TABLE 2.3-1

RADIOACTIVE LIQUID WASTE SAMPLING AND ANALYSIS (4, 5)

A. Monitor Tank Releases

Sampling Frequency	Type of Activity Analysis	Detectable Concentration (3)
Each Batch	Individual Gamma	5×10^{-7} uCi/ml (2)
	H-3	10^{-5} uCi/ml
Monthly Composite (1)	Gross Alpha	10^{-7} uCi/ml
	Sr-90	5×10^{-8} uCi/ml

NOTES

(1) A composite sample is one in which the quantity of liquid sampled is proportional to the quantity of liquid waste discharged from the plant.

(2) For certain mixtures of gamma emitters, it may not be possible to measure radionuclides in concentrations near this sensitivity limit when other nuclides are present in the sample in much greater concentrations. Under these circumstances, it will be more appropriate to calculate the concentrations of such radionuclides using measured ratios with those radionuclides which are routinely identified and measured.

(3) The detectability limits for radioactivity analysis are based on the technical feasibility and on the potential significance in the environment of the quantities released. For some nuclides, lower detection limits may be readily achievable and when nuclides are measured below the stated limits, they should also be reported.

(4) The results of these analyses should be used as the basis for recording and reporting the quantities of radioactive material released in liquid effluents during the sampling period. In estimating releases for a period when analyses were not performed, the average of the two adjacent data points spanning this period should be used. Such estimates should be included in the effluent records and reports; however, they should be clearly identified as estimates, and the method used to obtain these data should be described.

(5) Deviations from the sampling/analysis regime will be noted in the report specified in Section 5.6.1.

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TABLE 2.3-2

RADIOACTIVE GASEOUS WASTE SAMPLING AND ANALYSIS (5)

SAMPLE TYPE	SAMPLING FREQUENCY	TYPE OF ACTIVITY ANALYSIS	DETECTABLE CONCENTRATION(1)
Waste Gas Decay Tank Release			
Gas	Each Tank	H-3	10^{-6} uCi/cc
	Release	Individual Gamma Emitters	10^{-4} uCi/cc (2)
Reactor Building Purge Releases			
Gas	Each Purge	H-3	10^{-6} uCi/cc
		Individual Gamma Emitters	10^{-4} uCi/cc (2)
Condenser Vacuum Pump Releases			
Gas	Monthly	H-3	10^{-6} uCi/cc
	Monthly (3)	Individual Gamma Emitters	10^{-4} uCi/cc (2)
Unit Exhaust Vent Release Points			
Gas	Monthly (4)	H-3	10^{-6} uCi/cc
		Individual Gamma Emitters	10^{-4} uCi/cc (2)
Charcoal	Weekly (6)	I-131, I-133, I-135	10^{-12} uCi/cc
Particulates	Weekly	Individual Gamma Emitters	10^{-10} uCi/cc (2)
	Monthly Composite	Sr-90	10^{-11} uCi/cc
	Monthly Composite	Gross Alpha Emitters	10^{-11} uCi/cc

(1) The above detectability limits are based on technical feasibility and on the potential significance in the environment of the quantities released. For some nuclides, lower detection limits may be readily achievable and when nuclides are measured below the state limits, they should also be reported.