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Little Forest Legacy Site Licence Application
Document LFBG-PC-LA-D1

LITTLE FOREST LEGACY SITE 'POSSESS OR CONTROL' LICENCE EFFECTIVE CONTROL PLAN

(rev 0)

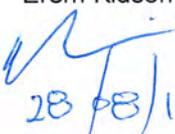
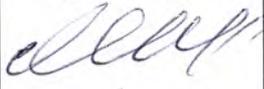
**Prepared By
Australian Nuclear Science and Technology Organisation**

January 2014

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Australian Nuclear Science & Technology Organisation
Little Forest Legacy Site - Effective Control Plan

REVISION SHEET		Document LFBG-PC-LA-D1		
		Print name, date and sign or initial		
Revision Number	Description of Revision	Prepared	Checked/ Reviewed	Approved
0	Original issue	Alamgir Kabir  28/08/14 Erem Kidson  28/08/14	Daniel Pond  28/08/14	Hefin Griffiths  29/8/14

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1 PURPOSE AND SCOPE

The purpose of this *Effective Control Plan* is to demonstrate that all activities to be undertaken at the Little Forest Legacy Site (LFLS) during the period that this 'Possess or Control' licence remains in force will be effectively controlled by ANSTO, and that all applicable requirements of the ARPANS Act and Regulations [1, 2] and the ANSTO business arrangements [3] and other statutory requirements will be complied with.

ANSTO is seeking an approval for a 'possess or control' licence application of the LFLS site. The licence application was originally submitted to ARPANSA in 1999 and ANSTO is updating all the documentation and providing additional information and clarifications to the original licence application. This plan forms the part of that supporting information of the 'possess or control' licence application

This Plan should be read in conjunction with other plans, specifically the *Safety Management Plan* [4], *Radiation Protection Plan* [5], *Waste Management Plan* [6], and *Emergency Plan* [7].

2 ACCOUNTABILITY OF APPLICANT

The CEO of ANSTO is the applicant to ARPANSA for the 'Possess or Control' licence authorisations being sought for the LFLS. The responsibility for maintaining effective control of the site and for ensuring compliance with the ARPANS legislation has been delegated to the Nominee who is the Head, Nuclear Services. The Nominee is assisted by the Facility Officer for the Facility.

The staff and monetary resources necessary to safely perform the 'Possess or Control' activities and meet the ARPANSA requirements have been approved by the senior management of ANSTO. These resources have been provided to the ANSTO Waste Operations which is managed by the Head, Nuclear Services, who reports to the General Manager, Nuclear Operations on waste management matters.

There are several processes that ensure ANSTO management remain informed and aware of safety during the 'Possess or Control' phase of the facility. Management will be informed by review of this licence application and by the safety approval process for the LFLS licence application which is described in LFBG-PC-LA-D2 *Safety Management Plan*. The normal reporting of the routine activities undertaken at the facility during the 'Possess or Control' phase will include safety issues and this will be discussed at the Nuclear Services staff meetings, e.g. tool-box talks prior to undertaking any routine groundwater and airborne sampling tasks at the site. Such tasks are carried out in accordance with the approved procedures. The event response system, described in the *Safety Management Plan*, will rapidly inform management of safety incidents and accidents.

ANSTO follows the ARPANSA legislation requirements for reporting including annual and quarterly reports and the requirement for immediate reporting in the event of a significant incident.

3 ORGANISATIONAL ARRANGEMENTS

The high level ANSTO organisational arrangements are shown in AG 5803 *ANSTO Organisation Chart* which is given here as Figure 1 [8]. Ultimate responsibility rests with the CEO who has delegated responsibilities to senior managers. The Head Nuclear Services is the delegated Nominee for the Facility. The Head Nuclear Services is responsible for nuclear and radiological safety standards and safety support, including radiation protection. The Head Nuclear Services has a dual role as Chief Nuclear Officer (CNO), and in this capacity is also the Chair of the Safety Assurance Committee (SAC). Other ANSTO sections important to the facility include Human Resources, Security and Finance.

Nuclear Services, a function under the Nuclear Operations Division, is central to the safety arrangements for ANSTO. The division structure is shown in Figure 2 – The three roles, responsibility and accountability of the Head of Nuclear Services and the Chief Nuclear Officer (note this is draft as at time of issue of this document. The names of some groups may be slightly amended over time, but the essence of the structure is current as at issue date). The Radiation Protection Services (RPS) group has the specialist Radiation Protection Advisers (RPAs) who developed the LFBG-PC-LA-D3

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Radiation Protection Plan and have input into the other plans. This group also provides the Health Physics Surveyors (HPS) who conduct the radiological surveys and who will provide close support to the work teams. The dosimetry services are also within this group.

