

**STATE
LUCAS HEIGHTS EMERGENCY
SUB PLAN**

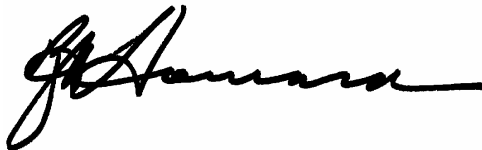
TITLE:

STATE LUCAS HEIGHTS EMERGENCY SUB PLAN

AUTHORITY:

The Lucas Heights Emergency Sub Plan has been prepared by the State Emergency Management Committee in compliance with the State Emergency and Rescue Management Act, 1989 (as amended), Section 23 (1).

APPROVED

A handwritten signature in black ink, appearing to read "J. Howard", is written over a light gray rectangular background.

.....
**Chairperson
State Emergency Management Committee.**

Dated: 17/11/2005

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DEFINITIONS

Absorbed Dose

means the energy imparted by ionising radiation per unit mass of irradiated material. The unit of absorbed dose is the gray (Gy). (Source: The Health Physics and Radiological Health Handbook)

Act

means the State Emergency and Rescue Management Act, 1989 (as amended). (SERM Act).

Agency

means a government Agency or a non-government Agency (Source: SERM Act).

Avertable Dose

means the dose to be saved by a protective action; that is, the difference between the dose to be expected with the protective action and that to be expected without it (Source: IAEA Basic Safety Standard – Safety Series No. 115)

Buffer Zone

is an area in which no permanent residential accommodation is allowed (NSW Health Strategy for Off-site Iodine Distribution). This is approximately 1.6 km radius from the reactor.

Control

means the overall direction of the activities, agencies or individuals concerned. Control operates horizontally across all agencies / organisations, functions and individuals. Situations are controlled.

Coordination

means the bringing together of agencies and individuals to ensure effective emergency or rescue management, but does not include the control of agencies and individuals by direction. (Source: SERM Act).

Defence-in-Depth

means the application of more than a single protective measure for a given safety objective such that the objective is achieved even if one of the protective measures fail (Source: IAEA Basic Safety Standards)

Deterministic Effect

means a radiation effect for which generally a threshold level of dose exists above which the severity of the effect is greater for a higher dose (Source: IAEA Basic Safety Standard – Safety Series No. 115)

Displan

In this plan means the NSW State Disaster Plan. The object of Displan is to ensure the coordinated response to emergencies by all agencies having responsibilities and functions in emergencies. (Source: SERM Act).

District Emergency Management Committee (DEMC)

In this plan means the Committee, constituted under the Act, which at District level is responsible for preparing plans in relation to the prevention of, preparation for, response to and recovery from emergencies in the District (District Displan), for which it is constituted. In the exercise of its functions, this committee is responsible to the State Emergency Management Committee (SEMC). (Source: SERM Act).

District Emergency Operations Controller (DEOCON)

means the Commissioner of Police is to appoint a District Emergency Operations Controller for each district who is to be a police officer holding the position of Region Commander. (Source: SERM Act)

Emergency

means an emergency due to the actual or imminent occurrence (such as fire, flood, storm, earthquake, explosion, terrorist act, accident, epidemic or warlike action) which:

- (a) endangers, or threatens to endanger, the safety or health of persons or animals in the State; or
- (b) destroys or damages, or threatens to destroy or damage, any property in the State,

being an emergency which requires a significant and co-ordinated response.

For the purposes of the definition of emergency, property in the State includes any part of the environment of the State. Accordingly, a reference in the Act to:

- (a) threats or danger to property includes a reference to threats or danger to the environment,
- (b) the protection of property includes a reference to the protection of the environment.

Emergency Operations Centre (EOC)

means a centre established at State, District or Local level as a centre of communication and as a centre for the coordination of operations and support during an emergency. (Source: SERM Act).

Evacuation

is a risk management strategy that may be used as a means of lessening the effects of an emergency or impact event on a community. It functions by removing people from the effects of the event, using distance as a protective measure. The following stages form the evacuation process:

1. Decision to evacuate
2. Warning
3. Withdrawal
4. Shelter
5. Return.

Evacuation Centre

means a centre established to meet the immediate needs of victims following an emergency situation. This may include travellers (commuters and tourists), who are unable to complete their journey.

