Section A-1 Conceptual Model and Site Diagram

Open Land Areas
(Page 1 of 2)
GAD 9003

Radiation Range: Gamma Radiation 0.003 mR/hr to 0.015 mR/hr

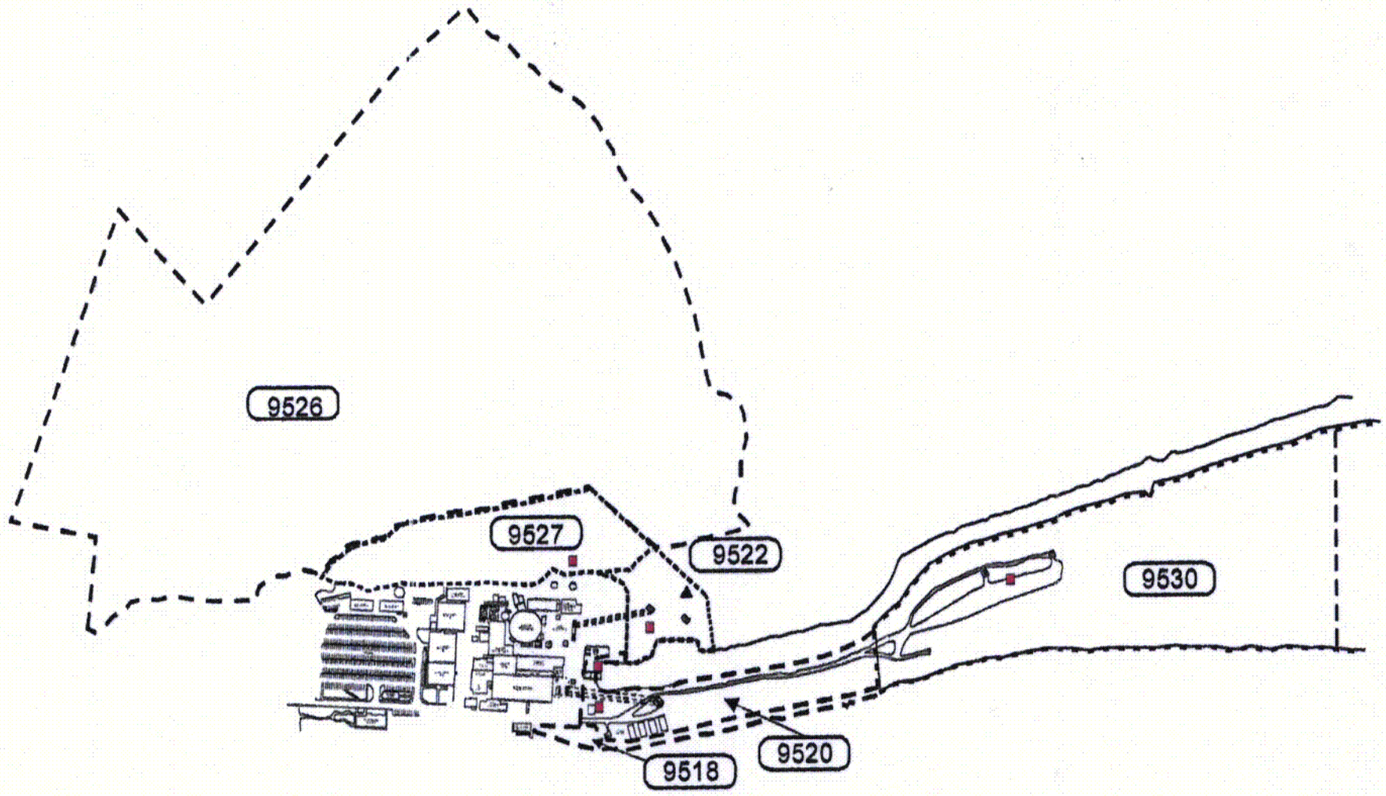
Radiation levels are typical of background radiation levels from primordial nuclides in soil and rock.

Contamination Range: Cs-137 0.79 pCi/gm to 7.20 pCi/gm. Co-60 0.041 pCi/gm to 7.50 pCi/gm

Elevated Cs-137 concentrations were measured in two areas (9520, 9522). Maximum Cs-137 concentration of 7.2 pCi/gm not confirmed during subsequent characterization surveys. Cs-137 maximum concentrations are less than the expected DCGLs. All other Cs-137 values are in the range associated with fallout from weapons testing. Co-60 detected in four survey areas (9520, 9522, 9527, 9530). A single measurements in one area (9522) identified Co-60 at a concentration greater than the DCGL. Subsequent characterization surveys could not confirm the elevated measurements. All other Co-60 measurements are less than the expected DCGL.

Isotope Identification: Cs-137 and Co-60

The only isotopes identified in soil samples taken in these areas are Cs-137 and Co-60. The only other isotopes identified in samples are primordial nuclides.



■ **Area 9530 Soil Sample Location.**
(Ref. CY RPM 5.1-2 Survey 2/2/99)

■ **Soil Samples Locations.**
(Ref. CY Results of Scoping Surveys 9/98)

Continued on next page.

Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels pCi/g Medium	Nuclide	Max
9518	Southwest Site Grounds (Non-Protected Area)	2					
9520	Southwest Site Storage Area	2	0.003	0.012	Soil	Co-60 Cs-137	0.13 6.30
9522	Southeast Site Grounds (Non-Protected Area)	2	0.012	0.015	Soil	Co-60 Cs-137	7.50 7.20
9526	Northeast Mountain Side	3			Soil	Cs-137	0.79
9527	East Mountain Side	2	0.061	0.132	Soil	Co-60 Cs-137	0.453 1.69
9530	Central Peninsula Area	2, 3	0.008	0.014	Soil	Co-60 Cs-137	0.041 1.69

Land Areas
(Page 1 of 2)
GAD 9003

Radiation Range: Gamma Radiation at background levels

Radiation levels are typical of background radiation levels from primordial nuclides in soil and rock.

Contamination Range: Cs-137 <0.18 pCi/gm to 1.898 pCi/gm
Cs-137 contamination detected at levels less than 20% of the expected DCGL. Cs-137 concentrations are at the levels associated with fallout from weapons testing.

Isotope Identification: Cs-137, Co-60

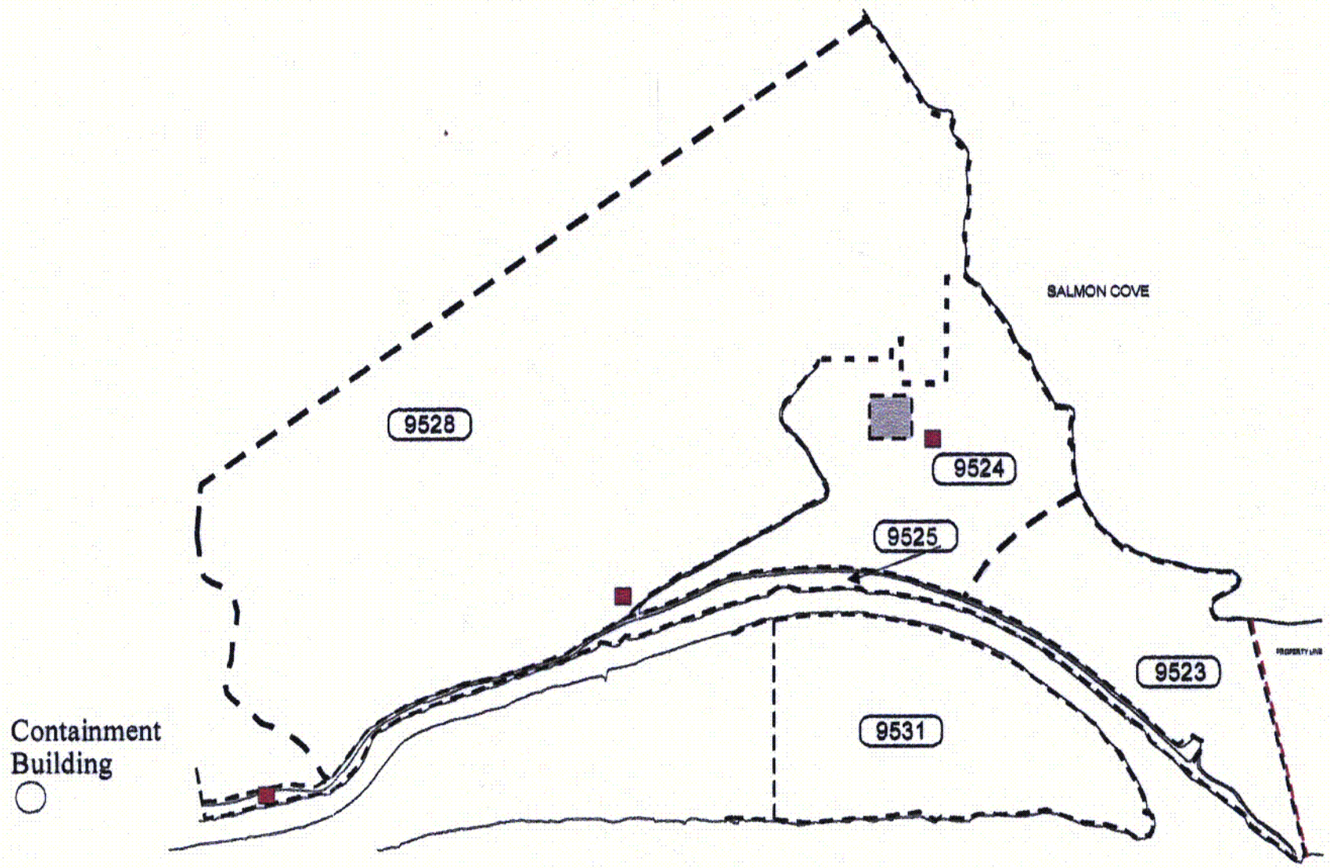
The predominant isotope identified other than primordial nuclides is Cs-137. Cs-137 is also attributed to fallout from weapons testing.

■ **Soil Sample Locations**

(Ref. Area 9524 HP 99-057 2/15/99)

(Ref. Area 9525 HNP Gamma Spect. 9525CG001 4/8/98)

(Ref. Area 9528 Duke G5745 12/21/00)



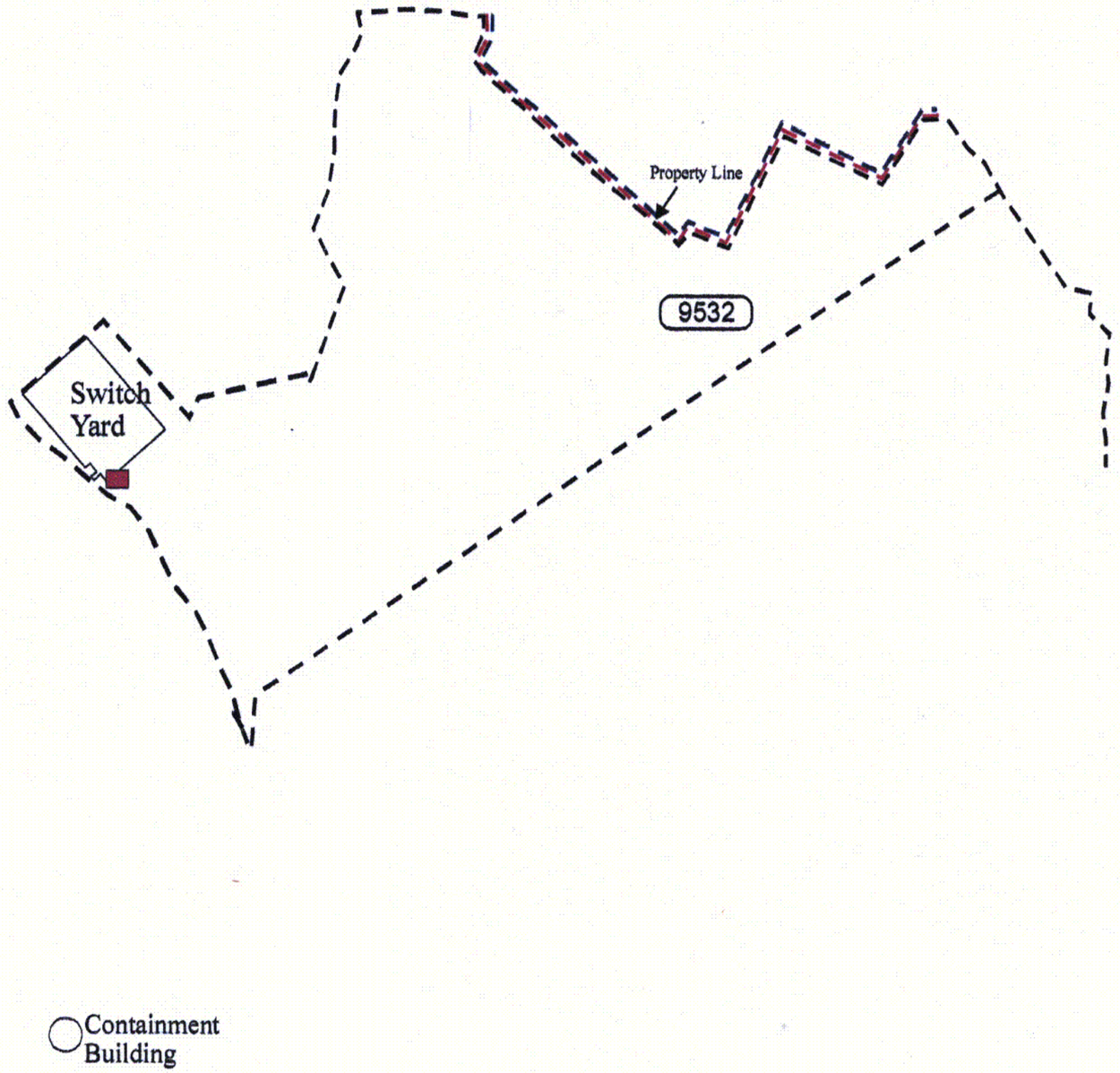
Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour		Contamination Levels pCi/g		
			Min	Max	Medium	Nuclide	Max
9523	Southeast Wetland Area	3					
9524	South Site Grounds (Non-Protected Area)	3			Soil	Cs-137	<0.18
9525	Southeast Site Road	3			Soil	Cs-137	<0.18
9528	Southeast Mountain Side	3			Soil	Cs-137	1.898
9531	South End of Peninsula	3					

East Site Grounds (Non-Protected Area)
Non-Impacted Area 9532
GAD 9003

Radiation Range: Environmental Background

The historical data indicates that site contamination events would have no radiological impact on the East Site Grounds due to distance and topography from the potential source of release. Records and surveillances do not indicate that spills, discharges and other occurrences would have resulted in the spread of contamination into the East Site Grounds. Environmental monitoring performed within the East Site Grounds at location #6-I has not identified plant related radionuclides at this location. Walk downs and visual inspections or the area have not identified obvious or perceptible storage, dumping or burial of plant-related radioactive materials in the East Site Grounds. Therefore the area has been properly classified as non-impacted.

■ **Environmental Monitoring Station #6-I**



Land Areas
(Page 1 of 2)
GAD 9003

Radiation Range: Gamma Radiation 009 mR/hr to .013 mR/hr

Radiation levels are typical of background radiation levels from primordial nuclides in soil and rock.

Contamination Range: Cs-137 up to 0.79 pCi/gm

Cs-137 contamination level is within the range associated with radioactive fallout in the general area of the plant.

