Radiation Management Plan

 Chiropractic Radiation Management Plan for use in the ACT

# Introduction

Radiation Management Plan of Insert Company Name

for chiropractic diagnostic examinations

to be carried out at Insert address

Document Number: Insert a unique reference number relevant to the Company

Prepared by: Insert Name

Date **Prepared**: Click here to enter a date

Date **submitted** to the ACT Radiation council: Click here to enter a date

Date of scheduled **review**: No more than 12 months after the date submitted

Scheduled annual review date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date of last review: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The ACT Radiation Council (the Council) has determined that, whilst advice can be sought externally, the responsibility for radiation safety cannot be delegated to a third party, and the Council therefore requires that the RSO must be: someone employed to provide daily advice/supervision services on behalf of the organisation; suitably qualified; and reasonably available to attend the site as required, having regard to the attendant risk of the source type(s) at the location.

Radiation Safety Officer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Phone: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Responsible Person: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Position: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Phone: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Work location: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Guidance on the use of this template**

This template is designed as an aid to the development of a Radiation Management Plan only. The template may not apply to your practice. As the radiation protection requirements are unique for each situation an appropriate Plan must be prepared. ACT Health does not take responsibility or liability for any protection measures in this template. The use of the template does not in any way imply that approval will be granted, applications are assessed by the ACT Radiation Council.

All text in this document must be reviewed to ensure that it is appropriate to the specific context of the practice. In general the un-highlighted text provides generic information which will apply to many practices. Some text is bolded as an aid to readability only, which does not infer any additional meaning.

Sections which are highlighted in light grey, Such as this, provide information to the person completing the template. They must be deleted and replaced with content as indicated.

Sections which are highlighted in dark grey, such as this, provide example information that may be applicable to the practice. They must be reviewed and, if appropriate, the highlighting should be removed or the example replaced by practice-specific information.

These guidance notes should be deleted before submitting the plan to the ACT Health Directorate.

For further information please contact the Health Protection Service at HPS@act.gov.au or on (02) 5124 9700

Template version 1.5 January 2021

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## Scope

The purpose of this plan is to ensure that all operations at this chiropractic practice are conducted as safely as possible and in compliance with the *Radiation Protection Act 2006,* the *Radiation Protection Regulation 2007,* the *Code for Radiation Protection in Planned Exposure Situations (2016)* (RPS C-1), and the *Code of Practice for Radiation Protection in the Application of Ionizing Radiation by Chiropractors (2009)* (RPS 19) **(the Code).**

It should be **read by all employees** who will deal with any radiation sources at the chiropractic practice, and must be readily available to all staff.

## Responsibilities of employer and employees

**Employers** have a responsibility to provide employees with a **safe working environment**. Employees are also responsible for their safety and that of their co-workers.

Chapter 5 and 6 of the *National standard for limiting occupational exposure to ionizing radiation* NOHSC: 1013(1995), and Section 3 of RPS C-1 outline the duties that employers and employees respectively must carry out. This includes but is not limited to obtaining regulatory approvals and monitoring, as well as implementing and updating, work procedures to keep exposures to ionizing radiation as low as reasonably achievable, societal and economic factors being taken into account.

**All employees** are required to understand and follow the radiation protection practices outlined in this plan.

## Principles of Radiation Protection

The **management of risks** from ionising radiation requires actions that are based on fundamental principles of radiation protection, safety and security. A brief summary of these principles as they apply to chiropractic applications is provided in this section.

### Categories of Exposure

There are a number of persons who may be exposed to radiation from sources at this practice. These exposures are **planned exposure situations** as they involve the deliberate introduction and operation of radiation sources. Exposure from background or natural sources are not covered by this plan.

**Occupational** exposures are incurred by staff at the chiropractic practice. This includes the dose received by the operators of the equipment as well as any other staff who may be exposed in the workplace.

**Medical** exposure is the exposure of patients as part of their medical diagnosis or treatment.

**Member of the Public** is any other person including visitors, people in adjoining tenancies and patients where exposure is not related to their diagnosis or treatment. Exposures of the embryo or foetus of pregnant workers are considered to be public exposures.

