

Environmental Protection Agency (EPA)
The Environmental Protection Agency (EPA) has responsibility for administering the Environmental Protection Act, 1994. The provisions of the Contaminated Lands Act, 1990 are incorporated into the EPA Act. This extends the Act’s powers to investigation and remediation of land, which may be contaminated as a consequence of a Chemical/HazMat Incident. The EPA through this Act also has regulatory responsibility for waste disposal (excluding radioactive materials).
The EPA also has significant emergency powers. These allow it to direct resources during an emergency where there are or are likely to be environmental impacts and to direct other actions which achieve a net environmental benefit.

EPA provides:
- An emergency call number (1300 130 372) that may be the first point of contact for some emergencies involving environmental issues.
- Technical advice with respect to minimising or preventing environmental damage.
- Monitoring of off-site effects of an emergency including run off into watercourses.
- Safe disposal of wastes by providing advice as to suitable short, medium and long term disposal/storage options.

**Department of Primary Industries and Fisheries (DPI&F)**
DPI&F is the lead and combat agency for emergency animal and plant diseases that occur in Queensland. Within the context of a HazMat incident the possibility exists that contamination may occur as:
- The release of a pollutant that destroys or renders livestock or agricultural products unsafe for use as food for humans or livestock.
- The release of a pollutant that destroys damages or renders unusable land or waters that are used for farming or fishing related purposes.

Any of the above situations can present a serious threat to the food chain and the natural environment and are managed under arrangements outlined in the Queensland Veterinary Emergency Plan.

**Department of Natural Resources, Mines and Energy (DNR&M)**
DNR&M is responsible for:
- The Gas Examiner’s duties as outlined under the *Gas Act, 1965*.
- The Explosives Inspectorate as outlined in the *Explosives Act, 1999*.

DNR&M is responsible for safety advice in the areas of explosives, petroleum and gas.

The Explosives Inspectorate, operating under the *Explosives Act, 1999* is available to provide advice on explosives issues ranging from commercial high explosives to pyrotechnics and fireworks.

The Petroleum and Gas Inspectorate, operating under the *Petroleum Act, 1923* and the *Gas Act, 1965* is available to provide advice on incidents relating to oil production and those involving natural or LP gas.

**Fire Authorities**
Mutual aid can be provided by the fire authorities from other States in accordance with established protocols.
Part 5

Operational Site Control

HazMat Control Zones
An essential component of the management of the incident is the establishment by the QFRS Fire Controller in consultation with the Police Forward Commander of a series of HazMat Control Zones. The prime objective for the QFRS is to define the protection or whether decontamination is needed by personnel to safely enter or leave a particular zone. In the same context the movement of materials or equipment between the HazMat zones must be controlled by the QFRS Fire Controller.

The QPS will be responsible for isolation of an incident site through the use of a secure outer cordon. This will be established in consultation with the QFRS Fire Controller. This objective is to contain affected persons or alternatively to exclude members of the community who may otherwise be exposed to the hazardous material. A conceptual layout of HazMat Control Zones is displayed in Figure 1.

Hot Zone
The Hot Zone is the area immediately surrounding the source of the release of the hazardous material. The concentration of the hazard in this zone poses a critical threat to persons, property and the environment. The Hot Zone is defined and controlled by the QFRS Fire Controller in consultation with officers from the CHEM Unit.

Entry to this Zone is restricted and controlled by the QFRS in compliance with HazMat procedures. These procedures include:
- Only trained personnel wearing the level of Personnel Protective Equipment (PPE) determined by the QFRS Controller can enter this zone.
- Entry must be through the HazMat Control Point and entry corridor.
- Response personnel must exit through the separate HazMat control decontamination facility for personnel and finally through the HazMat control point.

Considerations in determining the extent of the boundaries of the Hot Zone include:
- The type and physical characteristics of the hazard.
- The natural and built environment including the topography at the site and the relevant surrounding area.
- Prevailing weather conditions including forecast and unexpected changes.

Activities in this zone may include:
- Triage and rescue of victims and forward decontamination initiatives.
- Containment and encapsulation of the hazard release source.
- Monitoring of hazard concentrations and retrieval of samples for on-site identification and off-site laboratory testing.
- Evidence collection and police forensic examination.

Warm Zone
The Warm Zone is the area immediately surrounding the Hot Zone. The concentration of the hazard in this zone poses a serious threat to persons, property and the environment. The Warm Zone is defined and controlled by the QFRS Fire Controller in consultation with officers of the CHEM Unit.