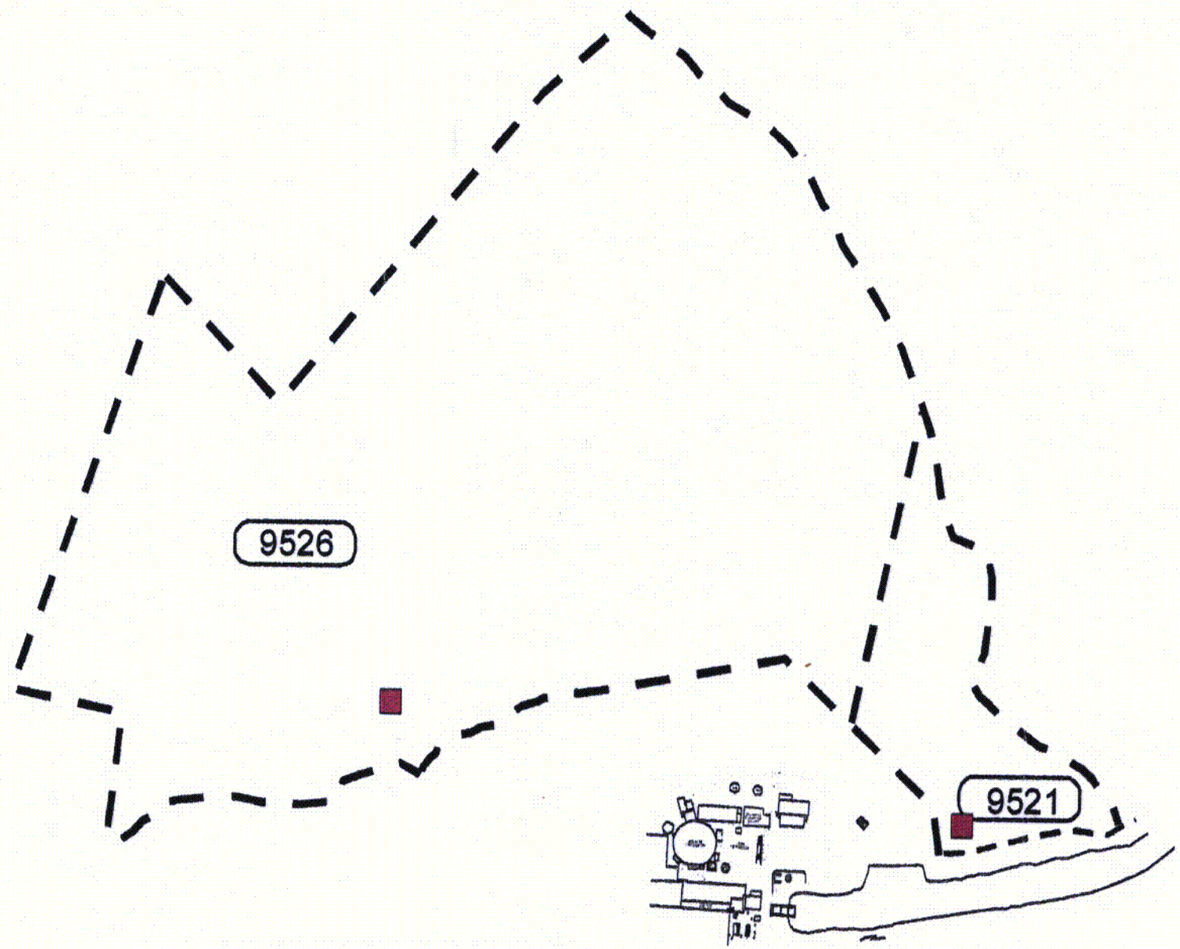
Isotope Identification: Cs-137

The only non-primordial radionuclide identified via gamma spectroscopy is Cs-137, which is found in area soils as a result of fallout from weapons testing.

Soil Sample Location

(Ref. Area 9521 YAECEL 9526 9526CSOO4 11/11/97)

(Ref. Area 9526 YAECEL 9528 9528CSOO4 11/19/97)



Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Sample Medium	Nuclide	Contamination Levels pCi/gm Min	Max
9521	Southeast Pond	3	0.009	0.013	Soil	Cs-137		0.596
9526	Northeast Mountain Side	3			Soil	Cs-137		0.79

C04

Landfill Areas
(Page 1 of 2)
GAD 9003

Radiation Range: Gamma Radiation , 0.006 mR/hr to 0.03 mR/hr

Gamma radiation levels are generally in the range of background radiation. The highest radiation level was approximately 2.5 to 3 times the background in the undisturbed areas.

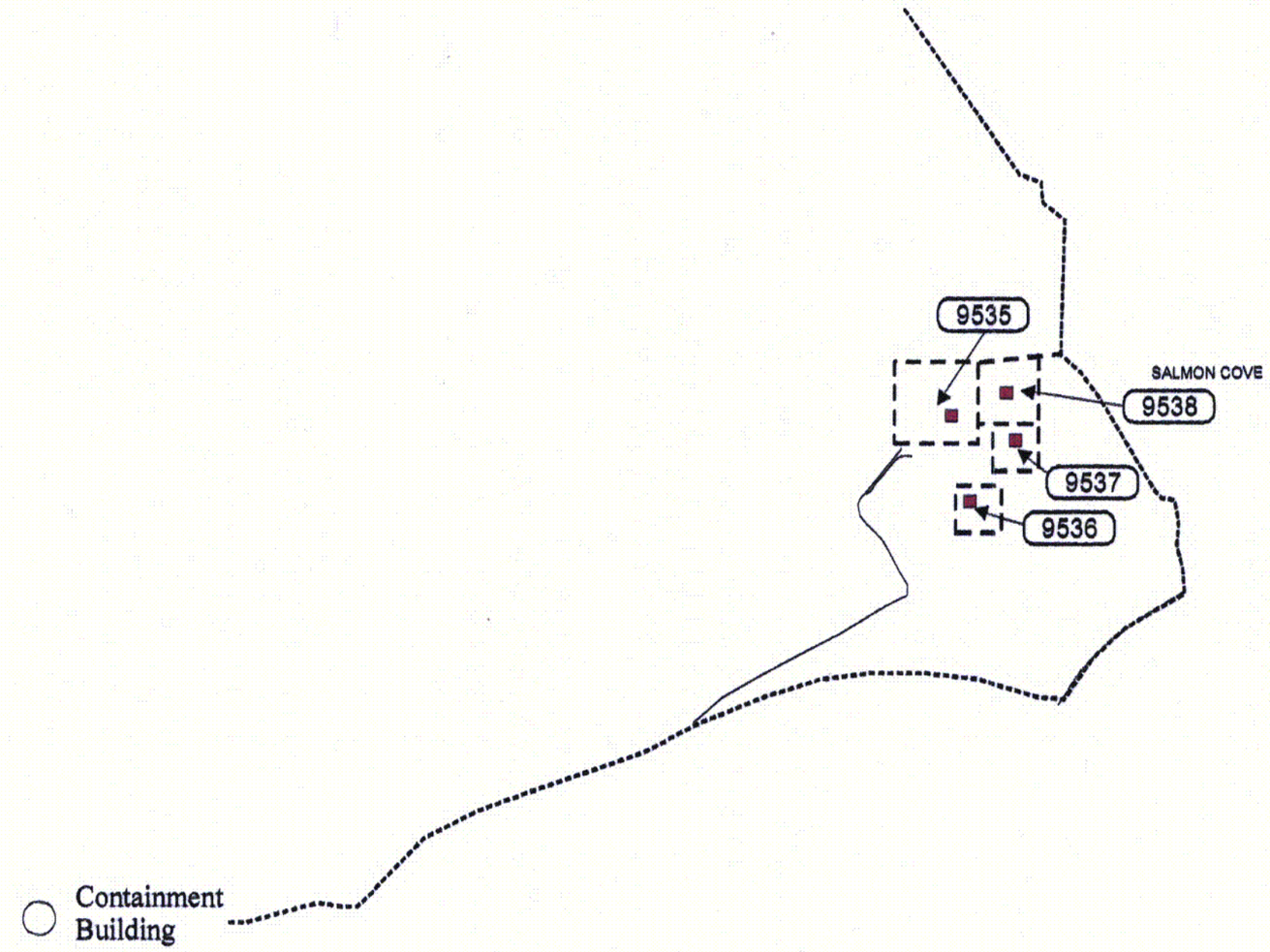
Soil Contamination Range: Cs-137 up to 52.9 pCi/gm. Co-60 up to 5 pCi/gm.

The Cs-137 concentrations in three survey areas (9536, 9537, 9538) are at the levels found in the vicinity of the plant due to fallout from weapons testing. Maximum Cs-137 concentration in one area (9535) exceeds the expected DCGL. Co-60 was also detected in that survey area with the maximum concentration above the expected DCGL.

Isotope Identification: Plant isotopes Cs-137 and Co-60

Potential contamination in these survey areas has been the result of materials form construction activities discarded at the landfill area. The predominant plant isotopes are Co-60 and Cs-137. Co-60 and Cs-137 are the only plant related isotopes identified in soil samples from these survey areas.

■ **Soil Sample Location.**
(Ref. GTS Duratek Inc. 1/27/99)



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Landfill Areas
(Page 1 of 2)
GAD 9003

Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels PCi/g Medium	Nuclide	Max
9535	South East Landfill Area	1		0.011	Soil	Co-60 Cs-137	5 52.9
9536	Construction Piles Near Rifle Range	2	0.009	0.03	Soil	Cs-137	0.149
9537	Permitted Landfill Area	2	0.006	0.01	Soil	Cs-137	0.039
9538	Material Storage Area	2	0.006	0.011	Soil	Cs-137	0.119

Site Buildings
FW/STM Penetration and Radwaste Reduction Facility
GAD 9001

Radiation Range: Gamma Radiation, <0.5 mR/hr to 150 mR/hr

The FW/STM Penetration area is external to the containment building and contains secondary side systems. The radiation levels are typical of background. The "less than" values indicate the minimum sensitivity of the instruments used to perform the radiation surveys. The Radwaste Reduction Facility (9226) maximum radiation levels are associated with processing equipment or materials within the building.

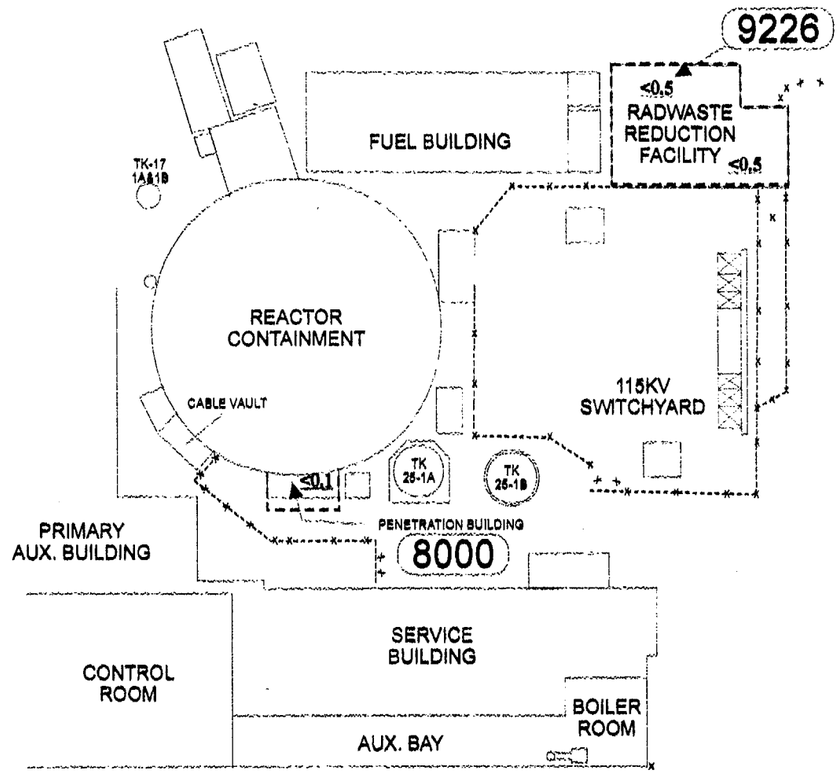
Contamination Range: Beta emitters up to 2,000-dpm/100 cm2. No alpha emitters detected.

No contamination has been detected in the FW/STM Penetration building. No systems designed to contain radioactive materials are within the buildings. Contamination has been recorded in the Radwaste Reduction Facility (9226). The area was designed to process potentially contaminated materials. Material processing equipment within the facility contained internal contamination. No alpha emitting radionuclides have been detected in these areas.

Isotope Identification: Plant isotopes Cs-137 and Co-60

Contamination in these areas has been the result of handling equipment and samples from radioactive systems. Therefore, the predominant beta emitting isotopes found in the plants are considered as those of potential concern. No alpha emitting isotopes have been detected in any of these areas.

XX Indicates dose rates-mR/hr.



Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels Beta/Gamma DPM/100cm2 Min	Max	Contamination Levels Alpha DPM/100cm2 Min	Max
9226	Radwaste Reduction Facility	1	<0.5	150	ND (<1000)	2000		
8100	FW/STM Penetration Building Upper Level	1		<0.1	ND (< 57.2)	<1000		
8200	FW/STM Penetration Building Mid Level	1		<0.1	ND (< 57.2)	<1000		
8300	FW/STM Penetration Building Lower Level	1		<0.1	ND (< 57.2)	<1000		

Site North
(Page 1 of 2)
GAD 9000

Radiation Range: Gamma Radiation at background levels

Radiation levels are typical of background radiation levels from primordial nuclides in soil and rock.

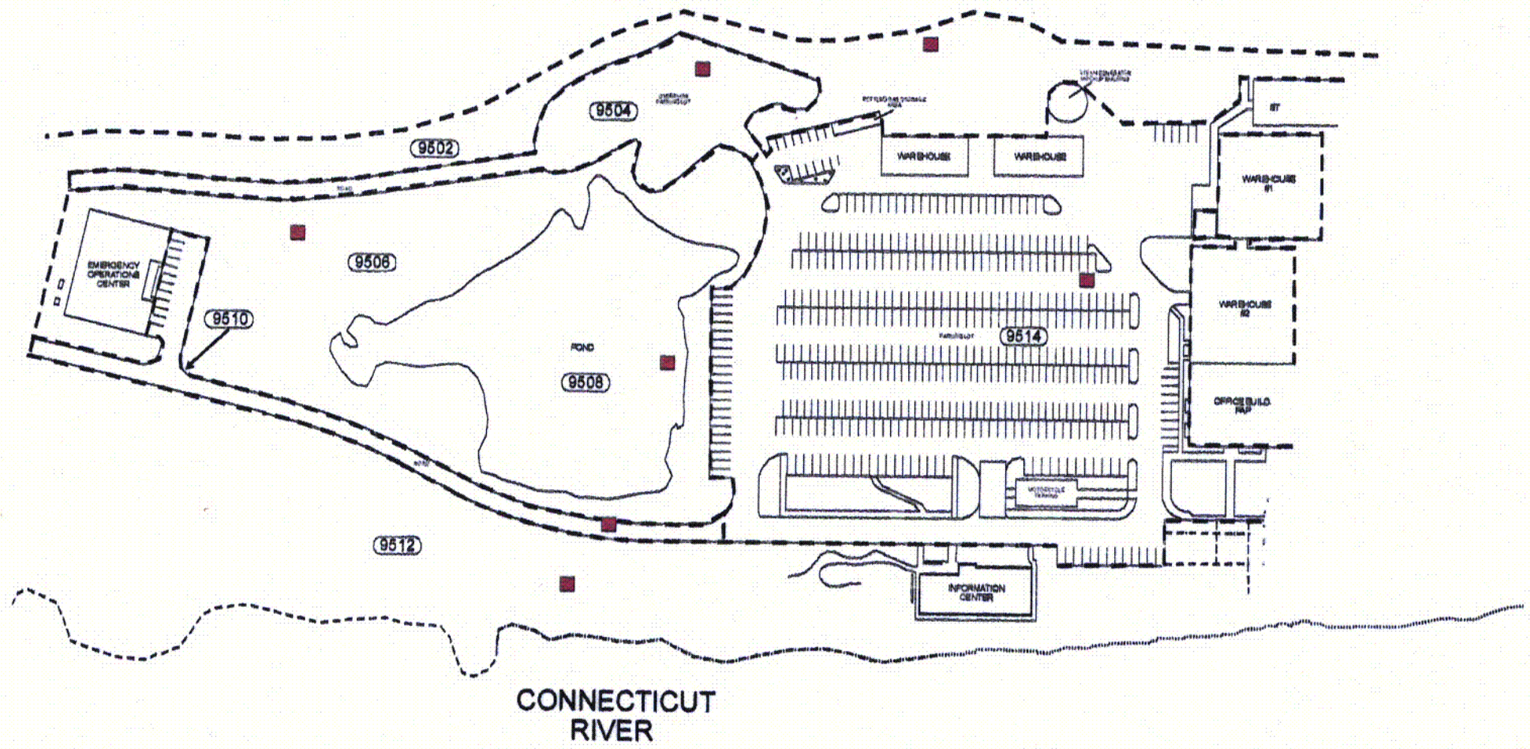
Contamination Range: Cs-137 <0.18 pCi/gm to 0.238 pCi/gm

Cs-137 contamination detected at levels less than 5% of the expected DCGL. Cs-137 concentrations are at the levels associated with fallout from weapons testing. Minimum detectable concentration is at the environmental Lower Level of Detection.

Isotope Identification: Cs-137

The only isotope identified other than primordial nuclides is Cs-137. Cs-137 is also attributed to fallout from weapons testing.

■ **Soil Sample Locations**
(Ref. Results of Scoping Surveys 9/98)



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Site North
(Page 2 of 2)
GAD 9000

Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels pCi/g Medium	Nuclide	Max
9502	Northeast Site Grounds (Non-Protected Area)	3			Soil	Cs-137	0.407
9504	Bypass Road / Secondary Parking Lot	3			Soil	Cs-137	<0.18
9506	North Site Grounds (Non-Protected Area)	3			Soil	Cs-137	0.08
9508	Pond	3			Sediment	Cs-137	0.233
9510	Access Road	3					
9512	Northwest site Grounds (Non-Protected Area)	3	0.008	0.013	Soil	Cs-137	0.238
9514	Primary Parking Lot	3	0.012	0.015	Soil	Cs-137	0.076

Yard Areas
(Page 1 0f 2)
GAD 9000

Radiation Range: Gamma Radiation, 0.007 mR/hr to 0.016 mR/hr

The gamma radiation range is typical of levels associated with background radiation. Radiation levels indicated with "less than" valves are indicative of the sensitivity of instrumentation used for those surveys. These survey areas are outside the Radiologically Controlled Area of the plant.

