

The Senate

Community Affairs
Legislation Committee

Australian Radiation Protection and Nuclear
Safety Amendment Bill 2015 [Provisions]

August 2015

© Commonwealth of Australia 2015

ISBN 978-1-76010-265-4

Secretariat

Ms Jeanette Radcliffe (Committee Secretary)

Mr Brien Hallett (Committee Secretary)

Mr Owen Griffiths (Principal Research Officer)

Dr Josh Forkert (Senior Research Officer)

Mr Tasman Larnach (Senior Research Officer)

Ms Carol Stewart (Administrative Officer)

PO Box 6100
Parliament House
Canberra ACT 2600

Phone: 02 6277 3515

Fax: 02 6277 5829

E-mail: community.affairs.sen@aph.gov.au

Internet: www.aph.gov.au/senate_ca

This document was produced by the Senate Community Affairs Committee Secretariat and printed by the Senate Printing Unit, Parliament House, Canberra.

This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Australia License.



The details of this licence are available on the Creative Commons website:

<http://creativecommons.org/licenses/by-nc-nd/3.0/au/>

MEMBERSHIP OF THE COMMITTEE

44th Parliament

Members

Senator Zed Seselja, Chair	Australian Capital Territory, LP
Senator Rachel Siewert, Deputy Chair	Western Australia, AG
Senator Carol Brown	Tasmania, ALP
Senator Joanna Lindgren	Queensland, LP
Senator Nova Peris OAM	Northern Territory, ALP
Senator Dean Smith	Western Australia, LP

Participating members for this inquiry

Senator Scott Ludlam	Western Australia, AG
Senator Claire Moore	Queensland, ALP

TABLE OF CONTENTS

Membership of the Committee	iii
--	------------

List of Recommendations	vii
--------------------------------------	------------

Chapter 1

Introduction	1
Referral of inquiry	1
Background.....	1
Overview of the bill.....	2
Consideration of the bill by other committees	3
Conduct of inquiry.....	3
Structure of report.....	4
Notes on references	4

Chapter 2

Key provisions.....	5
Introduction	5
Contractors.....	5
Definitions	5
Delegation of powers.....	5
Advisory committees.....	6
Remediation.....	6
Licensing	6
Directions.....	7
Information-gathering power.....	8
Reports.....	9
Improvement notices	9

Chapter 3

Key issues and committee view	11
Introduction	11
Support for amendments.....	11
Definitions	12
Improvement notices	12
Prohibition on certain nuclear installations	13
Nuclear power reactor definition.....	14
ARPANSA's powers during an emergency.....	15
Reduction in time for licence holder to request review.....	16
Legacy sites and coverage	16
National uniformity	18
Management of ARPANSA	18
Committee view.....	18

Appendix 1

Submissions and additional information received by the Committee.....	21
--	-----------

Appendix 2

Public hearings.....	23
-----------------------------	-----------

LIST OF RECOMMENDATIONS

Recommendation 1

3.37 The committee recommends that the Senate pass the Australian Radiation Protection and Nuclear Safety Amendment Bill 2015.

Chapter 1

Introduction

Referral of inquiry

1.1 On 18 June 2015, the Australian Radiation Protection and Nuclear Safety Amendment Bill 2015 (the bill) was introduced into the House of Representatives by the Minister for Health, the Hon Sussan Ley MP.¹ On 25 June 2015, on the recommendation of the Selection of Bills Committee, the Senate referred the provisions of the bill to the Senate Community Affairs Legislation Committee (the committee) for inquiry and report by 17 August 2015.²

1.2 The reason for the referral of the bill cited by the Selection of Bills Committee was 'to ensure that the wider community of involved stakeholders has the ability to put forward its views to fully inform Senators on the details of the legislation'.³

Background

1.3 The bill makes amendments to the *Australian Radiation Protection and Nuclear Safety Act 1998* (ARPNS Act) which provides a regime 'to protect the health and safety of people, and the environment, from the harmful effects of radiation'. The ARPNS Act establishes the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) and the office of Chief Executive Officer (CEO). One of ARPANSA's key roles includes regulating the use of radiation and the safety of nuclear installations by, and for, Australian Government entities.

1.4 The introduction of the bill follows a review by the Australian National Audit Office (ANAO) into the regulation of Commonwealth Radiation and Nuclear Activities.⁴ The review concluded that 'ARPANSA has been generally effective in managing key aspects of the regulatory framework applying to the possession and use of radiation and nuclear sources and facilities by Australian Government entities'.⁵ However, the ANAO also made several recommendations 'aimed at strengthening ARPANSA's management of potential conflicts of interest and expanding the risk-based approach to regulation'.⁶

1.5 On 19 March 2015, the South Australian Government established a Royal Commission to undertake an investigation into South Australia's potential future participation in the areas of activity that form part of the nuclear fuel cycle. Former

1 House of Representatives, *Votes and Proceedings*, 18 June 2015, p. 1405.

2 *Journals of the Senate*, 25 June 2014, p. 2831.

