

Environment Protection Authority South Australia

Radiation Safety Regulation in South Australia

ARPS 2023 - Brisbane Australia
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www.epa.sa.gov.au



Overview

The
Regulatory
Process

Features of
the
Legislation

Graded
Approach to
Safety

Engagement

South Australia - Environment Protection Authority



South Australia's independent environment and radiation regulator
Radiation Protection and Control Act / Environment Protection Act
Resources

Branch of 16 staff (regulation/policy/licence admin/technical)

Regulate:

Medical / Mining (Uranium NORM) / Industrial

Radiation laboratories

Emergency response

Support from specialists: air / surface / groundwater / 2 lawyers / 5 investigators

Expert Advisory Committee

Why New Legislation



1982 since last Act



New technology



National / International Uniformity



Need for less
prescription/outcome focussed



Modern tools for regulation

South Australia

Radiation Protection and Control Act 1982

An Act to provide for the control of activities related to radioactive substances and radiation apparatus, and for protecting the environment and the health and safety of people against the harmful effects of radiation; and for other purposes.

South Australia

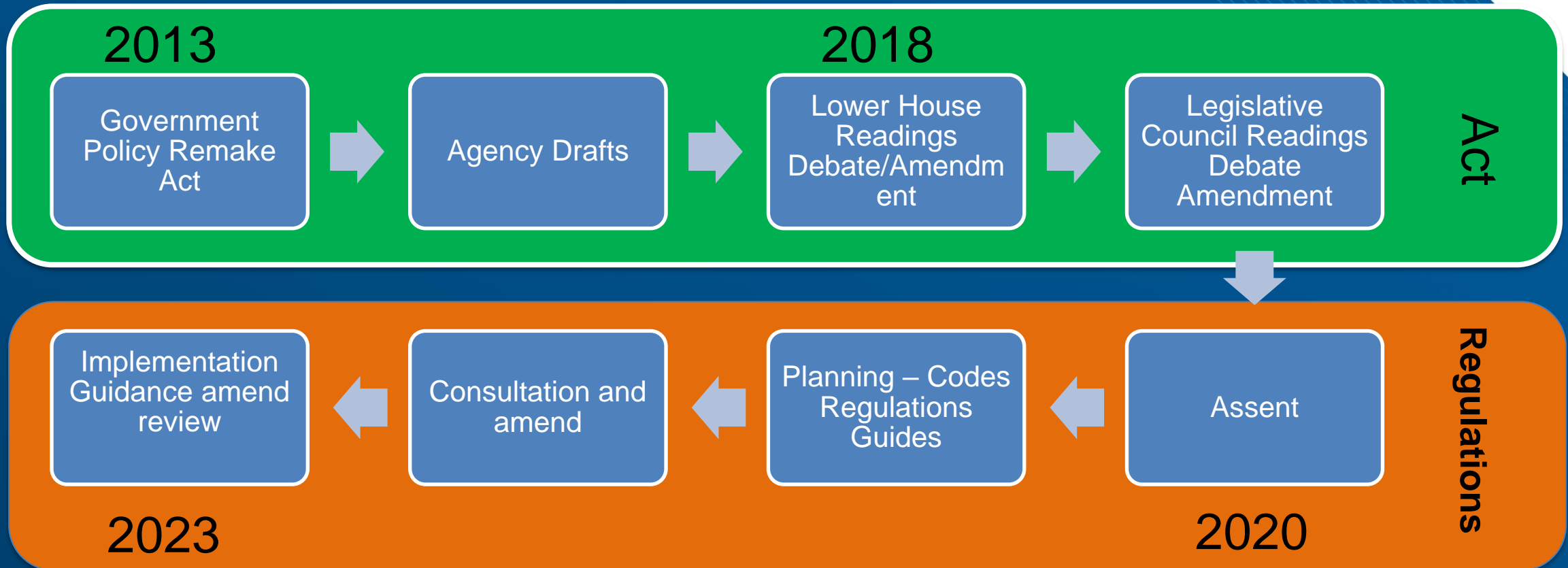
Radiation Protection and Control Act 2021

An Act to control activities involving radiation sources and to provide for the protection of people and the environment from the effects of radiation, to make related amendments to the *Environment Protection Act 1993*, to repeal the *Radiation Protection and Control Act 1982*, and for other purposes.