### Justification

The principle of justification requires that the **radiation exposure** situation should **do more good than harm**. That is, the potential risk due to exposure should be less than the benefit to an individual or to society.

In the case of chiropractic exposure the benefit is primarily to the **patient**. The justification for this exposure is primarily based on **clinical judgement** first with regard to the specific **procedure** to be used and then on a **case-by-case basis**. The justification must take into account **exposure to operators** and other persons.

### Optimisation

Protection must be optimised so that **radiation risks are as low as reasonably achievable (ALARA),** societal and economic factors taken into account.

This includes the **dose reduction** strategies of minimising **time** exposed to radiation, maximising **distance** from the radiation source, and using appropriate **shielding**.

Optimisation programs can include the use of **dose constraints** and comparisons to **reference levels** or doses received at similar practices.

### Limitation

Limits are set for **Occupational** and **Public Exposure** in RPS C-1. Limits ensure that no individual bears an unacceptable risk of harm.

**Limits are insufficient in themselves** to ensure the best achievable protection under the circumstances, and both the optimisation of protection and the limitation of doses and risks to individuals are necessary to achieve the highest standards of safety.

### Prevention of and response to Incidents and Accidents

Efforts must be made to **prevent accidents**, and to **reduce the severity** of radiation risks associated with any reasonably foreseeable event. **Incidents** can result from a variety of causes including inadvertent actions, equipment failure, negligence, or deliberately not following procedures.

Radiation incident prevention can be achieved through the implementation of a range of procedures, regular checks and reviews, and the use of physical protective measures. When properly implemented, this **defence-in-depth** ensures that no single technical, human or organisational failure would result in adverse consequences.

This also includes the **reporting** of radiation incidents both internally and to the regulator where appropriate.

# Overview

## The Responsible Person and the Radiation Safety Officer (RSO)

The **Responsible Person** is the legal person who has **overall management responsibility** and in whose name the sources are registered. This includes having responsibility for the security and maintenance of the sources, and control over who may use the sources.

A **Radiation Safety Officer** (RSO) must be appointed to **assist** the Responsible Person in ensuring that the following duties are carried out. The RSO must have sufficient knowledge and experience to ensure that radiation safety requirements are fulfilled at the practice. The Radiation Safety Officer may be the same person as the Responsible Person.

The **Responsible Person** and the Radiation Safety Officer at this practice are:

List the **name** and **contact details** of the Responsible Person, and the Radiation Safety Officer (with a short **summary of their qualifications and/or experience**).

The Responsible Person **must**:

* ensure a suitable **Radiation Management Plan** (RMP) is developed, documented, resourced, implemented and regularly reviewed;
* ensure that the Radiation Management Plan describes the management and reporting arrangements that enable a chiropractor to discharge their obligations under the Code;
* ensure **all persons** affected by the Radiation Management Plan **follow and comply with the Radiation Management Plan** and the Code;
* ensure **staff are appropriately trained** and informed;
* ensure that only persons **appropriately authorised** (licensed) by the ACT Radiation Council use or operate a radiation source;
* ensure that only sources **appropriately authorised** (registered) by the ACT Radiation Council are used;
* be **able to account** for all X-ray equipment within the Responsible Person’s control at all times;
* ensure that no procedure is carried out unless it has been, on an individual basis, **justified and approved by a chiropractor** inaccordance with this RMP;
* have systems in place to ensure that each **client is correctly identified** for the intended radiation procedure;
* ensure that **radiation incidents are investigated and reported** in accordance with this RMP;
* ensure **that personal radiation monitoring devices** are supplied, used and recorded in accordance with this RMP;
* ensure that radiation doses to occupationally exposed persons and members of the public do not exceed the **dose limits** specified in RPS C-1 and are kept as low as reasonably achievable (**ALARA**), economic and societal factors being taken into account;
* ensure that the X-ray **facility is designed, constructed, shielded, used**, and maintained so that **dose constraints** acceptable to the regulatory authority are applied and dose limits for occupationally exposed persons and members of the public are not exceeded;
* ensure that appropriate **warning signs and notices** are displayed in accordance with this RMP;
* ensure that a comprehensive equipment **Quality Assurance Program** is established, performed, maintained, documented and regularly reviewed;
* ensure that a **qualified expert is available** for consultation or advice on matters relating to radiation protection;
* ensure that **equipment repair, maintenance or modifications** are carried out in accordance with this RMP; and
* advise the Health Protection Service of the **receipt or disposal** of any radiation source.