3 Senate Selection of Bills Committee, *Report 8 of 2015*, 25 June 2015, Appendix 2.

4 ANAO, *Regulation of Commonwealth Radiation and Nuclear Activities*, Audit Report No. 29 2013–14 (ANAO audit report).

5 ANAO audit report, p. 16.

6 ANAO audit report, p. 19.

Governor of South Australia, Rear Admiral the Hon Kevin Scarce AC CSC RAN (Rtd), was appointed to head the Royal Commission. The Nuclear Fuel Cycle Royal Commission will report no later than 6 May 2016.⁷

Overview of the bill

1.6 In her second reading speech, Minister Ley stated that since the introduction of the ARPNS Act in 1998, there have been 'changes to international approaches to radiation and nuclear safety, as well as a number of reviews that have identified the desirability of minor changes to the regulatory scheme'. She stated:

Drawing on the recommendations of the various reviews and the experience of ARPANSA, this bill makes changes to the legislation to provide greater clarity regarding the reach of the legislation, improve risk management of radiation activities undertaken by Commonwealth entities and provide greater capacity for ARPANSA to act in the event of an emergency or noncompliance with the legislation.⁸

1.7 Minister Ley described the amendments of the bill as reflecting 'sound administrative practice' and highlighted proposed changes in four areas:

Firstly, the amendments provide ARPANSA with greater powers to monitor compliance with the legislation and to take action in the event of noncompliance. For example, the amendments enable the CEO of ARPANSA to require a licence holder to produce information or documents, or to appear before the CEO to answer questions. Inspectors are also being empowered to issue improvement notices to require licence holders to address contraventions of the legislation, or likely contraventions, within certain time frames....

Secondly, the amendments clarify the application of the legislation to contractors and those in arrangements with the Commonwealth or operating from facilities owned or controlled by Commonwealth entities. This provides greater regulatory certainty and ensures there is no gap in regulatory coverage between entities regulated by ARPANSA and those regulated by state and territory authorities....

Thirdly, the proposed amendments improve the licensing regime and make it more efficient by:

- enabling ARPANSA to issue time limited licences in circumstances where time limits may be more appropriate and ensures that unnecessary licences do not exist into perpetuity—currently, no licences expire;
- providing for ARPANSA to regulate activities to maintain the integrity and safety of contaminated legacy sites as under current arrangements, ARPANSA does not have a clear legal basis to undertake this work; and

7 Further information regarding the Nuclear Fuel Cycle Royal Commission is available at: www.nuclearrc.sa.gov.au.

8 The Hon Sussan Ley MP, *House of Representatives Hansard*, 18 June 2015, p. 6773.

- clarifying that ARPANSA may issue single licences for multiple activities to reduce regulatory burden and streamline arrangements.

Finally, the bill makes a number of minor technical and administrative amendments, such as updates to definitions and removal of outdated provisions to improve the operation of the legislation.⁹

1.8 Similarly, the Explanatory Memorandum (EM) states that the proposed amendments in the bill 'update and improve the operation of the ARPANS Act by':

- making some adjustments to the licensing regime to expressly enable ARPANSA to regulate remediation activities involving contaminated legacy sites, to clarify that ARPANSA may issue single licences for multiple facilities and/ or sources where this supports end-to end risk management and to enable ARPANSA to issue time limited licences;
- clarifying the application of the legislation to contractors and others working with Commonwealth entities;
- providing ARPANSA with greater capacity to respond to emergencies and to adopt a graduated response to non-compliance by introducing a wider range of monitoring and enforcement measures;
- updating the language used in technical definitions to better reflect internationally accepted terms and concepts; and
- making minor, technical amendments to improve clarity, remove redundant provisions and enhance administration of the regulatory regime.¹⁰

Consideration of the bill by other committees

1.9 The bill was considered by the Parliamentary Joint Committee on Human Rights (Human Rights committee) on 18 June 2015. The Human Rights committee stated the bill did not 'require additional comment as it promotes human rights or contains justifiable limitations on human rights (and may contain both justifiable limitations on rights and promotion of human rights)'.¹¹

1.10 The bill was also considered by the Senate Standing Committee for the Scrutiny of Bills (Scrutiny Committee) on 12 August 2015. The Scrutiny Committee made no comment on the bill.¹²

Conduct of inquiry

1.11 Details of the inquiry, including a links to the text of the bill and associated documents, were placed on the committee's website. The committee advertised the

9 The Hon Sussan Ley MP, *House of Representatives Hansard*, 18 June 2015, pp. 6773–6774.

10 Explanatory Memorandum (EM), p. 1.

11 Parliamentary Joint Committee on Human Rights, *Human Rights Scrutiny Report: Twenty-fourth report of the 44th Parliament*, 24 June 2015, p. 1.

12 Senate Standing Committee for the Scrutiny of Bills, *Alert Digest No. 7 of 2015*, 12 August 2015, p. 24.

inquiry on its website and in *The Australian* newspaper. The committee also wrote to a range of individuals and organisations likely to have an interest in the bill, drawing their attention to the inquiry and inviting them to make written submissions.

1.12 The committee received 5 submissions to the inquiry. These submissions are listed at [Appendix 1](#). The committee held a public hearing on 5 August 2015 at Parliament House in Canberra. Witnesses who gave evidence to the committee are listed at [Appendix 2](#). Public submissions, the public hearing transcript and additional documents are available on the committee's website: www.aph.gov.au/senate_ca.

Structure of report

1.13 Chapter 2 summarises key provisions of the bill. Chapter 3 outlines key issues raised during the inquiry and contains the committee's view and recommendation.

