

4.0 Recording and Reporting Internal Doses

Reports of occupational dose equivalent are required as specified in 10 CFR 835, and in DOE Order 231.1 and Manual 231.1-1. The occupational dose equivalent is composed of the dose equivalent received from external sources of radiation and the CEDE from intakes of radionuclides. This chapter describes the recording and reporting of the internal dose component, as performed by the IDP. Assessed internal doses are provided to the Hanford Radiation Records Program (HRRP). After compiling the data, the HRRP prepares the occupational dose reports.

4.1 Internal Dose Records

Evaluation Report

The primary record of internal dose is the Internal Dose Evaluation Report. Section 3.2.2 (“Documentation”) describes the contents of this report, which is issued for each assessed internal exposure. Completed reports are maintained by the HRRP in the radiation exposure files.

4.2 Internal Dose Database

INTERTRAC-REX

Dose information from Internal Dose Evaluation Reports is maintained by the HRRP in the Internal Dose Tracking System (INTERTRAC) subset of the REX computer database. INTERTRAC contains committed organ and effective dose equivalent data and summary intake information from the Internal Dose Evaluation Report for each assessed intake. This information is used to generate dose summaries for tracking and reporting occupational doses to individuals. REX provides online access to recorded internal doses for all active Hanford workers. Each contractor has access to files for its own employees.

4.3 Reports Of Internal Dose

Evaluation Summary

Summary letters of assessed internal dose are issued upon completion of the Internal Dose Evaluation Report, as discussed in Section 3.2.3.

Dose Summaries

Annual occupational dose reports (i.e., report cards), reports of occupational dose for terminating employees, and reports to the DOE Radiation Exposure Information Reporting System (REIRS) are provided by HRRP. Special requests for internal dosimetry information may be made to the IDP.

Chronic Exposure

Some Hanford workers may be considered to be chronically exposed to radionuclides during the course of their work. Typically, these are individuals working with tritium or uranium of low or depleted enrichment. Bioassay samples for these workers are collected throughout the year. A final internal dose assessment is issued after year-end for those workers having

- routine bioassay results that suggest a CEDE could exceed 10 mrem,
- or a baseline bioassay result that exceeded the screening level and that resulted in initiation of an evaluation (see the exhibits in Chapter 3.0 for flowcharts detailing conditions requiring initiation of an evaluation).

Throughout the year, the routine bioassay measurements are reviewed and the contractor is advised if there is an indication that the CEDE from chronic intakes could exceed 100 mrem.

4.4 Requests For Internal Dosimetry Records

Occupational radiation exposure records are controlled according to the requirements and provisions of the Privacy Act (1979) and ANSI/HPS N13.6, *Practice for Occupational Radiation Exposure Records Systems* (HPS, 1999). Access to the records is provided through the HRRP, as follows:

- Current employees may contact their company's radiation protection representative, who will arrange to obtain the requested records.
- Individuals may request their records either in person or by mail. Verbal requests are not honored.
- Employers requesting records of current or former Hanford workers should contact the HRRP.
- Requests by the U.S. Transuranium and Uranium Registries should be made by contacting the HRRP.
- If none of the above apply or are practical, contact the DOE Privacy Act Officer, who will prepare the proper paperwork and submit the request to the HRRP.

In the above cases, the following items are required before records can be released:

- An individual appearing in person must provide a driver's license or other photographic identification and sign a release form that will be provided by the HRRP. This signed release is entered into the individual's REX record.
- An individual requesting records by mail must provide in a notarized written request his/her name, social security number and/or payroll number, and signature. This written request must define exactly which records are needed and the address to which they should be sent. Verbal requests are not honored.
- Employer and U.S. Transuranium Registry requests must be accompanied by a signed radiation exposure release-of-information form.

4.5 Reference

[10 CFR 835. 1999. Department of Energy, Occupational Radiation Protection. U.S. Code of Federal Regulations.](#)

[Health Physics Society \(HPS\). 1999. American National Standard Practice for Occupational Radiation Exposure Records Systems. ANSI/HPS N13.6-1999, McLean, Virginia.](#)

Privacy Act, 44 Fed. Reg. 510772 (1979).

U.S. Department of Energy (DOE). 1996. "Environment, Safety and Health Reporting." DOE O 231.1 Chg 2. U.S. Department of Energy, Washington, D.C.

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