Evacuation Zone (EZ)

in this plan, an area approximating a 3-kilometre radius from the LHSTC as defined under additional Safety Element No 2 of the NSW Health Strategy for Off-site Iodine Distribution. It is a combination of the Buffer Zone and the UPZ.

Functional Area Coordinator (FAC)

in this plan means the nominated coordinator of a Functional Area, tasked to coordinate the provision of Functional Area support and resources for emergency response and recovery operations, who, by agreement of Participating and Supporting Organisations within the Functional Area, has the authority to commit the resources of those organisations (Source: Displan)

Group of Primary Interest

elements within the community that are considered the most at risk group with respect to the recommended generic intervention level of 10 milliGray avertable dose to the thyroid. These elements are:

- a. neonates and children to 3 years of age, pregnant and lactating women;
- b. children between 3 & 12 years of age;
- c. adolescents between 13 and 18 years of age.

Incident

means a localised event, either accidental or deliberate, which may result in injury or death or damage to property, which requires a normal response from an agency, or agencies.

Joint Media Information Centre (JMIC)

In this plan means a centre established by a combat agency or emergency operations controller consisting of media officers from the main participating organisations of a multi-agency operation.

Liaison Officer (LO)

in this plan means a person, nominated or appointed by an organisation or functional area to represent that organisation or functional area at a control centre, emergency operations centre or coordination centre. A liaison officer maintains communications with and conveys directions/requests to their organisation or functional area and provides advice on the status, capabilities, actions and requirements of their organisation or functional area. A liaison officer must have the authority to commit the resources of their organisation or functional area.

Milli grays (mGrays)

Is an absorbed dose measured in Grays (Gy). The milliGray is more commonly used. One Gray corresponds to one joule of radiation energy deposited in one kilogram of matter. (Source: NSW Health Strategy for off-site Iodine Distribution).

Precautionary Action Zone (PAZ)

in this plan, is the LHSTC together with the construction site for the replacement research reactor. PAZ is a pre-designated area around a facility where urgent protective actions have been pre-planned and will be implemented immediately upon declaration of a general emergency. The goal is to substantially reduce the risk of deterministic health effects by taking protective action before a release. (Source: ARPANSA Technical Report 136 – May 2004)

Preparation

in relation to an emergency includes arrangements or plans to deal with an emergency or the effects of an emergency. (Source: SERM Act).

Prevention

in relation to an emergency includes the identification of hazards, the assessment of threats to life and property and the taking of measures to reduce potential loss to life to life and property. (Source: SERM Act).

Protective Measures

protective measures are designed to ensure that the radiation doses to individuals or to a collective population are minimised.

Recovery

in relation to an emergency includes the process of returning an affected community to its proper level of functioning after an emergency (Source: SERM Act). This includes the welfare of affected persons as well as the physical reconstruction of the community.

Recovery Centre

provides a multiplicity of services in one location. This removes the necessity for victims to seek services at several venues and eliminates the duplication of services provided to individuals and families. It also aids in the coordination of human services.

Response

in relation to an emergency includes the process of combating an emergency and of providing immediate relief for persons affected by an emergency. (Source: SERM Act).

State Emergency Management Committee (SEMC)

means the committee constituted under the State Emergency and Rescue Management Act, 1989 (as amended), as the principal committee established under this Act for the purposes of emergency management throughout the State, and, in particular, is responsible for emergency planning at a State level.

State Emergency Operations Controller (SEOCN)

means the person appointed by the Governor, on the recommendation of the Minister, responsible, in the event of an emergency which affects more than one district, for controlling the allocation of resources in response to the emergency. The State Emergency Operations Controller is to establish and control a State Emergency Operations Centre. (Source: SERM Act).

Sub Plan

in this plan means an action plan required for a specific hazard, critical task or special event. It is prepared when the management arrangements necessary to deal with the effects of the hazard, or the critical task or special event differ from the general coordination arrangements set out in the main or supporting plans for the area.

