MEDICAL X-RAY FACILITIES: APPROVAL OF PLAN FOR RADIATION SHIELDING Pontario



TURN-AROUND TIME OF PLAN APPLICATIONS

- The service target by the X-ray Inspection Service (XRIS) at the Ministry of Health and Long-Term Care (ministry) is a turnaround time of 10 business days for processing plan applications provided that the submission is complete and accurate, containing all of the items on page 2 in boxes entitled. Part A + B, and the payment of \$360.00 is received by the ministry.
- Applications that are missing Part B information may take longer to process (up to 5 weeks). Applications with incomplete or inaccurate information may be returned unapproved or delayed.

Processing of CT scanner applications is more complex and therefore may take an additional 6 weeks or more.

• After submission, any subsequent changes made to the initial application (e.g., desired machine make/model) during the evaluation process requires a new application. Therefore, please check with your supplier and ensure the availability of the desired make/model to avoid unnecessary delays to your initial application.

1. WHEN A NEW PLAN APPROVAL IS REQUIRED

In accordance with section 3 of the *Healing Arts Radiation Protection (HARP) Act*, the Director of X-Ray Safety (Director) at the ministry approves all X-ray rooms for appropriate radiation shielding.

Approval is required from the Director with submission of a new schematic floor plan ('plan') before:

- 1. Installing a new X-ray machine (s. 3(1) of HARP Act); or
- 2. Making any changes to the original approved installation plan (s. 3(6) of HARP Act). **Examples** of such changes may include, but are not limited to:
- Replacing or upgrading an existing X-ray machine with a new unit (for example, upgrading from film to digital or from CR to DR technology)
- Performing any service work or repair which requires a change to the installation of an existing X-ray machine, excluding routine maintenance procedures for proper unit operation using original equipment manufacturer (OEM) parts
- Increasing the usage or anticipated maximum workload of the X-ray machine beyond the value approved on the original plan
- Making any changes, structural or otherwise, to spaces adjacent to the X-ray room that would alter their usage or increase their occupancy (for example, converting an adjacent Xray operatory into a reception area).

In general, any upgrade or modification that results in a change to the installation on the basis of which the Director (XRIS) issued the original plan approval requires a new written approval before the proposed change(s) is made.

2. HOW TO SUBMIT A PLAN APPLICATION

In order to achieve the 10 business days turnaround time for processing plans, e-mail the following items to xrisplans@ontario.ca with the ministry issued registration number in the subject line:

- 1. The Application with all information in Boxes "Parts A + B" on page 2 of this pamphlet
- The Fee: Scanned copy of the certified cheque or money order in the amount of \$360, payable to the Minister of Finance. After scanning, send the certified cheque/money order by Canada Post or courier to XRIS. See address under 'Contact Information' below. Provide the owner's name and address on the payment. Applications missing the proof of payment will not be processed.

NOTE ON CT SCANNERS: A letter of designation is required from the Minister (or authorized delegate) before installation of a CT scanner (s. 23 of HARP Act). Hospitals should contact their Local Health Integration Network (LHIN) for more information.

3. REGISTRATION OCCURS AFTER INSTALLATION

Once the plan is approved and the ministry is in receipt of the \$360 payment, the following will be emailed to the applicant: (1) the approved plan, (2) the Director's approval letter and (3) a blank copy of Form 1 ("X-Ray equipment Registration").

Submit a completed Form 1 immediately after equipment installation or ownership change to register your X-ray machine with XRIS. Please have a copy of the approved plan readily available onsite as part of your facility's records, to be presented to an XRIS inspector for review upon request.

DISCLOSURE: Please be advised The ministry may disclose a copy of the approved installation plan to any subsequent owner of the x-ray machine or as otherwise required by law.

CONTACT INFORMATION

X-Ray Inspection Service (XRIS) Ministry of Health and Long-Term Care 5700 Yonge Street, 5th Floor, Toronto ON M2M 4K5 Telephone: (416) 327-7937 Fax: (416) 327-8805

Submission of all plan documents and Forms 1, 2, and 3: xrisplans@ontario.ca General inquiries: xris@ontario.ca

Copies of Forms 1, 2, and 3 are made available at: www.forms.ssb.gov.on.ca Copies of the HARP Act and Regulation 543 can be found at: www.ontario.ca/laws Link to Health Canada Safety Codes:

http://www.hc-sc.gc.ca/ewh-semt/pubs/radiation/index-eng.php

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Page 1

MEDICAL X-RAY FACILITIES: TECHNICAL REQUIREMENTS ON PLAN



PART A - MINIMUM REQUIREMENTS

Please submit all of the following information to XRIS:

- 1. The plan (see 'Plan Drawing Requirements' heading)
- 2. Completed Form 2 "Application for Approval of X-ray Installation"
- 3. One completed **Form 3** "X-ray Equipment and Shielding Specifications" <u>for each X-ray room</u>

Note: Please ensure all appropriate areas are signed.

PART B - ADDITIONAL INFORMATION TO EXPEDITE PLAN APPROVAL PROCESS

Submission of the following items with your plan application, although <u>not</u> mandatory, will ensure a prompt review and quicker turnaround time:

- 1. Radiation shielding calculations as per Appendix 2 of Health Canada Safety Code 20A
- 2. Image receptor information provided on page 2 of Form 3, with supporting documentation (e.g., Manufacturer's specifications)
- 3. Scatter radiation data provided by Manufacturer or appropriate third-party (for panoramic, 3D/CBCT scanners, and some other X-ray machines)

SHIELDING METHODOLOGY: SAFETY CODE 20A

Shielding calculations are based on Appendix 2 of Safety Code 20A as per Regulation 543. If you opt to use a different shielding methodology which results in a discrepancy with SC 20A, the results obtained with SC20A prevails over any other method.

HIRING A THIRD-PARTY AGENT?

If you elect to hire a third-party agent to submit the plan application on your behalf, please communicate directly with your agent on matters related to the plan. Due to the high volume of submissions, the ministry will only be responding to enquiries from the plan submitter (agent).

PLAN DRAWING REQUIREMENTS

<u>PLEASE NOTE: Hard-copy plans are not accepted and will be immediately returned to the submitter.</u>

The conversion to purely electronic processing of plans is a "green" initiative that exemplifies the Ontario Government's commitment to reduce the carbon footprint of its operations.

- 1. The plan is to be submitted in one of the following electronic formats:
 - A. Electronic (PREFERRED): either AutoCAD file (.dwg) or Adobe Acrobat Reader file (.pdf); OR
 - B. Adobe Reader photo-scan file (.pdf) of hard-copy version of the plan, <u>IF</u> the content is fully legible when the PDF is printed on paper no larger than ledger size (11"x17").

<u>Please note:</u> Drawings that conform to professional standards (including architectural, engineering) are recommended, and will expedite review.

- 2. Include either on the plan or Form 3, where appropriate, <u>ALL items listed in section 2 of HARP Act Regulation 543</u>.
- 3. Use the following symbols on the plan, where necessary:
- •"★" to mark doors that should be equipped with self-closing devices.
- •"#" to indicate areas that require procedural control to prevent occupancy of the area during an X-ray exposure.
- 4. The plan must be legible and drawn to a scale of 1:50 or greater.
- 5. Include owner's name, full address (with postal code), and date on the plan.
- 6. <u>For facilities with existing plans:</u> Submit a new drawing. Do not use a previous plan. Reusing a previously approved plan is **unacceptable**.

<u>Please note:</u> Any plan that omits requirements #3 to #6 above will be returned to the sender for rectification, without review.

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