## Persons dealing with radiation

A complete list of persons who deal with radiation sources is provided in Appendix A.

The following **people deal with radiation sources** at this practice:

Include In this section a description of the roles and responsibilities for classes of persons who are likely to deal with a radiation source at the practice.

### Chiropractors

Licensed **Chiropractors** approve, justify and optimise radiation procedures and may operate radiation sources. All Chiropractors will be suitably qualified and registered with the Australian Health Practitioners Regulatory Agency.

The Chiropractor must comply with the requirements of this **Radiation Management Plan**.

The chiropractor must not undertake or approve a procedure involving exposure to ionizing radiation unless a **written referral** is provided in accordance with section 3.2.1 Written Referrals.

The chiropractor must not undertake or **approve** a procedure unless it has been **justified and optimised** in accordance with section 3.2.2 Approval, Justification, and Optimisation.

### Operators

Only a person who is **appropriately authorised** under a Licence issued by the ACT Radiation Council may perform ionizing radiation procedures.

**The operator must:**

* comply with the requirements of this **Radiation Management Plan**;
* not expose a person to ionizing radiation unless the **procedure has been approved** by a chiropractor;
* follow the established **protocol** for the procedure;
* ensure that the **protection of the client** is optimised within the scope of the parameters under the control of the operator;
* ensure that the radiation exposure of **persons other than the client** is minimised; and
* **wear**:
	+ **all personal protective equipment** provided by the Responsible Person where applicable to the procedure; and
	+ a **personal radiation monitoring device** where provided by the Responsible Person.

## Types of radiation sources and tasks performed

In this section list all the radiation sources at this practice including all relevant details such as serial numbers and registration numbers.

At this practice general fixed x-ray apparatus are used. A complete list of sources is included at Appendix B.

 Include a brief description of the tasks carried out which involve radiation sources below.

e.g.

At this practice we use radiation sources to perform chiropractic examinations of:

* the spine,
* the extremities distal to and including the elbow and knee,
* A.P. view of hip and shoulder.

## Hazards associated with the radiation

In this section detail the risks associated with each piece of equipment and each task listed above, including during routine operations and non-routine or potential incidents.

e.g.

**Task:** Diagnostic imaging using X-ray Apparatus

**Risk:** Exposure to radiation from: the primary X-ray beam; scattered radiation; and tube head leakage.

**Description:** This hazard is present in the X-ray room and adjacent rooms.

**Controls:** Follow procedure as outlined below.

# Procedures and Controls

## Strategies for Limitation and Minimisation of Dose

In this section include the maximum dose of radiation that is anticipated to be received by a person while the radiation principles and work practices outlined in this document are being followed. This may include personal protective equipment and or radiation shielding.

E.g.

### Doses and records

Chiropractors are expected to receive an annual **dose of less than 100µSv**. If this level is exceeded the responsible person will investigate practices and implement additional controls, as necessary, to reduce exposure. If any member of staff, member of the public or patient receives, or may have received, a dose above the limits specified in RPS C-1 this will be a radiation incident and must be reported accordingly.

All equipment **is maintained and serviced** on a regular basis by appropriately licensed persons as per section 4.2 of this Plan.

Staff and patient **doses are recorded** in accordance with section 3.9 of this Plan.

For radiographic procedures for **which Diagnostic Reference Levels (DRLs**) have been established in Australia, a program is in place to ensure that radiation doses administered to a person for chiropractic purposes are compared at least annually with the DRLs. If DRLs are consistently exceeded they must be reviewed to determine whether radiation protection has been optimised.

### Shielding

For fixed equipment shielding will be confirmed by **a radiation shielding report** which is submitted to HPS as part of the initial radiation source registration. Where **shielding modifications** are made subsequent to commissioning this will be documented and reported to the HPS.