Urgent Protective Action (Planning) Zone (UPZ)

in this plan is the area extending out from the Precautionary Action Zone to a radius of 3 km (referenced as ANSTO site Zone 2 on the map, Current Proposed Zoning Buffers, in the NSW Health Strategy for off-site Iodine distribution). The UPZ is a pre-designated area around the facility where preparations are made to promptly implement urgent protective measures based on environmental monitoring. (Source: ARPANSA Technical Report 136 – May 2004).

ABBREVIATIONS

ADF	Australian Defence Force
ASNSW	Ambulance Service of NSW
ANSTO	Australian Nuclear Science & Technology Organisation
ARPANSA	Australian Radiation Protection and Nuclear Safety Agency
BoM	Australian Bureau of Meteorology
DEC	Department of Environment and Conservation (NSW)
DEMC	District Emergency Management Committee
DEOC	District Emergency Operations Centre
DEOCON	District Emergency Operations Controller
Displan	NSW State Disaster Plan
EOC	Emergency Operations Centre
EZ	Evacuation Zone
HIFAR	High Flux Australian Reactor
HSFAC	Health Services Functional Area Coordinator
IAEA	International Atomic Energy Agency
JMIC	Joint Media Information Centre
LEMC	Local Emergency Management Committee
LHESP	Lucas Heights Emergency Sub Plan
LHSTC	Lucas Heights Science and Technology Centre
LLWP	Local Liaison Working Party
LO	Liaison Officer
NSWFB	New South Wales Fire Brigades
NSWRFS	NSW Rural Fire Service
PAZ	Precautionary Action Zone
PGI	Primary Group of Interest
SEMC	State Emergency Management Committee
SEOC	State Emergency Operations Centre
SEOCON	State Emergency Operations Controller
SES	State Emergency Service
SOP	Standing Operating Procedures
UPZ	Urgent Protective Action (Planning) Zone

Part 1 - INTRODUCTION

PURPOSE

101. This Plan details arrangements for responding to advice that there is a loss of control with the potential for or actual release of radioactive material from the Lucas Heights Science and Technology Centre (LHSTC).

BACKGROUND

102. Background
- a. Due to the safety systems employed within the LHSTC the risk of an uncontrolled radiation leak is regarded as low.
 - b. Advice from ANSTO and ARPANSA is that an uncontrolled radiation leak with off site consequences is extremely unlikely.
 - c. While the current arrangements are considered to be appropriate, three additional safety elements are included:
 - i. Adopting the World Health Organisation's recommended generic intervention level of 10 mGy avertable dose to the thyroid for adolescents (less than 18 year olds) children, infants, neonates, pregnant and lactating women;
 - ii. Extending the Urgent Protective Action (Planning) Zone (UPZ) from 2.5 km to 3 km; and
 - iii. Adopting a policy of evacuating out to 3 km from HIFAR.
 - d. Stable iodine will be available at all evacuation centres for protection from radioactive iodine if necessary.
 - e. More detailed background information is provided in the NSW Health Counter Disaster Unit Paper entitled "The ANSTO Research Reactor Lucas Heights – Strategy for off-site iodine distribution", which is available on the NSW Health website- www.health.nsw.gov.au/pubs/a/pdf/ansto.pdf

OBJECTIVES

103. The objectives of this plan are to define:
- a. roles and responsibilities;
 - b. control, coordination and liaison arrangements;
 - c. arrangements for the acquisition and co-ordination of resources;
 - d. public information arrangements and public education responsibilities;
 - e. public warning systems and responsibility for implementation; and
 - f. arrangements for the review, testing, evaluation and maintenance of this plan.

PLANNING ZONES

104. This plan covers the Evacuation Zone (EZ) which is a combination of the Buffer Zone and the UPZ. The evacuation of persons from the Precautionary Action Zone (PAZ) is the responsibility of ANSTO.
105. A map of the EZ is at Annex A.

PLANNING ASSUMPTIONS

106. The likelihood of an incident requiring intervention with iodine is extremely remote.
107. Deterministic effects should never be reached.
108. The recommended generic intervention level of 100mGy averted thyroid dose for adults will not be reached and as such, adults, other than pregnant and lactating women, will not require iodine prophylaxis, in any circumstances, beyond the LHSTC fence line.
109. An accepted generic intervention level of 10mGy averted dose to the thyroid in neonates, infants, children, adolescents and pregnant and lactating women could theoretically be reached but only with prolonged exposure (greater than 12 hours).
110. In the unlikely event of a worst case scenario where 10mGy averted dose to the thyroid could be reached, reducing the exposure period, and or removing people from downwind of the source will obviate the need for iodine prophylaxis
111. ANSTO's analysis of historic weather conditions and associated plume modelling indicate that it is highly unlikely that the entire area of the Evacuation Zone would ever need to be evacuated.

