

RPR 10B – Radiation Producing Machine Inspection
Dental X-Ray Machines

Authorized User: _____

Permit #: _____

Building: _____

Room(s): _____

Preliminary Review

1. Review the Authorized Users permitted dental x-ray units:
 - a. Have any machines been added to the inventory since the last inspection?
 - b. Have any machines been removed or marked as out-of-service since the last inspection?
 - c. Does the Authorized Users permit inventory match the inventory on record with the State?
2. Has the facility been issued personnel or area monitor dosimetry?
3. Review the dosimetry records since the last inspection, have any occupational exposures exceeded the following ALARA limits:

Worker Dose	ISU ALARA Guideline (mrem)
Whole body TEDE	300/quarter; 1000/year
Minor (< age 18) TEDE	30/quarter; 100/year
Declared Pregnant Worker: Embryo/Fetus	50/quarter; 100/gestation period
Extremity Limit	1250/quarter ^{**} ; 5000/year ^{**}
Non-radiation worker/Public	100/year

^{**} Not an established ISU ALARA Guideline

If yes, identify the individual and the limit that was exceeded:

4. Are the Authorized User and machine operators current on their X-ray Radiation Safety Training?
5. Does the AU have written safety procedures that include patient holding and any restrictions of the operating technique required for the safe operation of the particular x-ray system?
6. Does the AU have training records on file for all operators trained to the safety procedures?
7. Review the previous inspection, were any deficiencies found?
If yes, list the deficiencies and indicate if they have been corrected.

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1.0	Communications	Yes	No	NA
1.1	Is the current State Medical License posted in the facility? (J.11)			
1.2	Is the State Notice to Workers posted in the facility? (J.11)			
1.3	Is the X-ray Documents Notice posted? (J.11)			
1.4	Is the current Radiation Safety Call list posted?			
1.5	Are the Idaho DH&W enforcement actions posted in the facility (if applicable)?			
1.6	Are all signs/postings/labels in good and legible condition?			

2.0	Facilities	Yes	No	NA
2.1	Are all entrance doors locked if unattended?			
2.2	For fixed systems, is the exposure control permanently mounted in a protected area? (F.7.b)			

3.0	Equipment	Yes	No	NA
3.1	Does the machine appear to be in good operating condition?			
3.2	Does the control panel containing the main power switch bear the following label: “WARNING: This x-ray unit may be dangerous to patient and operator unless safe exposure factors, operating instructions and maintenance schedules are observed.”? (F.4.a)			
3.3	Does the x-ray control provide visual indication whenever x-rays are produced (F.6.j)?			
3.4	Does each unit provide an audible signal to the operator to indicate the exposure has been terminated? (F.6.j)			
3.5	Is the x-ray machine secured from unauthorized personnel when not in operation?			
3.6	Are means provided to initiate the radiation exposure by a deliberate action of the operator? (F.7)			
3.7	Is a tube stand or other mechanical support used for portable x-ray systems? (F Appendix B)			
3.8	Is the nominal fixed kVp not less than 50? (F.7.c.)			
3.9	Hand-held dental: Does the unit include a secondary radiation block? (F Appendix B)			

4.0	Administrative	Yes	No	NA
4.1	Are dosimeters or area monitors used when necessary and worn or placed in the appropriate locations?			
4.2	Are written operating procedures available for all operators of the radiation producing machine(s)? (F.3.a.iv)			

5.0	Records	Yes	No	NA
5.1	Are X-ray radiation training records on file for all x-ray machine operators?			
5.2	Are maintenance records available for each machine?			
5.3	Are facility specific training records on file for all x-ray machine operators?			

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Operational Survey

Perform the Operational Survey as specified in the X-ray Dose Spreadsheet and attach survey results.

Item #	Comments

General Comments

Performed By: _____

Date: _____

Acknowledged By: _____

Date: _____

Authorized User Representative