Soil and Asphalt Contamination Range: Co-60 from <0.1 pCi/gm to 1.592 pCi/gm. Cs-137 from 0.04 pCi/gm to 0.775 pCi/gm.

Maximum concentrations of both Co-60 and Cs-137 are below the expected DCGLs for the site. Cs-137 concentrations are within the range typical of Cs-137 from fallout due to weapons testing.

Isotope Identification: Plant isotopes Cs-137, Co-60

Contamination of theses survey areas has been the result of events involving plant releases or spills. The predominant plant isotopes Co-60 and Cs-137 dominate the isotopic mix. Cs-134 was the only other isotope identified in samples taken within the survey areas.

Sample Locations

(Ref. Area 9106 YAECEL G68836 9/22/97)

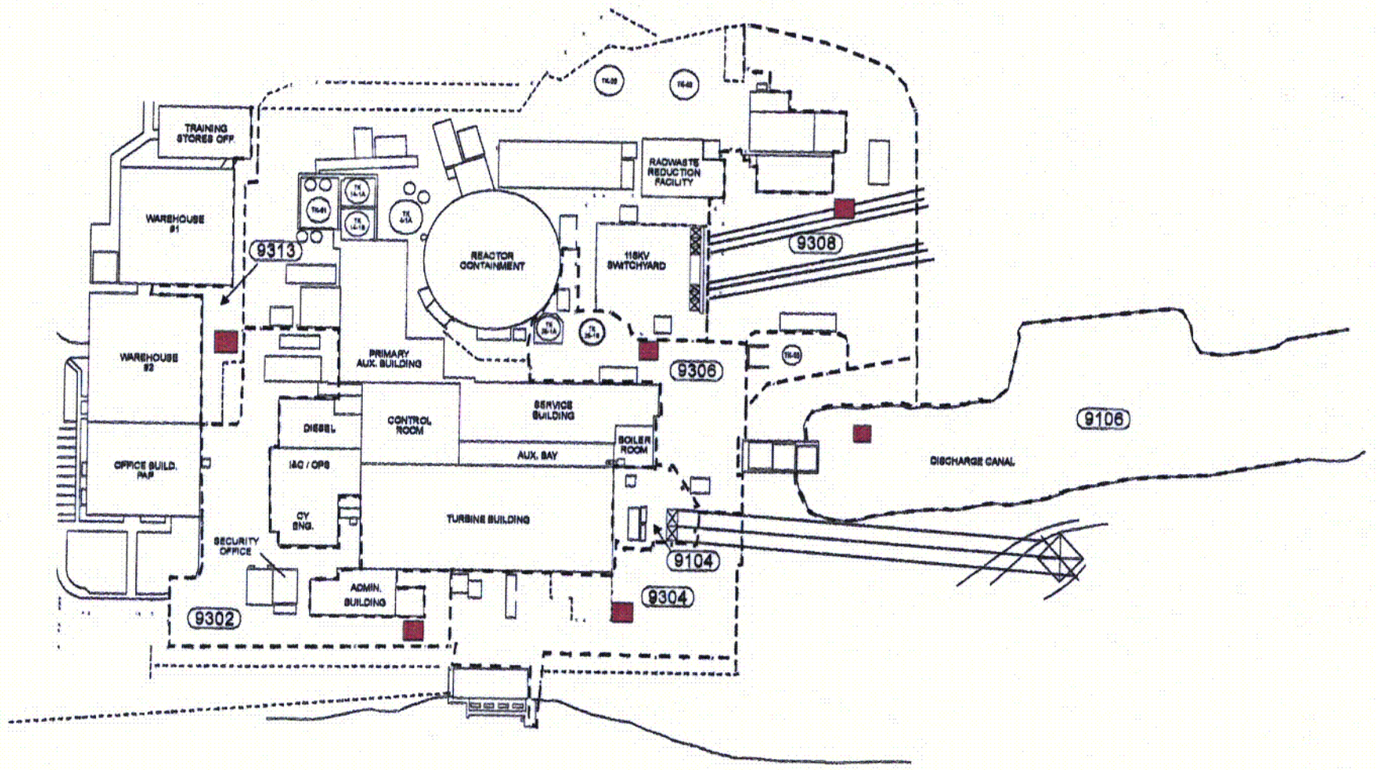
(Ref. Area 9302 HP 99-111 9/22/97)

(Ref. Area 9304 HNP Gamma Spect. 990107011 1/7/99)

(Ref. Area 9306 HP98-586 11/24/98)

(Ref. Area 9308 HNP Gamma Spect. 9308CS110 1/27/99)

(Ref. Area 9313 HP99-112 3/11/99)



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Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels pCi/g Medium	Nuclide	Max
9104	YD Main Transformer Area	3		<0.5			
9106	Discharge Canal	2	<0.1	<1	Sediment	Co-60 Cs-134 Cs-137	0.5 0.024 0.722
9302	Northwest Protected Area Grounds	3			Soil Asphalt	Co-60 Cs-137	<0.12 <0.10
9304	Southwest Protected Area Grounds	3	0.007	0.013	Soil Asphalt	Co-60 Cs-137	<0.10 0.04
9306	South Central Protected Area Grounds	2			Soil Asphalt	Co-60 Cs-137	0.532 0.775
9308	Southeast Protected Area Grounds	2	0.009	0.016	Soil	Co-60 Cs-137	0.31 0.33
9313	Central Site Grounds	3			Soil	Co-60 Cs-137	0.174 1.592

Radiation Controlled Areas
(Page 1 of 2)
GAD 9000

Radiation Range: Gamma Radiation, 0.016 mR/hr to >100 mR/hr

The radiation levels range from background values to High Radiation Areas (>100 mR/hr). The radiation levels are predominantly due to storage tanks and processing equipment within the areas. Dose rates in excess of approximately 0.1 mR/hr prohibit the determination of total surface contamination.

Contamination Range: Maximum beta emitters greater than 100,000 dpm/100 cm2. No alpha emitters detected.

Events associated with handling of radioactive resin, waste processing and leakage from contaminated systems has resulted in removable contamination in some areas. Fixed contamination in the asphalt as well as the soil beneath the asphalt is suspected. No alpha emitting radionuclides have been detected in these areas.

Soil and Asphalt Contamination Range: Co-60 up to 521 pCi/gm, Cs-137 up to 793 pCi/gm.

Soil and asphalt contamination resulted from handling of radioactive resins, waste handling and leakage from contaminated systems. Maximum concentrations have been remediated. All areas are within the Radiologically Controlled Area except the 115 Kv Switchyard (9102). Areas within the switchyard that were impacted by leakage events were controlled.

Isotope Identification: Plant isotopes Cs-137 and Co-60

Co-60 and Cs-137 are the predominant isotopes detected in both soil and asphalt samples in these areas. The only other gamma-emitting isotope identified in historical sample analysis is Cs-134. No alpha emitting isotopes have been detected in any of these areas.

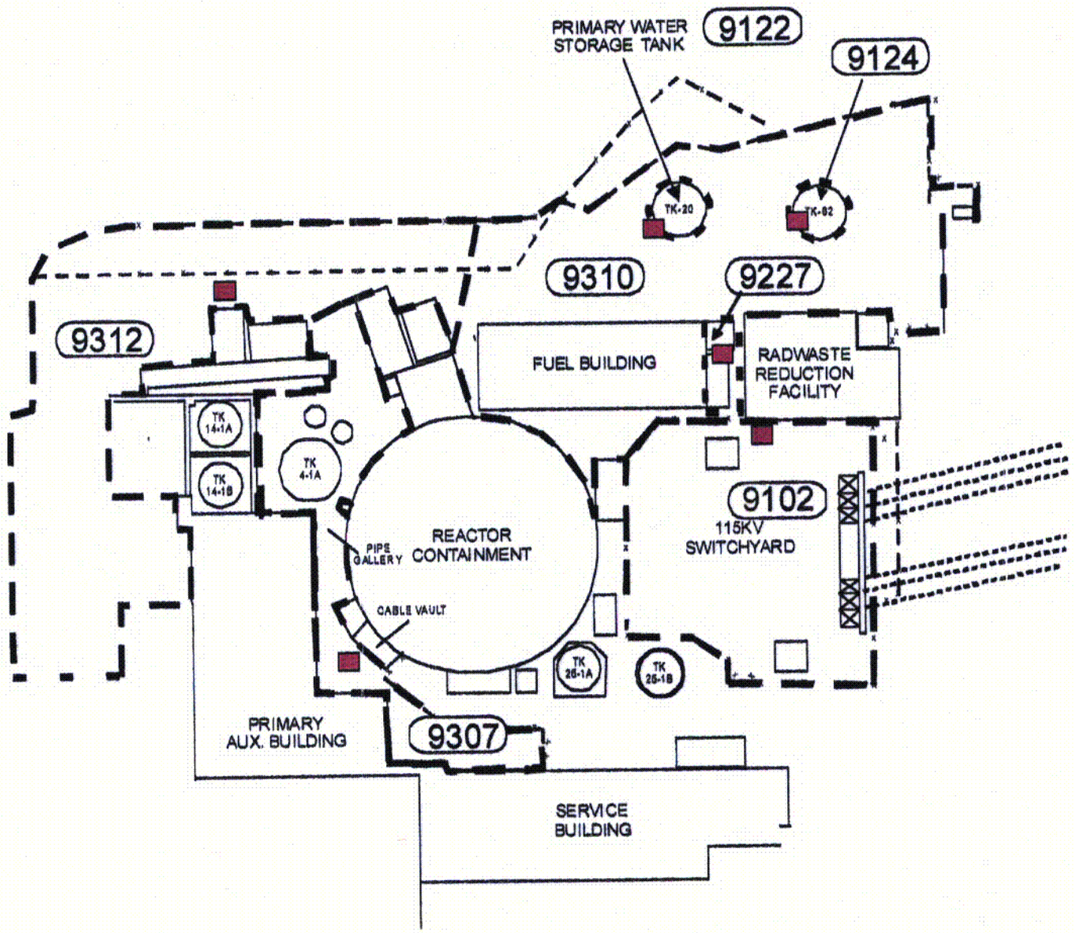
■ **Sample Location.**

(Ref. Area 9312 and 9227GTS Duratek Inc. 1/27/99)

(Ref. Area 9102 CY Survey 3/6/89)

(Ref. Area 9122 and 9124 CY Survey 4/20/82)

(Ref. Area 9307 HNP Gamma Spect. 9/9/98)



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C08

Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels pCi/g Medium	Nuclide	Max
9102	YD 115KV Switchyard Area	1	0.015	1	Soil	Co-60 Cs-137	2.87 4.49
9122	YD Primary Water Storage Tank Area	1	<0.2	5	Soil	Co-60 Cs-134 Cs-137	521 153 793
9124	YD Backup Primary Water Storage Tank Area	1	<0.2	5	Soil	Co-60 Cs-134 Cs-137	84.8 20.2 155.2
9227	Bus10 Pad and Ground Underneath	1		5	Soil	Co-60 Cs-137	22 735.2
9307	PAB / Service Building Alleyway	1	0.016	10	Asphalt	Co-60 Cs-137	202.4 97.14
9310	East Protected Area Grounds	1			Soil Asphalt	Co-60 Cs-137	213.7 3095
9312	Northeast Protected Area Grounds	1	0.032	>100	Asphalt	Co-60 Cs-137	0.31 7.94

Yard Areas
(Page 1 of 2)
GAD 9000

Radiation Range: Gamma Radiation, <0.2 mR/hr to 300 R/hr

Gamma radiation in the area of the fuel oil tank and the demin water storage tanks were measured at levels up to 0.5 mR/hr. All other structures are designed to contain radioactive materials and included water processing equipment. Maximum values are associated with radioactive resins that have been/will be disposed of as radwaste. Access to the structures has been controlled. The area outside the structures (9126) is within the Radiologically Controlled Area. Dose rates in excess of approximately 0.1 mR/hr prohibit the determination of total surface contamination.

Contamination Range: Beta emitters up to 675,000-dpm/100 cm2. Alpha emitters up to 6,000-dpm/100 cm2.

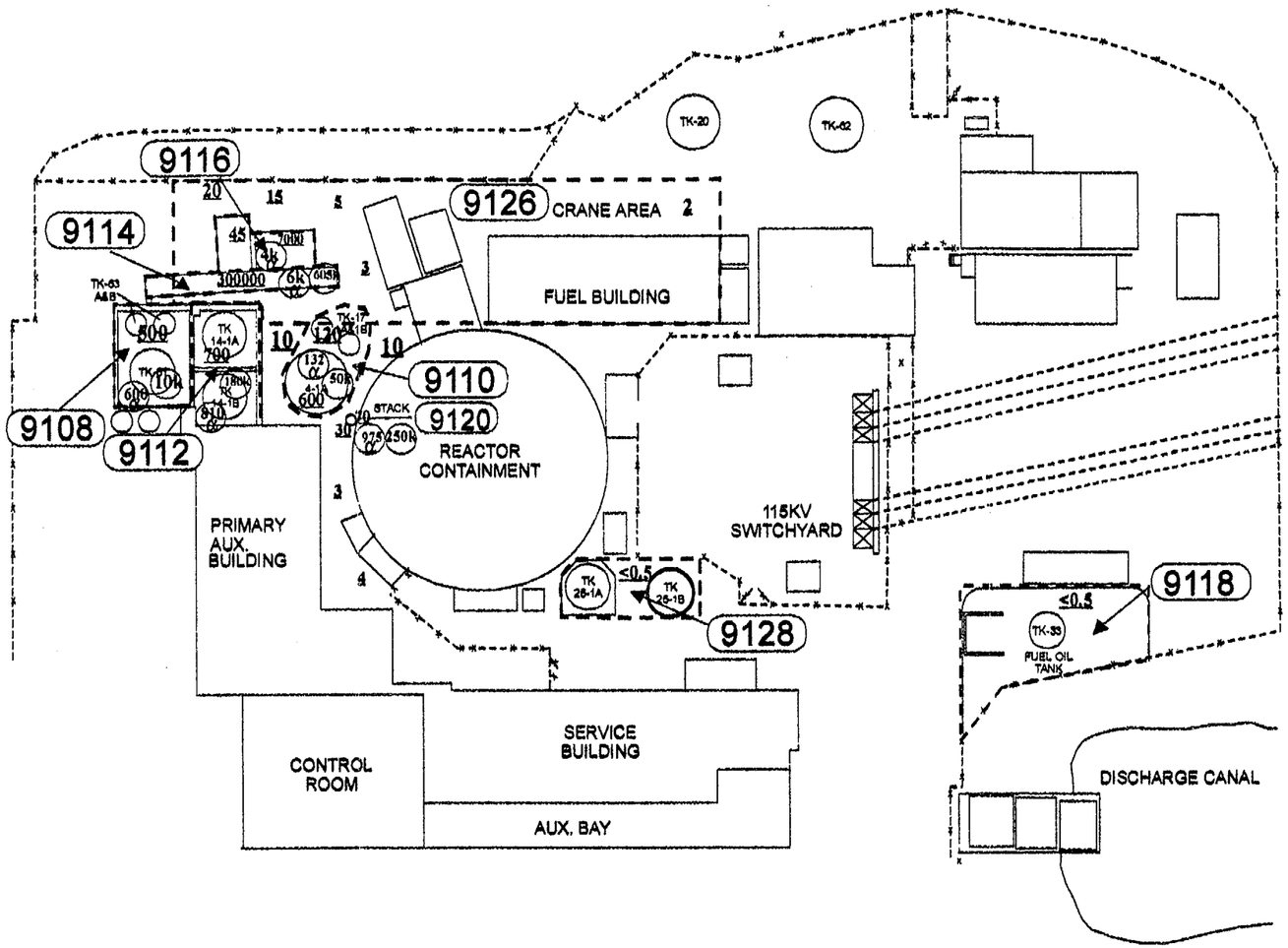
Removable beta contamination has been measured at levels greater than 100,000 dpm/100 cm2 in four survey areas (9112, 9114, 9116, 9120). Remediation activities in areas of high dose rates were not warranted. Areas of high removable contamination were posted and controlled. Alpha contamination was measured at levels greater than 500-dpm/100 cm2 in the same four survey areas. Three survey areas (9120, 9126, 9128) had no detectable removable contamination.

Isotope Identification: Plant isotopes Cs-137, Co-60 and Am-241

Contamination of theses survey areas has been the result of leakage from systems containing primary coolant or water processing resins. The predominant plant isotopes Co-60 and Cs-137 dominate the isotopic mix. The alpha contamination levels indicate the presence of Am-241 as well as other transuranics.