112. ANSTO will provide SEOCON with ongoing advice of the risk of any radiation leak.

SCOPE

113. The plan covers the following:
- a. Consideration of and determination to evacuate areas within the EZ;
 - b. the distribution and administration of iodine (if necessary); and
 - c. community education.
114. ANSTO and ARPANSA advise that the planned evacuation area will address many possible scenarios with the consequences of a radiation leak, including a terrorist act..
115. Arrangements for the response to incidents at ANSTO/LHSTC without off-site consequences are contained in the "ANSTO Response Plan for Accidents / Incidents at ANSTO / LHSTC".

METEOROLOGICAL CONDITIONS

116. A weather station is located at LHSTC, which provides information to the Bureau of Meteorology (BoM).
117. In the unlikely event of an actual or potential accidental release of radioactive materials, the prevailing meteorological conditions such as wind speed and direction and the stability or turbulence of the lower atmosphere, will have a significant effect on the spread and the downwind concentration of the radioactive materials.
118. ANSTO modelling indicates that 10 mGy thyroid dose levels beyond 1.6 km could only be obtained under weather conditions which keep the radioactive material concentrated in the airborne plume. These weather conditions of low wind speed and very stable atmosphere (Pasquill stability category "E" or "F") typically only occur during night-time inversion conditions during autumn and winter.

AREA COVERED BY PLAN

119. This plan covers the area from the LHSTC perimeter to a radius of 3 km (Evacuation Zone).
120. The New Illawarra Road is the only access to LHSTC and is subject to heavy traffic from both the East and West particularly in peak periods. Early and effective control of the road will be essential to the success of any evacuation and must be included in District level planning.
121. Vulnerable communities and facilities are to be identified in the District LHESP.

SUPPORTING PLANS AND SUB PLANS

122. Relevant plans to the LHESP include:
- a. State Disaster Plan and its supporting plans;
 - b. State Hazmat Plan;
 - c. Georges River District Disaster Plan;
 - d. Georges River Emergency Management District Lucas Heights Emergency Evacuation Sub Plan;
 - e. Sutherland Shire Local Disaster Plan; and
 - f. ANSTO Response Plan to Accidents / Incidents at ANSTO / LHSTC

TEST AND REVIEW OF PLAN

123. The Plan is to be reviewed by the State Emergency Management Committee at least every five years, with reviews of relevant aspects to be carried out following exercises, emergencies, changes to legislation or changes to the present planning parameters, eg when the replacement research reactor is commissioned.

Part 2 - ROLES AND RESPONSIBILITIES

GENERAL

200. This Part describes the roles and responsibilities of Emergency Services, Functional Areas and other organisations in response to a direction from SEOCON to evacuate or part evacuate the Evacuation Zone (EZ).

PARTICIPATING AND SUPPORTING ORGANISATIONS

State Emergency Operations Controller

201. The State Emergency Operations Controller (SEOCON) is to:
- a. On notification by ANSTO, obtain advice from other agencies;
 - b. Assess the level of threat to areas surrounding the evacuated areas and determine what actions are to be taken; and
 - c. Direct the evacuation of areas within the EZ at risk of radiation exposure.

District Emergency Operations Controller

202. The District Emergency Operations Controller (DEOCON) is to control the evacuation of the area directed by SEOCON.

Georges River DEMC

203. Tasks:
- a. develop plan for an evacuation of the Evacuation Zone;
 - b. develop warning systems; and
 - c. establish a Public Education Sub Committee.

NSW Police

204. Tasks:
- a. Control area and traffic, in particular New Illawarra Road, Heathcote Road and Princes Highway area;
 - b. Assist DEOCON to evacuate areas within the Evacuation Zone;
 - c. Deliver warnings; and
 - d. Secure evacuated areas.