Acknowledgements

1.14 The committee acknowledges the short period of time available for those who made submissions and gave evidence at the public hearing. The committee thanks all those who assisted with the inquiry.

Notes on references

1.15 References to the committee *Hansard* are to the *Proof Hansard*. Page numbers may vary between the proof and official *Hansard* transcript.

Chapter 2

Key provisions

Introduction

2.1 This chapter summarises key provisions of the bill amending the ARPNS Act. The key provisions of the bill, contained in Part 1 of Schedule 1, are outlined below. Part 2 of Schedule 1 contains the bill's transitional provisions.

Contractors

2.2 Items 1, 2, 3 of Part 1 are intended ensure that the ARPNS Act does not inadvertently regulate contractors who should be regulated under the relevant state or territory law. These items amend existing subsection 11(2) and insert a new subsection 11(3) to clarify that the ARPNS Act applies only when the controlled material or controlled apparatus is owned or controlled by a Commonwealth entity.¹ New section 11A is also added to clarify the application of the ARPNS Act in situations where a person is not a contractor to the Commonwealth but is nevertheless undertaking activities at facilities owned or controlled by the Commonwealth, or using controlled apparatus or material that is owned or operated by the Commonwealth.²

Definitions

2.3 Existing section 13 contains a list of definitions of key terms in the ARPNS Act. Items 4, 6, 7 and 11 amend the existing definitions of 'controlled facility' and 'nuclear installation'. In particular, items 6 and 7 remove references to 'nuclear materials' and 'nuclear waste' in the definition of 'nuclear installation'. These terms are replaced by references to 'radioactive materials' and 'radioactive waste'.

2.4 Items 5, 9 and 11 add new definitions into section 13 to reflect the other amendments of the bill, including 'improvement notice', 'permitted person', 'prescribed legacy site' and 'remediate'.

2.5 Item 10 repeals the existing definition of 'person covered by licence' and substitutes a new definition which captures the new category of 'permitted person'.

Delegation of powers

2.6 Existing section 18 outlines how, and to whom the CEO of ARPANSA may delegate powers and functions conferred by the ARPNS Act. Item 12 amend section 18 to reflect contemporary public service classifications. Item 13 inserts new subsection 18(1A) which addresses the new power given to the CEO to review improvement notice decisions. The CEO may delegate this power to persons holding, or performing, the duties of the Senior Executive Service departmental officers.³

1 Explanatory Memorandum (EM), p. 3.

2 EM, p. 4.

3 EM, p. 6.

Advisory committees

2.7 Existing sections 23 and 26 describe the functions of the Radiation Health Committee and the Nuclear Safety Committee which provide advice to the CEO and the Radiation Health and Safety Advisory Council. Subsection 23(2) and 26(2) currently provide that the committees' functions are to be performed only on the request of the CEO or the Council. Item 14 amends each of these subsections so that both the Radiation Health Committee and the Nuclear Safety Committee may only perform functions at the request of the CEO. The EM states:

This amendment has been necessary to ensure that the CEO has the capacity to manage the budget of ARPANSA and to prioritise requests for advice and development and review of policies, codes and standards. The Committees may still, however, provide advice to both the Council and the CEO.⁴

Remediation

2.8 The EM notes that '[c]urrently there is no clear way to license activities associated with the remediation of sites that have been contaminated by radioactivity but where the contamination is unrelated to, or did not arise from, a licensed facility, material or apparatus'. It states:

This issue was also identified by the International Atomic Energy Agency (IAEA) Integrated Regulatory Review Service (IRRS) mission to ARPANSA in 2007 and the follow-up IRRS mission in 2011. The IAEA noted the lack of a clear legal basis for regulating existing exposure situations, remediation and clearance.⁵

2.9 Existing subsection 30(1) currently provides that unless a controlled person is authorised by an ARPANSA licence, or otherwise exempt, the controlled person must not undertake certain activities. Item 16 inserts a reference to remediating a prescribed legacy site to this list of activities (new paragraph 30(1)(ea)). The EM states:

The effect of this amendment is that a person (specifically a Commonwealth entity) cannot remediate a legacy site that has been prescribed in the *Australian Radiation Protection and Nuclear Safety Regulations 2000* (ARPANS Regulations), unless that person is licensed to do so by ARPANSA or exempt by the ARPANS Regulations.⁶

Licensing

2.10 The bill makes a large number of amendments to the existing provisions for the licensing of activities undertaken by ARPANSA.

2.11 The EM notes that currently 'ARPANSA may issue facility licences in respect of activities described in section 30 and source licences in respect of dealings with controlled material and controlled apparatus described in section 31'. However, it

4 EM, p. 7.

5 EM, p. 7.

6 EM, p. 7.

observes that there are circumstances 'where it may be contrary to best practice regulation for ARPANSA to separately licence the facility and the sources'. Similarly, the EM notes that 'there may be circumstances where there is more than one controlled facility on a site and the activity is best regulated through one comprehensive risk management plan and one ARPANSA licence rather than through separate facility licences for each controlled facility'.⁷ Items 17 and 18 amend existing sections 31 and 32 to clarify that ARPANSA can issue licences covering multiple controlled facilities and/or sources.

2.12 Existing section 35 provides that licences are subject to a number of conditions. Item 19 amends this section so that licences are also subject to compliance with an improvement notice.

