

Minnesota Department of Health X-ray Unit 625 Robert Street North PO Box 64975 St. Paul, Minnesota 55164-0975

Information Notice 2007-01 October 2007 MODEL PROGRAM FOR MAINTAINING OCCUPATIONAL RADIATION EXPOSURE USING THE ALARA CONCEPT (AS LOW AS REASONABLY ACHIEVABLE)

You may use the text as it appears here or if you prefer, you may develop your own ALARA program for MDH review at the time of an inspection.

Management commitment:

- We, the management of this facility, are committed to the program described herein for keeping individual and collective doses as low as is reasonably achievable (ALARA). In accord with this commitment, we hereby describe an administrative organization for radiation safety and will develop the necessary written policy, procedures, and instructions to foster the ALARA concept within our institution. The organization will include a radiation safety officer.
- We will perform a formal annual review of the radiation safety program, including ALARA considerations. This will include reviews of operating procedures and past dose records, inspections, etc., and consultations with the radiation safety staff or outside consultants.
- Modifications to operating and maintenance procedures and to equipment and facilities will be made if they will reduce exposures unless the cost, in our judgment, is considered unjustified. We will be able to demonstrate, if necessary, that improvements have been sought, that modifications have been considered, and that they have been recommended but not implemented, and we will be prepared to describe the reasons for not implementing the changes.
- In additions to maintaining doses to individuals as far below the limits as is reasonably achievable, the sum of the doses received by all exposed individuals will also be maintained at the lowest practicable level.

Radiation Safety Officer (RSO) Commitment:

Annual review:

- The registrant and/or the radiation safety officer will perform an annual review of the radiation safety program for adherence to ALARA concepts. Reviews of specific procedures may be conducted on a more frequent basis.
- The registrant and/or the RSO will review at least quarterly the radiation doses of the workers to determine that the doses are ALARA in accordance with the policy.

Education responsibilities for ALARA program:

• The RSO will schedule briefing and educational sessions as needed to ensure that the workers and other personnel who may be exposed to radiation are instructed in the ALARA philosophy. They should also be informed that management and the RSO are committed to implementing the ALARA concept.

Cooperative efforts for development of ALARA procedures:

- Radiation workers will be given opportunities to participate in formulating the procedures that they will be required to follow to maintain the ALARA philosophy.
- The RSO will be in close contact with the workers in order to develop ALARA procedures for working with radiation-producing equipment.
- The RSO will establish procedures for receiving and evaluating the suggestions of individual workers for improving health physics practices and will encourage the use of those programs.
- Workers will be instructed in recourses available if they feel that ALARA is not being promoted and supported on the job.

Reviewing instances of deviation from good ALARA practices:

• The RSO will investigate all known instances of deviation from good ALARA practices and, if possible, will determine the causes. When the cause is known, the RSO will implement changes in the program to maintain doses ALARA.

Registrant's responsibility to supervised individuals:

- The registrant will explain the ALARA concept and the need to maintain exposures ALARA to all supervised individuals.
- The registrant will ensure that supervised individuals who are subject to occupational radiation exposure are trained and educated in health physics practices involving time, distance, shielding and appropriate techniques in maintaining exposures ALARA.