◯ **Indicates removable contamination levels-dpm/100cm2.**

XX Indicates dose rates-mR/hr.



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Radiation Controlled Areas
(Page 2 of 2)
GAD 9000

Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels Beta/Gamma DPM/100cm2 Min	Max	Contamination Levels Alpha DPM/100cm2 Min	Max
9108	YD North Tank Farm Area	1	0.8	>100	ND (<1000)	10000	ND (<20)	60
9110	YD South Tank Farm Area	1	2	>100	ND (<1000)	50000	ND (<20)	132
9112	YD Boron Storage Tank Area	1	15	>100	ND (<1000)	>100000	ND (<20)	>500
9114	YD Ion Exchange Area	1	1	>100	ND (<1000)	>100000	ND (<20)	>500
9116	YD Resin Slurry Area	1	<0.2	>100	ND (<1000)	>100000	ND (<20)	>500
9118	YD Fuel Oil Tank Area	3		<0.5				
9120	YD Primary Vent Stack	1	<0.2	70		>100000	ND (<20)	>500
9126	YD Large Yard Crane Area	1	<0.2	20		ND (<1000)		
9128	YD Demin Water Storage Tank Area	1	<0.2	<0.5		ND (<1000)		

Site Buildings
(Page 1 of 2)
GAD 9001

Radiation Range: Gamma Radiation <1 mR/hr

Radiation levels are indicative of background radiation. No radioactive systems or equipment are in these areas. All buildings are outside the industrial area. Variations in instruments used for surveys results in differences in minimum exposure rate levels.

Contamination Range: No detectable beta contamination. No detectable alpha contamination.

These facilities are outside the industrial area and are maintained as non-contaminated areas. Contamination materials have been stored in two areas (9410, 9404), but no building contamination has been detected in those areas. Surveys performed included both swipes for removable contamination and direct measurements (frisks) for total activity. No beta or alpha emitting radionuclides were detected in any of these survey areas.

Isotope Identification: Plant isotopes Cs-137 and Co-60

Since limited positive readings of any type have been obtained, the predominant beta emitting isotopes found in the plant are considered as those of potential concern. No alpha emitting isotopes have been detected in any of these areas.

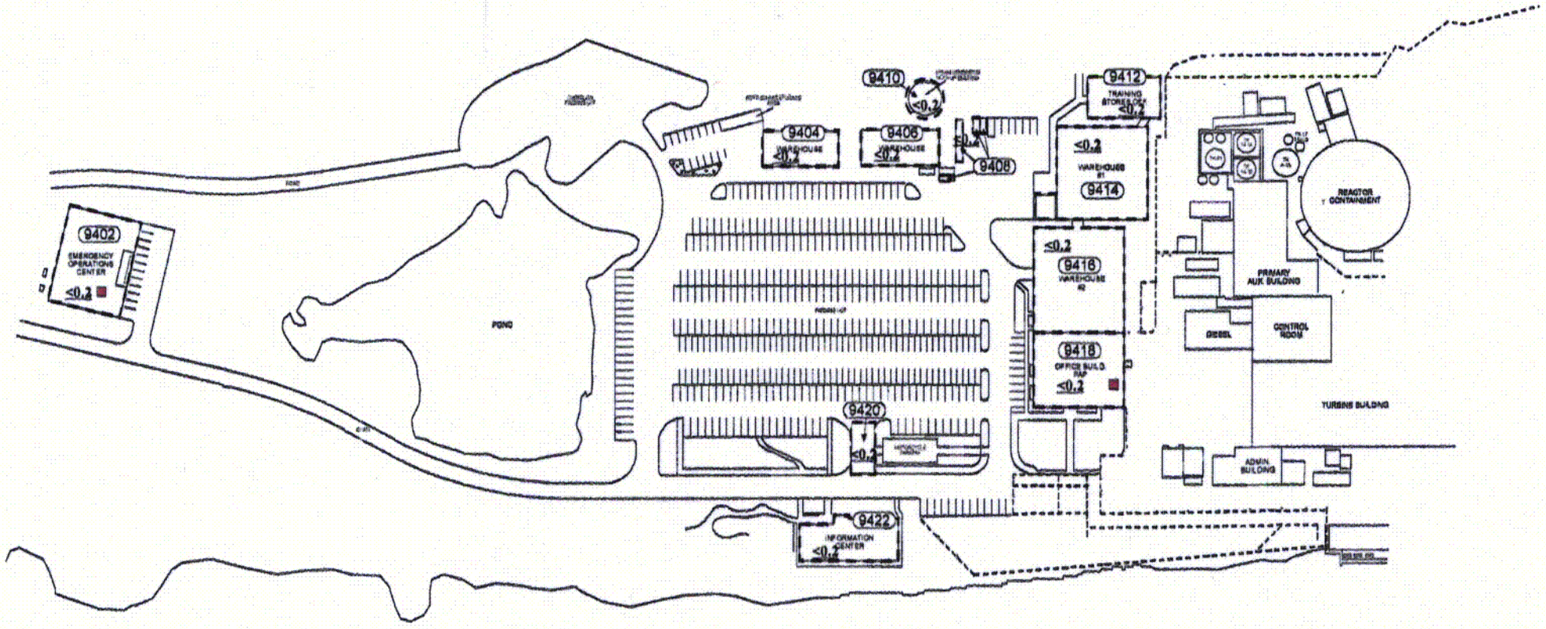
- **Soil Sample Location.**
(Ref. Area 9418, Duke G71263 2/5/98)

Area 9418 Concrete/Soil Samples: Cs-137 <0.18 pCi/g

- **Roof Sample Location.**
(Ref. Area 9403, HP 99-126 3/29/99)

Area 9403 Roof Samples: Cs-137 <0.18 pCi/g

XX Indicates dose rates-mR/hr.



Areas Not Shown

9403	Emergency Operations Center Roof
9423	Information Center Roof
9424	All Buildings in the Southwest Site Storage Area

Continued on next page.

Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels Beta/Gamma DPM/100cm2 Min	Max	Contamination Levels Alpha DPM/100cm2 Min	Max
9402	Emergency Operations Facility	3		<0.2		ND (< 57.2)		ND (<20)
9403	Emergency Operations Center Roof	3						
9404	North Warehouse	3		<0.2		ND (< 57.2)		ND (<20)
9406	South Warehouse	3		<0.2		ND (< 57.2)		ND (<20)
9408	Miscellaneous Trailer Complex	3		<0.2		ND (< 57.2)		ND (<20)
9410	Steam Generator Mockup Building	3		<0.2		ND (< 57.2)		ND (<20)
9412	Training Stores Office Building	2		<0.2		ND (< 57.2)		ND (<20)
9414	Warehouse #1	3		<0.2		ND (< 57.2)		132
9416	Warehouse #2	3		<0.2		ND (< 57.2)		ND (<20)
9418	Office Building #3 and PAP	3		<0.2		ND (< 57.2)		ND (<20)
9420	Office Trailer	3		<0.2		ND (< 57.2)		ND (<20)
9422	Information Center	3		<0.2		ND (< 57.2)		ND (<20)
9423	Information Center Roof	3						
9424	All Buildings Contained in the Southwest Site Storage Area	3		<1		ND (<1000)		ND (<20)

Site Buildings
(Page 1 of 2)
GAD 9001

Radiation Range: Gamma Radiation <0.5 mR/hr

Radiation levels are indicative of background radiation. No radioactive systems or equipment are in these areas. The Unconditional Release Facility and the HP Count Module were used to monitor for low levels of radioactivity on materials or in samples. Radiation levels were required to be maintained at low levels to allow for low level monitoring and counting. Variations in instruments used for surveys results in differences in minimum exposure rate levels.

Contamination Range: Beta emitters up to 5000-dpm/100 cm2 (9228). No detectable alpha contamination.

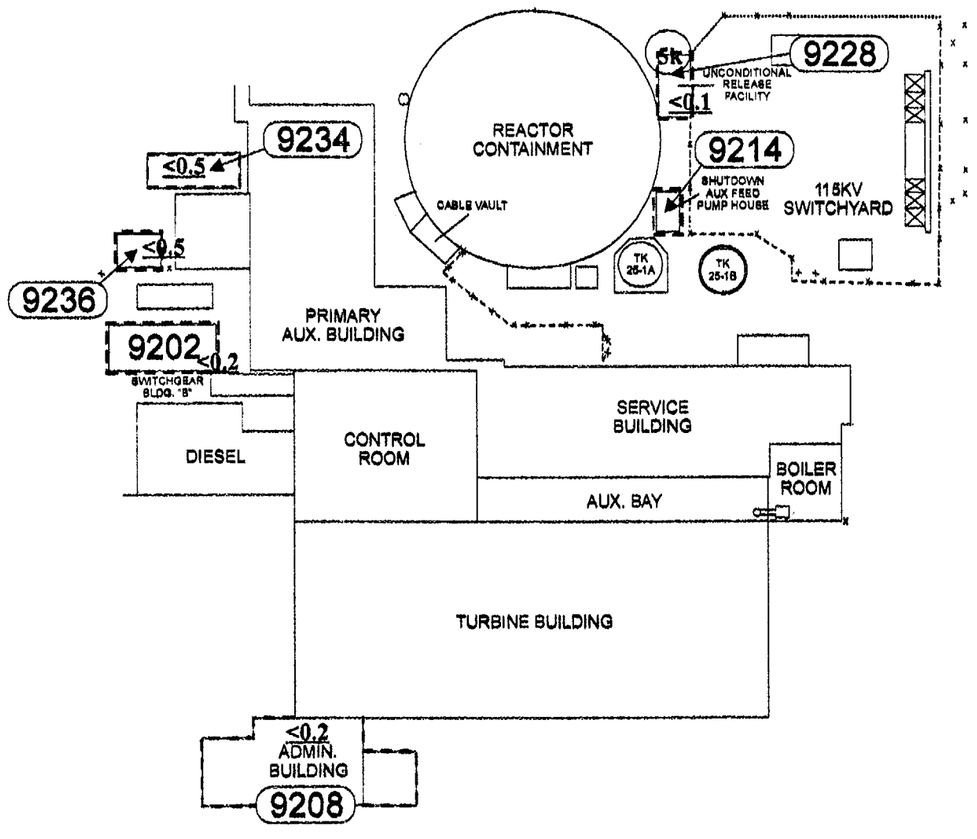
These facilities were maintained as non-contaminated. Any radioactive contamination detected resulted in immediate remediation. The only detectable contamination found in any of these facilities was in the Unconditional Release Facility. Identification of low levels of contamination on materials being processed would result in that material being returned for decontamination or disposal as radwaste. Identification of low levels of contamination in the facility required area decontamination and resurvey to verify satisfaction of clean area criteria. Surveys performed included both swipes for removable contamination and direct measurements (frisks) for total activity. No alpha emitting radionuclides were detected in any of these survey areas.

Isotope Identification: Plant isotopes Cs-137 and Co-60

Since limited positive readings of any type have been obtained, the predominant beta emitting isotopes found in the plants are considered as those of potential concern. No alpha emitting isotopes have been detected in any of these areas.

◯ **Indicates removable contamination levels-dpm/100cm2.**

XX Indicates dose rates-mR/hr.



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Site Buildings
(Page 2 0f 2)
GAD 9001

Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels Beta/Gamma DPM/100cm2 Min	Max	Contamination Levels Alpha DPM/100cm2 Min	Max
9202	Switchgear Building "B"	3		<0.2		ND (< 57.2)		
9208	Administration Building	3		<0.2		ND (< 57.2)		ND (<20)
9214	Shutdown Auxiliary Feed Pump House	2						
9228	Unconditional Release Facility	2		<0.1	ND (<45.4)	5000		ND (< 8.92)
9234	HP Project Trailer	2		<0.5		ND (<1000)		ND (<20)
9236	HP Count Module	2		<0.5		ND (<1000)		ND (<20)

Screenwell House
Elevation 8'-0", 21'-6", 36'-6"
(Page 1 of 2)
GAD 7000

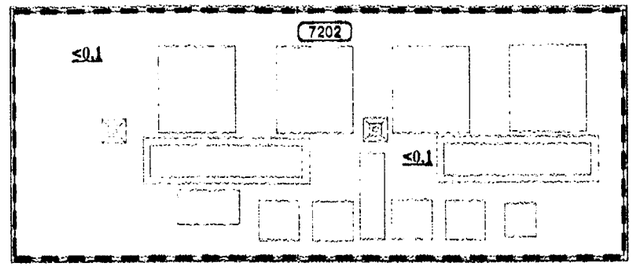
Radiation Range: Gamma Radiation <0.1 mR/hr (Background level)

General radiation levels through these survey areas are representative of background radiation.

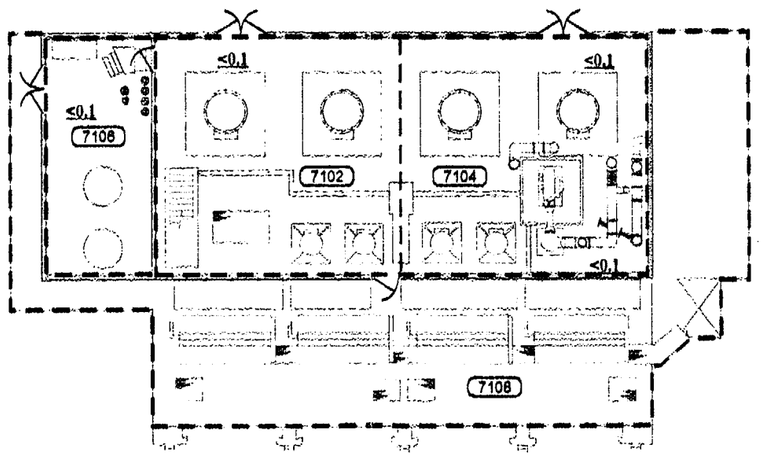
Removable Contamination Range: Beta emitters <1,000-dpm/100 cm2. No alpha emitters detected (<20 dpm/100 cm2)

The survey areas are outside the Radiologically Controlled Area boundary. Surveys for removable contamination have not detected either beta or alpha emitting radionuclides above the site limits for non-contaminated areas (i.e. removable beta contamination <1000 dpm/100 cm2, removable alpha contamination <20 dpm/100 cm2).

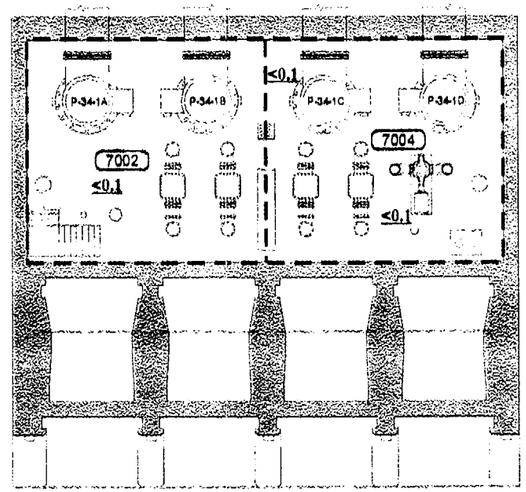
XX Indicates dose rates-mR/hr.



ROOF ELEVATION 36'-6"



ELEVATION 21'-6"



ELEVATION 8'-0"

Continued on next page.

Screenwell House
Elevation 8'-0", 21'-6", 36'-6"
(Page 2 of 2)
GAD 7000

Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels Beta/Gamma DPM/100cm2 Min	Max	Contamination Levels Alpha DPM/100cm2 Min	Max
7002	CW Circ Pump A&B Head	3		<0.1	ND (< 57.2)	<1000		ND (<14.)
7004	CW Circ Pump C&D Head	3		<0.1	ND (< 57.2)	<1000		ND (<14.)
7102	CW Circ Pump Motor A&B	3		<0.1	ND (< 57.2)	<1000		ND (<14.)
7104	CW Circ Pump Motor C&D	3		<0.1	ND (< 57.2)	<1000		ND (<14.)
7106	CW Hypochlorite Tank Area	3		<0.1	ND (< 57.2)	<1000		ND (<14.)
7108	CW Intake and Screen Area	3		<0.1	ND (< 57.2)	<1000		ND (<14.)
7202	CW Roof Area	3		<0.1	ND (< 57.2)	<1000		ND (<14.)

Waste Disposal Building
Elevation 0'-0", 12'-6", 18'-6", 36'-6" & Roof (Page 1 of 2)
GAD 6000

Radiation Levels: Gamma Radiation 1 mR/hr to >100 mR/hr

The building contained equipment designed to process radioactive liquids and gases. Radiation levels in access hallways range from 1 mR/hr to 10 mR/hr. The highest radiation levels, up to 600 mR/hr, are associated with equipment such as the degassifier and associated valves. Dose rates in excess of approximately 0.1 mR/hr prohibit the determination of total surface contamination.

Removable Contamination Range: Beta emitters up to >100,000 dpm/ 100 cm2. Alpha emitters up to >500 dpm/100 cm2.