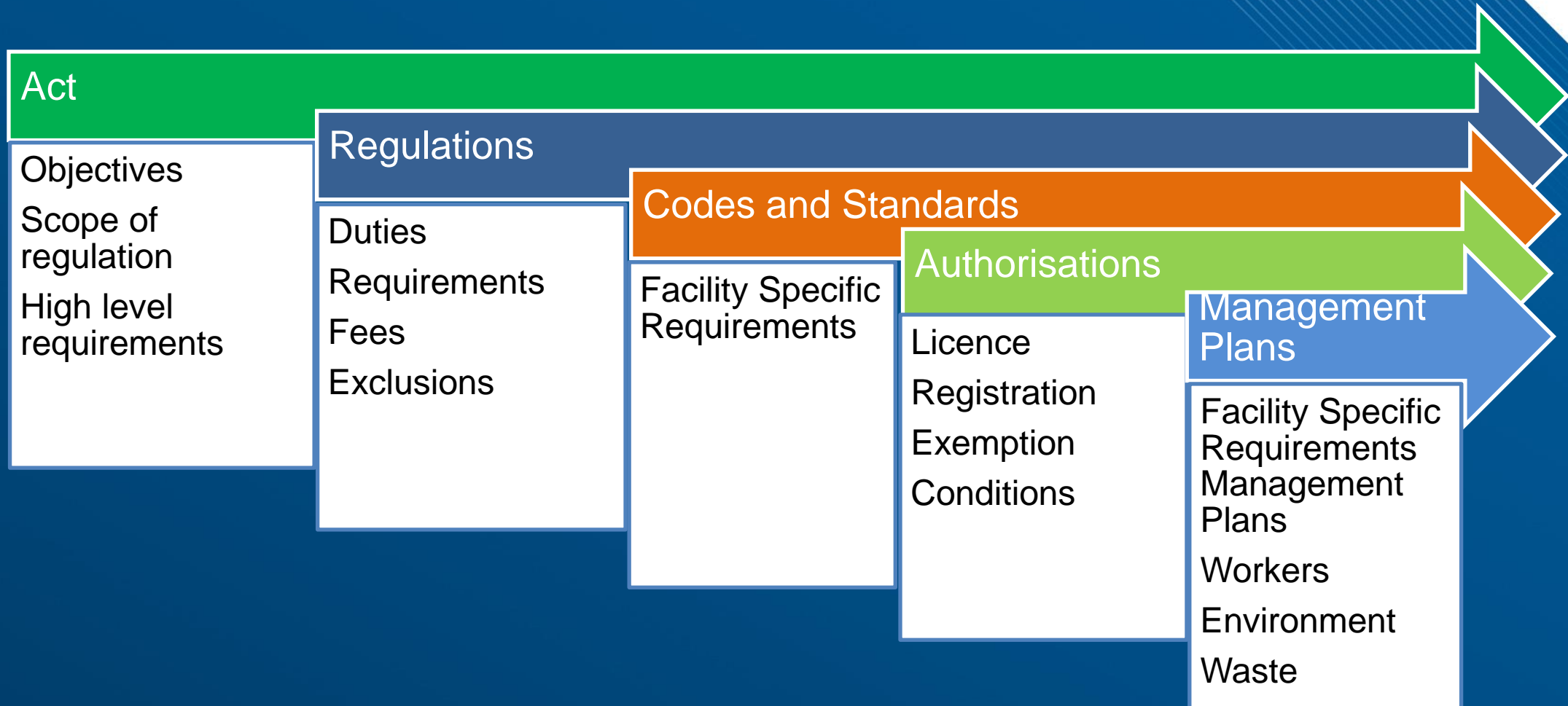
Objectives of New Legislation



Process for Development of Act / Regulations

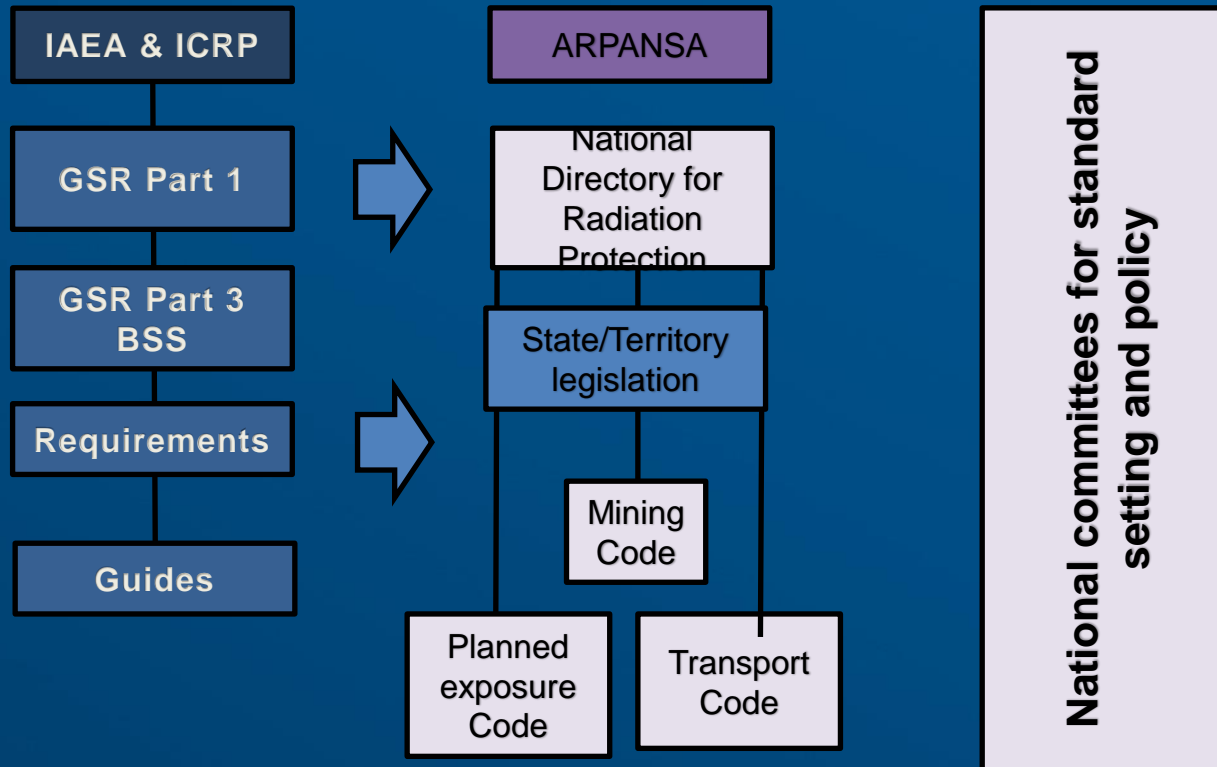


Broad Structure



National and International Uniformity

Regulatory practice benchmarked / harmonised nationally and internationally



South Australia

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Contents

Part 1—Preliminary

- 1 Short title
- 2 Commencement
- 3 Interpretation
- 4 Interaction with other Acts and laws

Part 2—Objects and principles

Modernised Regulatory Approach - Sustainability



Radiation Protection and Control Act 2021

5—*Objects of Act*

- (a) to protect people and the environment from the harmful effects of radiation by applying the radiation protection principle; and
- (b) to ensure that radiation sources are secured against misuse that may result in harm to people or the environment; and
- (c) to recognise the benefits of the safe and justified uses of radiation; and
- (d) to promote the principles of ecologically sustainable development.

Modernised Regulatory Approach

Elements of the Act

Version: 11.2.2023

South Australia

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- 6 Radiation protection principle
- 7 Principles of ecologically sustainable development

Part 3—Administration

Division 1—Radiation Protection Committee

- 8 Radiation Protection Committee
- 9 Terms and conditions of office
- 10 Functions
- 11 Validity of acts
- 12 Proceedings
- 13 Sub-committees
- 14 Application of Public Sector (Honesty and Accountability) Act
- 15 Provision of services

Division 2—Miscellaneous

- 16 Delegation
- 17 Annual report

Part 4—Radiation protection and control

Requirement for a licence with Conditions

Fees

Financial assurance

Sector specific Codes / Management Plans

Staged approval / notification of change

Authorised Officers

New tools for compliance

Increased Transparency

Graded Approach

- Scope of a graded approach can be broad:
 - Exemption/Notification/Licence
 - Codes and Standards
 - Conditions
 - Review and assessment
 - Compliance and enforcement
 - Monitoring
 - Reporting
 - Administrative requirements



Graded Approach

Legislation

- Mining licence where doses below 1mSv
- Monitoring of workers <1mSv

Codes and Standards

