

ATTACHMENT I TO LICENSE CHANGE APPLICATION 3

TABLE 4.11.1.1.1-1

RADIOACTIVE LIQUID WASTE SAMPLING AND ANALYSIS PROGRAM

Liquid Release Type	Sampling Frequency	Minimum Analysis Frequency	Type of Activity Analysis	Lower Limit of Detection (LLD) ( $\mu\text{Ci/mL}$ ) <sup>a</sup>
A. Batch Waste Release Tanks and Sumps <sup>d</sup>	P Each Batch	P Each Batch	Principal Gamma Emitters <sup>c</sup>	$5 \times 10^{-7}$
1. Discharge Waste Sample Tanks	P One Batch/M *	M *	I-131	$1 \times 10^{-6}$
2. Recovery Sample Tanks	P One Batch/M *	M *	Dissolved and Entrained Gases (Gamma Emitters)	$1 \times 10^{-5}$
3. Reactor Building Salt Water Drain Tank	P Each Batch	M Composite <sup>d</sup>	H-3 Gross Alpha	$1 \times 10^{-5}$ $1 \times 10^{-7}$
4. Yard Piping Drain Sump	P Each Batch	Q Composite <sup>d</sup>	Sr-89, Sr-90 Fe-55	$5 \times 10^{-8}$ $1 \times 10^{-6}$
B. Continuous Releases <sup>e</sup>	D Grab Sample	W Composite <sup>d</sup>	Principal Gamma Emitters <sup>c</sup>	$5 \times 10^{-7}$
1. RHR Heat Exchanger Service Water Outlet	M Grab Sample	M	I-131 Dissolved and Entrained Gases (Gamma Emitters)	$1 \times 10^{-6}$ $1 \times 10^{-5}$
2. Reactor Building Salt Water Drain Tank	D Grab Sample	M Composite <sup>d</sup>	H-3 Gross Alpha	$1 \times 10^{-5}$ $1 \times 10^{-7}$
	D Grab Sample	Q Composite <sup>d</sup>	Sr-89, Sr-90 Fe-55	$5 \times 10^{-8}$ $1 \times 10^{-6}$

\* If a batch is released during the month.

TABLE 3.12.1-1 (Continued)

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

EXPOSURE PATHWAY AND/OR SAMPLE	NUMBER OF REPRESENTATIVE SAMPLES AND SAMPLE LOCATIONS <sup>a</sup>	SAMPLING AND COLLECTION FREQUENCY	TYPE AND FREQUENCY OF ANALYSIS
4. INGESTION			
a. Milk	<p>Samples from milking animals in location, 1a1, within 5 km distance having the highest dose potential. If there are none, then, 1 sample from milking animals in each of 3 areas, 1a1, between 5 to 8 km distant where doses are calculated to be greater than 1 mrem per yr, or if there are none available within 8 km, then a location 8 to 17 km distant will be used.</p> <p>1 sample from milking animals at a control location, 1a2, 15-30 km distant, and not in a direction prevalently downwind from the Plant</p>	Semimonthly when animals are on pasture, monthly at other times.	Gamma isotopic <sup>e</sup> and I-131 analysis semimonthly when animals are on pasture; monthly at other times.
b. Fish and Invertebrates	<p>1 sample of each commercially and recreationally important species in vicinity of plant discharge area, 1b1 - 1b2.</p> <p>1 sample of same species in areas not influenced by plant discharge, 1b3.</p>	Sample in season or semiannually if they are not seasonal.	Gamma isotopic analysis <sup>e</sup> on edible portions.
c. Food Products	<p>Samples of 3 different kinds of broad leaf vegetation grown nearest each of two different offsite locations of highest predicted annual average ground-level D/Q, if milk sampling is not performed, 1c1 - 1c3.</p> <p>1 sample of each of the similar broad leaf vegetation grown 15-30 km distant in the least prevalent wind direction if milk sampling is not perform, 1c3.</p>	At time of harvest. <sup>i</sup>	Gamma isotopic <sup>e</sup> and I-131 analysis.
		At time of harvest. <sup>i</sup>	Gamma isotopic <sup>e</sup> and I-131 analysis.