Ambulance Service of NSW

205. Tasks:
- a. Assist with the provision of transport to those within the EZ area to be evacuated requiring assistance; and
 - b. Undertake other duties as directed by the State Health Services Functional Area Coordinator (HSFAC).

NSW Fire Brigades

206. Tasks:
- a. Place Fire Brigades resources, including Hazmat units on standby as required;
 - b. Facilitate tasks as outlined in associated plans;
 - c. Assist DEOCON and Police as required; and
 - d. Monitor, assess and provide decontamination facilities as required.

NSW State Emergency Service

207. Tasks:
- a. Assist DEOCON and Police as required.

NSW Rural Fire Service

208. Tasks:
- a. Assist DEOCON and Police as required.

Agriculture and Animal Services

209. Tasks:
- a. Provide facilities for pets and companion animals at evacuation centres; and
 - b. Provide animal care services for wildlife, domestic animals and companion animals evacuated or retrieved from the affected area.

Environmental Services

210. Tasks:
- a. Advise SEOCON on the need to evacuate;
 - b. Provide technical advice and support as requested by the Hazmat Controller and the Emergency Operations Controller in accordance with Hazmat Plan;
 - c. Provide liaison officers to the Hazmat Controller, Site Controller, and SEOCON and any other designated control facility as requested;
 - d. Coordinate decontamination and cleanup operations with assistance of NSW Fire Brigades, ARPANSA and ANSTO (on request); and
 - e. Provide advice to the SEOCON on the monitoring of environmental contamination.

Health Services

211. Tasks:
- a. Provide iodine as required at evacuation centres and administer if directed to do so by the HSFAC;
 - b. Arrange for first aid and counselling support at evacuation centres;
 - c. Ensure facilities under NSW Health management are aware of their responsibilities under this plan;
 - d. When necessary, provide iodine to Emergency workers who are entering the EZ; and
 - e. Provide advice on the health risk associated with any levels of radioactivity and residual contamination.

Transport Services

212. Tasks:
- a. Provide transport for evacuees and if required, emergency workers.

Public Information Services

213. Tasks:
- a. Assist in the development of warning systems;
 - b. Coordinate the delivery of warnings and public information via media outlets;
 - c. Set up Joint Media Information Centre (JMIC) where required; and
 - d. Assist with the development and implementation of a Public Education program.

Disaster Recovery Human Services

214. Tasks:
- a. Establish and manage evacuation centres at the direction of DEOCON; and
 - b. Provide welfare support as required

Sutherland Shire Council

215. Tasks:
- a. Assist with the identification of vulnerable facilities and communities;
 - b. Assist in the development and delivery of the Public Education program for the area;
 - c. Assist in warning residents that an evacuation is required; and
 - d. Assist in managing evacuation centres if requested to do so by the Disaster Recovery Human Services Functional Area Coordinator.

Local Liaison Working Party (LLWP)

216. The LLWP is a planning committee with no operational role. Its tasks are to:
- a. Promote awareness of the Lucas Heights Emergency Arrangements in consultation with the Georges River Public Education Sub Committee;
 - b. Assist the Georges River Public Education Sub Committee to develop a public education program;
 - c. Report to the Georges River District Emergency Management Committee; and
 - d. Ensure liaison occurs between Commonwealth and State agencies.

ANSTO

217. Tasks:
- a. Notify SEOCON and NSW Fire Brigades 000 of any accidents where there is a loss of control with the potential for or actual release of radioactive material;
 - b. Assist with the assessment of radiation dose relevant to the decision to evacuate;
 - c. Provide ongoing advice to SEOCON on the nature and level of any radioactivity beyond the facility boundary fence;
 - d. Provide off site monitoring of releases involving radioactive material, including capability to measure radioiodine in air;
 - e. Provide off site monitoring of releases involving radioactive material for comparison with the nationally recommended intervention levels and to indicate any possible 10mGy averted child thyroid dose;
 - f. Provide predictive radiological modelling advice;
 - g. Advise SEOCON of any hazards which are impacting on LHSTC during the operation of this plan, eg bush fires;
 - h. At the request of SEOCON / DEOCON, provide a liaison officer to the SEOC / DEOC;
 - i. Assist in the clean up of any contamination due to the incident and implement an environmental monitoring program, if necessary, to demonstrate community safety is no longer compromised; and
 - j. During the response phase, monitor contamination, assist with decontamination as required and advise SEOCON accordingly.

