

Government of Western Australia State Emergency Management Committee

STATE HAZARD PLAN

Hazardous materials emergencies (HAZMAT)

Note: This document contains information relating to the arrangements for managing emergencies resulting from the actual or impending spillage, release or escape of a chemical, radiological, or other substance that is capable of causing loss of life, injury to a person or damage to the health of a person, property or the environment. It must be read in conjunction with the State Emergency Management Plan, which contains the generic emergency management arrangements.

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AMENDMENT TABLE

Amendment		Details	Amended by:	
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Ame	endment	Details	Amended by:	
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5	October 2023	Version 01.04 - Consequential amendments approved by SEMC to reflect the change in terminology from 'welfare' to 'emergency relief and support' and related terms (resolution number 77/2023) and statement of fact and accessibility amendments approved by the SEMC Executive Officer (resolution number 17/2021) as outlined in State EM documents <u>amendments table October 2023</u> . SEMC approved an extension to the comprehensive review of the plan from August 2023 to December 2023 (resolution number 32/2023).	SEMC Business Unit	
6	March 2024	Version 01.05 – SEMC approved an extension to the comprehensive review of the plan from December 2023 to May 2024 (resolution number 99/2023).	SEMC Business Unit	

The SEMC acknowledges the Aboriginal peoples throughout the state of Western Australia as the Traditional Custodians of the lands where we live, work and volunteer. We recognise Aboriginal peoples' continued connection to land, waters and community, and pay our respects to Elders both past and present.

This document was designed to be viewed electronically. If anything in this document is inaccessible to you, or you are experiencing problems accessing content for any reason, please contact the State Emergency Management Committee Business Unit at semc.policylegislation@dfes.wa.gov.au.

All of the State emergency management legislation and documents can be accessed via the <u>State Emergency Management Framework page_of the</u> <u>State Emergency Management Committee website_</u>

¹ Copies of these West plans and their amendment history is available from the State Emergency Management Committee upon request.

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1 INTRODUCTION

The State Hazard Plan for Hazardous Material Emergencies (HAZMAT) (the Plan) provides an overview of arrangements for the management of HAZMAT emergencies in Western Australia and contains information on HAZMAT emergencies prevention, preparedness, response and initial recovery.

The Plan contains two annexes:

- a. **Annex A: Space re-entry debris**. The designated Hazard Management Agency (HMA) for space re-entry debris, including any debris containing radioactive and/or HAZMAT, is the Commissioner of Police².
- b. **Annex B: Nuclear Powered Warship**. The designated HMA for radiation escape from nuclear powered warships is the Commissioner of Police³.

The Plan refers to a range of existing plans and documents relating to HAZMAT emergencies but does not duplicate the information contained in these, instead providing directions to websites or other sources where further information can be obtained if required.

The Fire and Emergency Services (FES) Commissioner is the HMA for actual or impending spillage, release or escape of a chemical, radiological or other substance that is capable of causing loss of life, injury to a person or damage to the health of a person, property or the environment.⁴

1.1 SCOPE

This Plan covers emergency management arrangements within the geographic boundaries of WA, for HAZMAT emergencies. It describes risk reduction strategies, preparedness for, response to and initiation of recovery arrangements following the impact of HAZMAT emergencies.

The Plan includes emergencies at or involving:

- a. **Industry sites and ports** where one or more of the following conditions apply:
 - i. Hazardous materials have spread, or have the potential to spread, beyond the boundary;
 - ii. It is beyond the resources of the occupants to contain and clean up effectively and safely;
 - iii. The protective equipment and/or resources at the site are not adequate to deal with the situation;
 - iv. Employees are not experienced in dealing with the situation; and
 - v. Employees or the public are or could be placed at risk.
- b. Fires and/or unusual situations. Smoke from fires or odours from situations which involve significant quantities of plastics, tyres, mixed chemicals, waste and scrap from warehouses, manufacturing sites, shopping centres, domestic and farming premises, as well as recycling centres, including used-car recycling, landfill disposal sites and noxious industries.

² Emergency Management Regulations 2006 r. 16(f)

⁴ Emergency Management Regulations 2006 r. 17

³ Emergency Management Regulations 2006 r. 16(e)

reasonable timeframe.

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- c. Onshore Pipelines. Onshore pipelines licensed pursuant to the *Petroleum Pipelines Act 1969*, administered by the Department of Mines, Industry Regulation and Safety (DMIRS) but excluding island facilities (Barrow, Varanus and Airlie)⁵.
- d. **State Waters.** Spillages of HAZMAT (excluding oil) into State waters.
- e. **Unidentified materials**. To be treated as a HAZMAT incident until the materials have been identified. The FES Commissioner is the HMA for other substances.
- f. **Hazardous materials (HAZMAT).** Anything that, if it escapes while being produced, stored, moved, used or otherwise dealt with, may cause personal injury or death, or damage to property or the environment⁶.

⁵ Excluded due to privately owned facilities, safety case requirements for emergency

response and the inability of Fire Services to respond to remote islands in a

The Plan does not include:

⁶ Fire Brigades Act 1942 Part 1

- a. Biological substances. The designated HMA for biological substances is the Chief Executive Officer, Department of Health (WA Health). Arrangements for the management of emergencies from this hazard are included in the <u>State Hazard Plan – Human Biosecurity</u>.
- b. Oil spills on State Waters. The designated HMA for spillage, release or escape of oil onto State waters is the Chief Executive Officer, Department of Transport (DoT). Arrangements for the management of emergencies from this hazard are included in <u>State Hazard Plan – Maritime Environmental Emergencies</u>.
- c. **Clandestine Laboratories** Non-emergency activities at illicit drug manufacture sites (i.e. clandestine laboratories). Investigation and scene processing is considered day to day business for WA Police Force, under the authority of the *Misuse of Drugs Act 1981*. It is accepted that WA Police Force is responsible for routine non-emergency activities at clandestine laboratories. If a clandestine laboratory generates the occurrence of a hazard presenting a significantly greater risk (e.g. uncontrolled chemical release, fire or biological agent), control of the incident may be transferred to the relevant Controlling Agency for the subsequent hazard.

1.2 HAZARD DEFINITION

The *Emergency Management Act 2005* (EM Act), defines a hazardous substance as a chemical, biological or radiological substance, or any other substance, that is capable of causing loss of life, injury to a person, or damage to the health of a person or to the environment⁷. Hazardous substance emergencies for which the FES Commissioner is prescribed as HMA are emergencies resulting from the actual or impending spilling, release or escape of a chemical, radiological or other substance that is capable of causing loss of life, injury to a person or damage to the health of a person or damage to the health of a person, property or the environment⁸.

For the purposes of this Plan, the term Hazardous Materials Emergencies (or HAZMAT emergencies) is used to encompass emergencies arising from level 2 and level 3 HAZMAT/CBR incidents (i.e. requiring a significant and coordinated response). The acronyms HAZMAT and CBR (a subset of HAZMAT) are used in the context of the following definitions. In the context of CBR incidents, this Plan only covers emergency management of chemical and radiological incidents.

HAZMAT

The term HAZMAT is an acronym for hazardous materials. A hazardous materials incident means an actual or impending spillage or other escape of a hazardous material that causes or threatens to cause injury or death, or damage to property or the

environment⁹.

HAZMAT includes dangerous goods (DG) as defined in the *Dangerous Goods Safety Act 2004* and *Regulations 2007*, petroleum as defined in the *Petroleum Pipelines Act 1969* and the *Petroleum and Geothermal Energy Resources Act 1967*. They also include any other hazardous substances/materials which are considered a threat to health or the environment by the Department of Fire and Emergency Services (DFES), DMIRS, Department of Water and Environment Regulation (DWER), WA Health, or the Water Corporation. HAZMAT can also take the form of emissions from fires, or odours from situations including mixed products that may involve plastics, tyres, mixed chemicals as well as wastes and scrap metals.

CBR

CBR is an acronym for Chemical, Biological and Radiation. A CBR emergency is a hostile act or event, the intention of which is to kill, maim, sicken or prevent society from continuing with normal daily business.

CBR agents are typically weaponised and use explosive devices, mechanical devices or binary reactions for their dispersal. CBR emergencies, whether the intent is terrorism, criminal, revenge, psychological or hoax, will require a police law enforcement response and may invoke other plans.

CBR emergencies have implications relating to Commonwealth, State and Territory responsibilities, public

⁹ Fire Brigades Act 1942 Part 1

⁷ Emergency Management Act 2005, Part 1, s.3

⁸ Emergency Management Regulations 2006 r.17

safety, health, public confidence, national security and international relations. Therefore, CBR planning involves many special considerations that will be required to cover a wide range of potential hazards.

1.3 ORGANISATIONAL ROLES AND RESPONSIBILITIES

The FES Commissioner is the HMA for chemical, radiation or other substances emergencies. The FES Commissioner is also responsible under the *Fire Brigades Act 1942* to take all practicable measures for protecting and saving life and property endangered by HAZMAT incidents; for confining and ending such an incident; and for rendering the site of such an incident safe¹⁰.

Pollution incidents which require a response by the DWER under the *Environmental Protection Act 1986* may not be a HAZMAT emergency; however, it can be anticipated that all HAZMAT emergencies under the EM Act may have the potential to become a significant pollution incident.

Information regarding the response roles and responsibilities of relevant agencies under this Plan are detailed in Appendix C, Tables 1 and 2.

It is recommended that each agency with a role or responsibility under this Plan has appropriate operational procedures detailing their response arrangements in accordance with this Plan. These arrangements should be complementary to the agency's operational procedures detailing their roles and responsibilities under the <u>State</u> <u>Emergency Management Plan (State EM Plan)</u>.

1.3.1 HAZMAT Coordinating Committee (HCC)

The HCC is a non-operational committee. Its role is to provide advice and support to the State Emergency Management Committee (SEMC), Government agencies, industry, commerce and the community to ensure an efficient emergency management capability, for HAZMAT/CBRN emergencies, in the State of Western Australia.

1.3.2 HAZMAT Emergency Advisory Team (HEAT)

The HEAT is a group of technical and emergency management specialists competent in HAZMAT emergency management, available 24/7. Its role is to assist with the management of HAZMAT emergencies. HEAT's operations must be flexible, however, it will typically function as part of the Incident Management Team (IMT) to provide technical advice. It may also form as part of an Incident Support Group (ISG)/Operational Area Support Group (OASG) as dictated by the needs of the incident.

Organisation and membership will depend on the incident complexity, level, or as required by the HMA in accordance with <u>State Emergency Management Policy (State EM Policy)</u> section 5 and <u>State EM Plan</u> section 5. The roles and responsibilities of HEAT are detailed in Appendix D.

¹⁰ *Fire Brigades Act* 1942, s.25(b)

1.3.3 Chemical, Biological, Radiological Technical Group (CBRTG)

This Plan provides for the establishment of the CBRTG. Its role is to provide technical and emergency management advice to the IMT involved in the on-site CBR emergency response. The CBRTG is available 24/7. Its composition and functions are detailed in Appendix E.

1.4 RELATED DOCUMENTS AND LEGISLATION

This plan is to be read in conjunction with the following documents:

- Australian Bomb Data Centre, Bombs Defusing the Threat, 5th Edition, 2009;
- Australian Health CBRNINC Plan. Domestic Health Response Plan for Chemical, Biological, Radiological or Nuclear Incidents of National Consequence, 2014.
- Australian Standard 3745-2010, Planning for Emergencies in Facilities;
- Australia's Strategy for Protecting Crowded Places from Terrorism, Australian New Zealand Counter Terrorism Committee (ANZCTC), 2017;
- Guidance on the National Coordination Arrangements for Responding to the Deliberate Use of Chemical, Biological and Radiological Materials, National Chemical, Biological and Radiological Working Group (NCBRWG), Feb. 2006;
- National Chemical, Biological and Radiological Security Strategy, Australia New Zealand Counter-Terrorism Committee, 2013;
- National Counter-Terrorism Plan, Australia New Zealand

Counter-Terrorism Committee, 4th Edition, 2017;

- National Marine Chemical Spill Contingency Plan (Chemplan);
- Planning Guidance for Response to a Nuclear Detonation, 2nd Edition, June 2012, US National Security Staff Interagency Policy Coordinating Subcommittee for Preparedness and Response to Radiological and Nuclear Threats;
- State Hazard Plan Maritime Environmental Emergency;
- State Hazard Plan Terrorist Act;
- Suspicious Packages/Substances Assessment Guidelines, National CBR Working Group, May 2011;
- State Hazard Plan Animal and Plant Biosecurity; and
- State Hazard Plan Human Biosecurity.

