XXXX Nuclear Laboratory

Radiation Safety Training

All workers who are likely to receive an annual occupational dose in excess of 100 mrems must be

a. Kept informed of the storage, transfer, or use of radioactive material;
b. Instructed in radiation protection and the applicable NRC regulations and/or State regulations;
c. Instructed to report promptly any condition that may cause a violation of NRC regulations;
d. Instructed in the appropriate response in the event of any unusual occurrence that may involve radiation exposure; and
e. Advised that they may view their radiation exposure reports if they are issued dosimetry or have bioassay measurement taken pursuant to 19.13. Workers likely to receive > 100 mrem/y but not likely to receive 500 mrem/y are not required to be issued dosimeters.

Training shall occur:

a. Before an employee assumes duties with or in the vicinity of radioactive materials
b. During annual refresher trainer
c. Whenever there is a significant change in duties, regulation or the terms of the license

Training shall include

a. review of the radiation protection procedures and all applicable regulations and license conditions
b. Mandate to follow instruction of supervising authorized users for medical use of byproduct material, written radiation protection procedures and all applicable regulations and license conditions

<u>Training:</u>

I. Storage, transfer, and use of radioactive materials
    a. Only technologist's will inject, handle, and dispose of radioactive or contaminated material
    b. Radioactive material used at this facility
        i. Only Tc-99m, Tl-201 and I123 are used for injection or ingestion for diagnostic testing at this facility. Sr-89 is the only nuclide used for radiopharmaceutical therapy. Co-57 and Cs-133 are used in sealed source form for the calibration and testing of equipment. Note: I-131 is not used for diagnostic or therapeutic procedures in this facility.
    c. Locations where radioactive materials are used or stored
        i. Radioactive materials shall only be stored in the locked "hot lab" and decayed for storage in the rad waste closet.
        ii. No doses may be left unattended in the stress area or camera room at any time.
        iii. Injections may only be performed in the stress area or camera room.
        iv. The camera room, stress area, patient bathroom, hot lab and rad waste closet which are the restricted areas are the only areas where radioactive materials are allowed.
        v. The patient waiting room, office, cardiologist office, ultrasound room and employee restroom are considered unrestricted areas.
    d. Security
        i. The main door shall remain locked at all times except for the immediate arrival of patients.
        ii. The hot lab and rad waste closet are to be locked at all times.
        iii. Only technologist, the RSO, the physicist and doctors shall have access to the hot lab and rad waste closet. No ancillary personnel shall be permitted to have access or hold wild, crazy parties in these areas.

II. Health protection problems associated with exposure to radiation and/or radioactive material
    a. General Radiation Information
        i. Definition of Radiation
        ii. Radiation types and sources of radiation
        iii. Potential hazards or risks

III. Precautions or procedures to minimize exposure
    a. Radiation signs, symbols and labels
    b. ALARA Program
        i. An ALARA program is in affect at this facility.
        ii. All employees are reminded of the need to keep doses ALARA and the proper use of protective equipment is required. Basic radiation safety practices such as time, distance and shielding shall be observed. It is the workers responsibility to help keep dose equivalents ALARA.
        iii. Employees are responsible for reporting any unsafe practices to the RSO.

IV. Purposes and functions of protective devices

V. Applicable NRC regulations and any license conditions
    a. License Location
        i. The NRC license, state license, all pertinent regulations, notices and amendments are located in the file cabinet in the hallway in the drawer labeled NRC.
        ii. This facility is required to comply with NRC, Pennsylvania state, Department of Transportation and Environmental Protection Agency requirements.
        iii. The workers rights under the above regulations are stated within in specific regulations and as part of 10 CFR Part 19
    b. Specific or new procedures required by the license.
        i. At the present time the only new procedures required by the license are the adoption of all new procedures and regulations mandated in the new Part 20. These procedures were formally adopted and instituted at this facility and training was performed last year.

VI. Licensee's written radiation protection procedures
    a. Review of the Radiation Safety Manual procedures.
    b. Personnel dosimeters and the need wear them correctly
    c. Radioactive Material Control: Ordering, Receipt, Inventory, Storage, Security and Disposal
    d. Safe Handling of Radioactive Materials: Rules and Procedures for the se of radioactive material, Contamination control, Spill procedures and decontamination
    e. Instrumentation: Survey meters, Dose calibrators, Well counter and Probe
    f. Surveys: End of the day, contamination wipes, personnel and survey meter testing

VII. Responsibility to report promptly any condition that may cause a violation of NRC regulations or an unnecessary radiation exposure
    a. In the event of any unsafe conditions, loss of control of radioactive material, spill of radioactive or misadministration the RSO (Mickey Mouse) shall be notified immediately

VIII. Appropriate response in the event of any unusual occurrence that may involve radiation exposure
    a. Emergency or Accident Response
        i. Detailed radiation incident procedures are outlined in the radiation procedure manual.
        ii. Spill procedures are posted on the walls of the hot lab, imaging room and stress room
        iii. Review: Blue pads, radiac wash and Geiger counters are located in the hot lab. Workers are reminded to minimize the spill or contamination, notify others in the area, maintain control over the situation, decontaminate and notify the RSO of the situation.

IX. Worker request for radiation exposure reports
    a. Occupational doses are reviewed with each employee quarterly and any questions answered
    b. Film badge postings

X. New Procedures, Policies or Issues

I have reviewed the radiation safety program and manual of XXX Nuclear Lab and received training on the topics listed above.

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Name

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Date