Entry to this Zone is restricted and controlled by the QFRS in compliance with HazMat procedures. These include requirements that:
- Only trained personnel wearing the level of Personnel Protective Equipment (PPE) determined by the QFRS Controller can enter this zone.
- Entry must be through the HazMat control point and entry corridor.
State Chemical/HazMat Plan Version 2 – 4 October 2004

- Exit must be through the HazMat control personnel decontamination facility to the cold zone and the HazMat control point.

The extent of the boundaries of the Warm Zone depends on multiple factors including:
- The type and physical characteristics of the hazard.
- The natural and built environment including the topography at the site and the relevant surrounding area.
- Prevailing weather conditions including forecast and unexpected changes.

In the case of biological or radiological hazards the consultation process may involve advice from QHealth and/or DPI&F as necessary.

Activities in this zone are confined to decontamination, monitoring and testing of hazard concentrations and securing of contaminated articles including evidence. The assembly of persons for decontamination may occur in this zone.

Medical assessment of contaminated persons may be carried out in this zone. This assessment will be undertaken by ambulance paramedics who are trained and accredited in QFRS HazMat procedures.

Cold Zone
The Cold Zone is the area immediately surrounding the Warm Zone. The decontamination process exits into the Cold Zone. It is an area set aside for operational support by agencies for their personnel and equipment. The Police Forward Commander is responsible for coordination of agency operations in this area, which include:
- Operations of the QFRS HazMat control and incident control points.
- Operations of the QAS/QH control including casualty collection, triage and the treatment area for casualties.

- Limitations on vehicle movements (ie. access is provided on the basis of an established need to be in the area).
- Security of the entry and egress points.
- Direct control of the Police Forward Command Post and media centre.

The Cold Zone is defined as an area where no immediate “hazard” concentration has been detected. The cold zone is defined by the QFRS in consultation with officers of the CHEM Unit, the QPS Forward Commander and Ambulance Commander. The QFRS Fire Controller and officers of the CHEM Unit will monitor behaviour of the hazard release and advise the QPS Forward Commander of changed conditions that may threaten the safety of personnel operating in the cold zone. In the case of biological or radiological hazards the consultation process may involve advice from Q Health and/or DPI&F as necessary.

Access to the Cold Zone is limited to the personnel and equipment of response and support agencies.

Inner Cordon
The Inner Cordon encompasses the Hot Zone and the Warm Zone.

Entry to, and all operations within the Inner Cordon are controlled by QFRS.

Outer Cordon
The outer cordon is the area surrounding the incident site. Its purpose is to control access and exclude the public from the immediate area around operational and support activities. The outer cordon and the location of the Police Forward Command Centre is controlled by the Police Forward Commander and is determined by the scale/potential spread of the incident.

Part 5
Figure 1. Conceptual layout of Chemical/HazMat control zones

- **Outer Cordon**
- **Inner Cordon**
- **COLD ZONE**
  - Staging Area
  - Forward Command Post
  - QPS
  - QAS/QH
  - QFRS
- **WARM ZONE**
  - HazMat Decon
  - Mass Decon
- **HOT ZONE**
  - Holding Area (refuge)
  - Contaminated articles and evidence holding area
  - Triage and Treatment Area

- Plume
- Release site
- Wind direction
- Ground slope
Securing and Controlling the Hazard Release

Securing and Controlling the Hazard Release
During the course of a Chemical / HazMat Incident the exposure risk is exacerbated by the length of time the release of the hazard continues unchecked. It is this exposure period, which allows the variables such as weather changes and movement of persons to obstruct the process of mitigation, control and recovery. It follows that early location and securing of the hazard release is an imperative in the prevention of on going and increasing effects from the release of the contaminant.

Securing the hazardous material to prevent on-going harm to the community has equal status to the rescue and decontamination of victims.

Objectives include:
- Location of the source and positive identification of the hazard.
- Containment of the release on-site to prevent on-going spread of the contaminant.
- Positively establishing that there are no other sources or potential sources of the hazard.
- Notifying the Fire Controller and the PFCP of the type of hazard detected.
- Confirming with Fire Control and the PFCP that the location of the hazard source and encapsulation and control have been achieved.
- Conducting search for other sources or devices and recording the areas that have been cleared of suspicion.
- Establishing an off-site disposal location for the contaminant or conducting neutralisation of the hazard on-site.
- Arranging with PFCP for appropriate secured transport, transport routes and police escort for the hazardous material after encapsulation, where necessary.