Legislation and codes relevant to this plan include but are not limited to:

- Australian and International Standards that apply to the manufacture, storage, transport and safe use of hazardous materials;
- Australian Code for the Transport of Dangerous Goods by Road & Rail;
- Criminal Code Act Compilation Act 1913;
- Criminal Investigations Act 2006;
- Dangerous Goods Safety Act 2004 and Regulations 2007;
- Emergency Management Act 2005
- Emergency Management Regulations 2006

- Environmental Protection Act 1986 and Regulations;
- Fire and Emergency Services Act 1998;
- Fire Brigades Act 1942;
- Fire Brigades Regulations 1943;
- Misuse of Drugs Act 1981;
- Occupational Health and Safety Act 1984;
- Occupational Health and Safety Regulations 1996;
- Public Health Act 2016;
- Radiation Safety Act 1975;
- Radiation Safety (General) Regulations 1983; and
- Radiation Safety (Transport of Radioactive Substances) Regulations 2002.

1.5 ACTIVITIES INFORMING THE ASSURANCE PROCESS

The HMA ensures that aspects of operational performance are reviewed and that a consistent and structured approach is applied to all aspects of operational performance. This includes the implementation and evaluation of the outcomes (lessons identified, findings, recommendations, etc.) of such reviews¹¹.

Operational Performance Assurance activities identify and generate opportunities for improvement in operational performance to ensure that incident management and response capabilities are continuously improved to provide the most effective service to the community. The types of performance reviews conducted are:

- Reactive operational performance reviews;
- Live incident reviews;
- Operational investigations;
- Hot debrief;
- Formal Operational Debrief;
- Post Incident Analysis (PIA);
- Major Incident Review (MIR);
- External Reviews/Investigations;
- Proactive Operational Performance reviews;
- Post-Exercise Debrief;
- · Operational Readiness Review; and
- External Agency Report Reviews.

¹¹ DFES Policy No 54: Operational Performance Assurance Policy, 2017

Information relating to PIA's and MIR's conducted by DFES is included in the DFES Annual Report; this is an essential component of external performance reporting to the Minister for Emergency Services, State Parliament and the wider community. This information also facilitates decision making affecting DFES operations¹².

Post Operation Reports shall be provided to SEMC in accordance with <u>State EM Policy</u> section 5.11 and <u>State EM</u> <u>Plan</u> section 5.7.

1.5.1 Maintenance and Review of the Plan

DFES is responsible for maintaining this Plan and will do this through the HAZMAT Coordinating Committee.

¹² DFES Directive – Operational Performance Assurance, 2017

2 PREVENTION AND MITIGATION

2.1 RESPONSIBILITY FOR PREVENTION AND/OR MITIGATION

As the HMA, the FES Commissioner has overall responsibility for prevention and mitigation aspects of the chemical, radiation or other substances hazard.

Prevention and mitigation activities are carried out by other agencies and industry as part of their statutory obligations outside of the <u>EM Act</u>. Risk management processes are regulated by:

- a. Department of Mines, Industry Regulation and Safety;
- b. Department of Water and Environment Regulation;
- c. Department of Transport;
- d. Department of Fire and Emergency Services; and
- e. Radiological Council.

Law enforcement and intelligence agencies also conduct preventative activities relating to CBR. It is incumbent upon the HMA and all agencies involved in this Plan to support all law enforcement preventative measures, as well as those derived from their Legislative and duty-of-care responsibilities.

2.2 PREVENTION AND/OR MITIGATION STRATEGIES

Prevention requires active commitment by all sections of government, industry and the community that have involvement with hazardous materials/substances. This may include:

- a. Government through legislation, and Codes of Practice;
- b. Independent groups through development of Standards;

- c. Insurance industry through liability and risk assessments;
- d. Industry through risk management, plant design, procedures and investment in safety; and
- e. Community and individuals through training or awareness, personal protective equipment and safe practices.

2.2.1 Inspection Programs

Each agency with responsibility for prevention conducts a systematic inspection program based on identified risks relevant to their jurisdiction.

2.2.2 Inspection of Dangerous Goods Sites

DFES in partnership with DMIRS conducts regular inspections of selected licensed DG sites covering a selected range of issues associated with DG.

2.2.3 Reviews and Inspections of Fire and Emergency Services-Emergency Response Guides (FES-ERG) and Hazardous Material Risk Sites

DFES in partnership with DWER and the DMIRS develop an intervention list and conduct inspections of FES-ERG sites (refer to 3.3.2). DFES and DWERS also inspect non-Dangerous Goods HAZMAT Risk Sites to reduce the risk and impacts of incidents.

2.2.4 HAZMAT Coordinating Committee (HCC)

The HCC will review significant incidents to ascertain, where possible, the cause and ensure follow up actions are undertaken.

3 **PREPAREDNESS**

3.1 **RESPONSIBILITY FOR PREPAREDNESS**

As the HMA, the FES Commissioner is responsible for the development of plans and arrangements to manage emergencies in relation to HAZMAT, chemical and radiological incidents.

3.2 **RESOURCES**

3.2.1 CBR Resources Support from the Australian Government

- a. **CBR Emergency Management Capability.** The Australian Government maintains a CBR emergency management capability at the national level with a response support capability with respect to terrorist situations within the State. Australian Government support includes:
 - i. the Australian Defence Force (ADF);
 - maintenance of a stockpile of antidotes, antibiotics, vaccines and medical treatment for chemical or bioagents;
 - iii. provision through Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) of specialist advice and measurement devices for radiation based incidents;
- b. Provision of scientific support through the Defence Science and Technology Group (DSTG).

3.2.2 State Resources Available through DFES

- a. **Dedicated HAZMAT/CBR Resources.** DFES maintains an operational response capability for HAZMAT/CBR hazards.
- b. **Detection equipment on loan.** DFES has field detection equipment which is operated by the ChemCentre WA on the basis of an MOU between DFES and ChemCentre WA.
- c. **Sampling Equipment on Loan.** ChemCentre WA has provided DFES with gas sampling canisters to be placed on specialist response appliances. The canisters can be used to obtain air samples within the HOT ZONE as part of the initial response.
- d. **HEAT/CBRTG meeting rooms.** DFES maintains facilities required to enable the HEAT/CBRTG to meet and fulfil their functions. The WA Police Force and DFES will jointly determine the assembly location of CBRTG, as needed, based on the security environment.

3.2.3 Additional State Resources

- a. **Staff Recall.** All agencies that may be involved in a HAZMAT/CBR emergency shall have the ability to recall staff in accordance with their roles and responsibilities within the Plan.
- b. **Decontamination at Hospitals.** Select metropolitan and regional hospitals with an emergency department maintain external showers to be used for decontamination of casualties who may self-present at hospitals.

- c. **Atropine/Auto-injectors.** St John Ambulance Australia (WA) Inc (SJA) shall maintain a protocol with WA Health to authorise the use by ambulance personnel of Atropine/Auto-injectors that are stored in strategic locations throughout WA.
- d. **Air, Water, Soil** Monitoring. DWER maintains emergency air water and soil monitoring equipment to be deployed in emergencies to assist the HEAT and the HMA in decision making.

3.3 PLANNING AND ARRANGEMENTS

3.3.1 Combat and Support Agency Resourcing

Each agency that has agreed roles and responsibilities within the Plan are responsible for the provision of people and resources to meet those roles and responsibilities as detailed in Appendix C.

Agencies that provide representation to the HEAT/CBRTG shall ensure their representatives are available 24/7, and that they meet the competency requirements that have been mutually agreed with the HCC.

Those agencies whose roles and responsibilities also require on-scene attendance must also ensure an additional 24/7 availability of both personnel and equipment. Those personnel who attend must also meet mutually agreed competency requirements with DFES that are appropriate to their on-scene functions.

3.3.2 DFES Planning and Arrangements

The following plans and arrangements are managed by DFES, on behalf of the FES Commissioner, as HMA.

The Western Australian Fire and Emergency Services (WAFES) Manual

This Manual outlines the overall operational management structure and systems used by DFES for emergency preparedness and response throughout the State. It unites State Legislation, State Emergency Management Policies and Plans with the DFES's structures and its operational doctrine. It describes the FES Commissioner's intent for the role of DFES during emergencies in Western Australia.

Fire and Emergency Services – Emergency Response Guides (FES-ERG)

A site requires a FES-ERG if the quantity of DG stored or handled on site exceeds ten (10) times the manifest quantity in relation to those goods.

FES-ERGs are prepared or revised by the operator of the site in consultation with the Officer in Charge (OIC) of the fire station or the office of the Fire and Emergency Services Department nearest the site. The regulation requires that the operator of the site must review the agreed FES-ERG for the site and if necessary revise it:

- whenever there is a significant change to the type or quantity of DG on site;
- whenever there is a significant change to the layout of the site or to any structure on the site;
- as soon as practicable after a fire or dangerous situation occurs on the site; and

 in any event, at intervals of not more than 3 years from the day on which the guide was first prepared or last reviewed¹³.

Completed plans are maintained by DFES Special Operations Response Branch via an electronic database. FES will provide database access to key stakeholders on a need-to-know basis. <u>FES Emergency Guides and Plans</u>

Hard copies of the FESERG are also kept at the site or premises. Radioactive substances are specifically excluded from the *Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007*.

Site Inspections and Operational Pre-plans

DFES conducts a program of site inspections throughout Western Australia according to risk. DFES personnel are further required to prepare Operational Pre-plans (OPP). The OPP is designed to provide the OIC with information to help in applying appropriate action at an incident. Completed plans are maintained by DFES Special Operations Branch via an electronic database. DFES will provide database access to key stakeholders on a need-to-know basis.

Chemical Database

The DFES Communications Centre maintains a database (Chemdata) of information for HAZMAT emergencies.

Gas Dispersion Modelling

DFES and ChemCentre WA, through HEAT, maintains a computer-modelling program and competency for the calculation of downwind dispersion of gas releases.

Resourcing Fire Appliances

DFES ensures all fire appliances are provided with a HAZMAT Emergency Response Guide (HERG) for its fire-fighting personnel.

3.3.3 Industry Planning and Preparedness

Dangerous Goods Site Emergency Plans

All licensed DG sites under the *Dangerous Goods Safety* (*Storage and Handling of Non-explosive*) *Regulations 2007* are required to prepare an emergency plan.

Dangerous Goods Transport Emergency Response Plans

All DG consigned for transport in placard quantities are required under the *Dangerous Goods Transport (Road and Rail Transport of Non-explosive) Regulations 2007* to prepare an emergency plan. This includes a requirement to establish a contract with an "approved emergency responder," to provide a clean-up in the event of an emergency involving DG.

Industry Arrangements

Industries that deal in the storage, handling and transport of DG and hazardous substances shall maintain a 24/7 contact and ensure Safety Data Sheets (SDS) are available. As appropriate, industry is encouraged to develop their own

¹³ Dangerous Goods Safety (Storage and Handling on Non-explosives) Regulation 2007 (as amended 2017). r.76B

response capacity by:

- i. mutual aid agreements;
- ii. provision of emergency response appliances;
- iii. provision of protective equipment;
- iv. development of competent response teams; and
- v. maintenance of adequate stocks of neutralizing agents.

3.3.4 Approved Emergency Responders

Contractors can seek accreditation to become an approved DG emergency responder (for DG transport) by application to the DMIRS. The current list of approved emergency responders is maintained on the DMIRS website: www.dmirs.wa.gov.au/

3.4 TRAINING

Each agency is responsible for training their own staff in their roles as detailed in the Plan.