ARPANSA

218. Tasks:
- a. Assist with the assessment of radiation dose relevant to the decision to evacuate;
 - b. Provide independent teams to measure radioactivity levels of off site releases of radioactive materials including capability to measure radioiodine in air;
 - c. Provide independent ongoing advice to SEOCON on the nature of any risk of radioactivity beyond the facility boundary fence;
 - d. Provide independent predictive radiological modelling advice;
 - e. At the request of SEOCON / DEOCON, provide a liaison officer to the SEOC / DEOC;
 - f. Oversee the ANSTO cleanup of any contamination, and conduct independent checks of the ANSTO monitoring program;
 - g. Conduct an independent audit and certify that radioactivity levels no longer pose a risk to public or environmental health; and
 - h. During the response phase, monitor contamination, assist with decontamination as required and advise SEOCON accordingly.

Bureau of Meteorology (BoM)

219. Tasks:
- a. At the request of the SEOCON, provide a liaison officer to the SEOC; and
 - b. Provide meteorological information to SEOCON and ANSTO.

Department of Education and Training

220. Tasks:
- a. Ensure principals of all schools within the Evacuation Zone are aware of the evacuation arrangements;
 - b. Manage evacuation of their students when directed to do so; and
 - c. Provide teachers at evacuation centres to supervise students, as required.

Part 3 - PREVENTION & MITIGATION

PREVENTION & MITIGATION

300. The facilities at ANSTO are designed to have minimal impact on the public and the environment. Safety is achieved through "defence-in-depth" where a series of barriers or measures is established to prevent any adverse radiological impact on people or the environment.
301. Measures include the containment building design, shielding and filtration of effluents to reduce external radiation, training and review of procedures.
302. A final barrier in ensuring public safety in the case of an emergency is the 1.6km buffer zone around the HIFAR reactor. This zone means there are no residences close to the reactor.
303. ANSTO also complies with the international security standards for the protection of nuclear facilities.
304. In addition to the above precautions, ANSTO's operations are licensed under the Australian Radiation Protection and Nuclear Safety Act and are inspected regularly by independent safety professionals to ensure that all national and international standards are being met.

Part 4 - PREPARATION

PLANNING STRUCTURE

- 400. LHESP is a State level sub plan of the NSW State Disaster Plan
- 401. The Georges River District Emergency Management Committee (DEMC) is to develop the Lucas Heights Emergency Evacuation Sub Plan to the Georges River Displan in accordance with the policy in this plan.
- 402. The LHSTC has a response plan for accidents / incidents at the facility.

PUBLIC EDUCATION

- 403. The Georges River DEMC will establish the Georges River Public Education Sub Committee which is to develop a public education strategy and program to advise the public of the additional safety elements being introduced for an incident at LHSTC.

PUBLIC WARNINGS

- 404. The PIFAC will coordinate warnings to the public via the media.
- 405. The DEOCON will be responsible for coordinating on the ground warnings eg door knocks, PA systems etc.

STANDARD EMERGENCY WARNING SIGNAL (SEWS)

- 406. SEWS may be used to warn the public if they need evacuate.

Part 5 - CONTROL & COORDINATION ARRANGEMENTS

CONCEPT OF OPERATIONS

500. ANSTO has agreed to notify SEOCON & NSW Fire Brigades 000 of any incident from which there may be a risk of release of radioactive materials. This is to include incidents with any risk of off site consequences. ANSTO will provide ongoing advice to assist SEOCON in making the decision to evacuate areas of the zone which may be at risk.
501. The total population within the evacuation zone is approximately 13,000 however if an evacuation is called by SEOCON, only those within the area of the zone which could be affected are likely to require evacuation. Information from the Bureau of Meteorology regarding prevailing weather conditions particularly wind speed and direction will be a major consideration in determining areas that need to be evacuated.
502. Early advice is essential to the success of any evacuation, because it is intended that people from any at risk areas are evacuated before any radiation reaches them.
503. Notwithstanding the above, evacuation centres capable of accommodating the population likely to be affected (people and animals) within the Evacuation Zone are to be identified by the DEMC, as are the routes to them.
504. Evacuees will travel directly to designated evacuation centres, wherever possible in their own vehicles. Transport will be provided to those who require it.
505. Whilst it is most unlikely that the administration of iodine will be required, stocks will be positioned at evacuation centres as an additional safety measure.