Waste Operations is a functional unit of Nuclear Services. It provides the radioactive waste management services to the ANSTO facilities and projects at the LHSTC. Currently, for LFLS, ANSTO Waste Operations is the operator of the facility.

Ongoing liaison with the regulators, including ARPANSA is maintained by the Regulatory Affairs Manager from the Governance, Risk and Compliance group within the Office of the CEO.

The *Work Health and Safety (WHS)* Section in Human Resources and Work Health and Safety (HRWHS) provide specialist WHS advice and support to the organisation. Safety training is also managed by this section. The ANSTO Health Centre which is managed by the ANSTO Human Resources section provides workers compensation and rehabilitation services.

The CNO is also the Chair of the Safety Assurance Committee (SAC) which is the review and approval body for all safety significant changes, projects. The CNO is directly responsible and accountable to the CEO in this capacity. The SAC approval process provides an independent review of the project plans and submission. The first step in this process is an assessment by other radiation, WHS and systems safety specialists who have not been involved in supporting the project planning and design. The submission and assessor reviews are then considered at a full meeting of the SAC. For any consideration of SAC applications which relate to the domain of Nuclear Services, the CNO will recuse himself from the Chair and membership of the SAC committee in accordance with the committees operating protocols.

These organisational arrangements are reviewed periodically.

The WO Licensing Officer will liaise with the Regulatory Affairs Officer to monitor issues relating to the ARPANSA licence submission, and report to the Nominee, who is the Head Nuclear Services.

The Waste Operations Manager is the LFLS Facility Officer who is responsible for routine operational and safety matters and also coordinate the ongoing environmental monitoring tasks and project activities undertaken at the site with other groups at ANSTO, i.e. Environmental Monitoring Group and Institute of Environmental Research. The Waste Operations Manager will report to the Nominee on overall operational and administrative matters of the facility during the 'Possess or Control' phase.

If an external contractor is required to be engaged for any specific maintenance activities at the site, this will be managed by the ANSTO Site Services Group in coordination with the LFLS Facility Officer and ANSTO Safeguards and Security group. Contractors will report through their supervisor / manager to the nominated and accredited Contractor Supervisor appointed by Site Services staff as per ANSTO's WHS Management System.

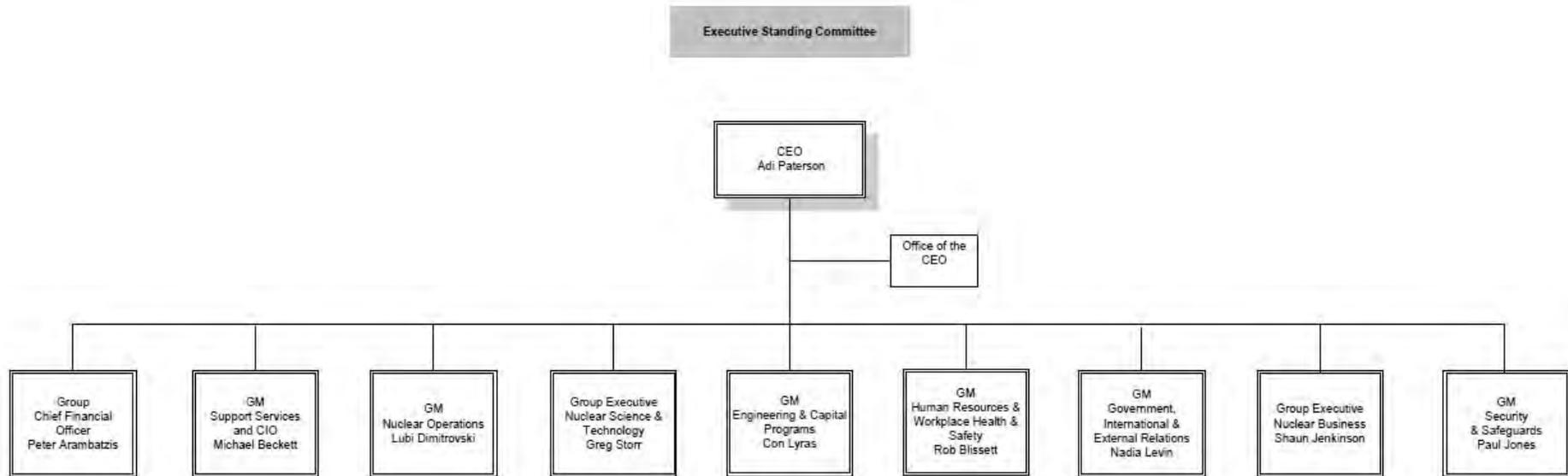
Training and authorisation of staff is described in LFBG-PC-LA-D2 Safety Management Plan. All staff have defined job roles set out in their position descriptions and their performance is monitored against objectives through the ANSTO Performance and Effectiveness Appraisal (APEA) process.