3.4.1 DFES Facilitated Training

DFES is responsible for managing an integrated training program for key personnel across agencies to ensure the SHP – HAZMAT operates successfully. This includes:

- a. **Management of CBR Incidents Course.** Training of personnel from agencies who may have an incident management role during a CBR emergency.
- b. Self-Contained Breathing Apparatus (SCBA) and Protective Equipment. Training of other agency personnel which have a CBR response role that is required to become competent in the use of SCBA and protective equipment appropriate to their roles and responsibilities contained in this Plan.

c. **Detection Equipment.** Training of DFES personnel in the operation, maintenance, and interpretation of dedicated detection equipment.

3.5 FIRST RESPONDERS

Agencies, whose personnel may be the first to arrive at a HAZMAT or HAZMAT/Fire emergency, shall provide potential first responders with appropriate guidelines with respect to first response actions. First responders could include transport drivers, police, ambulance, and local government employees.

Emergency services need an awareness level of training in what could be expected if responding to a HAZMAT emergency. First Responder Officers need to be aware that an incident may be the result of a criminal or terrorist action.

3.6 COMMUNITY INFORMATION AND EDUCATION

DFES ensures community awareness through its systematic inspection and compliance programs in cooperation with DWER and DMIRS.

DFES via HEAT/CBRTG is responsible for the provision of information related to the consequence management and impacts of incidents to the community and environment, as required.

3.7 EVACUATION ARRANGEMENTS

Evacuation arrangements will be developed according to the <u>State EM Policy</u> section 5.7 and <u>State EM Plan</u> section 5.3.2 that are appropriate for HAZMAT emergencies.

HAZMAT emergencies can sometimes release hazardous gases or contaminants which become airborne and can move

off-site with the wind. The onset of these emergencies is sometimes so rapid that evacuation is often not an option, and shelter-in-place actions are required.

DFES, as the Controlling Agency, will determine the need for either evacuation or shelter-in-place, through consultation and consideration of advice provided from HEAT/CBTRG to determine the area where this action will be required. DFES will implement evacuation measures in accordance with section 5.3.2 of the <u>State EM Plan</u>.

3.7.1 Major Hazard Facilities and Evacuation

In accordance with the *Dangerous Goods Safety (Major Hazard Facilities) Regulations 2007*, the owners of Major Hazard Facilities (MHF) are required to consult with the local community with respect to the actions they may need to take in the event of an emergency at the MHF.

3.8 ASSISTANCE ARRANGEMENTS WITH OTHER JURISDICTIONS

Should a HAZMAT emergency be beyond the resources of the State, support may be requested from the Australian Government, other States or overseas. Deployment will be managed by the agency employing the deployed personnel in accordance with individual agency policy and directives.

Assistance to interstate, overseas and other jurisdictions for HAZMAT emergencies will be coordinated at a state level by DFES. This will include determination of the process involved and recognition of pre-existing arrangements for interjurisdictional assistance by other agencies where such arrangements exist. Arrangements for Interstate Assistance (AIA) have been developed on behalf of the Commissioners and Chief Officers Strategic Committee (CCOSC) through the National Resource Sharing Centre (NRSC) to provide the timely and meaningful exchange of capability between Australian states and territories during significant incidents. The Commonwealth, through Emergency Management Australia (EMA), Co-Chairs CCOSC and is integral to this Arrangement.

The AIA provides for mutual assistance between Australian emergency management agencies: fire services, emergency services and land management agencies. It is for domestic use within Australia, which may involve New Zealand resources with the focus to support operational deployments.

All requests for Australian Government Physical Assistance are to be made in accordance with <u>State EM Policy</u> section 5.10 and <u>State EM Plan</u> section 5.6.

3.8.1 Australian Government Assistance

The provision of Australian Government physical assistance is dependent upon established criteria and requesting arrangements. All requests for Commonwealth physical assistance are to be made in accordance with <u>State EM Policy</u> section 5.10 and <u>State EM Plan</u> section 5.6.

3.8.2 Assistance Request

DFES may request interstate or international assistance from like agencies in the event of a major emergency or multiple emergencies beyond the capability of DFES resources. Following consultation at DFES State Operations Centre (SOC), EMA and Australasian Fire and Emergency Services Authorities Council (AFAC) may be contacted and advised that assistance is required including the effect required and/or composition of the resources required.

3.8.3 Eucla / South Australia

A Memorandum of Understanding exists between the Eucla Volunteer Fire and Emergency Service (VFES), the Shire of Dundas, the South Australia Country Fire Service and DFES to establish, maintain and support the Eucla VFES whose role and responsibilities involve cross border response and which include 'HAZMAT recovery.' The MOU remains in force for five (5) years from the 27th July 2017.

3.8.4 Assistance to Other States / Territories

CBR Incidents may trigger Interstate assistance arrangements provided in accordance with the protocols established under the National Counter-Terrorism Plan, National Counter-Terrorism Handbook and the Australian Government Disaster Response Plan (COMDISPLAN).

The Commonwealth of Australia and the State of Western Australia, as represented by DFES has a service delivery arrangement for the Indian Ocean Territories of Christmas Island and Cocus (Keeling Islands). This includes the provision of consultancy services and advice to the Commonwealth Department on a fee for service basis subject to the State agency's availability.

3.8.5 Assistance to Overseas

Requests for assistance from overseas jurisdictions are managed in accordance with the Australian Government Overseas Disaster Assistance Plan (AUSASSISTPLAN) and arrangements. Requests to WA from the Australian Government to assist jurisdictions overseas will be determined at the time by the Commissioner of Police on a case-by-case basis.

3.8.6 Interstate / International Deployment

DFES will consider all requests to provide personnel to assist interstate/international agencies in the combating of large emergencies. The deployment of resources will be dependent on the level of activity and/or prevailing risk in Western Australia at the time. Upon receiving a request for assistance, the FES Commissioner (or Deputy Commissioner Operations or delegate) will liaise with the host State/AFAC to identify the human and resource requirements and confirm deployment procedures

4 **RESPONSE**

4.1 **RESPONSIBILITY FOR RESPONSE**

The FES Commissioner as the HMA has responsibility for responding to HAZMAT¹⁴¹⁵ emergencies.

4.1.1 Multiple Hazards

In accordance with <u>State EM Plan</u> section 5.1.2, "where a subsequent hazard caused by the initiating hazards presents a significantly greater risk, management of the incident may be transferred to the relevant HMA for the subsequent hazard by agreement between the two agencies," DFES will respond 'by agreement' where the 'subsequent hazard' involves chemical, radiological or other substances until that aspect is completed.

4.1.2 Ships in State Waters

In relation to ships in State waters, or at berth, in which the emergency includes HAZMAT, and in which the hazard and/or the mitigating actions required may affect the structural integrity of the ship, then the emergency shall be regarded as a Marine Transport Emergency (MTE). DFES will be responsible for the HAZMAT component of the emergency.

4.1.3 Response Functions

The responsibilities for each response function covering HAZMAT/CBR are identified in Appendix C.

¹⁴ Fire Brigades Act 1942, s.25(b)

4.2 **RESPONSE ARRANGEMENTS**

4.2.1 Department of Fire and Emergency Services (DFES)

Mobilisation and management of DFES resources are coordinated through its Communications Centre (COMCEN) and the SOC, Metropolitan Operations Centre (MOC) or relevant Regional Operations Centre (ROC). COMCEN receives Triple Zero (000) calls state-wide and dispatches resources. DFES will respond in accordance with DFES Doctrine^{16 1718}. DFES HAZMAT/CBRN response involves 5 phases:

- Arrival
- Immediate action and product identification
- First strike action
- Recovery
- Decontamination.

DFES first arriving officers will provide a situation report (SITREP) and establish HOT, WARM and COLD control zones. The DFES Geospatial Information Systems (GIS) product, FES Maps automatically generates and publishes first responder maps on classification of a HAZMAT incident.

4.2.2 WA Police Force

Assists the HMA, through HEAT/CBRTG, in dealing with all chemical, radiological or other substances emergencies.

¹⁷ DFES SOP 3.6.1 HAZMAT/CBRN ¹⁸ DFES SOP 3.6.2 Decontamination

¹⁵ Emergency Management Regulations 2006, r.17

¹⁶ DFES Directive 3.6 HAZMAT/CBRN

WA Police Force will assume control for any terrorism related incident in accordance with State Hazard Plan - Terrorist Act and the Australian New Zealand Counter-Terrorism arrangements.

In some circumstances, where the cause of the emergency is determined by the Commissioner of Police in consultation with the FES Commissioner to be a criminal act, other than a terrorist act, of such a nature and magnitude that it requires a significant and coordinated police investigative response, the FES Commissioner may handover control of the incident, by agreement and documented to the Commissioner of Police.

The WA Police Force may mirror counter terrorism arrangements in response to such an incident without the determination of a terrorist act, utilising powers conferred by the *Criminal Investigations Act 2006*, as required.

DFES will continue to undertake a combat role for the chemical, radiological or other substance hazards where safe to do so. DFES Operations staff will be expected to operate under a WA Police Force Commander and be tasked in accordance with WA Police Force procedures during such incidents.

4.2.3 ChemCentre WA

Provides support to the HMA through HEAT/CBRTG, with chemical advice, on-scene sampling, detection and identification capability.

This includes expert advice with respect to the chemical and physical properties, neutralisation, decontamination, and environmental fate. ChemCentre WA also assists police with forensic analysis and monitoring of the site(s) as required.

4.2.4 Approved Emergency Responders (Dangerous Goods Transport)

To provide an approved emergency site clean-up response for DG transport incidents.

4.2.5 Bureau of Meteorology (BoM)

The BoM provides Incident Weather Forecasts (IWF) for a HAZMAT incident to DFES during the response phase. IWF provide forecast information (hourly for the first 12 hours). BoM can also provide briefings to DFES on forecast weather conditions during a HAZMAT incident if requested.

4.2.6 Consignors / Prime Contractors

In conjunction with Industry Owners and Operators to provide support assistance to the HMA during incident mitigation and to assume responsibility for site clean-up and disposal during the recovery phase.

4.2.7 Department of Mines, Industry Regulation and Safety

To advise the HMA, through HEAT/CBRTG, on the public safety aspects resulting from an emergency involving HAZMAT or DG and the measures required to minimize the impact on people, property and the environment.

DMIRS administer the *Dangerous Goods Safety Act 2004 and Regulations 2007*, in relation to the storage, handling and transport of DG and the *Petroleum Pipelines Act 1969* and the *Petroleum and Geothermal Energy Resources Act 1967*, in relation to the safe conduct of petroleum exploration and production, and petroleum pipelines. Through the WorkSafe Division administer the *Occupational Health and Safety Act 1984* and *Regulations 1996*. WorkSafe also provides expert advice to the HMA, through HEAT, on chemicals and the occupational health and safety risks resulting from HAZMAT or DG emergencies and measures to minimize those risks.

4.2.8 Department of Water and Environmental Regulation

Provide environmental advice to the HMA, through HEAT/CBRTG, on the impacts of the emergency on the environment. To administer the pollution, emission and, waste disposal/control provisions of the *Environmental Protection Act 1986*.

DWER provide support, as required to assist with identification of contaminated zones; provide air monitoring to assist in determining community protective actions; recommend measures to limit spread of contamination, environmental decontamination and disposal measures. Monitor clean-up to an appropriate environmental standard.

4.2.9 Department of Health (WA Health)

To advise the HMA, through HEAT/CBRTG, on the public safety aspects resulting from an emergency involving radiation HAZMAT materials and the measures required to minimize their impact on people, property and the environment. WA Health administers the *Radiation Safety Act 1975* and *Regulations*.

To provide medical treatment of casualties resulting from a HAZMAT emergency. WA Health also provides expert advice to the HMA, through HEAT/CBRTG, on public health risks resulting from the emergency and advise on measures to

minimise the health risks, loss of life and minimise permanent injury.

To provide support as required for the detection and identification of biological agents that may be involved in the emergency. To provide advice with respect to their biological properties, neutralisation, decontamination, and environmental fate. To assist police with forensic analysis and monitor until danger has passed.