- RMP Code – Controls <0.1mSv

Regulatory Practice

- RMP monitoring requirements



Radiation Protection

Code of Compliance

COC-1

Code of Compliance for radiation management plans 2022

Issued February 2023

This code was approved for publication by the Chief Executive of the South Australian Environment Protection Authority on 15 February 2023.

This code provides the mandatory requirements for radiation management plans to be submitted and complied with by applicants for a radiation management licence.

Graded Approach – Regulatory Practice



	Uranium	Mineral Sands	Engineering Workshop
Worker	Gamma individuals Dust area samples Radon decay products individual	Gamma area monitoring Dust area Radon area	Initially to demonstrate not required
Member of Public	Radon area Dust area Water	Radon area campaign Dust campaign	Nil
Environment	Radon Dust Water Non Human Biota	Water Dust campaign	Nil
Reporting	Quarterly Annual Incidents	Annual Incidents	Nil
Notification of change	Assess and approve	Notify if change to plan	Nil

Engagement - Why did we Engage



To understand
pressure points within
industry



To input into
development of
requirements



To Facilitate
compliance when new
requirements came
online

Engagement - What did we do?



Attended peak
body forums



Focus meetings
with key
stakeholders



Steering
Committees



Published on
website



Closed the loop
on Feedback



Implementation
Reference
Panel

Lessons Learned

Early planning helps to identify resources and time required to develop the regulations

Engagement with industry can have multiple advantages to the regulatory process

Prescription in legislation is not always the best strategy

There are some key elements in a regulatory framework that should be considered

Principles of a graded approach can be implemented across all aspects of the regulatory framework

Post implementation work needs to be considered, including lessons learned and further updates

Acknowledgment

I am joining you from Kaurna land, the plains of the Adelaide region.

I would like to acknowledge and pay respect to the traditional owners and custodians of the lands where I live and work.

Our circumstances are different but all of us are on lands that have history and people that came before us.