2.13 Items 22 and 23 amend existing section 35 to enable the CEO of ARPANSA, where appropriate, to limit the period of a licence at the time the licence is issued and also extend licences by written notice.

2.14 Currently, under existing section 40, an applicant for a licence or a licence holder may request reconsideration of certain licence decisions by the Minister. Similarly, under section 42, a controlled person to whom a direction is given by the CEO may also seek reconsideration of that decision by the Minister. In both cases the person has 90 days to request reconsideration by the Minister in writing.

2.15 Items 24 and 28 amend paragraphs 40(2)(b) and 42(2)(b) to require requests for reconsideration by the Minister to be made within 28 days, rather than within 90 days. The EM argues this proposed change:

- aligns the request for review period with that allowed by the Administrative Appeals Tribunal;
- better aligns the ARPNS Act with state and territory radiation legislation; and
- provides greater regulatory certainty by ensuring that a decision is final and is made within a reasonable period of time.⁸

Directions

2.16 Under existing section 41 the CEO may give written directions to a licence holder requiring them to take certain steps if the CEO believes, on reasonable grounds, that they are not complying with the Act or Regulations and that it is necessary to exercise the power in order to protect the health and safety of people or to avoid damage to the environment.⁹

2.17 Item 27 inserts a new subsection 41(1A) that expands the operation of this provision so that the CEO can also issue directions if:

7 EM, pp 8–9.

8 EM, p. 10.

9 EM, p. 11.

- (a) the CEO believes, on reasonable grounds, there is still a risk of death, serious illness, serious injury or serious damage to the environment arising from radiation in connection with a controlled facility or controlled material/apparatus; and
- (b) the CEO believes that there is an urgent need to exercise powers under this section in order to minimise risk.

2.18 The EM states:

This is intended to deal with the situation where a controlled person may be complying with the legislation but there may be, for example, an imminent weather event that means that action must be taken immediately, in order to minimise risk to people and the environment. In this circumstance, the CEO of ARPANSA should be able to issue such a direction without needing to first establish that the licence holder was non-compliant.¹⁰

2.19 Item 27 also revises existing subsection 42(2) allowing the CEO the power to make directions to a 'controlled person requiring the controlled person to take such steps in relation to the thing as the CEO considers appropriate' in similar circumstances.

2.20 The EM notes:

It is important to note that these amendments in no way shift responsibility or liability for safety – this continues to remain with the licence holders. The expanded directions power is not intended to undermine operator responsibility. The amendments simply expand the circumstances in which the CEO can issue directions to a licence holder where the CEO believes on reasonable grounds that there is a risk of death, serious illness, serious injury or serious damage to the environment arising from radiation in connection with a controlled facility, material or apparatus.¹¹

Information-gathering power

2.21 Item 29 inserts a new information-gathering power for the CEO of ARPANSA and creates an offence for a failure to comply. The EM notes:

Currently the CEO of ARPANSA has no power to compel controlled persons to appear before the CEO to answer the CEO's questions about possible non-compliance with the legislation or to provide documents to the CEO also regarding possible non-compliance.

This has been identified in recent reviews of ARPANSA as being a power that would be expected of like Regulators, but is absent from the suite of powers available to the CEO of ARPANSA.¹²

2.22 New section 44A would provide that the CEO may require (through written notice) controlled persons to provide information, produce documents or appear

10 EM, p. 11.

11 EM, p. 11.

12 EM, p. 12.

before the CEO, if the CEO believes on reasonable grounds that the person has information or a document relevant to whether the legislation, regulations or conditions of a licence have been complied with.

2.23 If the controlled person is an individual they are excused from these requirements if the information, the answer or the production of the document might tend to incriminate the individual or to expose the individual to a penalty (proposed subsection 44A(5)). The EM notes that this provision 'ensures that the privilege against self-incrimination is not abrogated'.¹³

2.24 A recipient of a notice under proposed section 44A is also excused from giving information, answering a question or producing a document in accordance with the notice if doing so would involve a contravention of an obligation under an international agreement (proposed subsection 44A(6)).

2.25 Proposed new section 44B creates an offence where a controlled person is given a notice by the CEO under section 44A and the person fails to comply with the notice. The penalty for the offence would be 30 penalty units.

Reports

2.26 Items 30 and 31 amend existing sections 59 and 60 to require the CEO to include details of directions and improvement notices in annual and quarterly reports given to the Minister, tabled in Parliament and published on the ARPANSA website.

Improvement notices

2.27 Item 36 inserts a new Division 2 (Improvement notices) to Part 7 of the ARPNS Act which deals with inspections. The new Division comprises three new sections which provide when inspectors may issue improvement notices, compliance with improvement notices and the review of improvement notice decisions.

2.28 The EM outlines the reasons for the proposed improvement notice framework:

A comparison of the ARPANS Act with other like Commonwealth and State/Territory legislation demonstrates that ARPANSA lacks a range of graduated enforcement powers that would be expected of a regulator charged with regulating radiation sources and nuclear facilities. Specifically, ARPANSA has limited capacity to identify non-compliance and require licence holders to address the non-compliance within a certain timeframe (with consequences for failure to do so).¹⁴

2.29 New subsection 80A provides that an inspector may give a licence holder an improvement notice if he/she reasonably believes that:

- a licence holder or a person covered by a licence is contravening, or is likely to contravene, a provision of the Act or the regulations; or
- a condition of a licence is being contravened or is likely to be contravened.