Decontamination Process

Decontamination agents
The principal agent used for decontamination is water. Although cold water is suitable for the purpose, warmer water should be used for the comfort of casualties where available. The use of surfactants such as soap and detergent that are suitable for use on humans can increase the effectiveness of decontamination.
Decontamination Objectives

The Objective of decontamination for persons who are known, or suspected to be contaminated, is to:

- Increase the survivability of victims.
- Prevent spread of contamination from affected persons to those who are not contaminated and to off-site environments.

Decontamination of emergency services personnel should be carried out as a separate operation from that given to casualties from the general community.

Operational considerations for decontamination include:

- Communication of the need for decontamination to the casualties.
- Self-evacuating casualties from the contamination site in multiple directions.
- Self-evacuating casualties who are unaware that they are contaminated.
- Casualties who are non-ambulant and cannot report to the decontamination point.
- The physical limitations imposed upon rescuers wearing appropriate Personal Protective Equipment that prevent the removal of large numbers of non-ambulant casualties to the HazMat mass decontamination point.
- Casualties who refuse to be decontaminated.
- Casualties who are not prepared to disrobe.
- Self-evacuating casualties who report directly to health facilities.
- Maintenance of personal dignity and privacy when decontamination occurs in a public place.
- Re-clothing of casualties.
- Security of casualties personal belongings.

Referral for off-site Decontamination

QFRS may be required to provide assistance in off-site decontamination, where possible.
Part 6

Community Protection Strategies

Industry – Community Off-Site Emergency Plans
Major Hazardous Facilities (industries) are required under legislation to have off-site emergency plans, which are relevant to potential exposure to adjacent communities.

In circumstances where a Chemical/HazMat incident emanates from a Major Hazardous Facility the relevant community off-site emergency plan should be followed.

Arrangements should be made under the direction/coordination of the QPS for the protection of the effected community. These include transport, evacuation, shelter in place or off-site refuge, provisioning including food and refreshments, medical surveillance and social welfare issues.

Evacuation
Evacuation is the relocation of the public or response personnel from an area of high risk to an area of safety. It is generally the preferred protective action where there is potential for persons to become contaminated during a HazMat Incident. The following issues may complicate evacuation:
- An extended geographic area is exposed or potentially exposed to the threat from the hazard.
- Insufficient resources available to implement the evacuation (includes notification/registration of all of the exposed community).
- Evacuation can be difficult to control. Once evacuation has been declared the potential arises that contaminated persons may self-evacuate without decontamination or medical assessment.

Evacuation Logistics and Control
The QFRS Fire Controller should advise the Police Forward Commander (PFC) and other relevant agencies on strategies to protect adjacent potentially exposed communities.

The strategies should include:
- Identification of safe transportation routes.
- The immediate welfare of those directed to adjacent or off-site refuge.

Alternative to Evacuation – Shelter in Place
‘Shelter in Place’ is the use of a structure in the effected or potentially effected area as a secure place from the threat from a hazard release.

Critical issues for deciding to use adjacent site refuge are:
- The nature and potency of the hazard.
- Evacuation is negated because of the rate of spread of contaminant.
- Evacuation routes are cut by the contaminant.
- Environmental factors which can make estimating the spread/behaviour of the contaminant unpredictable and thus the risk of exposure by moving persons from one place to another cannot be justified.

Critical issues for deciding which structures are suitable for use as a shelter in place during a HazMat incident are:
- Structures should have relatively low air exchange rates or it is relatively easy to reduce the air exchange rates to safe levels.
- The use of a structure for the purposes of providing shelter in place has been pre-planned.
- The community has received prior information for the use of the refuge and its protective value is known to them.
- A recognised means of communication is available to notify the community to use the refuge.
• Provision can be made to maintain the communications link with the refuge during the course of the incident.

Testing for Residual Hazard concentrations
At the termination of the incident, testing for residual concentrations of the hazard should be carried out outside the refuge before persons exit the refuge.

Off-Site Casualty Management
Casualties may present to hospitals and other medical facilities by:
• Self-presentation where persons self evacuate using their own means of transport to a hospital or other medical facility. Self-presenters are a threat to the safe operation of the facility and require decontamination. This site should be considered a separate incident site.
• Transportation of casualties by the QAS will only occur after decontamination.
Part 7

Recovery and Monitoring

Reconstitution of Contaminated Sites
The effects of a HazMat incident on the immediate and future use of the site and affected area may cause societal dislocation.

Clean up, Monitoring and Recovery may involve the following agencies:
- Chemical: EPA, QFRS, CHEM Unit, QHealth.
- Biological: QHealth / DPI
- Radiological: The Radiation Health, Q Health is responsible for assessment, remediation and future monitoring of sites affected by radioactive materials. The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) is responsible for the management of Commonwealth sites.