SEOCON

506. The SEOCON will order the evacuation operation, including the area to be evacuated.

DEOCON

507. The DEOCON will control the evacuation operation.

COMMUNICATIONS

508. Communications will be established between ANSTO, ARPANSA, the SEOC and DEOC.

Liaison Officers

509. Liaison Officers:
 - a. Emergency Services and Functional Areas are to be prepared to provide LOs to the SEOC and DEOC if required by the SEOCON / DEOCON;
 - b. ANSTO and ARPANSA are requested to be prepared to provide Liaison Officers to the SEOC / DEOC; and
 - c. BoM is requested to be prepared to provide a Liaison Officer to the SEOC.

Part 6 - EMERGENCY RESPONSE OPERATIONS

GENERAL

- 600.** This Part describes the sequence of actions required to mobilise the emergency management structure for an evacuation due to an incident at LHSTC with the potential for or an actual release of radioactive material with off site consequences.
- 601.** Operational decisions will be made by the Emergency Operations Controllers in consultation with the relevant agencies.

EARLY WARNING

- 602.** ANSTO has agreed to notify the SEOCON and NSW Fire Brigades 000 in the event of an incident where there is an uncontrolled release with the potential for or an actual release of radioactive material with potential off site consequences.

ACTIVATION OF PLAN

- 603.** This plan will be activated by the SEOCON.

Phase	Action
Alert & Standby	<p>SEOCON receives notification of an incident at LHSTC, where there is an uncontrolled incident with the potential for or an actual release of radioactive material with off site consequences.</p> <p>SEOCON informs</p> <ul style="list-style-type: none"> • Relevant Agency Controllers and Functional Area Coordinators (FACs) • Georges River DEOCON and other relevant DEOCONS <p>SEOCON activates SEOC to appropriate level and consults Commonwealth / State agencies and Functional Areas.</p>
Callout	<p>Following consultation with ARPANSA, Environmental Services, NSWFB, Health Services, BoM and ANSTO, SEOCON determines whether an evacuation is required. If so:</p> <p>SEOCON:</p> <ul style="list-style-type: none"> • Determines the areas of the EZ to be evacuated in consultation with ANSTO and relevant agencies • Directs DEOCON to carry out evacuation operation • Activates relevant State level agencies and Functional Areas.
Stand Down	<p>SEOCON is satisfied that the emergency has been contained and determines support is no longer required.</p> <p>SEOCON:</p> <ul style="list-style-type: none"> • Advises LOs and relevant DEOCONS • Arranges time and location of debriefing • Arranges for media and public to be advised.
Debrief	<p>SEOCON will arrange a formal debrief. This will involve representatives from each agency and functional areas. Agency debriefs are to be held beforehand.</p> <p>Final reports are completed and distributed by Agencies in accordance with SOPs.</p>

RESOURCE DEPLOYMENT

604. Priorities for the deployment of resources within or allocated to the District for the evacuation operation will be determined by the Georges River DEOCON.

ARRANGEMENTS FOR SEEKING OUTSIDE OF AREA ASSISTANCE

605. Agencies participating in the evacuation operation may obtain outside resources from their own organisations, but the DEOCON is to be advised.
606. All other requests for resources not available in the District are to be passed to the SEOC.

PUBLIC INFORMATION

607. Coordination of the media will be essential. Liaison will be established with media representatives from ANSTO, ARPANSA and BoM.
608. It can be anticipated that the SEOCON will activate the Public Information Functional Area Supporting Plan.
609. The Public Information Coordinator is to ensure the affected community is informed of the requirements of evacuation.

EVACUATION

610. SEOCON will determine the need for evacuation and nominate and prioritise which areas within the Evacuation Zone are to be evacuated.
611. Information and assessment of the accident control and release mitigation measures and dose estimates based on actual monitoring of radioactivity and the actual exposure circumstance (eg time of day, weather conditions), will determine whether the criterion of 10mGy of averted thyroid dose may be reached for the vulnerable population. If the 10 mGy thyroid dose is likely to be reached, the decision to evacuate should be made.
612. The Georges River DEMC will develop and maintain an evacuation plan for the EZ.