A copy of the Shielding Plan is kept together with this plan at the practice.

### For staff and the general public

All staff must **follow the procedures** outlined in section 3.2 (Specific Procedures).

No procedure shall take place unless it has been approved, justified, and the radiation exposure optimised by a licensed chiropractor.

### Other classes of exposed persons

When a member of staff becomes aware that she is **pregnant** she **should notify the Responsible Person** as soon as is practicable.

The Responsible Person will, if necessary, **adapt the working conditions** of the pregnant member of staff so as to ensure that the embryo or foetus is afforded the same level of protection as that of a member of the public (less than 1 mSv per year).

Any person **under the age of 18** will be afforded the same level of protection as that of a member of the public (less than 1 mSv per year).

The radiography of the abdomen or pelvic area of a pregnant client will not be approved.

## Specific Procedures

### Written Referrals

The chiropractor will not undertake or approve a procedure involving exposure to ionizing radiation unless a **written referral**[[1]](#footnote-1),[[2]](#footnote-2) is provided and the referral:

* contains adequate client identifying information;
* states the clinical question that the procedure should try to answer;
* includes the referrer’s contact details for consultative purposes;
* is retrievable; and
* is kept as long as the client record is kept.

At this practice this is achieved by this section should reference or include practice specific procedures which ensure that written referrals are obtained/kept.

### Approval, Justification, and Optimisation

Each **individual procedure is authorised** by a chiropractor prior to being carried out. When **authorising a procedure** involving the exposure of a person to ionizing radiation the chiropractor must:

* **be appropriately authorised**, under a radiation licence, by the ACT Radiation Council;
* ensure the procedure complies with the relevant provisions of the **Radiation Management Plan**;
* ensure that, where a radiation procedure of the abdomen or pelvic area of a **potentially pregnant** client is to be undertaken, the chiropractor must ensure that reasonable steps are taken immediately before the commencement of the procedure to establish whether the client is pregnant;
* not knowingly approve the radiography of the abdomen or pelvic area of a pregnant client[[3]](#footnote-3);
* **specify the procedure** to be performed when approving a procedure involving exposure to ionizing radiation;
* **justify** the radiation exposure taking into account:
	+ the specific objectives of the procedure;
	+ the characteristics of the individual involved;
	+ the total potential benefits, including the direct health benefits to the person and, where relevant, the benefits to society in general;
	+ the individual detriment to the client that may result from the procedure;
	+ the pregnancy status of a female client of child-bearing capacity;
	+ the efficacy, benefits and risk of available alternate techniques having the same objectives with less or no exposure to ionizing radiation; and
	+ any data and records relevant to the radiation exposure.
* **optimise** the radiation exposure ensuring that radiation doses to occupationally exposed persons and members of the public:
	+ do not exceed the dose limits specified in RPS C-1; and
	+ are kept as low as reasonably achievable, economic and societal factors being taken into account.

This section should reference or include practice specific procedures which ensure that the Approval, Justification and Optimisation of procedures are carried out correctly at this practice.

###  Operators

The operator must only use a radiation source in accordance withthe procedure below and **section 2.2.2 Operator**, including that **each individual procedure is approved** as above.

Before conducting a radiation procedure on a female client of child-bearing capacity that is likely to result in a radiation dose to an embryo or foetus of more than 1mSv, the operator seeks confirmation from the chiropractor that the **pregnancy status of the client has been established**.

**Immediately before** conducting a radiation procedure on a person, the operator takes reasonable steps to ensure that the **person is correctly identified** and ensure that it is the **prescribed procedure** that is to be performed on the person.

Detail how this is achieved at this practice.

The operator ensures that **no person is in the X-ray room during a radiation exposure** unless that person is required to be in attendance.

The operator is able to **observe the patient** (directly, in a mirror or via video) throughout procedures where the dosimetry or image quality could be affected by movement of the patient.

An operator of X-ray equipment, or other associated apparatus, who experiences any **fault or error** of equipment or system, or unusual operating behaviour will:

* immediately cease using the equipment or apparatus until the fault, error or unusual operating behaviour is rectified;
* record the details of the fault, error or unusual operating behaviour; and
* where the fault could compromise safety, diagnosis or care of the client, report it to the Responsible Person and the chiropractor.