Declaration of Current and Future Status - Contaminated Sites
Declarations of current and future status of the contaminated site should be issued in writing by the responsible authority to the owner-occupier of the site.

Declarations may be made by the Police Forward Commander in consultation with the QFRS Fire Controller and other responsible agencies as an interim measure to protect the community.

Part 8

Chemical / HazMat Plan – Review and Maintenance

Review
A review of the Plan is to be conducted, subsequent to:
- The performance of the Plan in facilitating operations at a hazardous materials emergency in Queensland.
- Exercises designed to practise or test any aspects of the Plan.
- Alterations to the roles or responsibilities of any agency involved in the Plan.
- HazMat occurrences external to Queensland or new technology, which suggest a review, should be carried out.

A requirement exists for an automatic review every two years regardless of the other review indications mentioned above.

Responsibility for the Review
The CBR Working Group is responsible for coordinating a review of this Plan and seeking its endorsement by the CBR Steering Committee.

Amendments to the Plan
Agencies should submit proposed amendments to the CBR Working Group for its consideration. Following endorsement by the CBR Steering Committee amendments to the Plan are to be issued to all stakeholders.

Training
Each agency is responsible for the training of its own personnel to perform the roles and responsibilities assigned in this Plan.
Part 9

Definitions

Definitions and Abbreviations

Assembly Area
A prearranged, strategically placed area, in the cold zone, where support response personnel, vehicles and other equipment can be held in readiness for use/call forward, during a response.

Clean-up Mode
Involves environmental stabilisation and removal of residual contamination during the recovery phase.

Combat Agency
The agency primarily responsible for responding to and dealing with the principal hazard during a particular phase of the incident.

Command
Command relates to agencies and operates vertically within an agency. The direction of members and resources of an agency in the performance of that agency’s role and tasks. Authority to command is established in legislation or by agreement within an agency.

Coordination
The bringing together of agencies and resources to ensure an effective emergency response. It is primarily concerned with the systematic acquisition and application of resources (organisational, personnel and equipment) in accordance with the requirements of an emergency. It operates vertically within agencies as a function of the authority to command and horizontally across agencies as a function of the authority to control.

Control
The overall direction of emergency management activities in an emergency situation. Authority for control is established in legislation or in an emergency response plan and carries with it the responsibility for tasking and coordinating other agencies in accordance with the needs of the situation. Control relates to situations and operates horizontally across agencies.

Emergency
An emergency is an incident with adverse implications which are sudden, usually unexpected, and requires immediate response from either internal or external emergency services or both.

Emergency Management
Emergency management is the use of an effective incident response system that focuses on controlling an emergency incident.

Evacuation Assembly Area
The initial assembly area for persons who are to be evacuated to a safer location.

Evacuation Centre
The safe destination to which evacuees are to be taken after departure from assembly area.

Fire Controller
The Officer of the QFRS who has overall control of the defined HazMat area during the consequences phase of an emergency.
Hazardous Material
A substance with the potential to cause harm to persons, property or the environment because of its:
- Chemical properties
- Physical properties
- Biological properties
- Radiological properties

Hazardous Materials Emergency
An unexpected spillage or escape of a hazardous material in sufficient quantity and potency to cause significant harm to persons, property or the environment. It may occur on land, in the air, inland waters or in a maritime environment.

QFRS Fire Controller
Means the officer of the QFRS who has overall control of the defined HazMat area during the consequences phase of an emergency.

Medical Commander
The Queensland Health Medical Commander is the Medical Officer responsible for the overall coordination of the Health Services at the site and responsible for providing information on casualty dispersal and Hospital bed status to the site. The Medical Commander is also responsible for liaison with the QAS Commander and the Queensland Health Clinical Coordination System to ascertain the casualty receiving capability of Hospitals and the provision of Medical Treatment Teams for deployment to the site if needed.

Police Forward Command Post (PFCP)
The Police Forward Command Post located within the Cold Zone, from which the Police Forward Commander controls and directs QPS activities and coordinates the activities of other agencies.

PPE
Personal Protective Equipment involves the levels of protective clothing and equipment including breathing apparatus used to ensure the safety of personnel during HAZMAT operations.

Queensland Ambulance Service (QAS) Controller
The Officer responsible for all ambulance resources committed to the incident. The Ambulance Controller is the Regional Ambulance Director or delegate. This Officer usually will be located at a Regional Ambulance Communications Centre during an incident.

QAS Commander
The Officer responsible for the command of all ambulance resources at the site of the incident, and liaison with other agencies.

Shelter in place
The use of a structure and its indoor atmosphere to temporarily separate the public or incident personnel from an external hazard.