Authority

613. Powers to evacuate are contained in section 60.L of the State Emergency and Rescue Management Act, 1989 (as amended).
614. If evacuation is ordered, the Police are to arrange for a check of the area to ensure that evacuation has been effected.

Evacuation Warnings

615. The initial evacuation warning to the public or advice not to evacuate will be authorised by the SEOCON. Subsequent warnings will be authorised by the Georges River DEOCON.
616. PIFAC is responsible for the release of warning messages to the media.
617. Evacuation will be issued by the following methods:
- Electronic media;
 - Use of public address systems fitted to Emergency Service vehicles; and
 - Evacuation teams, consisting of Emergency Services personnel and others as necessary, to carry out door knocks of the affected areas.
618. Warnings to evacuate are to be prepared in advance and are to contain:
- Instructions to evacuate;
 - Location of Assembly Areas for transport to Evacuation Centre/s;
 - Location of Evacuation Centre/s, for those using private transport; and
 - Authorised route/s to Evacuation Centres.

Withdrawal

- 619. Evacuees are to be encouraged to utilise their own vehicles, although transport will be provided for those who require it.
- 620. A system of identifying buildings which have been evacuated is to be developed by the Georges River DEMC.

Shelter

- 621. The Disaster Recovery Human Services Functional Area Coordinator is to:
 - a. Arrange for staffing of the identified evacuation centre(s) in time to receive the evacuees;
 - b. Provide welfare support services to evacuees in accordance with the Disaster Recovery Human Services Functional Area Supporting Plan; and
 - c. Address longer term requirements.

Return

- 622. SEOCON in consultation with Department of Environment and Conservation, the DEOCON, ANSTO and ARPANSA will advise the public that it is safe to return. A public information program will be implemented to advise the public of any issues associated with returning.

DEBRIEF

- 623. SEOCON is to advise agencies when stand down is to occur and will organise a debrief for all agencies involved.
- 624. The DEOCON in consultation with the appropriate Agencies and Functional Areas, is responsible for issuing the Stand Down and conducting a debrief with all agencies, including LEOCONs, involved.
- 625. Each Agency is to conduct its own debrief and submit a report to the DEOCON within two weeks.
- 626. The DEOCON is to conduct a combined agencies debrief within three weeks.
- 627. The SEOCON is to report to the SEMC on lessons learnt and matters highlighted during the debrief. Appropriate amendments are to be made to the LHESP and the District Lucas Heights Emergency Evacuation Sub Plan. Agency controllers / functional area coordinators are to ensure appropriate amendment action occurs to Supporting Plans/Instructions/SOPs etc.

Part 7 - EMERGENCY RECOVERY OPERATIONS

POLICY

- 700.** The policy for recovery operations is contained in Part 6 of the NSW State Disaster Plan and is to be applied in the event of an operation.

CHARACTERISTICS

- 701.** The characteristics of recovery operations following any release of radiation from LHSTC are likely to be:
- a. Little or no likelihood of any physical damage beyond the LHSTC boundary;
 - b. Little or no likelihood of residual radioactive contamination beyond the LHSTC boundary;
 - c. Little or no likelihood of casualties beyond the LHSTC boundary; and
 - d. An extremely high level of community concern about the risk of radioactive contamination.

PRINCIPAL REQUIREMENTS

- 702.** The principal requirements are likely to be:
- a. The need for an extensive and coordinated public information campaign to assure the public that the risk of radioactive contamination is over;
 - b. The availability of extensive counseling services; and
 - c. The capability to respond to reports of perceived residual radioactive contamination

COORDINATION

- 703.** SEOCAN is responsible to ensure that recovery planning takes place.
- 704.** Due to the expected high level of concern from the community, it may be advisable for a state level recovery coordinator to be appointed.
- 705.** The Minister or SEOCAN is authorised to appoint a state level coordinator.
- 706.** Regardless of the level of coordination, a local recovery committee should be appointed.
- 707.** Coordination of the media will be essential through out the recovery operations.

ANNEXURES

ANNEX A – Evacuation Zone