13 EM, p. 13.

14 EM, p. 15.

2.30 New subsection 80B provides that a licence is subject to the condition that an improvement notice must be complied with by the time specified in the notice.

2.31 New subsection 80C provides the process for a licence holder to seek reconsideration of an improvement notice decision from the CEO or the review of the decision of the CEO to confirm, vary or set aside the improvement notice by the Administrative Appeals Tribunal.

Chapter 3

Key issues and committee view

Introduction

3.1 A number of issues regarding the provisions of the bill and Australia's nuclear safety regulatory framework were raised in submissions, at the public hearing and in responses to questions on notice. These included:

- support of the amendments;
- definitions;
- improvement notices;
- the prohibition on certain nuclear installations;
- the nuclear power reactor definition;
- ARPANSA's powers during an emergency;
- the reduction in time for licence holders to request review;
- legacy sites;
- national uniformity; and
- the management framework of ARPANSA.

Support for amendments

3.2 While a number of specific concerns were raised, there was broad support expressed during the inquiry for the proposed amendments. For example, the Supervising Scientist supported 'the proposed amendments to the [ARPNS Act] on the basis they will provide an enhanced contemporary framework for Australian Government regulation of Commonwealth controlled nuclear facilities and radiation sources'.¹

3.3 Engineering Australia also supported the amendments in the bill. It observed that since the passing of the ARPNS Act in 1998, there have been improvements in international best practice in regulation. In particular, it highlighted that a new safety standard has been issued by the International Atomic Energy Agency (IAEA) and that reviews conducted by the IAEA's Integrated Regulatory Review Team of ARPANSA's activities have 'identified the need for strengthening the ARPNS Act'.²

3.4 Engineering Australia stated that the bill would provide:

- greater clarity regarding application of the legislation to contractors;
- the adoption of a risk-based approach;

1 *Submission 1*, p. 1.

2 *Submission 5*, p. 1

- a requirement for a licence holder to provide information;
- the power to issue improvement licences;
- the power to issue time limited licences; and
- the power to regulate activities on legacy sites.³

Definitions

3.5 The EM describes the proposed amendment of the definition of 'nuclear installation' from 'nuclear waste' to 'radioactive waste' as a change to 'more appropriate and technically correct references'.⁴ The Department of Health stated that the change 'aligns the terminology with the international practices established' by the IAEA. It noted that the 'IAEA does not provide a definition of 'nuclear waste' as all waste is captured under the definition of 'radioactive waste'. While it acknowledged that the definitions used in state and territory legislation may differ, the Department stated these 'are a matter for state and territory consideration'.⁵

3.6 However, Mr Nick Tsurikov warned that this change to the definition of 'nuclear installation' could potentially extend the scope of the legislation to other facilities where levels of radioactive waste may exist. He stated:

Commonwealth-regulated facilities such as offshore oil/gas exploration and/or production sites and related maintenance facilities that currently fall under the jurisdiction of the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) may need to be licensed in accordance with the ARPANS Act...The potential implication for the oil and gas is only one example – there are many situations where radioactive waste generated by processing or otherwise dealing with Naturally Occurring Radioactive Materials (NORM) could be captured under the ARPANS Act.⁶

Improvement notices

3.7 The CSIRO believed the provisions would make a useful improvement to the ARPNS Act but was concerned that 'it appears that no provision has been made to allow or seek allowance for a stay of the operation of an improvement notice in the event that a licence holder may avail itself the opportunity for a reconsideration of the decision by an inspector to issue the Improvement Notice under s80C'. It stated:

By virtue of the operation of s80B(1), the licensee must comply with that Improvement Notice even though it is under reconsideration by the CEO pursuant to a request made under s80C. Such a requirement would seem to be inconsistent with the aim of s80C where an Improvement Notice issued by in inspector must be reconsidered by the CEO upon a request being

3 *Submission 5*, p. 2.

4 Explanatory Memorandum (EM), p. 5.

5 Department of Health, response to question on notice no. 1, 12 August 2015, p. 1.

6 Mr Nick Tsurikov, responses to questions on notice, 10 August 2015, pp 2-3.

made by a licence holder within 28 days of the making of the Improvement Notice.⁷

3.8 The CSIRO noted that in the *Work Health and Safety Act 2011* this situation is dealt with by the application of section 228 'Stays of reviewable decision on internal review'. It suggested that the amendments being proposed by the bill should include a provision in similar terms.⁸

3.9 Ms Andrea Kunca, from the Department of Health, told the committee that the proposal had been considered. However, she stated:

One of the things to take into account is that we are looking at radiation protection. The whole reason for implementing improvement notices was to provide a more graduated risk management response so that you do not have to have a severe failure of the regulatory framework or of compliance...

What we are trying to do is to protect people and the environment. We think that the [improvement] notice provisions and the way they are intended to operate is adequate to balance the needs of the regulated entity as well as to fulfil the objectives of the ARPANSA Act.⁹

Prohibition on certain nuclear installations

3.10 Existing section 10 of the ARPNS Act provides that nothing in the legislation is taken to authorise the construction or operation of a list of nuclear installations. These include:

- a nuclear fuel fabrication plant;
- a nuclear power plant;
- an enrichment plant; and
- a reprocessing facility.