4.2.10 Department of Primary Industry and Regional Development (DPIRD)

To manage any resultant disruption to the agricultural sector, including residues in agricultural products.

4.2.11 Department of Transport (Maritime Division)

To assist the HMA with emergencies involving HAZMAT in State waters. To administer the *Pollution of Waters by Oil and Noxious Substances Act 1987.*

4.2.12 Industry Owners and Operators

To assist the HMA with dealing with the HAZMAT emergency, and to establish and maintain a capability for coping with HAZMAT emergencies occurring within their facilities.

4.2.13 Local Government (LG)

To ensure recovery from HAZMAT emergencies. To assist at HAZMAT emergencies, with advice and resources. The capability and commitment of each LG to undertake the tasks and meet the responsibilities identified in the <u>State EM Plan</u> should be confirmed by the HMA and detailed in the Local Emergency Management Plan (LEMP). This will ensure the

varying capabilities of individual LG's are recognised and agreed to by all parties.

4.2.14 St John Ambulance Australia (Western Australia) Inc

To provide triage, initial medical treatment and transportation of casualties resulting from an emergency. To advise the HMA, through HEAT/CBRTG. SJA may also support the emergency through the deployment of Special Operations Paramedics who are trained to operate in the HOT zone as part of an entry team.

4.2.15 Water Corporation

To protect the Water Corporation's water supply, sewerage, drainage and irrigation services and provide advice and support to the HMA, through HEAT/CBRTG on water pollution and hydraulic services aspects of HAZMAT emergencies. This includes monitoring water supplies to ensure public safety.

4.2.16 Arc Infrastructure Pty Ltd

To ensure the overall safety of railway operations outside the emergency area, and to assist the HMA to deal with the emergency.

4.2.17 Other Support Organisations

Provide support to the HMA and to meet their own statutory obligations.

4.2.18 Australian Government

The Australian Security Intelligence Organisation (ASIO) issues threat assessments including those covering CBR. The Australian Government maintains a corresponding CBR emergency management capability at the national level to respond to terrorist situations. This capability includes the preparation and maintenance of national DISPLANS, the provision of resources, and the Crisis Coordination Centre (CCC) operated by the Department of Home Affairs (DHA).

The Australian Government can provide a range of support to the State in the event of a CBR emergency depending upon the emergency. This can include agencies such as DSTG or the ARPANSA.

4.3 NOTIFICATIONS

DFES COMCEN is central to state-wide HAZMAT reporting and monitoring, as follows:

All emergencies involving HAZMAT are reported via Triple Zero (000) and referred to the Fire Service.

A notification process map is detailed in Appendix G.

4.4 PUBLIC WARNINGS/INFORMATION

DFES is responsible for the provision and management of public information in relation to HAZMAT incidents, in accordance with the <u>State EM Plan</u> section 5.3.1 and the <u>State Support Plan - Emergency Public Information</u>.

All emergency management organisations must coordinate their public information with DFES and only comment on matters within their jurisdiction.

4.4.1 Property Fire Warning System

The IC or Public Information Officer (PIO) can request the activation of public information in the event of a property fire involving HAZMAT, if it poses a threat to the public or attracts

sufficient media attention to warrant the issuing of public information. This request can be made to the controlling agency's media branch or DFES COMCEN.

If requested, the public information will advise the public that an incident has occurred and will:

- describe the incident;
- outline what people should do to keep safe from the threat;
- advise of road closures, if appropriate; and
- advise what firefighters and other government agencies are doing to protect the public.

4.4.2 Standard Emergency Warning Signal (SEWS)

The Standard Emergency Warning Signal (SEWS) is a distinctive siren sound to alert the community to the broadcast of an urgent safety message relating to a major emergency. SEWS is intended for use as an alert signal to be played on public media such as radio, television, or public address systems to draw listeners' attention to the emergency warning that follows. SEWS should only be used when issuing Emergency Warnings when there is a need to warn people to take urgent and immediate action to reduce the potential for loss of life or property from emergency events.

Note: SEWS is not required for all Emergency Warnings.

4.4.3 Emergency Alert

Emergency Alert is a warning system that uses web technology to send alerts to home phones and mobiles. It is an additional public information tool that can be used for any emergency where there is an imminent threat, to alert people in a specific location. The IC or PIO can request an Emergency Alert by calling the DFES State Situation Analysis Officer (SAO).

4.4.4 Emergency WA Website

HAZMAT incident and alert information is available on Emergency WA (<u>www.emergency.wa.gov.au</u>)

4.5 EVACUATION ARRANGEMENTS DURING RESPONSE

The IC will decide, upon advice from HEAT/ CBRTG, whether evacuation or shelter-in-place for an area is required.

4.5.1 Triggers for Evacuation or Shelter-in-Place

Evacuation. Evacuation will be required if:

- a. There is a direct threat to people downwind who may be directly exposed.
- b. People are within the impact zone of an explosive device (due to overpressure or shrapnel).
- c. There is potential for secondary devices targeting evacuees.

Shelter-in-Place. Shelter-in-place will be required if:

- a. There is no time to conduct an evacuation.
- b. The incident and the hazard are of short duration (i.e. a single gas cloud).
- c. Secondary devices are suspected along evacuation routes.

4.5.2 Activation of Evacuation Arrangements

DFES will advise other agencies, including the WA Police Force and Department of Communities, of the need to evacuate or shelter in place where their assistance is required, in accordance with State emergency management arrangements.

4.6 TERRORIST ACT ARRANGEMENTS

If the emergency is the result of a terrorist act, the incident will be dealt with in accordance with State Hazard Plan - Terrorist Act and the WA Police Force will take control of the emergency on behalf of the HMA, the Commissioner of Police.

An incident shall not be referred to as a terrorist act by any responding agency unless the Commissioner of Police has made this determination.

Where the cause of the emergency is not apparent and terrorism cannot be readily discounted, the WA Police Force shall be notified in order to commence investigations.

Note: Hostile acts may not be terrorism. They have to be supported by a cause as per the definition of a terrorist act within section 100.1 of the Commonwealth *Criminal Code Act 1995* (e.g. political, ideological or religious motive).

4.7 FUNCTION SUPPORT PLANS

4.7.1 Medical Services

The State Health Emergency Response Plan (SHERP) may be activated at any time where casualties have occurred as a consequence of the emergency. This plan is required to consider special control and decontamination procedures for contaminated casualties.

Other plans which may be activated in addition to those already nominated in support of this Plan may include:

- <u>State Support Plan Emergency Public Information; and</u>
- <u>State Support Plan Emergency Relief and Support</u>.

Other State Hazard Plans which may be activated may include:

- <u>State Hazard Plan Fire</u>
- <u>State Hazard Plan Maritime Environmental</u> <u>Emergencies;</u>
- State Hazard Plan Terrorist Act;
- <u>State Hazard Plan Human Biosecurity</u>
- State Hazard Plan Collapse and
- State Hazard Plan Earthquake.

4.8 INCIDENT AND SITE CONTROL

DFES will apply the Australasian Inter-service Incident Management System (AIIMS) as its tool for incident management, while the WA Police Force will utilise the Incident Command and Control System (ICCS Plus) as its framework for incident management.

DFES is responsible for site safety and implementation of control zones in relation to the HAZMAT emergency. The WA Police Force may assist the HMA/Controlling Agency, on request, with establishing cordons and other relevant activities for public safety. Site entry and decontamination upon leaving the HOT Zone will be managed by DFES.

4.8.1 Site Control Zones

Site control will be established by dividing the area around the incident into three Zones, referred to as the HOT, WARM and COLD Zones. The IC, in consultation with HEAT/CBRTG, will determine the boundaries for each zone, and each zone will be clearly identified.

4.9 ACTIVATION OF MULTI AGENCY ADVISORY AND SUPPORT GROUPS

- a. HEAT will be either notified or activated for all significant HAZMAT incidents.
- b. CBRTG will be either notified or activated for all significant CBR incidents.
- c. The multi-agency support groups ISG, OASG and/or State Emergency Coordination Group (SECG)) may be activated by DFES, in accordance with the provisions of <u>State EM Policy</u> section 5 and <u>State EM Plan</u> section 5 as required. For Level 2 incidents, establishment of an ISG must be considered. For Level 3 incidents, an ISG must be established.

4.10 DECLARATION OF AN EMERGENCY SITUATION OF STATE OF EMERGENCY

The FES Commissioner has powers in relation to HAZMAT emergencies under the *Fire and Emergency Services Act* 1998¹⁹ and *Fire Brigades Act* 1942^{20,21,22}. These powers are

wide-ranging and are normally adequate to respond to fire and HAZMAT emergencies. Should additional powers be required, such as the appointment of Hazard Management Officers (HMOs), sharing of information or detainment beyond 3 hours for decontamination, the <u>EM Act</u> can be used to access emergency powers through the declaration of an 'Emergency Situation'²³ or a 'State of Emergency'²⁴.

²² Fire Brigades Act 1942 s.34A

²³ Emergency Management Act 2005 s 50 and State EM Response Procedure 6

²⁴ Emergency Management Act 2005 s 56, s61 and State EM Response Procedure

¹⁹ Fire and Emergency Services Act 1998 s18B.

²⁰ Fire Brigades Act 1942 s34.

²¹ Fire Brigades Act 1942 s.60.

5 RECOVERY

5.1 RESPONSIBILITY FOR RECOVERY

Under the <u>EM Act</u>, a LG is required to ensure that effective Local Emergency Management Arrangements (LEMAs) are prepared and maintained to manage recovery following an emergency affecting the community. Where recovery activities are beyond the capacity of the local community, recovery activities will be undertaken in accordance with the <u>State EM</u> <u>Policy</u> section 6, <u>State EM Plan</u> section 6, and will commence during the response phase. As such, there needs to be high levels of understanding and cooperation between response and recovery organisations at each level (State, District, local).

5.1.1 Handover

A documented handover process will be applied, to identify that the situation has passed from the response to the recovery phase, and responsibility has passed from the HMA, to those identified as responsible for recovery.

5.1.2 Waste, Debris Management and Disposal

The DWER Pollution Response Unit (PRU) will provide advice covering waste disposal and site mitigation actions to meet current environmental standards. ChemCentre WA has a role in advising on site mitigation through a thorough understanding of the chemistry and physics of the contaminant(s). The Radiation Health Directorate will provide advice on radioactive waste.

5.1.3 Clean-up

Direct on-site recovery and clean-up of hazardous materials and infrastructure is the responsibility of the owner of the hazardous materials.

Those transporting DG are required to contact their Approved Emergency Responder, under the *Dangerous Goods Transport (Road and Rail Transport of Non-explosive) Regulations 2007,* to initiate clean-up operations. Note: Radioactive substances are not included in this regulation.

For incidents that involve radioactive substances, the clean-up in all cases has to be completed to the satisfaction of the Radiological Council.

Under the *Environmental Protection Act 1986*, DWER may issue a pollution notice to the owner of hazardous materials that are involved in an emergency situation, requiring clean-up.

5.1.4 Orpha Hazardous Materials

Recovery and clean-up of orphan hazardous material are the responsibility of the agency or entity in who owns or is in control of the land. Under certain circumstances, DWER may cover clean-up costs, where sensitive environments may be under threat. In all cases, clean-up has to be completed to the satisfaction of DWER.

5.2 TRANSITION TO RECOVERY

The Controlling Agency is responsible for the coordination of an assessment of all impacts relating to all recovery environments prior to cessation of the response, including a risk assessment and treatment plan to provide for safe community access to the affected area.

The Controlling Agency with responsibility for the response to an emergency must initiate a range of recovery activities during the response to that emergency.

On-site recovery and site restoration can only commence once the IC, in consultation with HEAT/CBRTG, have determined the site is 'safe for recovery.' A site is 'safe for recovery' when:

- a. the emergency impacting the site no longer exists;
- b. control of the situation has been established; and
- c. the site is safe for recovery by non-emergency services personnel using appropriate controls (e.g. work practices and personal protection).

