

2.0. RESPONSIBILITIES FOR PART A

All changes to Part A of the ODCM shall be reviewed and approved by the Station Operation Review Committee (SORC) and the Nuclear Regulatory Commission prior to implementation. |

It shall be the responsibility of the Station Manager to ensure that the ODCM is used in the performance of the surveillance requirements and administrative controls of the appropriate portions of the Technical Specifications.

TABLE A.3-1

Radioactive Liquid Waste Sampling and Analysis Program
(continued)

Liquid Release Type	Sampling Frequency	Minimum Analysis Frequency	Type of Activity Analysis	Lower Limit of Detection (LLD) (¹) (uci/ml)
C. Steam Generator Blowdown Flash Tank ⁽⁶⁾⁽⁸⁾ (Continuous Release) ⁽⁵⁾	W Grab Sample	M	H-3	1×10^{-5}
			Gross Alpha	1×10^{-7}
	W Grab Sample	Q (9)	Sr-89, Sr-90	5×10^{-8}
			Principal Gamma Emitters ⁽³⁾	5×10^{-7}
	W Grab Sample	M	I-131	1×10^{-6}
			Dissolved and Entrained Gases (Gamma Emitters)	1×10^{-5}
	W Grab Sample	M	H-3	1×10^{-5}
			Gross Alpha	1×10^{-7}
	W Grab Sample	Q (9)	Sr-89, Sr-90	5×10^{-8}
			Fe-55	1×10^{-6}

TABLE A.3-1

Notations
(Continued)

- (3) The principal gamma emitters for which the LLD specification applies include the following radionuclides: Mn-54, Fe-59, Co-58, Co-60, Zn-65, Mo-99, Cs-134, Cs-137, Ce-141, and Ce-144. This list does not mean that only these nuclides are to be considered. Other gamma peaks that are identifiable, together with those of the above nuclides, shall also be analyzed and reported in the Annual Radioactive Effluent Release Report in accordance with Technical Specification 6.8.1.4. Isotopes which are not detected should be reported as "not detected." Values determined to be below detectable levels are not used in dose calculations.
- (4) A composite sample is one in which the quantity of liquid sampled is proportional to the quantity of liquid waste discharged and in which the method of sampling employed results in a specimen that is representative of the liquids released.
- (5) A continuous release is the discharge of liquid wastes of a nondiscrete volume, e.g., from a volume of a system that has an input flow during the continuous release.
- (6) Sampling and analysis is only required when Steam Generator Blowdown is directed to the discharge transition structure.
- (7) Principal gamma emitters shall be analyzed weekly in Service Water. Sample and analysis requirements for dissolved and entrained gases, tritium, gross alpha, strontium 89 and 90, and Iron 55 shall only be required when analysis for principal gamma emitters exceeds the LLD.

The following are additional sampling and analysis requirements:

- a. PCCW sampled and analyzed weekly for principal gamma emitters.
 - b. Sample Service Water System (SWS) daily for principal gamma emitters whenever primary component cooling water (PCCW) activity exceeds 1×10^{-3} uC/cc.
 - c. With the PCCW System radiation monitor inoperable, sample PCCW and SWS daily for principal gamma emitters.
 - d. With a confirmed PCCW/SWS leak and PCCW activity in excess of 1×10^{-4} uC/cc, sample SWS every 12 hours for principal gamma emitters.
 - e. The setpoint on the PCCW head tank liquid rate-of-change alarm will be set to ensure that its sensitivity to detect a PCCW/SWS leak is equal to or greater than that of an SWS radiation monitor, located in the unit's combined SWS discharge, with an LLD of 1×10^{-8} uC/cc. If this sensitivity cannot be achieved, the SWS will be sampled once every 12 hours.
- (8) If the Turbine Building Sump (Steam Generator Blowdown Flash Tank) isolate due to high concentration of radioactivity, that liquid stream will be sampled and analyzed for Iodine-131 and principal gamma emitters prior to release.

TABLE A.3-1

Notations
(Continued)

- | (9) Quarterly composite analysis requirements shall only be required when
| analysis for principal gamma emitters indicate positive radioactivity.

TABLE A.4-1

Radioactive Gaseous Waste Sampling
and Analysis Program
(continued)

Gaseous Release Type	Sampling Frequency	Minimum Analysis Frequency	Type of Activity Analysis	Lower Limit of Detection ⁽¹⁾ (LLD) (uCi/cc)
3. Gland Steam Packing Exhauster	Continuous	W Particulate Sample	Principal Gamma Emitters ⁽²⁾	1×10^{-11}
	Continuous	W Charcoal Sample	I-131	1×10^{-12}
	Continuous	M Composite Particulate Sample	Gross Alpha	1×10^{-11}
	Continuous	Q Composite Particulate Sample (8)	Sr-89, Sr-90	1×10^{-11}
4. Containment Purge	p ⁽³⁾ Each Purge Grab Sample	P Each Purge	Principal Gamma Emitters ⁽²⁾	1×10^{-4}
			H-3 (oxide)	1×10^{-6}

TABLE A.4-1

Notations
(Continued)

- (2) The principal gamma emitters for which the LLD specifications applies include the following radionuclides: Kr-87, Kr-88, Xe-133, Xe-133m, Xe-135, and Xe-138 in noble gas releases and Mn-54, Fe-59, Co-58, Co-60, Zn-65, Mo-99, I-131, Cs-134, Cs-137, Ce-141 and Ce-144 in iodine and particulate releases. This list does not mean that only these nuclides are to be considered. Other gamma peaks that are identifiable, together with those of the above nuclides, shall also be analyzed and reported in the Annual Radioactive Effluent Release Report in accordance with Technical Specification 6.8.1.4. Isotopes which are not detected may be reported as "not detected." Values determined to be below detectable levels are not used in dose calculations.
- (3) Sampling and analysis shall also be performed following shutdown, startup, or a THERMAL POWER change exceeding 15 percent of RATED THERMAL POWER within a one hour period unless; 1) analysis shows that the DOSE EQUIVALENT I-131 concentrations in the primary coolant has not increased more than a factor of 3; 2) the noble gas activity monitor for the plant vent has not increased by more than a factor of 3. For containment purge, requirements apply only when purge is in operation.
- (4) Tritium grab samples shall be taken at least once per 24 hours when the refueling canal is flooded.
- (5) The ratio of the sample flow rate to the sampled stream flow rate shall be known for the time period covered by each dose or dose rate calculation made in accordance with Technical Specifications 3.11.2.1, 3.11.2.2, and 3.11.2.3.
- (6) Samples shall be changed at least once per seven (7) days and analyses shall be completed within 48 hours after changing, or after removal from sampler. Sampling shall also be performed at least once per 24 hours for at least seven (7) days following each shutdown, startup, or THERMAL POWER change exceeding 15 percent of RATED THERMAL POWER within a one-hour period and analyses shall be completed within 48 hours of changing. When samples collected for 24 hours are analyzed, the corresponding LLDs may be increased by a factor of 10. This requirement does not apply if; 1) analysis shows that the DOSE EQUIVALENT I-131 concentration in the reactor coolant has not increased more than a factor of 3; and 2) the noble gas monitor shows that effluent activity has not increased more than a factor of 3.
- (7) Samples shall be taken prior to start-up of condenser air removal system when there have been indications of a primary to secondary leak.
- (8) Quarterly composite analysis requirements shall only be required when analysis for principal gamma emitters indicate positive radioactivity.