3.11 Section 10 also provides that the CEO must not issue a licence in respect of any of these facilities.

3.12 The Australian Nuclear Association (ANA) strongly recommended that section 10 be repealed. It argued:

Section 10 was put into the ARPANS legislation to make a political statement in 1998, now 17 years later it is time that this prohibition was removed. ARPANSA has been operating for many years; it has an established regulatory track record including regulating and issuing licences for the construction and operation of the new OPAL reactor. Section 10 is an unnecessary prohibition in an Act to establish a scheme for licensing all Commonwealth entities using radiation including nuclear installations.¹⁰

7 *Submission 2*, p. 1.

8 *Submission 2*, p. 2.

9 *Committee Hansard*, pp 5–6.

10 *Submission 3*, p. 1.

3.13 The ANA observed that section 10 also unnecessarily repeats the requirements covered by section 13 'under definitions of installations for which the ARPANSA CEO can issue licences'. It noted that a South Australian Royal Commission was currently considering 'opportunities for expanding involvement in nuclear fuel cycle facilities'. It stated:

If any of the facilities listed in Section 10 (a nuclear fuel fabrication plant, a nuclear power plant, an enrichment plant or a reprocessing facility) is proposed then ARPANSA as the Commonwealth regulator of nuclear facilities would be the appropriate regulator. There is no other Commonwealth regulator who can deal with these facilities. ARPANSA should not be prohibited by legislation from regulating such a nuclear installation if there is Commonwealth involvement.¹¹

3.14 Similarly, Engineers Australia recommended that consideration be given to removing section 10. It stated:

Section 10 was introduced before Australia had adopted all the international conventions on nuclear safety and before there was an understanding of the importance of reducing greenhouse gas emissions and the part that nuclear power plays internationally in the reduction of emissions. One of the Energy White Paper key themes is technology neutrality. This is not possible if one of the main low emissions technologies is prohibited.¹²

3.15 However, at the public hearing, Dr Gavin Mudd opposed any change to section 10. He stated:

[L]ooking at the broader energy debate, I cannot see how nuclear would be economically competitive or anything else on those grounds, let alone worthwhile in terms of safety criteria, given that Australia has abundant renewable energy resources and so on. I do not see any sort of need for that. I certainly do not see, looking at the radioactive waste side of all types, how there is a need to change any of the current provisions that exist at the state and federal levels.¹³

Nuclear power reactor definition

3.16 The ANA also recommended that existing section 13 of the ARPNS Act be amended. This section defines the types of 'nuclear installations' which ARPANSA can regulate, including nuclear reactors for research or production of nuclear materials for industrial or medical use. However, the ANA noted that the current definitions do not include nuclear reactors for the production of electricity. It strongly recommended that section 13 be amended 'to include a nuclear power reactor in the definition of nuclear installations'. The ANA argued:

Around the world, nuclear power is a major generator of low carbon emission electricity. Should nuclear power plants be proposed as part of

11 *Submission 3*, p. 2.

12 *Submission 5*, p. 2.

13 *Committee Hansard*, p. 9.

Australia's future electricity system, ARPANSA would be the appropriate regulator.¹⁴

ARPANSA's powers during an emergency

3.17 Australian Nuclear Science and Technology Organisation (ANSTO) discussed proposed section 41 which outlines the powers of the CEO of ARPANSA to give written directions to controlled persons. It noted that the proposed amendment:

- Expands the operation of the provision so that the CEO of ARPANSA can issue written directions to licence holders even in the absence of non-compliance with the legislation or licence conditions during emergency situations; and
- Allows the CEO to provide written directions to a controlled person requiring them to take actions in relation to a hazardous thing or to the controlled facility, material or apparatus.¹⁵

3.18 ANSTO observed the EM to the bill reaffirms the internationally accepted principle of operator responsibility for safety and clearly sets out that the powers of the ARPANSA CEO would only be used in the most exceptional of circumstances. It observed:

Operators have an intimate knowledge of their facilities and how to manage them during an emergency, as well as the practiced emergency operations experience. In the very unlikely event of a major emergency at one of ANSTO's sites, it would be important that the public and emergency management stakeholders know unequivocally that ANSTO and designated emergency response organisations have responsibility for the implementation of the relevant emergency plans.

The text of the [EM] indicates that the CEO of ARPANSA cannot direct specific safety actions by the license holder as this would indeed "shift responsibility" to ARPANSA. Since the direction given by the CEO could not reference a licence condition or indeed a regulatory requirement, for clarity, such directions should reference internationally accepted principles of nuclear safety or security.¹⁶

3.19 The ANSTO noted that the principle of operator responsibility for safety reflects international best practice, as developed under the auspices of the IAEA as well as being reflected in the international nuclear safety treaties to which Australia is party.¹⁷

3.20 At the public hearing, Mr Jack Dillich from ARPANSA highlighted that the proposed powers were intended to equip the regulator to address rare unforeseen circumstances. He stated:

14 *Submission 3*, p. 2.

15 *Submission 4*, p. 2.

16 *Submission 4*, p. 3.

17 *Submission 4*, p. 3.