At this point a formal handover process will be applied from the Controlling Agency to:

- the property owner/occupier;
- product owner;
- agency or entity in control of the land;
- local government;
- local government Recovery Coordinator(s); and/or
- State Recovery Coordinator/Controller

APPENDIX A: DISTRIBUTION LIST

This State Hazard Plan is available on the <u>SEMC website</u>. The agencies below will be notified by the HMA (unless otherwise specified) when an updated version is published on this website.

- All agencies and organisations with responsibilities under this plan:
 - Arc Infrastructure Pty Ltd
 - o Australian Federal Police
 - o ChemCentre WA
 - Chamber of Commerce and Industry Western Australia
 - Department of Primary Industries and Regional Development Western Australia
 - o Department of Mines, Industry Regulation and Safety
 - o Department of Water and Environmental Regulation
 - o Department of Fire and Emergency Services
 - Department of Health (Public Health)
 - Department of Health (Radiation Health)
 - Department of Transport (Maritime Division)
 - o Fremantle Port
 - o PathWest
 - o St John Ambulance Australia (Western Australia) Inc
 - Water Corporation
 - o WA Police Force

- Australian Defence Force
- Emergency Management Australia (SEMC Business Unit to notify)
- National Library of Australia (SEMC Business Unit to notify)
- Minister for Emergency Services (SEMC Business Unit to notify)
- Minister for Police
- Minister for State Development
- Minister for Transport
- State Emergency Management Committee (SEMC), SEMC subcommittee and SEMC reference group members (SEMC Business Unit to notify)
- State Library of Western Australia (SEMC Business Unit to notify).

APPENDIX B: GLOSSARY OF TERMS / ACRONYMS

Terminology used throughout this document has the meaning prescribed in section 3 of the *Emergency Management Act 2005* or as defined in the <u>State Emergency Management</u> <u>Glossary</u>. In addition, the following hazard-specific definitions apply.

B1 GLOSSARY OF TERMS

ABSORPTION	Use of a sorbate/sorbent system through the process of swelling. Materials commonly used are sawdust, clay and polyolefin-type fibres.
BIOLOGICAL AGENT	A microorganism (or a toxin derived from it) which causes disease (or has a toxic effect) in humans, plants or animals.
CBR TECHNICAL GROUP	A group of technical and emergency management specialists on call 24/7 to provide specialist advice.
COLD ZONE	The outermost area surrounding the incident site within which it is safe to operate unprotected. It contains the Control Point or Command Post and such other support functions as are deemed necessary to control the incident.

CONSEQUENCE MANAGEMENT

CONTAMINATION

CONTROLLED WASTE

DANGEROUS GOODS (DG) Measures to protect public health and safety and provide emergency relief to businesses and individuals affected by the consequences of an emergency.

Presence or transfer of a hazardous substance(s) on humans, mobile and immobile objects, soil and water.

A 'controlled waste' is a waste that can harm human health and the environment unless it is managed properly and appears in Schedule 1 of the *Environmental Protection (Controlled Waste) Regulations 2004.* The Regulations require the transport of these wastes to be carried out only by licensed carriers and each load transported to be documented.

Substances and articles that, because of their physical and chemical (physiochemical) or acute toxicity properties, present an immediate hazard to people, property or the environment. In WA, dangerous goods are regulated under the *Dangerous Goods Safety Act 2004*. Many substances are both hazardous substances and dangerous goods, however, there are substances that are

hazardous substances but not dangerous goods and vice versa.

DECONTAMINATION The reduction of contamination of the natural, built environment, people and animals.

DISPERSION Spread of the hazardous material or substances. Parameters such as weather (especially temperature and wind), substance properties (like volatility and specific weight: lighter or heavier than air) and topographical conditions have great influence on the dispersion.

DISSEMINATION A spreading abroad for some fixed purpose or with definitive effect.

EXPOSURE

Process by which the hazardous material or substance becomes available for absorption, swallowing, breathing touching the skin or eyes of humans. A person can be exposed to radiation (radiant energy or the particles emitted in the transfer of radiant energy) and receive a radiation dose without coming into contact with the substance emitting the radiation.

FIELD LIAISON CHEMIST (FLC)

FIELD LIAISON

OFFICER (FLO)

HAZARDOUS

CHEMICALS

An operational officer provided by ChemCentre WA, who is experienced in emergency management of HAZMAT emergencies. The FLC is fully conversant in the chemical and physical properties of Hazmat materials and serves as on-site liaison between DFES FLO and the Lead Chemist (LC) and Sampling Chemist (SC) taking samples of, and analysing hazardous materials.

An operational officer provided by DFES, who is experienced in emergency management and HAZMAT emergencies, to serve as the on-site liaison between the Special Operations Advisor (SOA) and the Incident Controller, and to coordinate the operational activities of all agencies at the incident site.

Substances, mixtures and articles that can pose a significant risk to health and safety if not managed correctly. They may have health hazards, physical hazards and/or environmental hazards.

HAZARDOUS MATERIALS

As defined in the *Fire Brigades Act 1942,* means anything that, if it escapes while being produced, stored, moved, used or otherwise dealt with, may cause personal injury or death, or damage to property or the environment. Hazardous Materials' is a term frequently used to cover one or more of hazardous chemicals; hazardous substances; dangerous goods; hazardous or controlled waste materials; and radioactive materials.

HAZARDOUS SUBSTANCES

As defined in the *Emergency* Management Act 2005, means a chemical; biological or radiological substance; or any other substance, that is capable of causing loss of life, injury to a person, or damage to the health of a person or to the environment. Under the OSH Regulations 1996, a substance is a hazardous substance if it meets criteria under; the Approved Criteria (AC) classification system; or an international system called the Globally Harmonised System and Labelling of Chemicals (GHS Classification system). For the purpose of this Plan, the definition as per the Emergency Management Act 2005 applies.

HOT ZONE The area immediately surrounding the incident, which extends far enough to prevent adverse effects associated with either an explosive device or an agent affecting personnel outside the Zone. **IDENTIFICATION** The clear and qualitative determination of which hazardous material is present. The planned and structured procedure MASS DECONTAMINATION for the decontamination of a large number of casualties. MITIGATION The actions necessary to ensure confinement and containment that will minimise risk to both life and the environment in the early stages of a spill or leak. MONITORING A continuous or periodic process of qualitatively or quantitatively determining the presence, absence or level of a hazardous material. NEUTRALISATION Neutralisation is the process of applying acids or bases to a spill to form a neutral salt. The application of solids for neutralizing can often result in confinement of the spilled material. One of the advantages of neutralization is

that a hazardous material can be

rendered non-hazardous

ORPHAN HAZARDOUS MATERIALS	Orphan hazardous materials are materials in which the 'owner' of the materials cannot be found to cover the cost for clean-up. They may also be		hazardous materials emergencies, to coordinate the technical functions of the HEAT or CBRTG, to assist the Incident Controller.	
	materials in which the chemical	STATE WATERS	State waters include:	
	composition and degree of hazard are unknown.		 State (Coastal) waters extending three (3) nautical miles seawards from baseline (ref. Commonwealth 	
POLLUTION RESPONSE	A senior operational Environmental Officer and Inspector appointed under PRC) the provisions of the <i>Environmental</i> <i>Protection Act 1986</i> , who is experienced in emergency management of HAZMAT emergencies. The PRC is fully conversant in HAZMAT air, water and soil monitoring and sampling and serves as an on-site liaison between the DFES FLO and the Pollution Response Field Monitoring Teams that are monitoring emissions and assessing environmental risks.		Gazette, S29, February 1983);	
COMMANDER (PRC)			 Waters within proclaimed and designated Ports; 	
			 Enclosed waters; and 	
			 Inland waters. 	
		TERRORIST ACT	Actions or threats intended to advance a political, ideological or religious cause by coercing or intimidating an Australian or foreign government or the public, by causing serious harm to people or property, creating a serious	
RADIOLOGICAL	Any radioactive substance, which could		risk of health and safety to the public, disrupting trade, critical infrastructure or electronic systems. As defined in the Commonwealth <i>Criminal Code Act</i>	
AGENT	be used in a CBR event to create a radiation hazard to humans or cause disruption to the community.			
SAMPLE	A small part selected for inspection or analysis.		<i>1995</i> section 100.1.	
SPECIAL OPERATIONS ADVISOR (SOA)	An operational officer provided by DFES, who is experienced in emergency management and			

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THREAT	The term threat is used in two ways in this document:	ARPANSA	Australian Radiation Protection and Nuclear Safety Authority
	 Communication received in any media format where an intention of harm or action is stated, or through discovery of articles deemed to be suspicious. The message or article may ultimately prove to be a hoax or the result of a misunderstanding. A condition resulting from a risk assessment process used by State and National security services to determine the likelihood of a CBR event in the community. 	ASIO	Australian Security Intelligence Organisation
		AUSASSISTPLAN	Australian Government Overseas Disaster Assistance Plan
		BOM	Bureau of Meteorology
		CBR	Chemical, Biological, Radiological
		CBRN	Chemical, Biological, Radiological, Nuclear
		CBRTG	Chemical, Biological, Radiological and Nuclear Technical Group
WARM ZONE	The area surrounding the HOT Zone	CCC	Crisis Coordination Centre
	where personnel and equipment decontamination and hot zone support takes place. It includes control points for the access corridor and thus assists in reducing the spread of contamination.	CCOSC	Commissioners and Chief Officers Strategic Committee
		ССР	Casualty Clearing Post
		COMCEN	Communication Centre
B2 ACRONYMS		COMDISPLAN	Commonwealth Disaster Plan
ADF	Australian Defence Force	DFES	Department of Fire and Emergency
AFAC	Australasian Fire and Emergency Services		Services
	Authorities Council	DG	Dangerous Goods
AIA	Arrangements for Interstate Assistance	DHA	Department of Home Affairs
AIIMS	Australian Inter-Service Incident Management System	DISPLAN	Disaster Plan

DMIRS	Department of Mines, Industry Regulation and Safety	НСС	Hazardous Materials (HAZMAT) Coordination Committee
DMO	Duty Mapping Officer	HEAT	HAZMAT Emergency Advisory Team
DMPU	Disaster Management Preparedness Unit	HERG	HAZMAT Emergency Response Guide
DoT	Department of Transport	НМА	Hazard Management Agency
DPIRD	Department of Primary Industry and	IC	Incident Controller
	Regional Development Defence Science Technology Group	ICC	Incident Control Centre
DSTG		ICCS Plus	Incident Command and Control System
DWER	Department of Water and Environment and Regulation	ІМТ	Incident Management Team
EHO	Environmental Health Officer	ISG	Incident Support Group
EMA	Emergency Management Australia	IWF	Incident Weather Forecast
EOU	Emergency Operations Unit	LC	Lead Chemist
FES	Fire and Emergency Services	LEMA	Local Emergency Management Arrangements
FES-ERG	Fire and Emergency Services – Emergency Response Guide	LEMC	Local Emergency Management Committee
FLC	Field Liaison Chemist	LEMP	Local Emergency Management Plan
FLO	Field Liaison Officer	LG	Local Government
GHS	Globally Harmonised System	MHF	Major Hazard Facilities
GIS	Geospatial Information Systems	MIR	Major Incident Review
HAZMAT	Hazardous Materials	МОС	Metropolitan Operations Centre
		MOU	Memorandum of Understanding

MTE	Marine Transport Emergency	SEWS	Standard Emergency Warning Signal
NPW	Nuclear Powered Warship	SHERP	State Health Emergency Response Plan
NRSC	National Resources Sharing Centre	SHICC	State Health Incident Coordination Centre
OASG	Operational Area Support Group	SITREP	Situation Report
OCDO	On-call Duty Officer	SJA	St John Ambulance Australia (Western
OIC	Officer in Charge		Australia) Inc
OPP	Operational Pre Plan	SOA	Special Operations Centre
OSH	Occupational Safety and Health	SOC	State Operations Centre
PIA	Post Incident Analysis	SPRED	Space Re-entry Debris
PIO	Public Information Officer	SOP	Standard Operating Procedures
PRC	Pollution Response Commander	VFES	Volunteer Fire and Emergency Services
PRU	Pollution Response Unit	WAFES	Western Australian Fire and Emergency Service
ROC	Regional Operations Centre	WA Health	Department of Health
SAO	State Situation Analysis Officer		•
SC	Sampling Chemist		
SCBA	Self-Contained Breathing Apparatus		
SDS	Safety Data Sheet		
SECG	State Emergency Coordination Group		
SEMC	State Emergency Management Committee		

APPENDIX C: RESPONSE ROLES AND RESPONSIBILITIES

Introduction

DFES, through the FES Commissioner as the HMA, has the primary role of coordinating the response to HAZMAT emergencies. However, DFES requires the support and assistance of other organisations to ensure an integrated community response occurs.

