

**West Valley Site Management Program
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1.0 PURPOSE

This document establishes the West Valley Site Management Program's (WVSMP) requirements for personnel dosimetry on the Retained Premises of the Western New York Nuclear Service Center (WNYNSC) in accordance with 10 CFR Part 20: *Standards for Protection Against Radiation*. Personnel dosimetry requirements for work on the Retained Premises are determined by the WVSMP Radiation Safety Officer (RSO) in consultation with the Part 20 Radiation Safety Committee (Part 20 RSC).

2.0 EXTERNAL DOSIMETRY

Based on routine radiation surveys and personnel monitoring data, external radiation levels on the Retained Premises do not require the use of personnel dosimeters for routine work; therefore, the need for external dosimetry for activities on the Retained Premises will be determined on a job-specific basis. Dosimeters assigned to workers at the Retained Premises will be worn only for the measurement of occupational exposures on the Retained Premises, and will not be shared by another individual, or worn into the State-Licensed Disposal Area (SDA) or any other facility.

If required, thermoluminescent dosimeters (TLDs) will be issued by the WVSMP or its radiological support contractor, and processed through a National Voluntary Laboratory Accreditation Program. Dosimeters will only be issued upon successful completion of a radiological worker training program where the individual will be trained in the proper use of these devices. The WVSMP will supply and require the proper use of personnel dosimeters by:

- Adult radiological workers likely to receive an occupational dose for the calendar year is likely to exceed 10 percent of the dose limit appropriate for the individual as specified in RP-RPP-500, *Radiation Protection Plan for the Retained Premises*.
- Declared pregnant women exposed to occupational radiation likely to result in a dose to the embryo/fetus greater than 50 mrem during the entire gestation period.

Minors will not be issued personnel dosimetry or be qualified as radiological workers.

3.0 INTERNAL DOSIMETRY

The need for internal dosimetry will be determined on a job-specific basis. Bioassays, whole body scans, measurements of the concentration of radioactive materials in air in work areas, or a combination of these measurements, may be performed to determine the occupational radioactive material intake and to assess the committed effective dose equivalent to:

- Adults likely to receive an annual intake greater than 10 percent of the applicable Annual Limit on Intake (ALI).
- Declared pregnant women likely to receive a committed effective dose equivalent greater than 50 mrem during the entire gestation period.

Bioassay services for in-vitro bioassay will be provided by an approved contractor laboratory and may include facilities available through the U.S. Department of Energy. The committed dose equivalent to any organ or tissue, and the estimated intake and identity of radionuclides from any intakes received, will be determined by qualified health physics contractor staff or dosimetry provider, and reviewed by the RSO and the Part 20 RSC.

4.0 PRIOR OCCUPATIONAL DOSE

Workers likely to receive an annual intake or external exposure from sources on the Retained Premises greater than 10 percent of the applicable ALI or Annual Radiation Exposure Limit will complete a record of previous radiation dose history prior to being issued dosimetry. Records of occupational radiation dose received during the current year as well as records of lifetime cumulative occupational radiation dose will be requested from previous employers and other facilities where personnel monitoring was conducted.

5.0 REVIEW AND REPORTING

Dosimetry records or a summary of the records will be reviewed quarterly by the RSO and the Part 20 RSC. If an individual is monitored for both internal and external exposure, the internal and external doses will be summed to demonstrate compliance with the administrative dose limits. Doses will be determined by monitoring or calculation in accordance with 10CFR20.1202 - 1204.

Radiation exposure data, including the results of any measurements, analyses, and calculations of radioactive material deposited or retained in the body, will be reported in writing, on an annual basis, to any individual who has received dosimetry under this program in the previous year. At the request of a former worker, a written report of exposure to radiation or radioactive material will be furnished within 30 days of the request. Additionally, the WVSMP will submit a written report to the U.S. Nuclear Regulatory Commission (NRC) and the involved individual should an individual's dose exceed the NRC's occupational dose limits. This report will be furnished within 30 days upon learning of the exposure.

6.0 RECORDKEEPING

External and internal dosimetry records, including the measurements and calculations used to determine dose, will be maintained by the WVSMP. These records will also include any documentation pertaining to previous occupational radiation dose history. Dosimetry and documentation of the WVSMP's review of dosimetry records and any calculated doses will be kept in the confidential WVSMP personnel files maintained by the WVSMP Office Manager until license termination by the NRC.