In my opinion there has to be the wherewithal, even though it is invoked very, very infrequently, for the regulator to intervene at short notice. I do understand the concern that ANSTO is raising. But I think it is a give and take; it is a compromise. As an independent regulator I say that in the interests of public safety and the environment I think it is best to err on the side of the flexibility the regulator would have to infrequently, if ever, intervene in such situations. And of course appeal would be available after the fact.¹⁸

3.21 Ms Andrea Kunca from the Department of Health outlined the amendments were intended to address an existing limit on the CEO's power whereby directions can only be made when there is non-compliance. She observed the IAEA's general safety requirements state that 'a regulatory agency should be able to exercise its authority to intervene in connection with any facilities or activities that present a significant radiation risk and require corrective actions to be undertaken'. She also highlighted the criteria to be met:

[T]he wording of the legislation, while it is judgmental—it is a question of judgment—is relatively stringent. You have to have strong and reasonable grounds to believe that there is a serious risk to people and to the environment in relation to a controlled facility or materials and the CEO believes that the need is urgent to address that to minimise that risk. Inherent in the wording you could probably say that it would be a relatively high threshold to meet, that it would not be used that frequently.¹⁹

Reduction in time for licence holder to request review

3.22 ANSTO welcomed that the EM to the bill included that '[w]hile a request for reconsideration must be made within 28 days, additional information may be provided to the decision maker on review, at any time during the period of reconsideration. It observed that '[c]onsidering the high level of detail and expert information that may be needed to inform a request to review a decision, this language provides the licence holder with the flexibility needed to avoid filing an incomplete submission'.²⁰

Legacy sites and coverage

3.23 At the hearing, Mr Jack Dillich from ARPANSA noted that the amendments of the bill facilitate including certain legacy sites under ARPANSA's regulatory remit. He gave an example:

We recently issued a 'possess and control licence' for a legacy site and this site had been used back in the 1960s. It was outside regulatory control although it had been monitored by an organisation for decades. Under the legislation, based on the definitions we had to call it something that was an ill fit and the possess and control licence was something we had to use somewhat awkwardly...[T]he proposed amendment will allow in the future

18 *Committee Hansard*, p. 6.

19 *Committee Hansard*, p. 7.

20 *Submission 4*, p. 3.

for legacy sites to be licensed as controlled facilities with the ability to control possible remediation of those sites.²¹

3.24 The ANSTO welcomed the amendments of the bill relating to the licensing of legacy sites which require remediation as 'they provide a clear legal basis for the safe management of legacy sites'. It stated:

For example, ANSTO has responsibility for a legacy site adjacent to its Lucas Heights Campus, known as the Little Forest Legacy Site, which was previously used by the Australian Atomic Energy Commission. ARPANSA has licenced ANSTO to "possess and control" the site, but the legal basis for licensing any other action in respect of the site (such as any remediation which might be necessary in future) was unclear. This amendment will now allow ANSTO, as a controlled person authorised by an ARPANSA licence, to undertake necessary safe management activities at the site.²²

3.25 The Supervising Scientist also supported 'the proposed widening of monitoring and enforcement provisions and changes to the current licensing regime to enable the [ARPANSA] to directly regulate remediation activities involving contaminated legacy sites'.²³

3.26 However, Mr Nick Tsurikov raised some definitional issues with the amendments pointing to 'the possible absence of the clear definition of what a "legacy site" actually is and the potential use of the currently suggested definition in ARPANSA documents that will be developed in the future'.²⁴ He did not consider the proposed definition of 'prescribed legacy site' was adequate and argued additional clarification may be needed. Mr Tsurikov stated:

It is understood that there may not be sufficient time to discuss and develop an appropriately detailed definition for the purposes of the Act, but when the review of the Regulations in support of the Act will be carried out – additional clarifications may need to be provided.²⁵

3.27 Mr Tsurikov also highlighted that there were many situations where radioactive waste generated by processing or otherwise dealing with Naturally Occurring Radioactive Materials (NORM) could be captured under the ARPNS Act. He noted that 'Part 2 of the ARPANSA Safety Guide RPS-15 lists 13 different industries and if any waste generated by these industries in the past...is currently located on the Commonwealth land – these sites will need to be identified and appropriately licensed'.²⁶

21 *Committee Hansard*, p. 2.

22 *Submission 4*, p. 4.

23 *Submission 1*, p. 1.

24 Mr Nick Tsurikov, responses to questions on notice, 10 August 2015, p. 2.

25 Mr Nick Tsurikov, responses to questions on notice, 10 August 2015, p. 2.

26 Mr Nick Tsurikov, responses to questions on notice, 10 August 2015, p. 3.

National uniformity

3.28 Issues relating to the consistency and national uniformity of radiation protection and nuclear safety regulation were also raised, particularly regarding legacy sites. For example, the Department of Health noted that the ARPNS Act does not apply to legacy sites controlled by the states and territories. It stated:

Contaminated sites are not dealt with under the National Directory for Radiation Protection (NDRP), and national uniformity has yet to be established for such sites.