Contamination on surfaces of the survey areas results from system leakage or maintenance activities that required accessing the internals of components or systems. Due to high radiation levels, decontamination of areas following repair of leaks or system openings was not warranted. Both beta and alpha emitting radionuclides have been detected in swipe surveys. Three survey areas contain beta contamination greater than 100,000 dpm/100 cm2 (Areas 6006, 6306, 6412). Seven survey areas contain alpha contamination greater than 500 dpm/100 cm2 (Areas 6004, 6006, 6306, 6308, 6312, 6408, 6412).

Isotope Identification: Co-60, Cs-137, Am-241

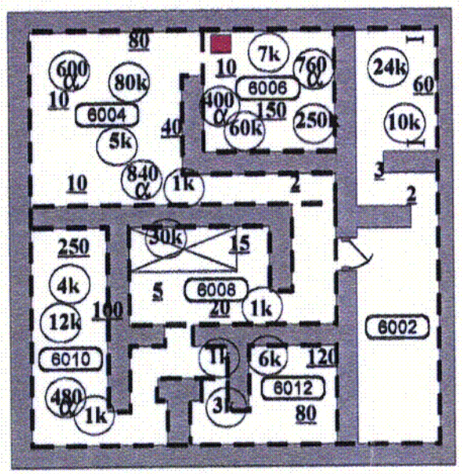
■ **Core Sample Location.**
(Ref. GTS Duratek, 1/27/99)

Core Bore Sample: Isotopic analysis data from concrete core bore, gamma spectroscopy. Cs-137 approximately 60% of mix, Co-60 approximately 36%. Presence of Am-241 implies the presence of transuranic radionuclides. (Refer to smear analysis next page.)

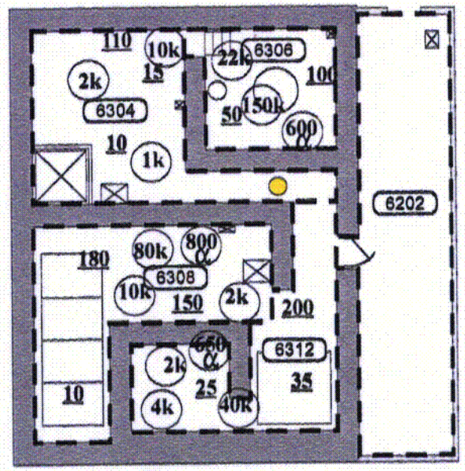
● **Smear Location.**
(Ref. Thermo NUtech, DAW-A4, N7-06-061 4/11/97)

○ **Indicates removable contamination levels-dpm/100cm2.**

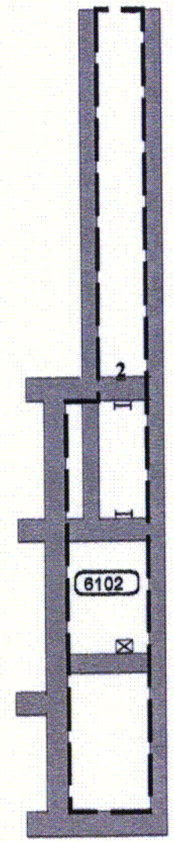
XX Indicates dose rates-mR/hr.



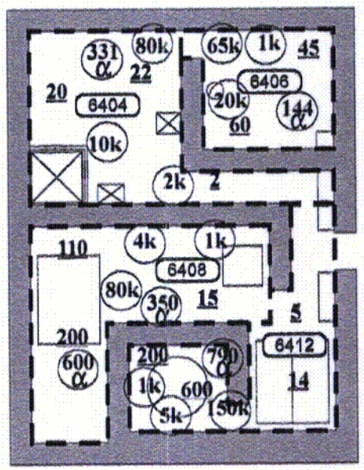
ELEVATION 0'-0"



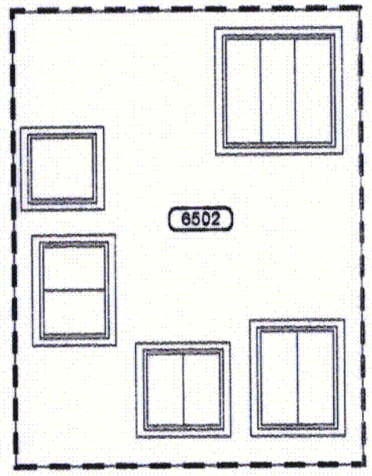
ELEVATION 18'-6" & 12'-6"



Elevation 12'-6"



ELEVATION 35'-6"



ROOF

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C10

Waste Disposal Building
Elevation 0'-0", 12'-6", 18'-6",
36'-6" & Roof (Page 2 of 2)
GAD 6000

General Area Smear Analysis

Nuclide	µCi/Sample
H-3	5.585 E-05
C-14	9.451 E-05
Pu-241	6.010 E-05
Am-241	3.359 E-07
Cm-243, 244	2.375 E-07
Mn-54	1.210 E-05
Co-60	2.140 E-05
Cs-134	2.892 E-05
Cs-137	8.634 E-05
Gross Beta	1.042 E-04

Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Radiation Levels mR/hour Max	Contamination Levels Beta/Gamma DPM/100cm2 Min	Contamination Levels Beta/Gamma DPM/100cm2 Max	Contamination Levels Alpha DPM/100cm2 Min	Contamination Levels Alpha DPM/100cm2 Max
6002	Waste Disposal Building Hall Area Lower Level	1	<2	60	ND (<1000)	24000		ND (<20)
6004	Waste Disposal Building Area Outside Reboiler Room	1	0.6	80	ND (<1000)	80000	ND (<20)	>500
6006	Waste Disposal Building Bottoms Pump and Reboiler Area	1	18	>100	3000	>100000	ND (<20)	>500
6008	Waste Disposal Building Sump Trench Area Lower Level	1	<2	20	ND (<1000)	30000		ND (<20)
6010	Waste Disposal Building-Waste Decay Tank A,B,C Area	1	<2	>100	ND (<1000)	4000	ND (<20)	480
6012	Waste Disposal Building Surge Tank Area Lower Level	1	<2	120	ND (<1000)	6000		ND (<20)
6102	Waste Disposal Building Hall Area	1	<2	2		ND (<1000)		ND (<20)
6202	Waste Disposal Building Hallway Area	1		2		ND (<1000)		ND (<20)
6304	Waste Disposal Building Evaporator Area	1	<2	>100	ND (<1000)	10000		ND (<20)

Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Radiation Levels mR/hour Max	Contamination Levels Beta/Gamma DPM/100cm2 Min	Contamination Levels Beta/Gamma DPM/100cm2 Max	Contamination Levels Alpha DPM/100cm2 Min	Contamination Levels Alpha DPM/100cm2 Max
6306	Waste Disposal Building Radwaste Liquid Evaporator	1	8	100	ND (<1000)	>100000	ND (<20)	>500
6308	Waste Disposal Building Degassifier Transfer Pump Area	1	1	>100	ND (<1000)	80000	ND (<20)	>500
6312	Waste Disposal Building Degassifier and Associated Valves	1	1	>100	ND (<1000)	40000	ND (<20)	>500
6404	Waste Disposal Building Evaporator Area	1	1	22	ND (<1000)	80000	ND (<20)	331
6406	Waste Disposal Building Liquid Evaporator Area	1	20	60	ND (<1000)	65000	ND (<20)	144
6408	Waste Disposal-Waste Gas Compressor A&B Area	1	1	>100	ND (<1000)	20000	ND (<20)	>500
6412	Waste Disposal Building Degassifier Area and Associated Valves	1	1	>100	ND (<1000)	>100000	ND (<20)	>500
6502	Waste Disposal Building Roof Area	1						

Service Building
Elevation 41'-6" and 59'-6" (Page 1 of 2)
GAD 5200

Radiation Levels: Gamma Radiation <1 mR/hr.

Radiation levels are indicative of background radiation. No radioactive systems or equipment are in these areas. The "less than" value represents the minimum detectable radiation levels based on the instruments used to perform the surveys.

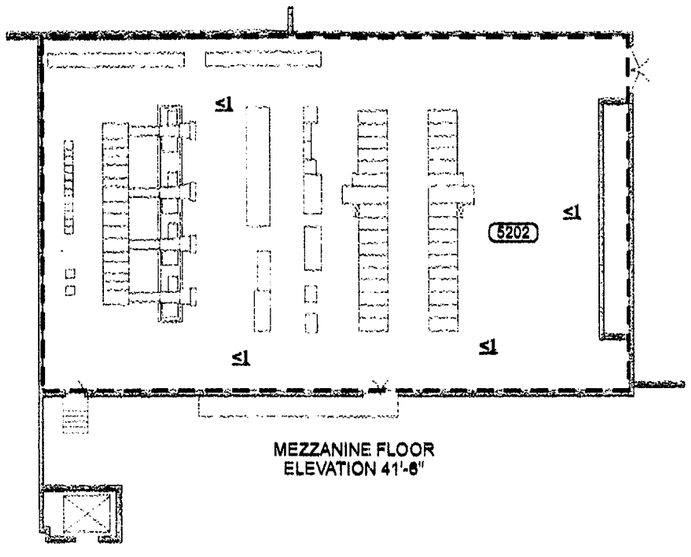
Contamination Levels: No beta emitting or alpha emitting radionuclides have been detected in these survey areas.

The areas were maintained as non-contaminated areas. No radioactive contamination has been detected on the surfaces of these survey areas. Surveys performed included both swipes for removable contamination and direct measurements (frisks) for total activity.

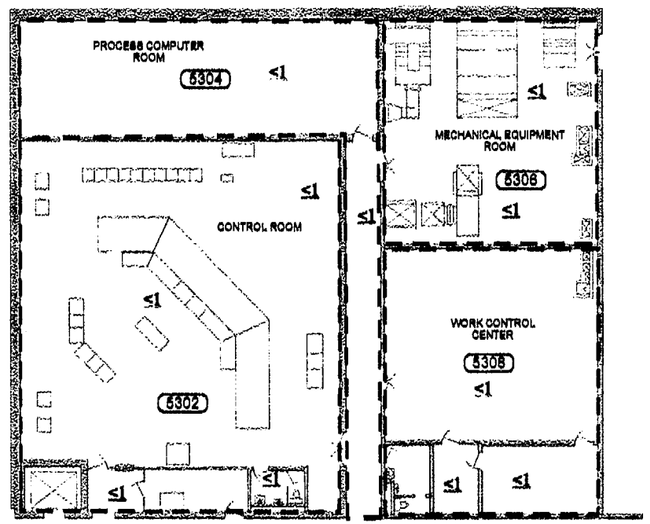
Isotope Identification: Plant isotopes Cs-137 and Co-60

Since no positive readings of any type have been obtained in these survey areas, the predominant beta emitting isotopes found in the plants are considered as those of potential concern. No alpha emitting isotopes have been detected in any of these areas.

XX Indicates dose rates-mR/hr.



MEZZANINE FLOOR
ELEVATION 41'-6"



OPERATING FLOOR
ELEVATION 59'-6"

Areas Not Shown

5402 Service Building Roof

Continued on next page.

Service Building
Elevation 41'-6" and 59'-6"
(Page 2 of 2)
GAD 5200

Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels Beta/Gamma DPM/100cm2 Min	Max	Contamination Levels Alpha DPM/100cm2 Min	Max
5202	Service Building Switch Gear Area	3		<1	ND (< 57.2)	<1000		ND (<20)
5302	Service Building Control Room Area	3		<1	ND (< 57.2)	<1000		ND (<20)
5304	Service Building Computer, Operations, Security Area	3		<1	ND (< 57.2)	<1000		ND (<20)
5306	Service Building Machine and Equipment Area	2		<1	ND (< 57.2)	<1000		ND (<20)
5308	Service Building Work Control Center	2		<1	ND (< 57.2)	<1000		ND (<20)
5402	Service Building Roof	2	<0.1	<1		ND (< 57.2)		

Aux Boiler Room and Diesel Generator Bld.
Elevation 21'-6" (Page 1 of 2)
GAD 5101

Radiation Levels: Gamma Radiation <1 mR/hr.

Radiation levels are indicative of background radiation. No radioactive systems or equipment are in these areas. Minor contamination of the internals of the auxiliary boilers has been detected, however the boilers are to be removed from the survey area. The "less than" value represents the minimum detectable radiation levels based on the instruments used to perform the surveys.

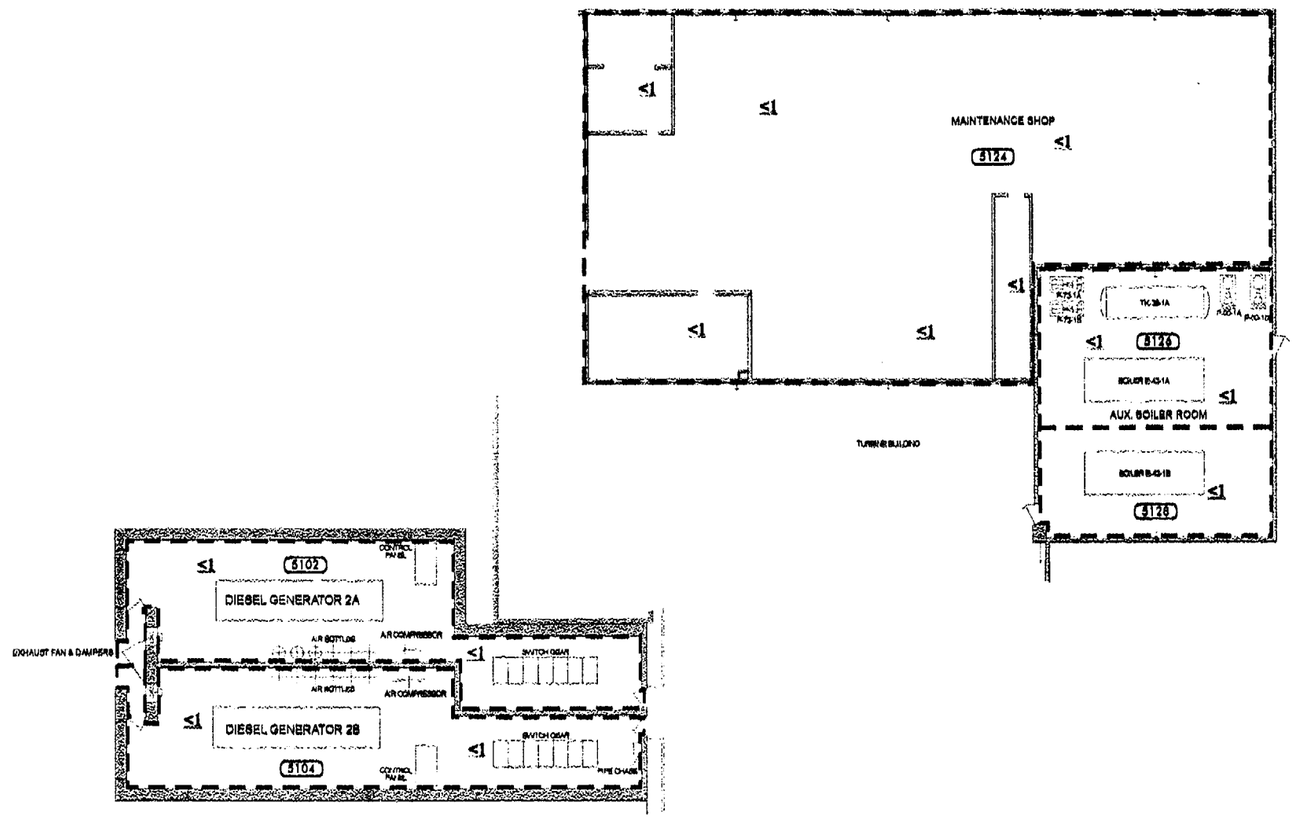
Contamination Levels: No beta emitting or alpha emitting radionuclides have been detected in these survey areas.

The areas were maintained as non-contaminated areas. Radioactive contamination was detected on the internals of the auxiliary boilers, which will be removed from the area prior to final survey. No radioactive contamination has been detected on the surfaces of these survey areas. Surveys performed included both swipes for removable contamination and direct measurements (frisks) for total activity.

Isotope Identification: Plant isotopes Cs-137 and Co-60

Since no positive readings of any type have been obtained in these survey areas, the predominant beta emitting isotopes found in the plants are considered as those of potential concern. No alpha emitting isotopes have been detected in any of these areas.

XX Indicates dose rates-mR/hr.



