Florida Bureau of Radiation Control Model Procedure



1. THE ALARA PHILOSOPHY

Part III of Chapter 64E-5, Florida Administrative Code (F.A.C.), establishes standards for protection against radiation hazards. Section 65E-5.303, F.A.C., requires licensees to use to the extent practical procedures and engineering controls based upon sound radiation protection principles to achieve occupational and public doses that are <u>as low as reasonably achievable</u> (ALARA). Management, the radiation safety officer (RSO) and all authorized users must participate in the establishment, implementation and operation of a radiation protection program which applies the ALARA philosophy of minimizing exposures to radiation.

The primary concept of the ALARA philosophy is that unnecessary exposure to radiation should be avoided, even though current occupational exposure limits provide a very low risk of injury. The objective is to reduce occupational exposures (both individual and collective) as far below regulatory limits as is reasonably achievable by means of good radiation protection planning and practice, as well as by a management commitment to policies that deter departures from good practices. The three primary methods of minimizing exposure to radiation are: TIME, DISTANCE and SHIELDING. When working with sources of radiation, always minimize the TIME, maximize the DISTANCE, and make use of available SHIELDING to keep exposures ALARA.

| 2. | MANAGEMENT | COMMITMENT |
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| Иe, | the | management | of _ | | |
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| are co | ommit | tted to the ALAF | RA phi | ilosophy of maintaining occupational and public radiation doses as low as reasonably achievable. | |

- A. It will be a management priority that all personnel working with radioactive material be made aware of our commitment to the ALARA philosophy and that they be instructed in the procedures to be used to keep their exposures as low as possible.
- **B.** Management has delegated authority to our RSO to ensure adherence to ALARA principles. Management will support the RSO in instances where this authority must be asserted.
- **C.** Management will make all reasonable modifications to procedures, equipment and facilities to reduce exposures, unless the cost is considered to be unjustified. We will be prepared to describe the reasons for not implementing modifications that have been recommended.

3. RADIATION SAFETY OFFICER RESPONSIBILITIES

- **A.** The RSO will emphasize the ALARA philosophy to all personnel working with radioactive material, and will instruct workers to review current procedures and propose changes to reduce exposure levels.
- B. If personnel monitoring is conducted, the RSO will review dosimetry reports for all monitored personnel upon receipt (monthly for film badges or quarterly for TLDs) to determine if unnecessary exposures are being received. The RSO will sign and date each report reviewed. The RSO will investigate within 30 days the cause of any personnel exposure considered to be excessive. If warranted, the RSO will take corrective actions to ensure that unnecessary exposures are halted and recurrence is prevented. A report of each investigation and the actions taken, if any, will be recorded and maintained for inspection purposes.
- C. At least annually, the RSO will conduct a formal review of the radiation protection program's content and implementation, as required by subsection 64E-5.303(3), F.A.C. The review will include an evaluation of equipment, procedures, inspection findings, and any incidents. The RSO will assess trends in occupational exposures as an index of the program's success and to determine if any modifications to the program are needed. A summary of the results of each annual review, including a description of actions proposed and taken (if any) will be documented by the RSO, discussed with management, and signed and dated by both. A report on each audit will be maintained on file for 3 years from the date of the review, in accordance with section 64E-5.335, F.A.C.

| undersigned certify that the commitments set forth a | bove have been implemented. |
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| Signature (RSO) | Signature (management) |
| Name and title | Name and title |