The following are the response roles and responsibilities of agencies under this Plan. Brief all-hazards information is also provided for agencies who may have a role under this Plan – full details of these roles and responsibilities can be found in the <u>State Emergency</u> <u>Management Plan</u>, Appendix E.

Agency Responsibilities

The agencies will undertake the agreed responsibilities, as detailed below. All the agencies should maintain appropriate internal plans and procedures in relation to the specific agency responsibilities.

<u>Note</u>: The capability and commitment of each local government to undertake the tasks and meet the responsibilities identified in this State Hazard Plan should be confirmed by the HMA and detailed in LEMAs. This will ensure the varying capacity and capabilities of individual LGs are recognised.

TABLE 1 – RESPONSE FUNCTIONS COVERING HAZMAT EMERGENCIES

Organisation	Responsibilities (see State EM Plan Appendix E for full all-hazards roles and responsibilities)
Approved Emergency Responders (Dangerous Goods Transport)	 a. Maintain all the requirements for accreditation, identified by the DMIRS for the Class or Division of DG for which the proponent intends providing a clean-up service; b. Respond to the incident site as required, and upon handover by the IC, conduct a site clean-up and disposal under supervision of the Local Recovery Coordinating Group; and Ensure compliance with written handover processes from response to recovery phase.
Arc Infrastructure Pty Ltd	 a. Be contactable on a 24/7 basis; b. Provide on-site railway advice and assistance in support of the railway emergency; c. Arrange provision of appropriate resources support, if available, including equipment for the emergency; d. Assist DFES in establishing railway area security during the emergency; e. Provide support on-site communication facilities; f. Arrange for the recovery and/or safe disposal of residual goods, after the emergency has been declared safe by the HMA; and g. Provide a written report and/or participate in posts operation debriefs on the emergency, as required.
ChemCentre WA	 a. Be contactable and available on a 24/7 basis; b. Provide a representative to the HEAT; c. Provide, maintain and operate a mobile response laboratory, for the purpose of detecting, identifying, and monitoring hazardous materials or substances, involved in the HAZMAT emergency on a 24/7 basis; d. Provide competent chemical response personnel as an on-scene HEAT representative; e. Provide competent on-site team leader (Field Liaison Chemist – FLC) an on-site specialist; f. When operating on-site, provide written advice/documentation to the IC, through the FLO, using the proformas as agreed with the HMA; g. Maintain DFES's detection/analytical equipment (as identified in the CCWA/DFES MOU);

Organisation	Responsibilities (see State EM Plan Appendix E for full all-hazards roles and responsibilities)
	 h. Provide on-site HOT zone triage capability by providing a Lead Chemist (LC) and Sampling Chemist (SC) capable of entering the HOT zone, operating detection equipment, and collecting samples of hazardous materials and substances; i. Provide appropriate sampling equipment with instructions for their use by DFES personnel, either for on-site incident management or off-site environmental monitoring by DWER personnel; j. Provide information with respect to any potential chemical incompatibilities, methods of neutralization, including any reactivity's with any media used to control the hazardous materials and substances; k. If required, confirm adequacy of decontamination procedures applied to equipment and personal protective equipment; and l. Provide a written report and/or participate in post operation debriefs on the emergency, as required.
Consignors / Prime Contractors	 a. To operate their services safely and in accordance with applicable laws and regulations; b. Ensure emergency plans are in place for DG transport, including contracts with 'approved emergency responders; c. Ensure compliance with fatigue management regulations under the <i>Occupational Safety and Health Regulations 1996</i> for transport drivers; d. Keep Industry Owners and Operators informed of the movement of all their vehicles on task; e. Be contactable on a 24/7 basis; f. Provide technical advice as required; g. Provide an on-site representative as required; h. Assist the IC at the site of the incident; i. Provide appropriate equipment including neutralising and/or absorption agents to enable incident mitigation; j. Assume responsibility for recovery and/or safe disposal of residual goods, damaged equipment and property and/or contaminated soils and water following the situation being rendered safe forrecovery k. Ensure site clean-up and ensure restoration to its original condition as much as reasonably possible; l. Provide the Director, Dangerous Goods and Petroleum Safety Branch, Resources Safety Division, DMIRS with an incident report in accordance with the <i>Dangerous Goods Safety Act 2004 and Regulations</i>; and m. Provide a written report and/or to participate in post operation debriefs on the emergency, as required.

Organisation	Responsibilities (see State EM Plan Appendix E for full all-hazards roles and responsibilities)
Department of Communities	a. Provide emergency relief and support services to the community in line with the State Support Plan – Emergency Relief and Support
Department of Fire and Emergency Services (DFES)	 b. Mobilise DFES resources, and as required, assemble HEAT, ISG, OASG; c. Nominate an IC for each HAZMAT emergency according to AIIMS; d. Establish an on-site Incident Control Centre (ICC) and Operations Point (OP), and in consultation with HEAT, determine the HOT, WARM and COLD Zone perimeters; e. In consultation with HEAT, determine the requirement for evacuation or shelter-in-place, and execute as necessary; f. Assist with the identification of the hazardous materials or substances involved; g. Provide prompt first strike action according to Standing Operating Procedures. Actions may include:
	 i. Rescue; ii. Fire fighting; iii. Elimination of ignition sources; iv. Stopping leakages; v. Containment of hazardous materials or substances; vi. Neutralisation; and/or vii. Decontamination.
	 h. Task and coordinate participating agencies; i. Maintain a record of activities; j. If required, provide assistance during clean-up of the site; k. In consultation with HEAT, ensure the preparation and approval of public information; l. Arrange a debriefing of participants immediately following an emergency; m. Manage HEAT through the deployment of the Special Operations Advisor (SOA), and the Field Liaison Officer (FLO); n. Maintain a composite database on hazardous materials and substances to provide immediate first strike information;

Organisation	Responsibilities (see State EM Plan Appendix E for full all-hazards roles and responsibilities)
	 o. If required, undertake a Post Incident Analysis (PIA) and/or a Post Operation Report in accordance with State EM Policy section 5.11 and State EM Plan section 5.7; p. Provide and maintain the HEAT meeting room and associated facilities; and
	Assist the WA Police Force and other relevant agencies [e.g. DMIRS] in determining the cause of the emergency.
Department of Health	(i) Public Health
(WA Health)	 a. Be contactable on a 24/7 basis; b. Provide a representative to the HEAT; c. Provide advice on potential dangers to public health and actions to be taken in order to mitigate the
	 d. Provide detailed toxicological advice to emergency personnel, and the public, as required; e. Prepare and maintain a public health response and recovery plan for public advice, health surveillance and medical testing; and f. Provide a written report and/or participate in post operation debriefs on the emergency, as required.
	(ii) Medical Care
	 a. Provide advice on the need for special medical care as may be required for casualties / exposure to an identified chemical hazard; and b. Coordinate the provision of specialised medical care both at the site of the HAZMAT incident and any secondary / tertiary medical care of the victims.
	 (iii) Radioactive Hazards In the case of emergencies involving radioactive [<i>or potentially radioactive</i>] hazards: a. Provide a representative to the HEAT, when requested; b. Monitor the radioactive environment and define contaminated areas; c. Provide laboratory analysis of air, water, food and fodder samples; d. Establish and direct measures to mitigate the radiological impact on public health; e. Establish human exposure criteria and assess the public health impact of radiation levels; f. Recommend measures to limit the spread of radioactive contamination;

Organisation	Responsibilities (see State EM Plan Appendix E for full all-hazards roles and responsibilities)
	 g. Direct and assist in collection of ingestion pathway samples; h. Establish procedures and make recommendations for the use of substances to prevent or reduce the effects of contamination; and i. Advise and assist on decontamination measures.
Department of Mines, Industry Regulation and Safety (DMIRS)	 a. Provide two DG on-call officers (Dangerous Goods and Critical Risks Directorate) to be contactable and available on a 24/7 basis; Provide a DG Officer (DGO) to HEAT to provide advice on potential dangers to public safety and actions to be taken to mitigate the hazard effects; Deploy a DGO to the incident scene, as required; Provide a Worksafe representative to HEAT, when required, to advise on the hazard and occupational safety and health aspects and actions to be taken; Investigate the cause of the emergency, where applicable; Provide a written report and/or participate in post operation debriefs on the emergency, as required; and Maintain approval process for Approved Emergency Responders according to the Dangerous Goods Safety (Road and Rail Transport of Non-explosives) Regulations 2007.
Department of Primary Industry and Regional Development WA (DPIRD)	 a. To coordinate the appropriate response to any significant disruption to Primary Industry. b. To coordinate animal welfare in emergencies in line with the arrangements identified in the State Emergency Animal Welfare Plan.
Department of Transport (DoT) (Maritime Division)	 a. To be contactable on a 24/7 basis; b. Provide technical advice and resources support; c. Provide a representative to the HEAT, when requested or where the marine environment maybe affected; d. Provide advice to help identify the hazardous material or substance involved; e. Maintain a marine exclusion zone around the affected zone; f. Provide transport (air, sea) to support a response involving a marine HAZMAT emergency;

Organisation	Responsibilities (see State EM Plan Appendix E for full all-hazards roles and responsibilities)
	 g. Provision of advice on environmental monitoring subsequent to the spillage or release; h. Recover costs from polluter (as detailed in State Hazard Plan – Maritime Environmental Emergencies); i. Provide a written report and/or participate in post operation debriefs on the emergency, as required; and j. Assist with long term clean-up, when required.
Department of Water and Environmental Regulation (DWER)	 a. To be contactable and available on a 24/7 basis; b. Provide a representative to the HEAT; c. Provide, maintain and operate a mobile response vehicle, for the purpose of detecting and monitoring chemicals and particulates escaping into the environment during an emergency, on a 24/7 basis; d. Provide competent environmental response personnel as an on-scene HEAT representative; e. Provide environmental monitoring during the emergency response phase for off-site impacts in air and water and provide advice on the impacts to the IC, through the FLO, in writing using the proformas as agreed with the HMA; f. Provide advice on minimisation of impacts on the environment, including containment, confinement and clean-up, decontamination, minimisation of wastes, and waste disposal; g. Coordinate post-incident environmental sampling and provide interpretation of environmental monitoring data and results where required; and k. Provide a written report and/or participate in post operation debriefs on the emergency, as required.
Industry Owners and Operators	 a. To have available a well-documented and tested contingency plan for coping with HAZMAT emergencies occurring on their facility; b. To ensure employees have proper training and skills to handle on-site HAZMAT emergencies; c. To immediately advise the DFES Communications Centre via 000 of any emergencies involving HAZMAT occurred on their facility that require activation of State Hazard Plan – HAZMAT; d. To assist the emergency services in coping with a HAZMAT emergency caused by their facility either on-site or off-site by making available their own resources; e. To be contactable on a 24/7 basis; f. To provide specialist advice as required; g. To supply information on the availability and location of neutralising agents and associated special equipment for dealing with HAZMAT emergencies;