The operator must follow the detailed equipment procedures which are kept at the premises.

This section should reference or include all practice specific procedures which ensure that diagnostic radiography is carried out safely.

## Personal Protective Equipment

The following protective equipment is used at the premises:

This section must include all personal protective equipment to be worn by persons involved in the use of radiation.
This section should also include any protective equipment otherwise available to staff and patients.

## Awareness

**Each access point** (e.g. door) into a radiation area has a **visible warning sign** or device to indicate that the room contains an ionizing radiation hazard.

Illustrated **notices** requesting that the client inform staff before the radiation procedure if she may be **pregnant** are prominently displayed within the facility.

Detail or reference any additional awareness measures here.

## Monitoring

A **Personal Dosimeter,** such as an electronic personal dosimeter (EPD) or a TLD or OSL badge, is **provided to each occupationally exposed person** who is likely to be exposed to ionizing radiation in excess of **1 mSv** in any one year. Monitoring devices may also be issued to other potentially exposed persons.

The personal monitoring devices provided to each person will be capable of measuring the type of radiation emitted by the radiation equipment being used.

**A record is kept** of the radiation doses received by each occupationally exposed person in accordance with the requirements of RPS C-1.

### Details of Personal Monitoring

Detail or reference the methods of monitoring and recording of radiation sources and doses to workers. Include monitoring details (name of approved supplier etc.) and frequency of monitoring.

e.g.

At this practice all chiropractors will be issued with a 3 monthly TLD or OSL Badge issued by ARPANSA.

## Training

**Each person who may be occupationally exposed** to ionizing radiation will receive training or instruction that relates to:

* the type of work being undertaken;
* the radiation source, and related ancillary equipment, that the individual may be required to use;
* any potential radiation hazards associated with the practice;
* the means of protection and minimisation of unwanted radiation exposure;
* the requirements of the Radiation Management Plan; and
* the location of, or how to access, the Radiation Management Plan.

All staff will receive training prior to commencing work and training will be refreshed at least annually. Records of all training will be kept.

Detail the training and information to be provided to persons involved in carrying out the radiation practice. Include details of initial training/qualifications and ongoing training requirements, training providers etc.

## Expert advice

The following qualified expert is available for consultation on optimisation, dosimetry and quality assurance and to give advice on matters relating to radiation protection.

 Insert the name and contact details of a qualified expert.

## Quality Assurance Program

A comprehensive equipment Quality Assurance Program has been established and is performed, maintained and regularly reviewed at this site.

Insert the details of all daily, weekly, monthly or annual checks that are performed on the equipment.

The Quality Assurance program includes all planned and systematic actions necessary to provide adequate confidence that a structure, system, component or procedure will:

* 1. perform satisfactorily and safely;
	2. comply with agreed standards; and
	3. include quality control procedures, with particular emphasis on the optimisation of radiation protection .

## Records Management

This Radiation Management Plan will be kept on site and readily available to all staff. The plan will be reviewed at least annually. Any updates or modifications to the Radiation Management Plan will be submitted to the Health Protection Service.

The Responsible Person has authority over the safety procedures and work practices referred to in all other documented safety procedures and work practices that exist, are referred to, or used within the organisation. These procedures will not be modified without consideration of the effect on the Radiation Management Plan.

The following records shall be kept:

A **source register** containing up to date information on the acquisition, relocation, replacement or disposal of all radiation-producing equipment, and the maximum energy of radiation sources possessed and used.

Provide details here

e.g.

This register is kept in section................. of this plan.

For all **source disposals** the records should be kept of disposal information include details of its disposal and written confirmation from the organisation accepting responsibility for it (e.g. the disposal notice).

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A register of who has been **authorised to deal with a radiation source**.

Provide details here

e.g.

 This register is kept in section 2.1 of this plan

A **radiation incident** report register, containing all internal reports pertaining to radiation related incidents.

Provide details here

e.g.

