

Intra-oral Dental Diagnostic Radiography

Tools for Assisting Possession Licensees

The following tools have been developed to assist possession licensees in complying with their legislated requirements.

- Tool 1: The '*Radiation Safety Officer - Annual Checklist*' has been developed to assist radiation safety officers in performing their annual checks.
- Tool 2: The '*Operational Checks – Daily Checklist*' has been developed to assist persons who are to perform the daily operational checks on the radiation practice.
- Tool 3: The '*Operational Checks – Monthly Checklist*' has been developed to assist persons who are to perform the monthly operational checks on the radiation practice.
- Tool 4: The '*Operational Checks - Six Monthly Checklist*' has been developed to assist persons who are to perform the six monthly operational checks on the radiation practice.
- Tool 5: The '*Maintenance of Manual Film Processors*' has been developed to provide guidance on how to maintain a manual film processor. This procedure should be displayed in a prominent location adjacent to the processing equipment.
- Tool 6: The '*Contact List*' has been developed to provide a list of contact details as well as the compliance status of equipment and premises. This list should be placed adjacent to each X-ray unit's control panel.
- Tool 7: The '*X-ray Equipment Details*' may assist possession licensees in maintaining an inventory (including location) of each X-ray unit in the possession of the possession licensee.
- Tool 8: The '*X-ray Register*' may assist possession licensees by providing an exposure register which is required to be completed by the user of the X-ray equipment.
- Tool 9: The '*Training Log*' is a means by which the possession licensee may keep a record of the training provided to each user, staff and other persons.
- Tool 10: The '*Maintenance Report*' is a means by which the possession licensee may keep a record of maintenance and repair work that may be conducted on the X-ray unit, and other auxiliary equipment.

These tools should be checked to ensure that they cover the requirements detailed in the possession licensee's specific radiation safety and protection plan, and amended as required.

RADIATION SAFETY OFFICER

ANNUAL CHECKLIST

DATE CONDUCTED:

- all users and employees understand, and are complying with, the radiation safety and protection plan
- the details of each X-ray unit, including location, are accurately recorded on the Possession Licence and on the possession licensee's equipment register
- the Possession Licence is current and appropriate
- all users hold Use Licences which are current and appropriate, and are authorised by the possession licensee to use the X-ray equipment
- all maintenance is conducted and recorded
- all operational checks are being conducted and recorded, and any relevant problems have been appropriately rectified
- all repairs to the X-ray equipment are recorded
- all repairs to the film processors are recorded
- personal protective equipment is readily available
- a suitable reference radiograph is available
- the film processing solutions are suitable for the type of film in use
- all records required by the radiation safety and protection plan are maintained and kept in a readily accessible location
- compliance certificates for the X-ray equipment and premises have been obtained within the necessary time frames (3 years for equipment and 5 years for premises)

Action Required

Action required	Action to be taken by	Action date

Name: _____
Radiation Safety Officer

Signature: _____

Date: _____

Note: A copy of this report should be provided to the possession licensee.

OPERATIONAL CHECKS

MONTHLY CHECKLIST

DATE CONDUCTED:

- Perform retake/reject analysis to determine the reason for the retake or reject. *(Note: This may highlight problems with the film, developing process, the X-ray unit or the operator involved, which may need to be rectified)*

Action Required

Action required	Action to be taken by	Action date

Name: _____

Signature: _____

Date: _____

OPERATIONAL CHECKS
SIX MONTHLY CHECKLIST

DATE CONDUCTED:

- Check that the processing box is free of light leaks
- Check that personal protective equipment is in good condition
- Check that unexposed X-ray films are stored in accordance with manufacturer’s recommendations, in a container away from excessive heat, humidity or chemical contamination (e.g. from film processing chemicals), and adequately shielded against ionizing radiation or in an area remote from any X-ray unit
- Check that the oldest X-ray film is used first
- Check that film is within the expiry date specified by the manufacturer
- Check that exposure factors for specific examinations are available
- Check that the RSO details are displayed in a prominent location adjacent to the X-ray equipment and are correct
- Check that the processor maintenance procedures are displayed in a prominent location adjacent to the film processor
- Check that instructions for mixing chemicals and processing films are available
- Check that a time/temperature chart, a timer and a thermometer are available for manual processing
- Check that radiation warning signs are displayed on each X-ray unit and are in good condition

Action Required

Action required	Action to be taken by	Action date

Name: _____

Signature: _____

Date: _____

MAINTENANCE OF MANUAL FILM PROCESSORS

The following procedures will be conducted at least every 2 weeks or if the chemicals become contaminated.

Fixer

1. Dispose of old solution and thoroughly clean the tank with a 'fixer only' cloth and water. Steel wool and abrasive powders must not be used.
2. Prepare the fixer solution as specified by the chemical manufacturer.
3. Stir the fixer before use with a 'fixer only' stirrer.

Note: Always mix developer after fixer as contamination of developer is a greater problem and often requires immediate disposal of the developer. Contamination of developer with even a small quantity of fixer will result in fogging of the processed radiograph.

Developer

1. Dispose of old solution and thoroughly clean the tank with a 'developer only' cloth and water. Steel wool and abrasive powders must not be used.
2. Prepare the developer solution as specified by the chemical manufacturer.
3. Stir the developer before use with a 'developer only' stirrer.

Record that the above procedures have been carried out in the maintenance log book.

CONTACT DETAILS

Radiation Safety Officer

Name: _____

Phone: _____

Mobile: _____

Chief Executive, Queensland Health

c/- Director
Radiation Health Unit
PO Box 2368
FORTITUDE VALLEY BC QLD 4006

Telephone: (07) 3328 9987
Facsimile: (07) 3328 9622
Mobile: 041 327 9672 (emergencies and out of hours calls)

Radiation Health

Radiation Health Unit
PO Box 2368
FORTITUDE VALLEY BC QLD 4006

Telephone: (07) 3328 9987
Facsimile: (07) 3328 9622
Email: radiation_health@health.qld.gov.au
Website: www.health.qld.gov.au/radiationhealth

X-RAY REGISTER

Room Number: _____ Equipment Details: _____

Date	Patient's Name	Gender	DOB	Particulars of examination	Name of User	Comments

Note: All exposures must be recorded, including retakes and rejects.