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Aux. Boiler Room and Diesel Generator Bld.
Elevation 21'-6" (Page 2 of 2)
GAD 5101

Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels Beta/Gamma DPM/100cm2 Min	Max	Contamination Levels Alpha DPM/100cm2 Min	Max
5102	Service Building "A" Diesel Generator Area	3		<1	ND (< 57.2)	<1000		ND (<20)
5104	Service Building "B" Diesel Generator Area	3		<1	ND (< 57.2)	<1000		ND (<20)
5124	Service Building Maintenance Clean Shop Area	2		<1	ND (< 57.2)	<1000		ND (<20)
5126	Service Building "A" Auxiliary Boiler Area	2		<1	ND (< 57.2)	<1000		ND (<20)
5128	Service Building "B" Auxiliary Boiler Area	2		<1	ND (< 57.2)	<1000		ND (<20)

Service Building
Elevation 21'-6" and 35'-4" (Page 1 of 2)
GAD 5100

Radiation Range: Gamma Radiation up to 2 mR/hr

The area consists of support facilities for the Radiological Control Area. Radiation levels typically represent background levels isolated area within the Service Building Maintenance Decon Area (5118). Radiation levels in that area approach 2 mR/hr due to contaminated decontamination equipment in the area. The area contains the RCA control point, offices, locker rooms, laboratory and counting facilities that have been maintained as non-contaminated areas and that contain no systems containing radioactivity other than laboratory drains designed for contaminated waste.

Contamination Range: Beta emitters up to 30,000-dpm/100 cm2. No alpha emitters detected.

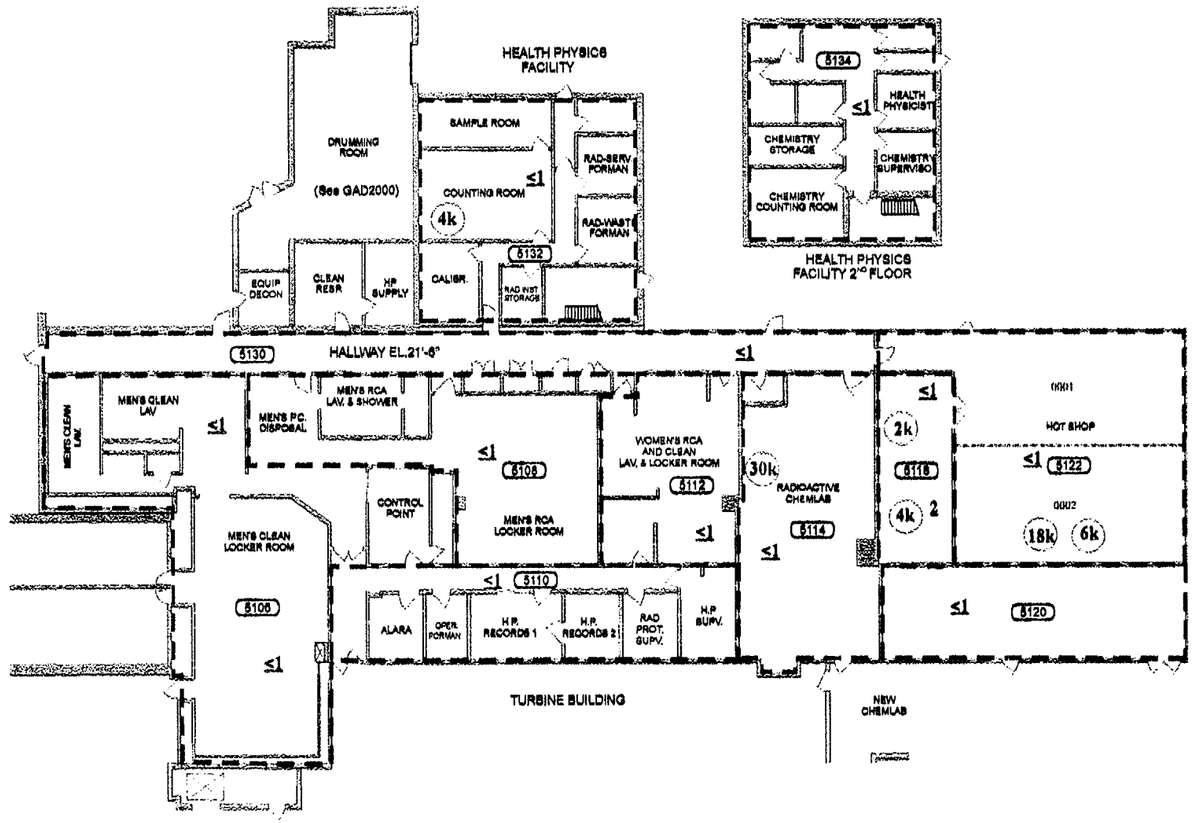
Contamination has been recorded in the Counting Room (5132), Radioactive Chemlab (5114), Service Building Maintenance Shop Clean Area (5122), and Service Building Maintenance Decon Area (5118). The areas are designed for work with contaminated equipment and are within the Radiological Control Area. Support areas such as offices, locker rooms and the RCA control point have been maintained as clean areas. No alpha emitting radionuclides have been detected in these areas.

Isotope Identification: Plant isotopes Cs-137 and Co-60

Contamination in these areas has been the result of handling equipment and samples from radioactive systems. Therefore, the predominant beta emitting isotopes found in the plants are considered as those of potential concern. No alpha emitting isotopes have been detected in any of these areas.

◯ **Indicates removable contamination levels-dpm/100cm2.**

XX Indicates dose rates-mR/hr.



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Service Building
Elevation 21'-6" and 35'-4"
(Page 2 of 2)
GAD 5100

Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels Beta/Gamma DPM/100cm2 Min	Max	Contamination Levels Alpha DPM/100cm2 Min	Max
5106	Service Building Clean Locker Room Area	2		<1	ND (< 57.2)	<1000		ND (<20)
5108	Service Building Hot Locker Room Area	2		<1	ND (< 57.2)	<1000		ND (<20)
5110	Service Building HP Control Point and Office Areas	2		<1	ND (< 57.2)	<1000		ND (<20)
5112	Service Building Woman's Locker Room Area	2		<1	ND (< 57.2)	<1000		ND (<20)
5114	Service Building Hot Chemistry Area	1		<1	ND (<1000)	30000		ND (<20)
5118	Service Building Maintenance Decon Area	1	<1	2	ND (<1000)	4000		ND (<20)
5120	Service Building Machine Shop Clean Area	2		<1	ND (< 57.2)	ND (<1000)		ND (<20)
5122	Service Building Machine Shop Hot Area	1		<1	ND (< 57.2)	18000		ND (<20)
5130	Service Building East Hallway	2		<1	ND (< 57.2)	<1000		ND (<20)
5132	Service Building Health Physics Facility 1st Floor	2		<1	ND (< 57.2)	4000		ND (<20)
5134	Service Building Health Physics Facility 2nd Floor	2		<1	ND (< 57.2)	<1000		ND (<20)

Turbine Building
Elevation 59'-6" (Page 1 of 2)
GAD 4400

Radiation Range: Gamma Radiation <0.02mR/hr (Background level)

General radiation levels through these survey areas are representative of background radiation.

Removable Contamination Range: Beta emitters <1,000-dpm/100 cm2. No alpha emitters detected (<20 dpm/100 cm2)

The survey areas are outside the Radiologically Controlled Area boundary. Surveys for removable contamination have not detected either beta or alpha emitting radionuclides above the site limits for non-contaminated areas (i.e. removable beta contamination <1000 dpm/100 cm2, removable alpha contamination <20 dpm/100 cm2).

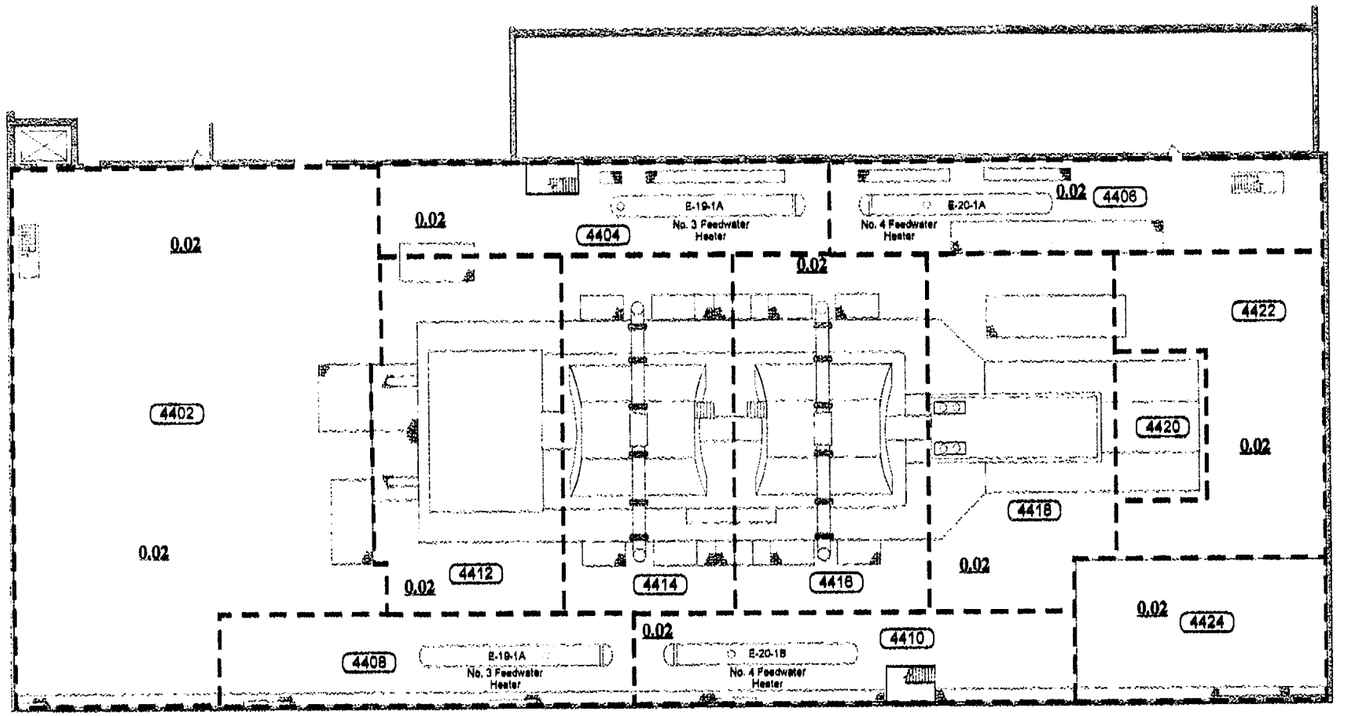
Fixed Contamination Range: Beta <5000-dpm/100 cm2 averaged over 1 m2. No alpha emitters detected.

Extensive surveys of more than 1500 m2 of the floor space (more than 475,000 measurements) identified no single 100-cm2 area of greater than 10,000 dpm and no one square meter with average radioactivity greater than 5000 dpm/100 cm2. No other areas were identified that would approach the expected DCGL values. Fixed contamination has been detected within systems as a result of Steam Generator tube leakage. Systems impacted are primarily associated with the high-pressure steam components. Maximum fixed beta measurement from the interior of components was approximately 450,000 dpm. Alpha surveys results indicated less than Minimum Detectable Activity for all surveys.

Isotope Identification: Predominant Isotopes: Cs-137.

The only isotope identified in components contaminated as a result of steam generator tube leakage is Cs-137. No alpha emitting nuclides have been identified.

XX Indicates dose rates-mR/hr.



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Turbine Building
Elevation 59'-6" (Page 2 of 2)
GAD 4400

Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels Beta/Gamma DPM/100cm2 Min	Max	Contamination Levels Alpha DPM/100cm2 Min	Max
4402	Turbine Building Laydown Area North Floor	2		0.02	ND (< 57.2)	<1000		ND (<20)
4404	Turbine Building Steam Generator Feedwater Heater 3A Area	2		0.02	ND (< 57.2)	<1000		ND (<20)
4406	Turbine Building Steam Generator Feedwater Heater 4A Area	2		0.02	ND (< 57.2)	<1000		ND (<20)
4408	Turbine Building Steam Generator Feedwater Heater 3B Area	2		0.02	ND (< 57.2)	<1000		ND (<20)
4410	Turbine Building Steam Generator Feedwater Heater 4B Area	2		0.02	ND (< 57.2)	<1000		ND (<20)
4412	Turbine Building H.P. Turbine Area	2		0.02	ND (< 57.2)	<1000		ND (<20)
4414	Turbine Building L.P. #1 Turbine Area	2		0.02	ND (< 57.2)	<1000		ND (<20)
4416	Turbine Building L.P. #2 Turbine Area	2		0.02	ND (< 57.2)	<1000		ND (<20)
4418	Turbine Building Generator Area	2		0.02	ND (< 57.2)	<1000		ND (<20)
4420	Turbine Building Exciter Area	2		0.02	ND (< 57.2)	<1000		ND (<20)
4422	Turbine Building Laydown Area South Floor	2		0.02	ND (< 57.2)	<1000		ND (<20)
4424	Turbine Building Open Hoist Area	2		0.02	ND (< 57.2)	<1000		ND (<20)
4502	Turbine Building Ceiling Area	2		0.02	ND (< 57.2)	<1000		ND (<20)
4603	Turbine Building Roof Area	2		0.02	ND (< 57.2)	<1000		ND (<20)

Turbine Building
Elevation 47'-0"
GAD 4300

Radiation Range: Gamma Radiation <0.02 mR/hr (Background level)

General radiation levels through these survey areas are representative of background radiation.

Removable Contamination Range: Beta emitters <1,000-dpm/100 cm2. No alpha emitters detected (<20 dpm/100 cm2)

The survey areas are outside the Radiologically Controlled Area boundary. Surveys for removable contamination have not detected either beta or alpha emitting radionuclides above the site limits for non-contaminated areas (i.e. removable beta contamination <1000 dpm/100 cm2, removable alpha contamination <20 dpm/100 cm2).

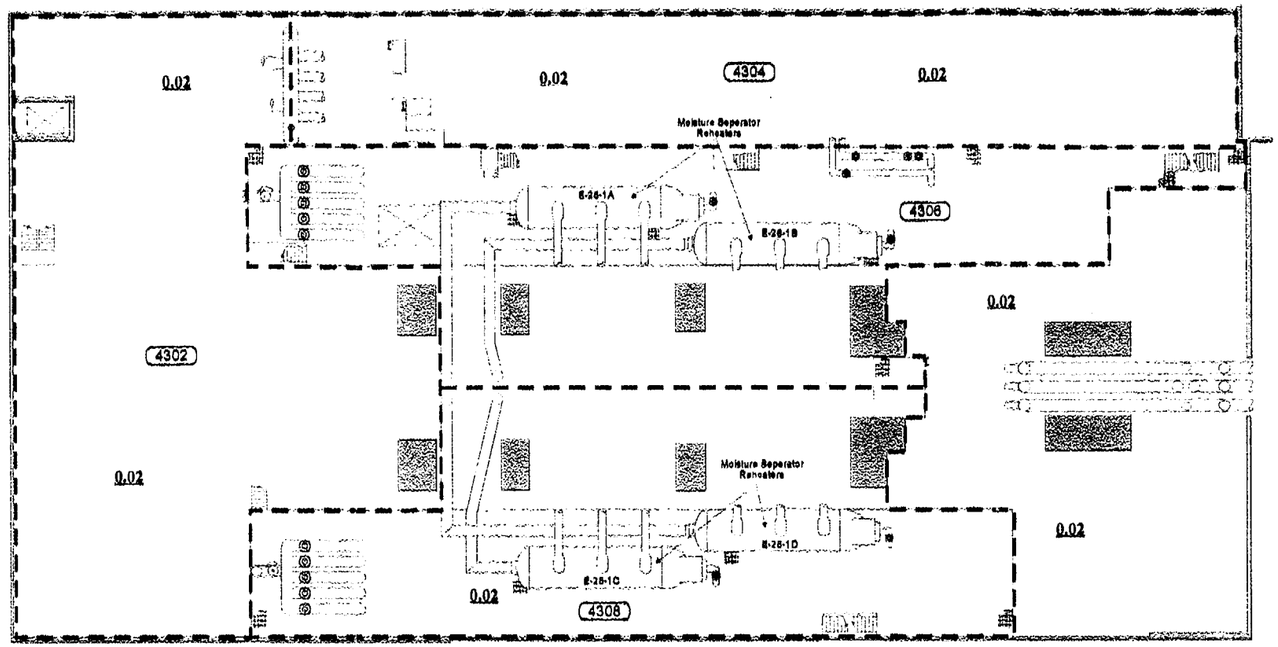
Fixed Contamination Range: Beta <5000 dpm/100 cm2 averaged over 1 m2. No alpha emitters detected.

Surveys performed for beta emitters did not detect radioactivity levels above the Minimum Detectable Activity values for instruments used (MDA <5000 dpm/100 cm2) Fixed contamination has been detected within systems as a result of Steam Generator tube leakage. Maximum contamination level found on component interior surface was approximately 7500-dpm/100 cm2. Systems impacted are primarily associated with the high-pressure steam components. Alpha surveys results indicated less than Minimum Detectable Activity for all surveys.

Isotope Identification: Predominant Isotopes: Cs-137.

The only isotope identified in components contaminated as a result of steam generator tube leakage is Cs-137. No alpha emitting nuclides have been identified.