Organisation	Responsibilities (see State EM Plan Appendix E for full all-hazards roles and responsibilities)
	 h. To ensure recovery and/or safe disposal of any product residues after the scene has been rendered safe; i. To co-operate with their Local Emergency Management Committee (LEMC) by participating in the local planning process; j. To participate in mutual aid arrangements with other similar industries in the LG area; k. Provide a written report and/or participate in post operation debriefs on the emergency, as required; and l. Assist with long term clean-up, when required.
Local Government (LG)	 a. Maintain liaison with the HMA; b. Provide advice on LG drains, water and sewerage systems; c. Provide resources support at the request of the HMA; d. Provide advice through the local Environmental Health Officer (EHO); e. Provide a written report and/or participate in post operation debriefs on the emergency, as required; f. Develop a Local Recovery Plan in accordance with the <i>Emergency Management Act 2005</i>; g. Manage community recovery process in consultation with the HMA; and h. Coordinate long-term community recovery, in accordance with the Local Recovery Plan, when required. Note: The capability and commitment of each LG to undertake the tasks and meet the responsibilities identified in the State Plan should be confirmed by the HMA and detailed in the Local Hazard Emergency Plan. This will ensure the varying capabilities of individual LG are recognised and agreed to by all parties.
Other Support Organisations	 a. Attend at the emergency site when requested / required; b. Provide technical advice; c. Assist with the provision of resources / services; d. Assist in clean-up operations; e. Carry out statutory tasks;

Organisation	Responsibilities (see State EM Plan Appendix E for full all-hazards roles and responsibilities)
St John Ambulance Australia (Western Australia) Inc	 a. To attend at the site of a HAZMAT emergency and undertake obligations as per-the State Health Emergency Response Plan; b. Provide a representative to HEAT when required; c. Provide suitably qualified paramedics to assist the HMA, with the triage and extrication of casualties from the HOT zone; and d. Provide a written report and/or participate in post operation debriefs on the emergency, as required.
Water Corporation	 a. Be contactable on a 24/7 basis; b. Provide technical advice and resources support; c. Provide a representative to the HEAT, when requested, or where its services and operations may be affected; d. When requested, provide on-site representative for technical advice purposes and other such assistance that may be appropriate and available; e. Advise on water supply, drainage sewerage and large scale irrigation systems; f. Where requested assist with containment, clean-up and disposal of spillages; g. Provide a written report and/or participate in post operation debriefs on the emergency, as required; and; h. Assist with the long term clean-up, when required.
WA Police Force	 a. To assist the HMA in dealing with HAZMAT emergencies; b. Provide a representative to HEAT when required; c. Ensure a member from the Emergency Operations Unit (EOU) is contactable and available on a 24/7 basis; d. Assemble the SECG if required; e. In the absence of HMA, assume the role of IC, until such time as a DFES Officer arrives; f. Assist in the conduct of evacuations, traffic management and other response activities to protect the public, where safe to do so, on requested of the HMA; g. Investigate the cause of the emergency together with other agencies as appropriate; and h. Provide a written report and/or participate in post operation debriefs on the emergency, as required.

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TABLE 2 – RESPONSE FUNCTIONS COVERING CBR EMERGENCIES

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Organisation	Response Responsibilities (see State EM Plan Appendix E for full all-hazards roles and responsibilities)
Australian Government	 a. Emergency Management Capability. The Australian Government maintains a corresponding CBRN emergency management capability at the national level. This capability includes the preparation and maintenance of national DISPLANS, the provision of resources, and the Crisis Coordination Centre (CCC) operated by the Department of Home Affairs (DHA); and b. State Assistance. The Australian Government can provide support to the State in the event of a CBRN emergency.
ChemCentre WA	 a. Be contactable and available on a 24/7 basis; b. Provide a representative to the CBRTG as required; c. Provide, maintain and operate a mobile response laboratory, for the purpose of detecting, identifying, and monitoring hazardous materials or substances, involved in the C emergency on a 24/7 basis d. Provide competent chemical response personnel as an on-scene CBRTG representative; e. Provide competent on-site team leader (Field Liaison Chemist – FLC) an on-site specialist; f. When operating on-site, provide written advice/documentation to the IC, through the FLO, using the proformas as agreed with the HMA; g. Provide on-site HOT zone triage capability by providing a Lead Chemist (LC) and Sampling Chemist (SC) capable of entering the HOT zone, operating detection equipment, and collecting samples of CBR agents; h. Maintain DFES's detection/analytical equipment (as identified in the CCWA/DFES MOU); i. Provide appropriate sampling equipment with instructions for their use by DFES personnel, either for on-site incident management, or off-site environmental monitoring by DWER personnel; j. Provide information with respect to any potential chemical incompatibilities, methods of neutralization, including any reactivity's with any media used to control the CBR agents; k. If required, confirm adequacy of decontamination procedures applied to equipment and personal protective equipment l. Sample for additional evaluation at ChemCentre WA and/or arrange sample transport/analysis by the Defence Science and Technology Group Organisation (DSTG) to confirm identity of traditional chemical

Organisation	Response Responsibilities (see State EM Plan Appendix E for full all-hazards roles and responsibilities)
	 weapons; m. Perform HOT zone sampling for Biological agents using agreed protocols for subsequent Biological agent identification by PathWest; n. Maintain chain of evidence and procedural protocols for WA Police forensics; o. Provide information on the hazard; p. Monitor until danger has passed; q. Provide backup radiation detection support if required; and r. Provide a written report and/or participate in post operation debriefs on the emergency, as required.
Department of Communities	a. Provide emergency relief and support services to the community in line with the State Support Plan – Emergency Relief and Support
Department of Fire and Emergency Services (DFES)	 a. Ensure a Special Operations Advisor (SOA) and a Field Liaison Office (FLO) is available and contactable on a 24/7 basis; b. Provide State representation at the national level covering consequence management of CBR; c. Provide a member to the CBRTG, as required; d. Assist CCWA personnel with respect to site entry, sample collection and agent identification; e. Assist ambulance personnel with respect to site entry, patient triage, treatment and rescue; f. Undertake mass decontamination procedures, as required; g. Provide direction for evacuation or Shelter-in-Place, as required; h. Coordinate resources and services; i. Provide on-site assessment in association with CCWA, as required; j. Provide reports to the National CBRN database; and k. Media management and coordination support.
Department of Health (WA Health)	 a. Coordinate the overall health response; b. Provide medical support to people affected by CBR agents; c. Protect health facilities from contamination; d. Provide prophylaxis to those exposed, including first responders and other emergency staff;

Organisation	Response Responsibilities (see State EM Plan Appendix E for full all-hazards roles and responsibilities)
	 e. Provide a 24/7 contact for an Environmental Health Officer; f. Provide a 24/7 contact for a Toxicologist; g. Provide a 24/7 contact for Radiation Health; h. Provide a 24/7 contact for a Microbiologist; i. Provide advice and information in the case of emergencies involving radioactive [orpotentially radioactive] hazards:
	 i. Provide a representative to the CBRTG, when required; ii. Monitor the radioactive environment and define contaminated areas; iii. Provide laboratory analysis of air, water, food and fodder samples; iv. Establish and direct measures to mitigate the radiological impact on public health; v. Establish human exposure criteria and assess the public health impact of radiation levels; vi. Recommend measures to limit the spread of radioactive contamination; vii. Direct and assist in collection of ingestion pathway samples; viii. Establish procedures and make recommendations for the use of substances to prevent or reduce the effects of contamination; and ix. Advise and assist on decontamination measures.
	 j. Provide advice and information in the case of emergencies involving biological [or potentially biological] hazards Provide guidance to emergency services on microbiology specimen collection and other methods to assess the biohazard; Confirm the presence of a potential biohazard by detection in appropriate specimens using methods consistent with national best practice; Comply with WA Police Force and/or forensic investigations to maintain the chain of evidence using protocols developed by WA Police Force forensic division; Provide guidance on the level of biohazard where this can be determined from laboratory results; Provide information on the implications for biohazard containment; Provide a representative to the CBRTG when required;

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Organisation	Response Responsibilities (see State EM Plan Appendix E for full all-hazards roles and responsibilities)
	 vii. Provide and maintain appropriate protective equipment for entry into a biohazard contaminated site; viii. Provide surveillance or monitoring appropriate to the identified biohazard until danger has passed; and I. To develop and maintain laboratory tests for detection of biohazard agents consistent with national best practice.
Department of Transport (DoT)	a. Provide emergency transport (public).
Department of Water and Environmental Regulation (DWER)	 a. Be contactable and available on a 24-hour basis; b. Provide a representative to the CBRTG as required; c. Provide and maintain trained personnel in the use of appropriate protective equipment for entry into the contaminated zone, if required; d. Assist to identify zones of contamination; e. Carry out perimeter air and water monitoring and sampling; f. Identify resources required for decontamination of the environment and clean up; g. Recommend measures to limit the spread of contamination; h. Advise and assist DFES on environmental decontamination measures; i. Advise with respect to disposal of contaminated materials; and j. Provide backup radiation detection support, if required.
Local Government (LG)	 a. Maintain liaison with the HMA; b. Provide advice on LG drains, water and sewerage systems; c. Provide resources support at the request of the HMA; d. Provide advice through the local EHO; e. Provide a written report and/or participate in post operation debriefs on the emergency, as required; f. Develop a Local Recovery Plan in accordance with the <i>Emergency Management Act 2005</i>; g. Manage community recovery process in consultation with the HMA; and

Organisation	Response Responsibilities (see State EM Plan Appendix E for full all-hazards roles and responsibilities)
Other Support	 h. Coordinate long-term community recovery, in accordance with the Local Recovery Plan, when required. a. Attend at the emergency site when requested / required;
Organisations	 b. Provide technical advice; c. Assist with the provision of resources / services; d. Assist in clean-up operations; and e. Carry out statutory tasks.
St John Ambulance Australia (Western Australia) Inc	 a. To activate the St John Ambulance Australia (Western Australia) Inc. Emergency Management Plan (AmbPlan-WA) which provides for pre-hospital mass triage, pre-hospital care and the transport of casualties to hospital; b. Provide suitably qualified paramedics to assist DFES with the triage and extrication of casualties from the HOT zone of a CBR incident, where appropriate; c. Administer basic treatment to casualties in the HOT zone, including the use of antidotes, and where appropriate, authorized by the State Health Coordinator (SHC); d. Assist DFES staff with the decontamination of casualties and provide patient treatment; e. Provide Level B protective equipment to Paramedic Special Operations staff appropriate for CBR agents where atmospheric concentrations and/or splash risk aremoderate to low, easily controlled or not likely to change rapidly; and f. Transport of casualties from the Casualty Clearing Post (CCP) to the appropriate hospital facility as directed by the Ambulance Network Coordinator or the State Health Incident Coordination Centre (SHICC).
Water Corporation	 a. Be contactable on a 24/7 basis; b. Provide a representative to the CBRTG as required; c. For emergencies impacting Water Corporation assets, activate the joint agency coordination team (WA Health and Water Corporation) – manage in accordance with the Joint Agency Contingency Plan. d. Provide advice on water supply, drainage sewerage and public irrigation systems; and e. Ensure security of Water Corporation assets.

Organisation	Response Responsibilities (see State EM Plan Appendix E for full all-hazards roles and responsibilities)
WA Police Force	 a. Incident Control, where agreed between the FES Commissioner and Commissioner of Police; b. Provide security, threat assessments (where possible); c. Provide site security where appropriate (dangerous persons, explosives and CBR dissemination or dispersal devices); d. Traffic and crowd control; e. Investigations, forensics, evidence collection; f. Registration of casualties; and f. Fatalities (Disaster Victim Identification protocols).

APPENDIX D: HAZMAT EMERGENCY ADVISORY TEAM (HEAT)

Role

To assist with the management of the HAZMAT emergencies.

Functions

- a. Assist with identification of the hazardous materials or substances;
- b. Provide technical advice;
- c. Advise the IC on:
 - i. the nature of the hazards (to people, property and the environment);
 - ii. potential impacts;
 - iii. the level of protection for responders;
 - iv. evacuation requirements and distances required;
 - v. neutralising agents; and
 - vi. recovery measures.
- d. Advise Media Liaison Representatives from either DFES or the WA Police Force;
- e. Advise the IC when the situation can be declared safe, and stand down procedures commence;
- f. Contribute to the debrief session before leaving;
- g. Provide a detailed briefing to the Local Recovery Coordination Group, if required;
- h. Collect information with respect to their own agencies statutory functions; and
- i. Have input into a PIA.

