

In 2007, the ICRP revised its 1990 recommendations and published ICRP103 (2007), *The 2007 Recommendations of the International Commission on Radiological Protection*. The International Atomic Energy Agency has also published its *Fundamental Safety Principles SF-1* (2006) and subsequently revised its *Basic Safety Standards* as GSR Part 3.

In light of the changes to these international publications, ARPANSA's Radiation Health Committee reviewed RPS1 and recommended that it be rewritten to take into account ICRP103, SF-1 and GSR Part 3. RHC agreed that RPS1 be replaced by:

- a 'top-tier' document setting out the underlying principles and philosophies forming the basis of the system of radiation protection in Australia, and
- a series of codes that would set out in a regulatory style the requirements to be met by radiation users.

The top tier Australian publication, the *Fundamentals for Protection against Ionising Radiation, RPS F-1*, was published in February 2014 and provides an understanding of the harmful effects of ionising radiation and associated risks for the health of humans and of the environment. RPS F-1 however, contains no mandatory requirements. Regulatory elements for adoption by the Australian radiation regulators would be contained in subsequent radiation protection codes.

Drafting commenced on a code for radiation protection in planned exposure situations (RPS C-1) concurrently with the preparation of RPS F-1. The intention of RPS C-1 was to set out the requirements for the protection of occupationally exposed persons, the public and the environment in planned exposure situations in Australia.

Following two periods of public consultation and approval from the Office of Best Practice Regulation, RPS C-1 was published in December 2016. This presentation outlines some of the changes introduced in RPS C-1 and their implications for regulators and users.

WORKING SAFELY WITH IONISING RADIATION: GUIDELINES FOR EXPECTANT OR BREASTFEEDING MOTHERS

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Additional to this role, Andrew is an ANSTO Incident Controller, who in the event of accident or incident would assume control of the situation and provide operational

support to emergency responders and the ANSTO Emergency Operational Manager.

A physicist by background, Andrew holds a Master of Science in Radiation and Environmental Protection, a Bachelor of Science with honours, and has worked in the radiation protection industry for over 12 years.

He is a member of the Australasia Radiation Protection Society, the UK Society for Radiological Protection, and the UK Institute of Physics.

ABSTRACT

The Australian Nuclear Science and Technology Organisation's (ANSTO) Radiation Safety Standard outlines the elements developed and implemented by ANSTO to assist management and workers to establish and maintain a healthy and safe workplace. This Standard supports ANSTO in delivering excellence in its work health and safety performance with regard to all aspects of radiation safety, including the requirements of the ARPANSA Planned Exposure Code RPS C-1 (2016).

For those actions that have been assessed and are deemed to be justified this Standard describes a Dose Optimisation Framework to

maximise the overall benefit as far as is reasonably achievable under the prevailing circumstances. It also describes additional restrictions that apply to occupational exposure for a female worker who has notified ANSTO of pregnancy or is breastfeeding.

To encourage early notification and to provide assurance that appropriate controls are considered and put in place where required ANSTO has published guidelines for expectant or breastfeeding mothers. This document provides advice for workers who may be exposed to ionising radiation during the course of their work at ANSTO. It is specifically aimed at female workers who are planning a family or are currently pregnant or breastfeeding.

This guideline explains how ANSTO takes a collaborative approach to protect workers and their families. The guide aims to assist ANSTO in achieving its duty of care to its workers during pregnancy and breastfeeding and as a tool for education and awareness of early notification for expectant or breastfeeding mothers and their managers and supervisors

This presentation describes the development of this document, and summarises the advice given.