

PLANT SYSTEMS

BASES

3/4.7.11 SEALED SOURCE CONTAMINATION

The limitations on sealed source removable contamination ensure that the total body or individual organ irradiation does not exceed allowable limits in the event of ingestion or inhalation of the source material. The limitations on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 70.39(c) limits for plutonium. Sealed sources are classified into three groups according to their use, with surveillance requirements commensurate with the probability of damage to a source in that group. Those sources which are frequently handled are required to be tested more often than those which are not. Sealed sources which are continuously enclosed within a shielded mechanism (i.e., sealed sources within radiation monitoring or boron measuring devices) are considered to be stored and need not be tested unless they are removed from the shielded mechanism.

3/4.7.12 SETTLEMENT OF CLASS I STRUCTURES

In order to assure that settlement does not exceed predicted and allowable settlement values, a program has been established to conduct a survey of a specified number of points at the site on a semi-annual basis. The first survey was conducted in May 1976 to establish baseline elevations for most of the points. Where applicable, the base-line elevations of points established subsequent to the May 1976 survey have been adjusted to the May 1976 survey by an evaluation of the settlement records of settlement points on the same structure or on nearby structures. Baseline elevations for some points were established on dates other than May 1976 as indicated in Table 3.7-5. Additional surveys will be performed semi-annually. The determination of the elevation of the points located in the immediate vicinity of the Service Water Reservoir shall be by precise leveling with second-order Class II accuracy as defined by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Survey, 1974.

The change in elevation of points 113 and 117 in the main plant area shall be determined by direct measurement from a single instrument set-up. A difference in survey rod readings from the single set-up will establish an initial difference in elevation between the two points. Subsequent reading will determine if there is a change in the initial difference, indicating additional differential movement. Because the differential movement between points 113 and 117 have previously approached the allowable limit, the direct reading method will provide the most accurate data and will minimize random survey error associated with survey loops. The direct reading method will involve equipment and will produce results that are comparable to second-order Class II accuracy.