 An electronic register will be kept on file at the practice

**Dose records** of the radiation doses received by each occupationally exposed person in accordance with the requirements of RPS C-1.

For **each X-ray procedure**, a record is kept of either:

* + sufficient information on the procedure that would allow the **radiation dose to the client** to be estimated; or
	+ the radiation dose administered to the client.

Provide details here

e.g.

 An electronic register will be kept on file at the practice

All results from the comprehensive **Quality Assurance program** and their outcomes are clearly documented. Records of **Training** and all **maintenance/service** will also be stored.

Provide details here

e.g.

 In an electronic register which is kept on file at the practice.

Detail any other records which pertain to radiation sources and or exposure and how they shall be kept

# Incidents and Non-routine Operation

In this section reference or detail any procedures which are designed to minimise the radiation hazard arising from activities other than those required for normal operations. This includes servicing, maintenance, accidents and radiation incidents.

## Radiation Incidents

Any staff member who becomes aware of an incident must ensure that the **incident is reported to the chiropractor and the Responsible** **Person** as soon as practicable and within 24 hours.

Contact the Responsible Person on (02) Insert phone number here

 **In the event of a radiation incident**, the Responsible Person will:

* ensure that the radiation incident is **investigated;**
* **submit a written report** of all reportable radiation incidents, including the preventative action to avoid a recurrence, to the Health Protection Service within 7 days. The Radiation Incident form which is available at [www.health.act.gov.au/businesses/radiation-safety](http://www.health.act.gov.au/businesses/radiation-safety) should be used;
* ensure an **internal report** on each radiation incident is written and kept in the institution’s radiation incident report register;
* ensure that measures are implemented so that the possibility of the **recurrence** of the radiation incident investigated is **minimised**; and
* ensure that where an **embryo or foetus** inadvertently receives a radiation dose of more than 1 mSv, there are protocols in place, which include an estimate and record of the radiation dose to the embryo or foetus, to address the situation.

In the case of a radiation source that is, or may be, **lost or stolen, immediately report** the event to the Health Protection service on (02) 5124 9700;

Reportable incidents include, but are not limited to, the following:

* incidents that cause, or may lead to, radiation doses **exceeding** the **dose constraints** to workers or members of the public, or any **radiation injuries;**
* **lost or stolen** Radiation Apparatus;
* **damage** to, or malfunctioning of, a Radiation Apparatus;

For more information see schedule 13 of RPS6, the *National Directory for Radiation Protection, June 2017*.

## Storage, disposal, servicing, repair or replacement of Radiation Sources

The Responsible Person will **advise the Health Protection Service** of the **receipt or disposal** of any radiation-producing equipment. This needs to be done **within 7 days**. The appropriate form (notification of service or disposal notice) is available from [www.health.act.gov.au/businesses/radiation-safety](http://www.health.act.gov.au/businesses/radiation-safety) .

All repair and servicing will be performed by persons who hold an appropriate Radiation Licence. The Licence status of service personnel will be verified prior to the service commencing.

Records of each service, repair or maintenance will be kept at the practice.

In this section detail any additional procedures for Repair/Service (when, who repairs radiation sources)

# Definitions and Related Documents

## Documents

*Radiation Protection* ***Act*** *2006*

*Radiation Protection* ***Regulation*** *2007*

ARPANSA Codes of Practice (available from [www.arpansa.gov.au/publications/codes/rps.cfm](http://www.arpansa.gov.au/publications/codes/rps.cfm)):

**RPS C-1** *Code for Radiation Protection in Planned Exposure Situations (2016)*

**RPS6** *National Directory for Radiation Protection, June 2017*

**RPS14** *Code of Practice for Radiation Protection in the Medical Applications of Ionizing Radiation (2008)*

**RPS19** *Code of Practice for Radiation Protection in the Application of Ionizing Radiation by Chiropractors (2009)*

List any additional practice specific procedures or other documents here.

