
3.0 Effluent Monitoring, Waste Management, and Chemical Inventory Information

Environmental monitoring requirements at the Hanford Site are set forth in DOE Order 5400.1, "General Environmental Protection Program." By definition in the Order, environmental monitoring consists of two major activities: effluent monitoring and environmental surveillance. Effluent monitoring is the collection of samples and analyses, or measurements, of liquid and gaseous effluents for the purpose of characterizing and quantifying contaminants released to the environment, providing source terms for assessing potential exposures of the public, providing a means to control effluents at or near the point of discharge, and determining compliance with applicable standards and permit requirements. Environmental surveillance is the collection and analysis of samples, or direct measurements, of air, water, soil, vegetation, foodstuffs, terrestrial and aquatic biota and other environmental media from DOE sites and their environs for the purpose of assessing the potential exposure of members of the public, assessing the effects, if any, on the local environment, and determining compliance with applicable standards and permit requirements.

Monitoring effluents and managing waste and chemical inventories at Hanford Site facilities are essential to

determine the effects these materials may have on the public, workers at the Site, and the surrounding environment. Hanford Site contractors have programs to monitor liquid and airborne effluents and manage solid waste and chemical inventories. Facility effluent monitoring programs are designed to measure effluents at their point of release into the environment, whenever possible (Section 3.1). The effectiveness of effluent treatment and control and waste management practices are evaluated through near-facility monitoring (Section 3.2). Types, quantities, and locations of chemicals are also tracked (Section 3.3). This section summarizes the data collected in 1995 by these programs. More detailed program, sampling, and waste management information is contained in the volumes, *Westinghouse Hanford Company Operational Environmental Monitoring Annual Report, Calendar Year 1995* (Schmidt et al. 1996), *1995 Hanford Tier Two Emergency and Hazardous Chemical Inventory* (DOE 1996c), the *Hanford Site Annual Dangerous Waste Report for Calendar Year 1995* (DOE 1996b), and *Summary of Radioactive Solid Waste Received in the 200 Areas*