Special organisational arrangements operate in response to a serious incident and these are described in LFBG-PC-LA-D6 Emergency Plan.

All documentation related to the facility is stored on ANSTO computer servers and in relevant ANSTO paper files. Nominated staff have the appropriate access to this information.

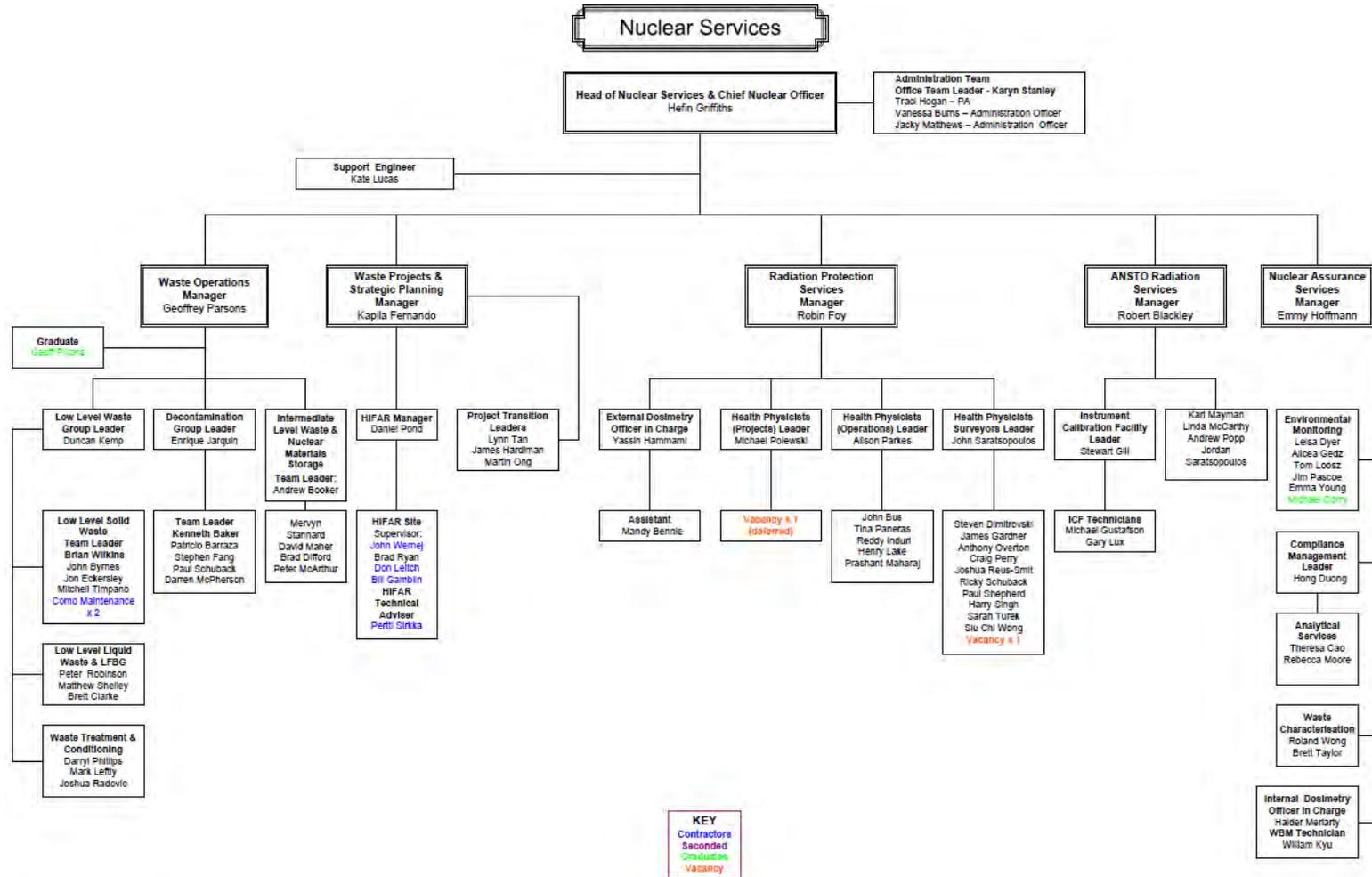
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Figure 1 - Organisational chart of ANSTO



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Figure 2 – The three roles, responsibility and accountability of the Head of Nuclear Services and the Chief Nuclear Officer (note this is draft as at time of issue of this document. The names of some groups may be slightly amended over time, but the essence of the structure is current as at issue date)



KEY
 Contractors
 Seconded
 Graduate
 Vacancy

4 MANAGEMENT SYSTEMS

ANSTO has policies in place relating to all aspects of its operations. The safety and environmental policy *Occupational Health, Safety and Environment Policy* [9] states ANSTO's commitment to occupational health, safety and the environment and sustainability. It outlines ANSTO's actions to meet those commitments. Other policies, including those for security, quality, human resources and business, provide a comprehensive framework. These policies are periodically reviewed.