Composition

a. Core members

- i. Department of Fire and Emergency Services;
- ii. ChemCentre WA;
- iii. Department of Water and Environment Regulation;
- iv. Department of Health, Environmental Health;
- v. Department of Mines, Industry Regulation and Safety, Dangerous Goods and Critical Risks Directorate; and
- vi. WA Police Force.

b. Non-Core members

- i. Water Corporation;
- ii. Department of Transport, Maritime Division;
- iii. Department of Mines, Industry Regulation and Safety, (Worksafe);
- iv. St John Ambulance Australia (WA) Inc; and
- v. Department of Health, Radiation Health.

NOTE: Core members are required to attend all emergencies when HEAT is activated. Non-core members attend as requested.

c. Other HEAT members

 DFES GIS. Mapping support can be provided through the DFES Spatial Services Unit. The on-call Duty Mapping Officer (DMO) provides out of hours support under State Operations Centre arrangements and can be contacted as per DFES Weekly State Duty Roster. ii. Co-opted members for HEAT. Representatives from other agencies or departments may be coopted to serve on the HEAT, e.g. Main Roads WA. Depending on the situation other specialist advisors such as local Shire or industry representatives may also be co-opted as determined by the Incident Controller and the HEAT.

HEAT Deployment

Upon advice from the designated DFES Officer, HEAT will either proceed to the HEAT meeting room at the Emergency Services Complex, Cockburn Central, or on scene according to agreed response protocols and needs of the incident.

APPENDIX E: CBR TECHNICAL GROUP (CBRTG)

Role

To assist HMA or controlling agency in the consequence management of a CBR emergency.

Responsibilities

- a. Assist with identification of the CBR agent;
- b. Provide technical advice;
- c. Advise on-site operations and the IC on:
 - i. the nature of the hazards (to people, property and the environment);
 - ii. potential impacts;
 - iii. the level of protection for personnel involved in HOT zone entry;
 - iv. evacuation requirements and distances required;
 - v. mass decontamination requirements;
 - vi. agent monitoring;
 - vii. monitor safety of the WA Police Force evidence collection and forensic requirements;
 - viii. ensure adequate sampling of any CBR agent for evidence collection;
 - ix. determine needs for support technical equipment as may be needed from the Commonwealth;
 - k. liaise with other specialist groups as required (e.g. WA Police Force Bomb Squad or Forensic Teams);

- xi. liaise with Commonwealth expertise as may be available;
- xii. use of neutralizing, disinfection or fixing agents;
- xiii. assist with determination for a handover of a safe site for WA Police Force entry; and
- xiv. provide advice with respect to recovery measures, if required;
- d. Identify from the WA Police Force any law enforcement issues and their requirements, covering:
 - i. dangerous persons;
 - ii. unexploded devices;
 - iii. apprehension of perpetrators;
 - iv. forensics;
 - v. evidence collection, sampling, chain of evidence; and vi. fatalities;
- e. Advise Media Liaison Representatives to ensure the accuracy of technical information and correct misinformation, as required;
- f. Assist with the preparation of public information messages, as required;
- g. Ensure accuracy of technical advice to ensure accurate briefings to the senior management, SECG, Government and the IC;
- h. Determine acceptable standards for clean-up where existing standards are not available;
- i. Advise HMA or controlling agency when the site can be declared safe;

- j. Remain available until the emergency is over, or ensure backup support and handover for a prolonged emergency situation;
- k. Support the HMA or Controlling Agency, as required, for debriefing and the initiation of recovery processes;
- I. Have input into a Post Incident Analysis or Major Incident Review; and
- m.Assist the WA Police Force or any other relevant agency with follow-up investigations.

Composition

- a. Core members of CBRTG are:
 - i. WA Police Force; and
 - ii. DFES, Special Operations.
- b. *Non-core members*. Other agencies will be called upon, as required. These may include WA Health, CCWA, PathWest, Radiation Health, DWER, SJA and Water Corporation.
- c. Other Group members
 - i. Mapping support can be provided through the DFES Spatial Services Unit. The on-call Duty Mapping Officer (DMO) provides out of hours support under State Operations Centre arrangements and can be contacted as per DFES Weekly State Duty Roster.
 - ii. DFES clerical records support.

CBRTG Deployment

Upon notification the CBRTG will proceed to the nominated briefing room.

Further CBRTG operational arrangements

- a. The CBRTG will operate under the same guidelines as the HEAT). The DFES Special Operations Advisor (SOA) is responsible for the management of the group, while the Field Liaison Officer (s) (FLO) will attend the incident scene and serve as the communication link for on-site operations.
- b. Agencies which provide an on-scene response to this must only liaise through the FLO while on-scene, and must ensure another representative is provided to the assembled CBRTG.
- c. The CBRTG does NOT have the same representation as the HEAT.
- d. Essential requirements for CBRTG representation include:
 - i. Understanding emergency management arrangements in State Hazard Plan - Terrorist Act and State Hazard Plan - HAZMAT;
 - ii. Recognised qualification or experience in CBR for their role; and
 - iii. To be available 24/7.

APPENDIX F: HAZMAT COORDINATING COMMITTEE (HCC)

Established by Cabinet 8 May 1989. It reports to to the State Emergency Management Committee (SEMC).

The role of the HCC

To provide advice and support to the SEMC, Government agencies, industry, commerce and the community to ensure an efficient emergency management capability for hazardous materials emergencies, in the State of Western Australia.

The terms of reference of the HCC are:

- a. Assist the HMA to develop, maintain, monitor and test State Hazard Plan – HAZMAT.
- b. Keep SEMC informed about the State's emergency management capability as it pertains to HAZMAT.
- c. Review incidents to make recommendations in respect to the prevention of, preparedness for, response to and recovery from HAZMAT emergencies.
- d. Provide a multi-agency forum for:
 - i. The resolution of issues associated with HAZMAT emergency management arrangements; and
 - ii. To assist in the development of HAZMAT policy for SEMC.
- e. To raise awareness and provide advice to agencies and the broader community about emergency management arrangements with respect to HAZMAT.

The composition of the HCC is:

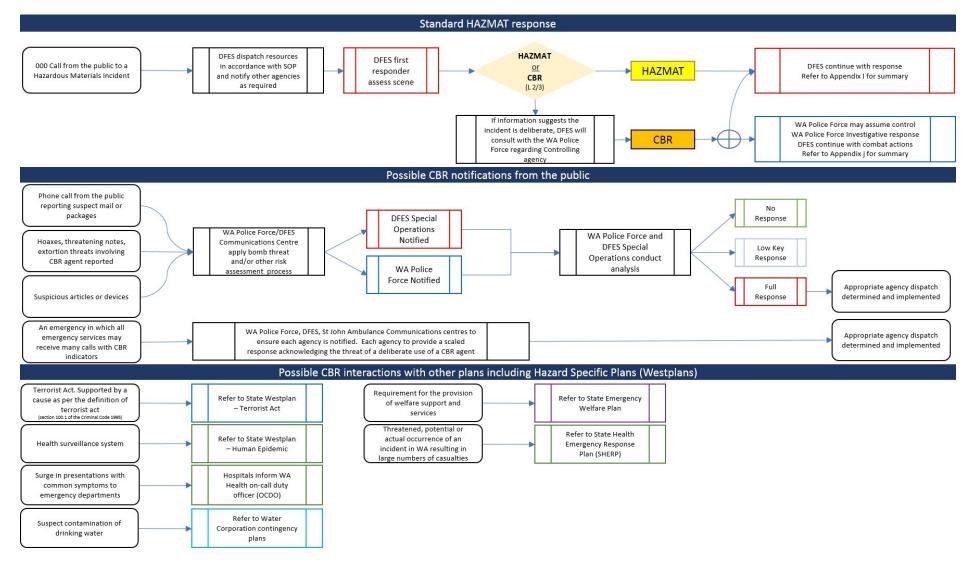
- a. Department of Fire and Emergency Services (DFES), Operations (Chair);
- b. Australian Association of Port and Marine Authorities;
- c. Chamber of Commerce and Industry of WA;
- d. ChemCentre WA;
- e. Department of Mines, Industry Regulation and Safety (DMIRS). One (1) representative from Dangerous Goods and Critical Risks Directorate and one (1) from Worksafe;
- f. Department of Water and Environmental Regulation (DWER);
- g. Department of Health, Environmental Health Directorate and Disaster Preparedness and Management Unit (DMPU);
- h. Department of Transport, Marine Safety Branch;
- i. DFES, Operations Capability (including Committee Secretariat);
- j. Water Corporation;
- k. WA Police Force;
- I. Western Australian Local Government Association; and
- m.Arc Infrastructure (Rail).

The HCC shall meet biannually, or as required.

For CBR related agenda items, the committee composition may from time to time invite representation from:

- a. Australian Defence Force (ADF);
- b. Australian Federal Police (AFP);
- c. Department of Primary Industries and Regional Development (DPIRD);
- d. St John Ambulance Australia (Western Australia) Inc (SJA);
- e. The Western Australian Centre for Pathology and Medical Research (PathWest);

APPENDIX G: NOTIFICATION



APPENDIX H: HAZMAT/CBR HANDOVER BRIEFING

	Handover	Briefing					REPORTING RHY	THM:	
Incident HMA/ Incid Type/Name: Controller:	ent Operational Period From To	Function:	Time/Date Completed:	Sequence No:		 SIT REPS: 			
Area of Operations:	Date:	WebEOC Refe	erence:			 BRIEFINGS 			
HANDOVER: FF	OM:	TO:				RESOURCES:			
(OUTGOING)						 COMMITTEE):		
IC OR PC									
DEPUTY						 FUTURE RE 	SOURCE EXPECTAT	IONS:	
PLANNING						OUTSTANDING	ACTIONS:		
LOGISTICS									
OPERATIONS						OTHER:			
SAFETY									
COMMUNICATIONS						LIST OF ATTAG	CHMENTS:		
PUBLIC INFORMATION									
INVESTIGATIONS									
INTELLIGENCE									
RECOVERY									
CURRENT INCI	ENT STATUS:]		SIGN: FROM:		SIGN TO:	
OBJECTIVES/C	OMMANDERS INTENT	:				TIME:D/	ATE:	TIME:	DATE:
CRITICAL ISSU	ES / RISKS / IMPACTS	:							
 TO BE CONS 	IDERED:								
 TO BE ADDR 	ESSED:								
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APPENDIX I: HAZMAT RESPONSE FUNCTIONS BY AGENCY

Agency Function	Department of Fire & Emergency Services	WA Police Force	ChemCentre	Department of Mines, Industrial Regulation and Safety	Department of Water and Environmental Regulation	HAZAMT Emergency Advisory Team	St John Ambulance	Department of Health	Department of Communities	Spill Generator (Approved responders for transport emergencies)	Material or land owner, State or Local Government
Incident control	•	Emergency Coordination						◆ Public health advice			
Incident assessment	٠		♦ Includes Chemical Identification	♦ Includes Dangerous Goods Risk	Includes Environmental Impact	Refer to Appendix D					
Rescue	•						Emergency medical services	Emergency medical services			
Firefighting HAZMAT combat	•							◆ Radiation monitoring			
Communication coordination	•										
Evacuation	•	♦ Assist	Advice to IC	Advice to IC	Advice to IC	Advice to IC			State Emergency Welfare Plan		
Safety advice	•		•	◆ Occupational exposure Worksafe	•	•					
Public information	•		Advice to IC	Advice to IC	Advice to IC	Advice to IC		Advice to IC			
Resource management	•										
Welfare of responders	•										
Decontamination of casualties	♦ Onsite		◆ PPC/E decontamination advice and testing					♦ Hospital			
Recovery	Activation				•					◆ Clean up	◆ Clean up

Items in blue are the HMA roles and responsibilities. Items in black are supporting activities as detailed in appendix C, response roles and responsibilities

ANNEX A – NUCLEAR POWERED WARSHIP (NPW)

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ANNEX B – SPACE RE-ENTRY DEBRIS (SPRED)

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