XX Indicates dose rates-mR/hr.



Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels Beta/Gamma DPM/100cm2 Min	Max	Contamination Levels Alpha DPM/100cm2 Min	Max
4302	Turbine Building 30" Main Steam Line Area	2		0.02	ND (< 57.2)	<1000		ND (<20)
4304	Turbine Building 24" Main Steam Line Area	2		0.02	ND (< 57.2)	<1000		ND (<20)
4306	Turbine Building MSRHR 1A and 1B Area Reheater	2		0.02	ND (< 57.2)	<1000		ND (<20)
4308	Turbine Building MSRHR 1C and 1D Area Reheater	2		0.02	ND (< 57.2)	<1000		ND (<20)

Turbine Building
Elevation 37'-6" (Page 1 of 2)
GAD 4200

Radiation Range: Gamma Radiation <0.02 mR/hr (Background level)

General radiation levels through these survey areas are representative of background radiation.

Removable Contamination Range: Beta emitters <1,000-dpm/100 cm2. No alpha emitters detected (<20 dpm/100 cm2)

The survey areas are outside the Radiologically Controlled Area boundary. Surveys for removable contamination have not detected either beta or alpha emitting radionuclides above the site limits for non-dontaminated areas (i.e. removable beta contamination <1000 dpm/100 cm2, removable alpha contamination <20 dpm/100 cm2).

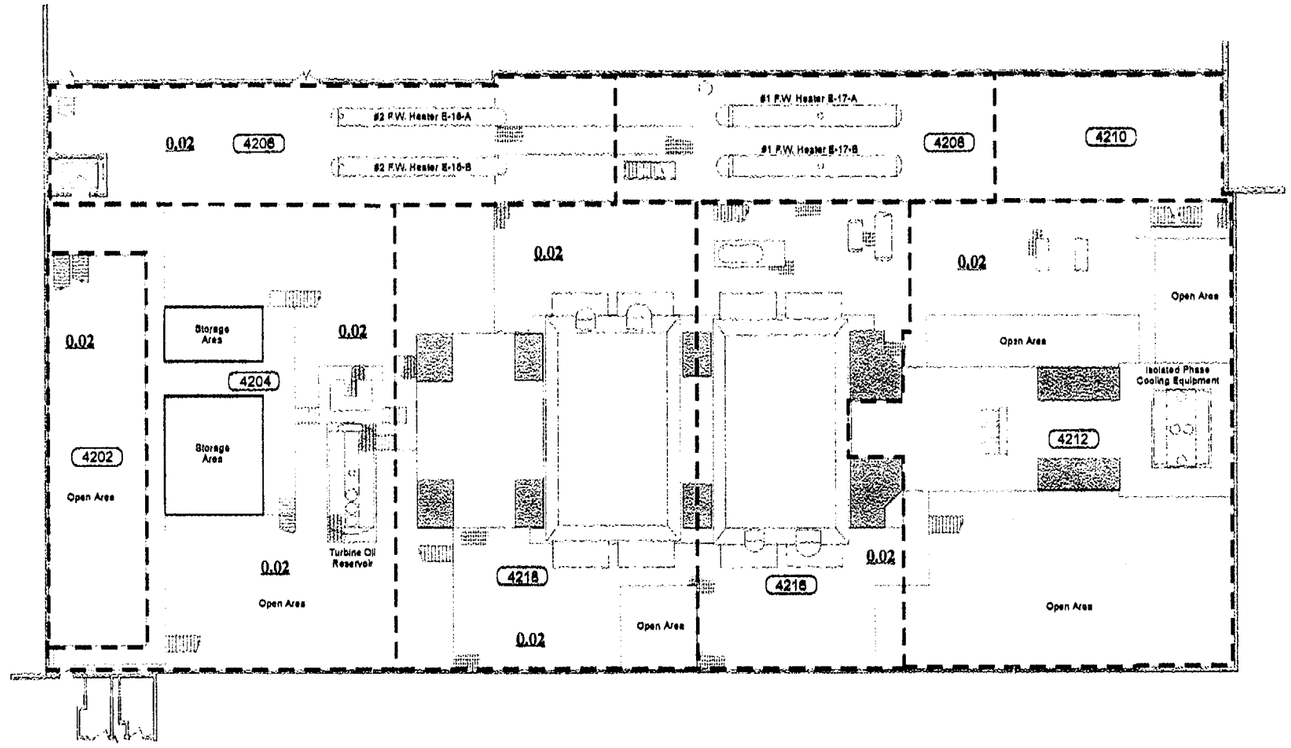
Fixed Contamination Range: Beta <5000 dpm/100 cm2 averaged over 1 m2. No alpha emitters detected.

Surveys performed for beta emitters did not detect radioactivity levels above the Minimum Detectable Activity values for instruments used (MDA <5000 dpm/100 cm2) Fixed contamination has been detected within systems as a result of Steam Generator tube leakage. Systems impacted are primarily associated with the high-pressure steam components. Alpha surveys results indicated less than Minimum Detectable Activity for all surveys.

Isotope Identification: Predominant Isotopes: Cs-137.

The only isotope identified in components contaminated as a result of steam generator tube leakage is Cs-137. No alpha emitting nuclides have been identified.

XX Indicates dose rates-mR/hr.



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Turbine Building
Elevation 37'-6" (Page 2 of 2)
GAD 4200

Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels Beta/Gamma DPM/100cm2 Min	Max	Contamination Levels Alpha DPM/100cm2 Min	Max
4202	Turbine Building North End Open Area (Walls & supports)	2		0.02	ND (< 57.2)	<1000		ND (<20)
4204	Turbine Building Oil Reservoir Area	2		0.02	ND (< 57.2)	<1000		ND (<20)
4206	Turbine Building S/G Feedwater Heater 2A and 2B Area	2		0.02	ND (< 57.2)	<1000		ND (<20)
4208	Turbine Building S/G Feedwater Heater 1A and 1B Area	2		0.02	ND (< 57.2)	<1000		ND (<20)
4210	Turbine Building Steam Generator Feedwater Control Valve Area	2		0.02	ND (< 57.2)	<1000		ND (<20)
4212	Turbine Building South End/Turbine Hall	2		0.02	ND (< 57.2)	<1000		ND (<20)
4216	Turbine Building S/G Feedwater Heater 6B and 5B Area	2		0.02	ND (< 57.2)	<1000		ND (<20)
4218	Turbine Building S/G Feedwater Heater 6A and 5A Area	2		0.02	ND (< 57.2)	<1000		ND (<20)

Turbine Building
Elevation 21'-6" (Page 1 of 2)
GAD 4100

Radiation Range: Gamma Radiation <0.01mR/hr (Background level)

General radiation levels through these survey areas are representative of background radiation.

Removable Contamination Range: Beta emitters <1,000-dpm/100 cm2. No alpha emitters detected (<20 dpm/100 cm2)

The survey areas are outside the Radiologically Controlled Area boundary. Surveys for removable contamination have not detected either beta or alpha emitting radionuclides above the site limits for non-contaminated areas (i.e. removable beta contamination <1000 dpm/100 cm2, removable alpha contamination <20 dpm/100 cm2).

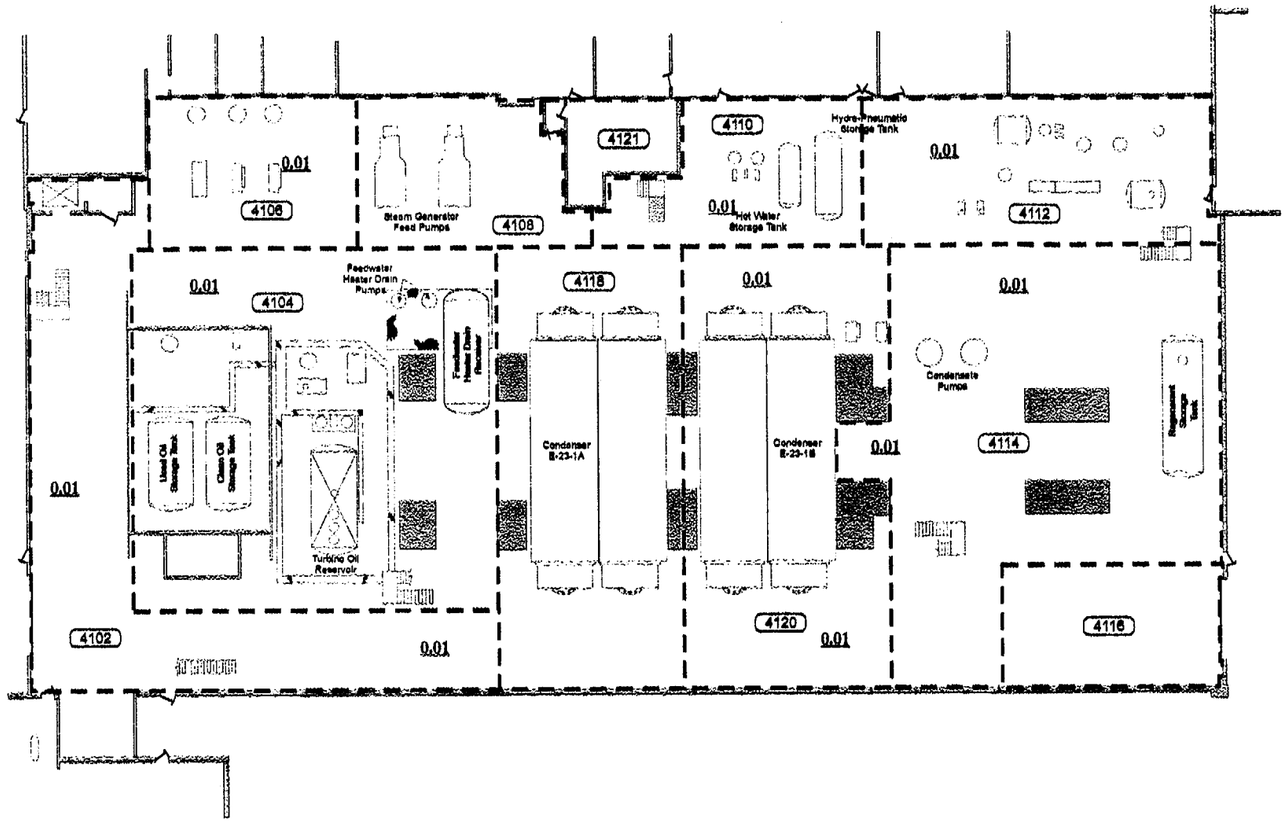
Fixed Contamination Range: Beta <5000-dpm/100 cm2 averaged over 1 m2. No alpha emitters detected.

Extensive surveys of more than 1600 m2 of the floor space (more than 500,000 measurements) identified one discrete area of 16,646 dpm within a 100-cm2 area. The area was remediated. No other areas were identified that would approach the expected DCGL values. Fixed contamination has been detected within systems as a result of Steam Generator tube leakage. Systems impacted are primarily associated with the high-pressure steam components. Alpha surveys results indicated less than Minimum Detectable Activity for all surveys.

Isotope Identification: Predominant Isotopes: Cs-137.

The only isotope identified in components contaminated as a result of steam generator tube leakage is Cs-137. No alpha emitting nuclides have been identified.

XX Indicates dose rates-mR/hr.



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Turbine Building
Elevation 21'-6" (Page 2 of 2)
GAD 4100

Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels Beta/Gamma DPM/100cm2 Min	Max	Contamination Levels Alpha DPM/100cm2 Min	Max
4102	Turbine Building North Floor Area	2		0.01	ND (< 57.2)	<1000		ND (<20)
4104	Turbine Building Oil Room, Heater Drains, Emergency Power	2		0.01	ND (< 57.2)	<1000		ND (<20)
4106	Turbine Building Air Compressor Area	2		0.01	ND (< 57.2)	<1000		ND (<20)
4108	Turbine Building Steam Generator Feed Pump Area	2		0.01	ND (< 57.2)	<1000		ND (<20)
4108	Turbine Building Steam Generator Feed Pump Area	2		0.01	ND (< 57.2)	<1000		ND (<20)
4110	Turbine Building Chemistry/Closed Cooling Water Area	2		0.01	ND (< 57.2)	<1000		ND (<20)
4112	Turbine Building Water Treatment Area	2		0.01	ND (< 57.2)	<1000		ND (<20)
4114	Turbine Building Condenser Pump and South Floor Area	2		0.01	ND (< 57.2)	<1000		ND (<20)
4116	Turbine Building Hoist/Equipment Laydown Area	2		0.01	ND (< 57.2)	<1000		ND (<20)
4118	Turbine Building Condenser "A" Water Box "A & B" Area	2		0.01	ND (< 57.2)	<1000		ND (<20)
4120	Turbine Building Condenser "B" Water Box "C & D" Area	2		0.01	ND (< 57.2)	<1000		ND (<20)
4121	Turbine Building Secondary Chem Lab	2		0.01	ND (< 57.2)	<1000		ND (<20)

Containment Building
Elevation 48'-6" (Page 1 of 2)
GAD 3300

Radiation Range: Gamma Radiation <0.1mR/hr to >100 mR/hr

General radiation levels ranged from <1mR/hr to >100 mR/hr. The containment has been maintained as a High Radiation Area (>100 mR/hr). The radiation levels are associated with primary system components such as the steam generators, reactor coolant pumps, and primary system piping. Dose rates in excess of approximately 0.1 mR/hr prohibit the determination of total surface contamination.

Removable Contamination Range: Beta emitters up to >100,000 dpm/100 cm2. Alpha emitters up to >500-dpm/100 cm2.

The survey areas within the containment building have been maintained as contaminated areas (i.e. removable beta contamination >1000 dpm/100 cm2, and/or removable alpha contamination >20 dpm/100 cm2). Area contamination has resulted from system leakage during normal operation, component maintenance and fueling activities. Removable beta contamination of >100,000 dpm/100cm2 have been measured in Areas 3302, 3312, 3313, 3320, 3322, 3324, and 3326. Removable alpha contamination of >500-dpm/100 cm2 have been measured in Areas 3311, 3312, 3313, 3320, 3322, 3324. Areas 3315 and 3326 have no documented removable alpha contamination.

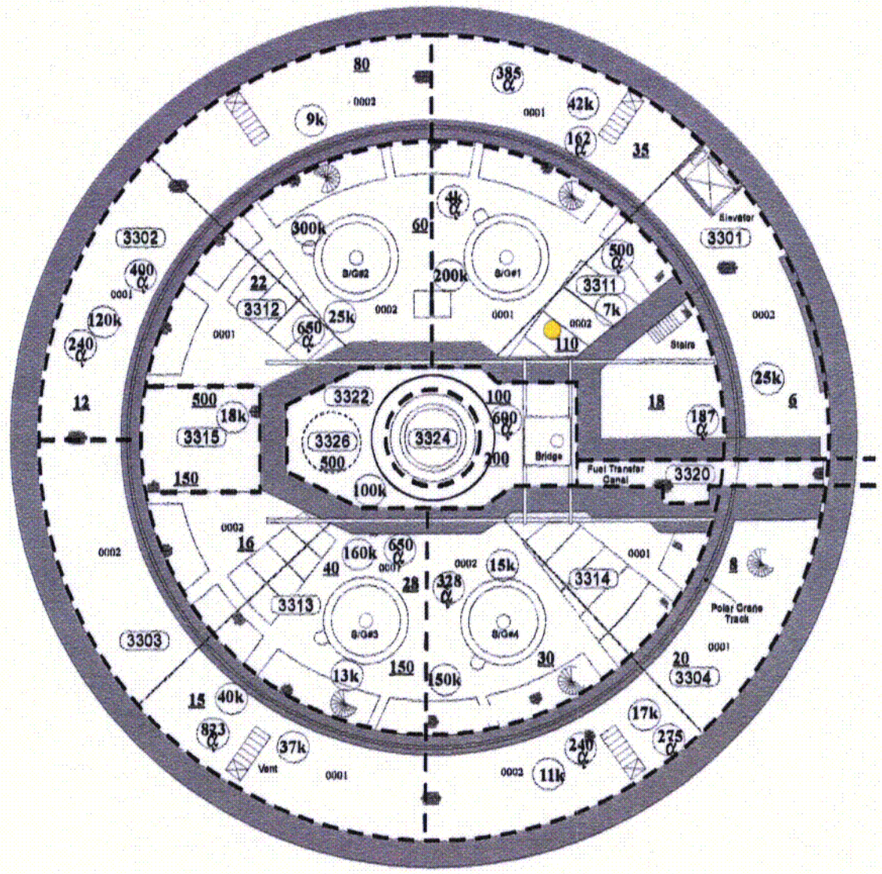
Isotope Identification: Predominant Isotopes: Co-60, Cs-137, Am-241

Isotopic analysis of a swipe sample indicated Co-60 as the predominant gamma-emitting isotope, with a Co-60 to Cs-137 ratio of 7.5:1. Am-241 has been identified in the swipe survey samples.