There are several measures in place to ensure these policies are available and understood. They are available on the ANSTO intranet which is accessible to all staff. There are regular staff forums held by the CEO and within the divisions at which safety is discussed and emphasised and this reinforces the intent of the policy. The safety training programs further expand and explain the intent of the policy.

Supporting the safety policies are the radiation safety standards. The standard AS 2310 *Radiation Safety* [10] commits to the As Low As Reasonably Achievable (ALARA) principle to optimise radiation protection and safety. It sets dose objectives in applying the principle including an ANSTO worker annual dose constraint of 15 millisieverts and an ANSTO public annual dose constraint of 0.3 millisieverts. These constraints are below the required levels recommended by ARPANSA given in ARPANSA RPS No. 1 *Recommendations and National Standard for Limiting Exposure to Ionizing Radiation* [11].

There are objectives for general safety performance and the key performance indicators are monitored. ANSTO also has an Environmental Management Strategy and associated environment monitoring program. WHS and environmental performance is monitored through the ANSTO Executive WHS&E committee.

Nuclear Services documents are developed in accordance with the ISO 9001 certification. Documents supporting the WHS and other policies are within certified ISO 9001 systems and the ISO 14001 system and this ensures there are procedures for document control and records management. The safety standards and requirements are contained in the WHS Management System which is within ANSTO's ISO 9001 accredited BMS. Further information on the WHS system and the management of safety records is given in the Safety Management Plan.

The effectiveness of these management systems is monitored and maintained by the audit programs required by the ISO certifications. These include both internal audits by ANSTO staff and external audits by the certifying organisation. Audit records are maintained and non-conformances and corrective actions are managed through these processes.

5 RESOURCES

The ANSTO processes for identifying the safety resource requirements are at several levels. For each potentially hazardous process or activity, a hazard identification and risk assessment following AS 2301 *Risk Management* [12] is performed which identifies the required equipment, including Personal Protective Equipment (PPE). Risks associated with the routine monitoring and maintenance activities undertaken during the 'Possess or Control' period of the facility are assessed in ANSTO/T/TN/2013-10 rev0 *Safety Assessment of the Little Forest Legacy Site* [13].

The *Radiation Protection Plan* identifies the necessary involvement by radiation specialists and it also recommends constraints for the allowable involvement of radiation workers. The risk assessments and plans are reviewed internally by the ANSTO Safety Assurance Committee (SAC).

The ANSTO funding approval processes for facilities on-going care and maintenance works ensure there is sufficient funding available for the necessary equipment and people resources.

On approval, the funds are made available to the facility management team and staff. All external purchases of items and services, including additional training, are through the ANSTO Procurement section and follow the requirements of the Government Procurement Guidelines.

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6 REFERENCES

- 1 Australian Radiation Protection and Nuclear Safety (ARPANS) Regulations 1999.
- 2 ARPANSA Regulatory Guide: Plans and Arrangements for Managing Safety, v4, January 2013 (<http://www.arpansa.gov.au/pubs/regulatory/guides/OS-LA-SUP-240B.pdf>).
- 3 ANSTO Business Management System (ABMS), Staff Intranet, <http://staff/corporate-information/BusinessManagementSystem/index.htm>.
- 4 LFLS, 'Possess or Control' Licence – Safety Management Plan, LFBG-PC-LA-D2, 2013.
- 5 LFLS, 'Possess or Control' Licence – Radiation Protection Plan, LFBG-PC-LA-D3, 2013.
- 6 LFLS, 'Possess or Control' Licence – Waste Management Plan, LFBG-PC-LA-D4, 2013.
- 7 LFLS, 'Possess or Control' Licence – Emergency Plan, LFBG-PC-LA-D6, 2013.
- 8 AG-5803 ANSTO Organisation Chart (Executive Standing Committee), ANSTO Intranet, May 2013.
- 9 ANSTO Occupational Health, Safety and Environment Policy, March 2010.
- 10 ANSTO OHSE AS-2310 *Radiation Safety*, August 2009.
- 11 ARPANSA RPS No. 1 Recommendations and National Standard for Limiting Exposure to Ionizing Radiation.
- 12 AS 2301 *Risk Management*, August 2009.
- 13 ANSTO/T/TN/2013-10 Rev 0, Safety Assessment of the Little Forest Legacy Site at Lucas Heights, ANSTO Systems Safety & Reliability, A. Kabir, 2013..