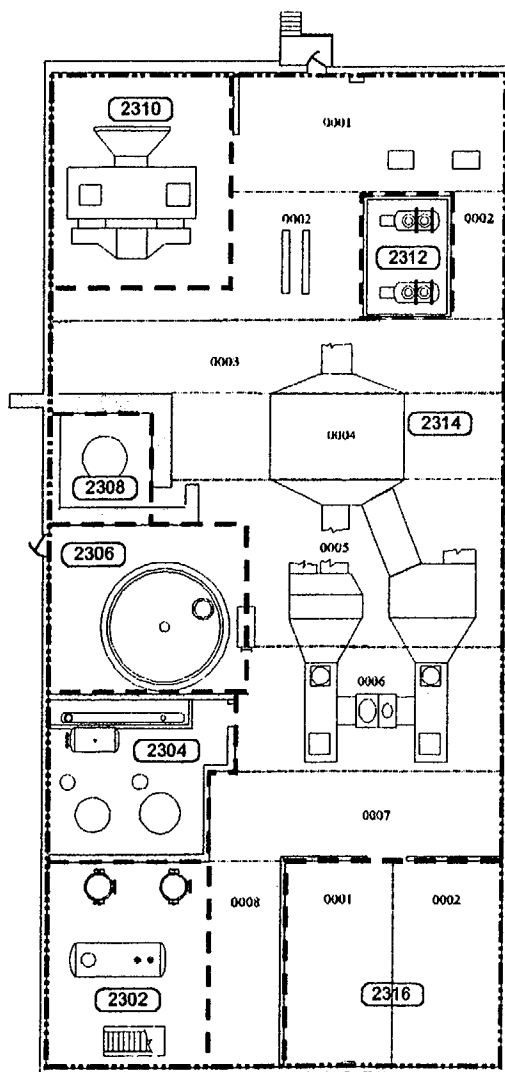




**DRAFT**



Elevation 35'-6"

Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour		Contamination Levels Beta/Gamma DPM/100cm2		Contamination Levels Alpha DPM/100cm2	
			Min	Max	Min	Max	Min	Max
2302	Auxiliary Building Component Cooling Area	1	<0.1	0.3	< 57.2	1000	<20	
2304	Auxiliary Building Boric Acid Evaporator Area	1	0.2	24	< 57.2	40000	<20	581
2306	Auxiliary Building Boric Acid Mix Tank Area	1	1	35	< 57.2	>100000	<20	420
2308	Auxiliary Building Volume Control Tank Room	1	2	>100	< 57.2	30000	<20	
2310	Auxiliary Building Purge and Dilution Fans	1	1	15		<1000	<20	
2312	Auxiliary Building Service Water Strainer Area	1	1	6		<1000	<20	
2314	Auxiliary Building HEPA Filter and Hall Area	1	1	>100		<62	<15.2	
2316	Auxiliary Building Boric Acid Storage Room	1	0.2	0.5		<1000	<20	

ENCLOSURE 4



Primary Auxiliary Building.  
Elevation 35'-6"  
GAD 2000

**Radiation Range:** Gamma Radiation <1mR/hr to >1 R/hr.

General area dose rates in the filter area (2314) range from <1 mR/hr to 2 mR/hr with isolated areas up to 5 mR/hr with hot spots up to 160 mR/hr as measured with an ion chamber (Eberline RO-2). Highest dose rates (>1R/hr) are in survey unit 2308 due to the Volume Control Tank. Dose rates in excess of approximately 0.1mr/hr prohibit the determination of total surface contamination.

**Removable Contamination Range:** Beta emitters up to >100,000 dpm/100cm<sup>2</sup> (2306). Alpha emitters up to 581 dpm/100cm<sup>2</sup> (2404).

The general area was maintained as a clean area, (i.e. no removable contamination greater than 1000 dpm/100cm<sup>2</sup>). Contaminated areas have existed at times in the Boric Acid Mix Tank area (2306), the filter housings (2314) and evaporator area (2304). Typically, 25% of swipe survey samples have been analyzed for alpha emitting nuclides. No alpha contamination greater than 100 dpm/100cm<sup>2</sup> was detected in the general area. Note that fixed contamination measurements are limited by the background dose rates from equipment and systems that will be removed prior to final area characterization.

**Isotope Identification:** Predominate Isotopes: Co-60, Cs-137.

Isotopic analysis of samples from the PAB indicate the predominate isotopes impacting the dose from residual activity area Co-60 and Cs-137. The ratio of these isotopes varies from approximately 1:1 to greater than 90% Co-60. The only other isotope of significant measured activity is Fe-55, which has been measured at levels similar to Co-60. However, the Fe-55 contribution to dose, and therefore the DCGL is minimal.