## Dictionary

|  |  |
| --- | --- |
| **Diagnostic Reference Levels (DRLs)** | dose levels for X-ray exposures applied to groups of standard-sized clients or standard phantoms for common types of chiropractic examinations and broadly defined types of equipment. These levels are expected not to be exceeded for standard procedures when good and normal practice regarding diagnostic and technical performance is applied. DRLs will be set by relevant professional bodies and published by ARPANSA or the relevant regulatory authority from time to time. |
| **Dose constraint** | a prospective restriction on anticipated dose, primarily intended to be used to discard undesirable options in an optimisation calculation. In occupational exposure, a dose constraint may be used to restrict the options considered in the design of the working environment for a particular category of employee.In public exposure, a dose constraint may be used to restrict the exposure of the critical group from a particular source of radiation. |
| **HPS** | Health Protection Service of the ACT Government’s Health Directorate. |
| **OSL** | Optically Stimulated Luminescence (dosimeter) |
| **Qualified expert** | a person who:(a) is qualified in the application of the physics of therapeutic or diagnostic uses of ionizing radiation; and(b) has been recognised by the relevant regulatory authority as being able to perform the dosimetric calculations, radiation measurements and monitoring relevant to the person’s area of expertise. |
| **Radiation Incident** | any unintended or ill-advised event when using ionizing radiation apparatus, specified types of non-ionizing radiation apparatus or radioactive substances, which results in, or has the potential to result in, an exposure to radiation to any person or the environment, outside the range of that normally expected for a particular practice, including events resulting from operator error, equipment failure, or the failure of management systems that warranted investigation. |
| **Referrer** | A registered medical practitioner or other health professional who is entitled to refer individuals to the chiropractor who will be responsible for the overall conduct of the procedure involving the exposure of the person to ionizing radiation. |
| **Responsible Person**  | In relation to any radioactive source, radiation-producing equipment, prescribed radiation facility or premises on which radioactive sources are stored or used means the legal person:1. having overall management responsibility including responsibility for the security and maintenance of the source, radiation-producing equipment, facility or premises;
2. having overall control over who may use the source, radiation-producing equipment, facility or premises; and
3. in whose name the source, radiation-producing equipment, facility or premises would be registered if this is required.
 |
| **RMP** | Radiation Management Plan |
| **RPS C-1** |  *Code for Radiation Protection in Planned Exposure Situations (2016)*, ARPANSA, Yallambie. |
| **RSO** | Radiation Safety Officer. The Radiation Safety Officer is responsible for recommending or approving corrective actions, identifying radiation safety problems, initiating action, and ensuring compliance with regulations. |
| **TLD** | Thermo-Luminescent Dosimeter (replaced by OSL dosimeters) |
| **X-ray equipment** | any equipment that produces ionizing radiation when energised. |

APPENDICES

1. List of persons dealing with Radiation Sources

The following **people deal with radiation sources** at this practice:

Include in this section all other personnel who are likely to deal with a radiation source at this practice. Include licence numbers where appropriate.

|  |  |  |  |
| --- | --- | --- | --- |
| **Person** | **Position** | **Licence/Authorisation** | **Expiry date** |
| John Smith | Owner/Responsible Person | RS77/122. |  |
| Steve Citizen | chiropractor | RS34/145. |  |
| Frank Thompson | chiropractor | RS24/045. |  |
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1. List of Radiation Sources

In this section list all radiation sources at this practice including all relevant details such as make, model, serial numbers and registration numbers.

 The following sources are handled under this Radiation management plan:

| **Registration Number** | **Source Location** | **Manufacturer/Model** | **Serial Numbers** | **Expiry date** |
| --- | --- | --- | --- | --- |
| RS22\_145 | Surgery 1 | GE radiographio | 455455, 4455564 |  |
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1. This referral may be in hard copy or electronic form. [↑](#footnote-ref-1)
2. In the case of self-referral, including the required information in the client’s notes will suffice. [↑](#footnote-ref-2)
3. Where a client is known to be pregnant the chiropractor must not carry out any radiography of the client. If radiography of that client is considered necessary, the client should be referred to their GP in the first instance, who will consider referral to a radiologist, since the radiography of a pregnant patient is required to be approved by a radiation medical practitioner in accordance with the *Code of Practice for Radiation Protection in the Medical Applications of Ionizing Radiation (2008)* (RPS 14). [↑](#footnote-ref-3)