The NDRP is a compendium of policies and procedures agreed by the states and territories that COAG agreed in 2004 would be the overarching vehicle for attaining National Uniformity across all jurisdictions, where nice separate pieces of radiation safety legislation currently exist. Amendments to the NDRP are prepared and agreed through the Radiation Health Committee, coordinated by ARPANSA. Discussions regarding the approach for control of contaminated legacy sites are ongoing.²⁷

3.29 Mr Nick Tsurikov outlined his concerns in this area:

It is understood that, for the purposes of standardisation of regulations throughout Australia it is intended that relevant ARPANSA documents are to be incorporated into the State/Territory legislation – but, to the best of my knowledge, the time frame for this process was not agreed upon.²⁸

Management of ARPANSA

3.30 Engineers Australia recommended that consideration also be given to examining the management structure of ARPANSA. It highlighted different management structures adopted in the United Arab Emirates and the United Kingdom for their nuclear program regulators.²⁹

Committee view

3.31 The committee notes the general support expressed in submissions for the proposed amendments to the ARPNS Act. The committee agrees that the provisions of the bill will usefully update the legislation, clarify a number of matters and enhance the powers of the ARPANSA to undertake its role in regulating Commonwealth entities using radiation.

3.32 The CSIRO proposed a minor amendment to allow stays while decisions regarding improvement notices are the subject of reconsideration. While this proposal has some merit, the committee is persuaded that, on balance, this is not appropriate in the context of radiation protection management. However, in the view of the committee, this matter should be monitored by the Department of Health to ensure the provisions for improvement notices operate as intended.

27 Department of Health, response to question on notice no. 3, 12 August 2015, p. 1

28 Mr Nick Tsurikov, responses to questions on notice, 10 August 2015, p. 2.

29 *Submission 5*, p. 3.

3.33 Section 10 and the definition of 'nuclear installation' in section 13 of the ARPNS Act currently act to prohibit the construction or operation of certain nuclear installations, including a 'nuclear power plant'. The provisions of the bill do not alter this situation. While some submissions urged these parts of the legislation be amended, in the view of the committee, this would be a significant change to the existing regulatory framework. A change of this significance is broader than the committee's inquiry into the provisions of the bill and deserves separate consideration. In this context, the committee notes the important inquiry currently being undertaken by the Royal Commission on the Nuclear Fuel Cycle in South Australia. Similarly, the committee notes the issues regarding national uniformity of regulation of radiation protection and nuclear safety raised during the inquiry also fall beyond the committee's consideration of the provisions of the bill.

3.34 The provisions of the bill provide ARPANSA with an increased capacity to respond to emergencies and with enhanced compliance monitoring and enforcement powers. However, an unavoidable tension appears to exist between the principle of operator responsibility for safety at licensed facilities and the proposed power of ARPANSA's CEO to give directions in emergency circumstances. In the view of the committee, the new proposed power balances these interests appropriately and follows international best practice. ARPANSA clearly should have the capacity to issue directions to licenced facilities in emergency situations, even where there is compliance. Notably, the EM states:

It is not envisaged that the power would be exercised in other than exceptional circumstances, and its exercise will not be inconsistent with the implementation of the licensee's approved emergency plans and arrangements.³⁰

3.35 It is also important to recognise that a decision by the ARPANSA CEO to give directions can be reviewed under section 42 of the existing legislation.

3.36 It was emphasised during the inquiry that radiation protection and nuclear safety regulators may occasionally require significant flexibility to undertake their role in protecting the public and the environment.³¹ In this context, the committee considers the bill makes a number of sensible amendments to update the existing regulatory framework and enhance the capacity to ARPANSA to undertake its duties.

30 EM, p. 11.

31 Mr Jack Dillich, ARPANSA, *Committee Hansard*, p. 6.

Recommendation 1

3.37 The committee recommends that the Senate pass the Australian Radiation Protection and Nuclear Safety Amendment Bill 2015.

Senator Zed Seselja

Chair

APPENDIX 1

Submissions and additional information received by the Committee

Submissions

- 1** Supervising Scientist, Department of the Environment
- 2** CSIRO
- 3** Australian Nuclear Association
- 4** Australian Nuclear Science and Technology Organisation
- 5** Engineers Australia

Additional Information

- 1** The Legacy of Early Uranium Efforts in Australia, 1906-1945: From Radium Hill to the Atomic Bomb and Today, article, from Dr Gavin Mudd, received 5 August 2015
- 2** Radon releases from Australian uranium mining and milling projects: assessing the UNSCEAR approach, article, from Dr Gavin Mudd, received 5 August 2015
- 3** Radon sources and impacts: a review of mining and non-mining issues, article, from Dr Gavin Mudd, received 5 August 2015
- 4** Continuing pollution from the Rum Jungle U-Cu project: A critical evaluation of environmental monitoring and rehabilitation, article, from Dr Gavin Mudd, received 5 August 2015

Answers to Questions on Notice

- 1** Answers to written Questions on Notice, received from the Mr Nick Tsurikov, 10 August 2015
- 2** Answers to Questions taken on Notice during 5 August public hearing, received from Department of Health, 12 August 2015

APPENDIX 2

Public hearings

Wednesday, 5 August 2015

Parliament House, Canberra

Witnesses

Australian Radiation Protection and Nuclear Safety Agency

DILLICH, Mr Jack, Chief Inspector and Regulatory Services Branch Head

SELVA KUMAR, Mr Manickam, Senior Officer, Regulatory Policy

CSIRO

STEELE, Dr Jack, General Manager, Science Excellence

WALLIS, Mr Mark, General Manager, Business and Infrastructure Services

WEBSTER, Mr Neil, Radiation Safety Manager

Department of Health

KUNCA, Ms Andrea, Assistant Secretary, Regulatory Policy Branch

MUDD, Dr Gavin Mark, Private capacity