

SPECIFICATIONS AND SURVEILLANCE BORIC ACID STORAGE TANKS

POOR ORIGINAL

1.0 PURPOSE

The purpose of this procedure is to specify the chemistry and radio-chemistry requirements and the surveillance requirements for the water in the boric acid storage tanks. This procedure also gives the quality requirements for any batch of boric acid produced by the reactor coolant waste processing system evaporators or a batch prepared in the boric acid batch tank.

2.0 SPECIFICATIONS

2.1 The specifications for water in the boric acid storage tanks are given in Table 1.

NOTE

The quality of water entering the storage tanks as makeup will be such that the quality of the tank contents remains within specifications after the addition.

2.2 The specifications for boric acid solutions resulting from evaporation of reactor coolant waste (evaporator bottoms) are given in Table 2.

NOTE

Table 2 also discusses the specifications for batches of boric acid in a boric acid batch tank.

3.0 SURVEILLANCE - Table 1

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3.1 Sampling and analysis of the boric acid storage tanks will be accomplished in accordance with Table 1.

3.2 Sampling and analysis of the reactor coolant waste evaporator bottoms will be accomplished in accordance with Table 2.

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SPECIFICATIONS AND SURVEILLANCE BORIC ACID STORAGE TANKSTABLE 1BORIC ACID STORAGE TANKS**POOR ORIGINAL**

<u>ANALYSIS PROCEDURE/METHOD (1)</u>	<u>SPECIFICATION</u>	<u>FREQUENCY</u>
1. Conductivity/901	NS	1/M
2. pH at 25 c/902	(2) (3)	1/M
3. % Boric Acid/903	7.0 - 8.0	1/7 days
4. Chloride/906	1.0 ppm (max)	1/M
5. Fluoride/907	1.0 ppm (max)	1/M
6. Lithium/908	NS	1/M
7. Gross Beta Gamma Activity/1001	NS	1/M
8. Tritium	NS	1/M

- (1) All analyses, other than pH and % Boric acid, should be performed on an aliquot of a 1:1 diluted sample. Results should be corrected by multiplying each analytical result by 2.
- (2) The pH result should be the pH as determined in step 4.3.2.2 of RCP 1-903.
- (3) Should be performed on a 1:20 dilution of the storage tank solution.

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TABLE 2 (1)

RC WASTE EVAPORATOR BOTTOMS

<u>ANALYSIS PROCEDURE/METHOD</u>	<u>SPECIFICATION</u>	<u>FREQUENCY (2)</u>
1. Boric Acid/903	6.25 - 8 wt.%	
2. Chloride/906	1.0 ppm (max)	
3. Fluoride/907	1.0 ppm (max)	

- (1) If analysis of boric acid batch tank is requested, results should also be within these specifications.
- (2) All analyses shall be performed prior to disposition of any bottom. See RCP 1-206 for evaporator release permit.

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