Smear Location.
(Ref. Thermo NUtech, DAW-A2, N7-06-061 4/11/97)

Indicates removable contamination levels-dpm/100cm2.

XX Indicates dose rates-mR/hr.



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Containment Building
Elevation 48'-6" (Page 2 of 2)
GAD 3300

Charging Floor Smear Analysis

Nuclide	µCi/Sample
Fe-55	5.184 E-03
Ni-63	1.014 E-03
Sr-90	7.775 E-06
Pu-238	5.117 E-06
Pu-239, 240	1.490 E-06
Pu-241	1.730 E-04
Am-241	7.108 E-06
Cm-242	8.796 E-07
Cm-243, 244	4.217 E-07
Mn-54	1.106 E-04
Co-60	5.104 E-03
Cs-134	1.011 E-04
Cs-137	3.195 E-04
Gross Alpha	4.199 E-05
Gross Beta	8.441 E-03

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
3301	Containment Enclosure #1 Outside Crane Charging Floor	1	<1	35	ND (<1000)	42000	ND (<14.1)	385
3302	Containment Enclosure #2 Outside Crane Charging Floor	1	<1	80	ND (<1000)	>100000	ND (<14.1)	400
3303	Containment Enclosure #3 Outside Crane Charging Floor	1	<1	15	ND (<1000)	40000	ND (<14.1)	>500
3304	Containment Enclosure #4 Outside Crane Charging Floor	1	<1	20	ND (<1000)	17000	ND (<14.1)	275
3311	Containment Enclosure #1 Inside Crane Charging Floor	1	<1	>100	ND (<1000)	>100000	ND (<14.1)	500
3312	Containment Enclosure #2 Inside Crane Charging Floor	1	<1	22	ND (<1000)	>100000	ND (<14.1)	>500
3313	Containment Enclosure #3 Inside Crane Charging Floor	1	1	>100	ND (<1000)	>100000	ND (<14.1)	>500
3314	Containment Enclosure #4 Inside Crane Charging Floor	1	<1	30	ND (<1000)	>100000	ND (<14.1)	328
3315	Containment Enclosure Removable Grating for RX Head Staging	1	4	>100	6000	18000	<20	
3320	Containment Enclosure CTMT Rx Refuel Canal to Spent Fuel Pit	1	2.5	>100	1000	>100000	<20	>500
3322	Containment Enclosure CTMT Reactor Refueling Cavity	1	10	>100	1000	>100000	44	>500
3324	Containment Enclosure CTMT Reactor Vessel Area	1	4	>100	ND (<1000)	>100000	ND (<14.1)	>500
3326	Containment Enclosure Upper Core Package Storage Area	1		>100		>100000		

Containment Building
Elevation 22'-0" (Page 1 of 2)
GAD 3200

Radiation Range: Gamma Radiation <1mR/hr to >100 mR/hr

General radiation levels ranged from <1mR/hr to >100 mR/hr. The containment has been maintained as a High Radiation Area (>100 mR/hr) with some areas exceeding Locked High Radiation Area limits (>1 R/hr). The radiation levels are associated with primary system components such as the steam generators, reactor coolant pumps, and primary system piping. Dose rates in excess of approximately 0.1 mR/hr prohibit the determination of total surface contamination.

Removable Contamination Range: Beta emitters up to >100,000 dpm/100 cm2. Alpha emitters up to >500-dpm/100 cm2.

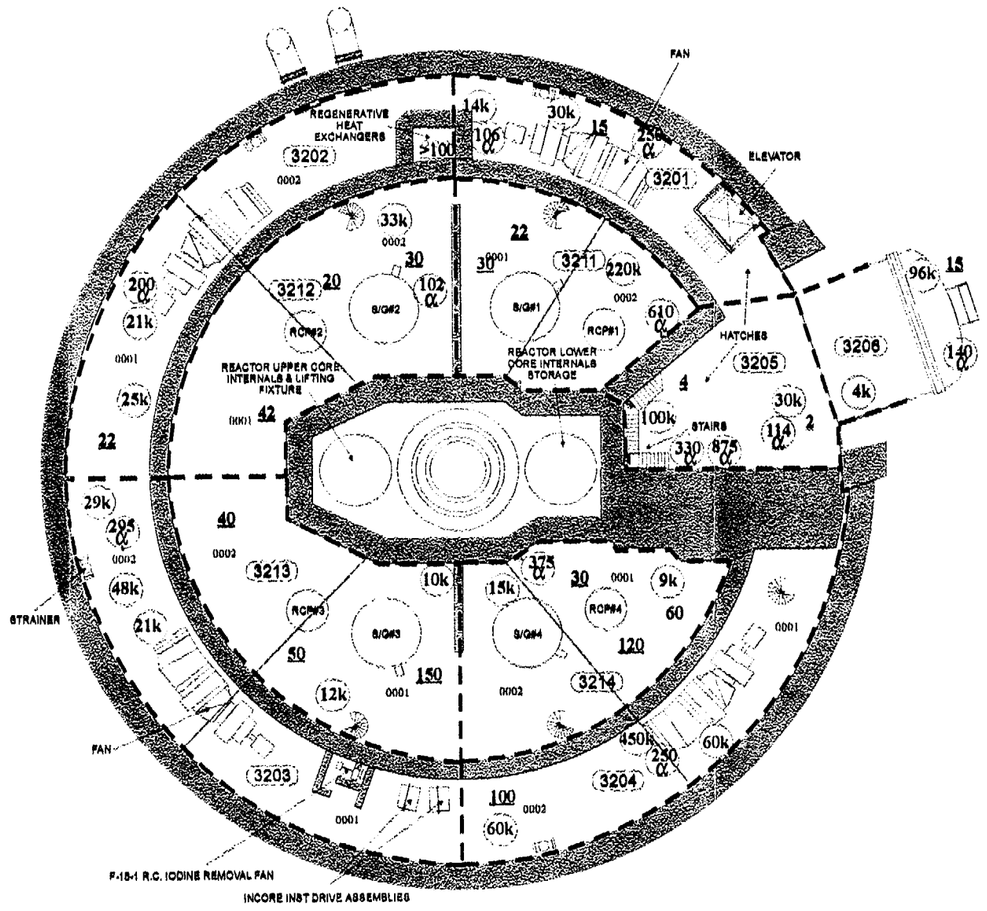
The survey areas within the containment building have been maintained as contaminated areas (i.e. removable beta contamination >1000 dpm/100 cm2, and/or removable alpha contamination >20 dpm/100 cm2). Contamination has resulted from system leakage during normal operation and component maintenance. Most areas have experienced removable beta contamination levels of >100,000 dpm/100cm2 (Areas 3204, 3205, 3211) although all survey areas have exceeded contamination limit for removable radioactivity. Removable alpha contamination of >500-dpm/100 cm2 has been measured in Areas 3205 and 3207. Area 3213 has no documented removable alpha contamination.

Isotope Identification: Predominant Isotopes: Co-60, Cs-137

Isotopic analyses of swipe samples indicate the predominant isotopes impacting the dose from residual radioactivity are Co-60 and Cs-137. The ratio of these isotopes varies from 1.4:1 Cs-137 to Co-60 to 3.5:1 Cs-137 to Co-60.

◯ **Indicates removable contamination levels-dpm/100cm2.**

XX Indicates dose rates-mR/hr.



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Containment Building
Elevation 22'-0" (Page 2 of 2)
GAD 3200

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
3201	Containment Enclosure #1 Outer Annulus Ground Level NE	1	1	15	ND (<1000)	30000	ND (<14.1)	250
3202	Containment Enclosure #2 Outer Annulus Ground Level NW	1	1	>100	ND (<1000)	25000	ND (<14.1)	200
3203	Containment Enclosure #3 Outer Annulus Ground Level SW	1	1	10	ND (<1000)	48000	ND (<14.1)	295
3204	Containment Enclosure #4 Outer Annulus Ground Level SE	1	1	>100	ND (<1000)	>100000	ND (<14.1)	250
3205	Containment Enclosure Containment Foyer Area Ground Level	1	<1	2	ND (<1000)	>100000	ND (<14.1)	>500
3206	Containment Enclosure Containment Hatch Area Ground Level	1	<1	15	ND (<1000)	96000	ND (<14.1)	140
3211	Containment Enclosure Loop #1 Inner Annulus Mid Ground NE	1	4	30	25000	>100000	18	>500
3212	Containment Enclosure Loop #2 Inner Annulus Mid Ground NW	1	5	42	ND (<1000)	33000	ND (<14.1)	102
3213	Containment Enclosure Loop #3 Inner Annulus Mid Ground SW	1	15	>100	ND (<1000)	12000	ND (<14.1)	
3214	Containment Enclosure Loop #4 Inner Annulus Mid Ground SE	1	5	>100	ND (<1000)	14000	ND (<14.1)	375

Containment Building
Elevation 1'-6" (Page 1 of 2)
GAD 3100

Radiation Range: Gamma Radiation <0.1mR/hr to >100 mR/hr

General radiation levels ranged from <1mR/hr to <100 mR/hr except for the containment enclosure Cable Vault that has maximum levels of <0.1 mR/hr. The containment has been maintained as a High Radiation Area (>100 mR/hr) with some areas exceeding Locked High Radiation Area limits (>1 R/hr). The radiation levels are associated with primary system components such as the steam generators, reactor coolant pumps, and primary system piping. Dose rates in excess of approximately 0.1 mR/hr prohibit the determination of total surface contamination.

Removable Contamination Range: Beta emitters up to >100,000 dpm/100 cm2. Alpha emitters up to >500-dpm/100 cm2.

The survey areas within the containment building have been maintained as contaminated areas (i.e. removable beta contamination >1000 dpm/100 cm2, and/or removable alpha contamination >20 dpm/100 cm2). Contamination has resulted from system leakage during normal operation and component maintenance. Most areas have experienced removable beta contamination levels of >100,000 dpm/100cm2 (Areas 3103, 3105, 3111, 3112) although all survey areas have exceeded contamination limit for removable radioactivity. Removable alpha contamination of >500-dpm/100 cm2 has been measured in four area (Areas 3111, 3112, 3113, and 3114). No documented removable alpha contamination was found for Area 3107.

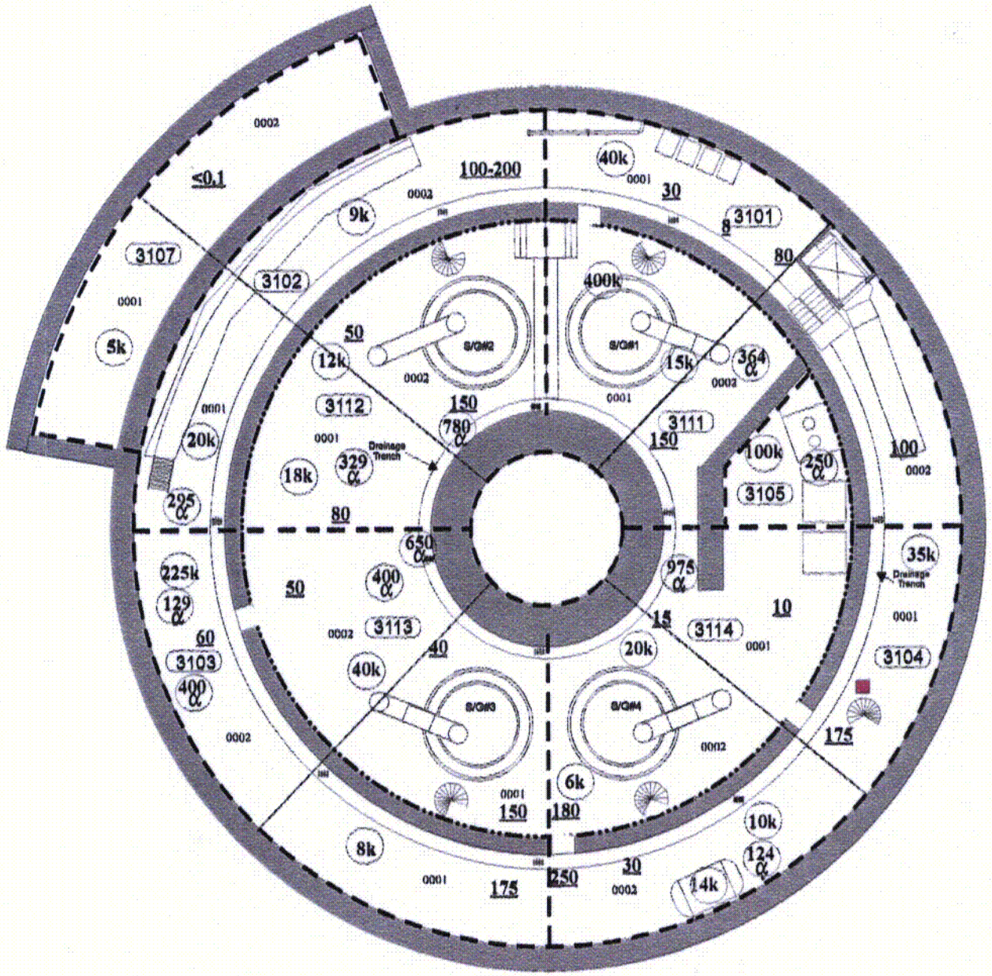
Isotope Identification: Predominant Isotopes: Co-60, Cs-137, Am-241

■ **Core Sample Location.**
(Ref. GTS Duratek Inc. 1/27/99)

Core Bore Sample: Isotopic analysis of a core bore indicated Cs-137 as the predominant gamma emitting isotope, with a Cs-137 to Co-60 ratio of 11:1. For Area 3104, the 0-0.5" section of the core sample contained Co-60 at 23.40pCi/g, Cs-134 at 2.66 pCi/gm, and Cs-137 at 279.00 pCi/g. Isotopic analyses of swipe samples indicate the predominant isotopes impacting the dose from residual radioactivity are Co-60 and Cs-137. The ratio of these isotopes varies from 25:1 Co-60 to Cs-137, to 1:1. Am-241 has been identified in the swipe survey samples.

◯ **Indicates removable contamination levels-dpm/100cm2.**

XX Indicates dose rates-mR/hr.



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Containment Building
Elevation 1'-6" (Page 2 of 2)
GAD 3100

Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels Beta/Gamma DPM/100cm2 Min	Max	Contamination Levels Alpha DPM/100cm2 Min	Max
3101	Containment Enclosure #4 Outer Annulus Lower Level NE	1	<1	80	ND (<1000)	40000	ND (<20)	
3102	Containment Enclosure #1 Outer Annulus Lower Level NW	1	<1	>100	ND (<1000)	20000	ND (<14.1)	295
3103	Containment Enclosure #2 Outer Annulus Lower Level SW	1	<1	175	ND (<1000)	>100000	ND (<14.1)	400
3104	Containment Enclosure #3 Outer Annulus Lower Level SE	1	<1	>100	ND (<1000)	35000	ND (<14.1)	124
3105	Containment Enclosure Containment Sump Area	1	30	>100	10000	>100000	ND (<14.1)	250
3107	Containment Enclosure Cable Vault Outside Containment	1		<0.1	ND (<1000)	5000	ND (<14.1)	
3111	Containment Enclosure Loop #1 Inner Annulus Lower Level NE	1	45	>100	5000	>100000	ND (<20)	>500
3112	Containment Enclosure Loop #2 Inner Annulus Lower Level NW	1	10	>100	12000	>100000	ND (<20)	>500
3113	Containment Enclosure Loop #3 Inner Annulus Lower Level SW	1	10	>100	2000	40000	ND (<20)	>500
3114	Containment Enclosure Loop #4 Inner Annulus Lower Level SE	1	15	>100	880	20000	ND (<14.1)	>500

Containment Building Profile
All Elevations (Page 1 of 2)
GAD 3001

Radiation Range: Gamma Radiation <0.1mR/hr to >100 mR/hr

General radiation levels ranged from <1mR/hr to >100 mR/hr. The containment has been maintained as a High Radiation Area (>100 mR/hr). The radiation levels are associated with primary system components such as the steam generators, reactor coolant pumps, and primary system piping and vessel. Dose rates in excess of approximately 0.1 mR/hr prohibit the determination of total surface contamination in Area 3403. Dose rates in excess of 10 mR/hr prohibit the determination of total surface contamination in Areas 3002 and 3004.

Removable Contamination Range: Beta emitters up to >100,000 dpm/100 cm2. Alpha emitters up to >500-dpm/100 cm2.

The survey areas within the containment building have been maintained as contaminated areas (i.e. removable beta contamination >1000 dpm/100 cm2, and/or removable alpha contamination >20 dpm/100 cm2). Area contamination has resulted from system leakage during normal operation and component maintenance. High radiation and contamination levels have limited access to Areas 3002 and 3004. Removable beta contamination of >100,000 dpm/100cm2 have been measured in Areas 3002 and 3004. Removable alpha contamination of >500-dpm/100 cm2 have been measured in Areas 3002 and 3004. Areas 3002, 3004, and 3403 were not routinely surveyed due to limited accessibility.

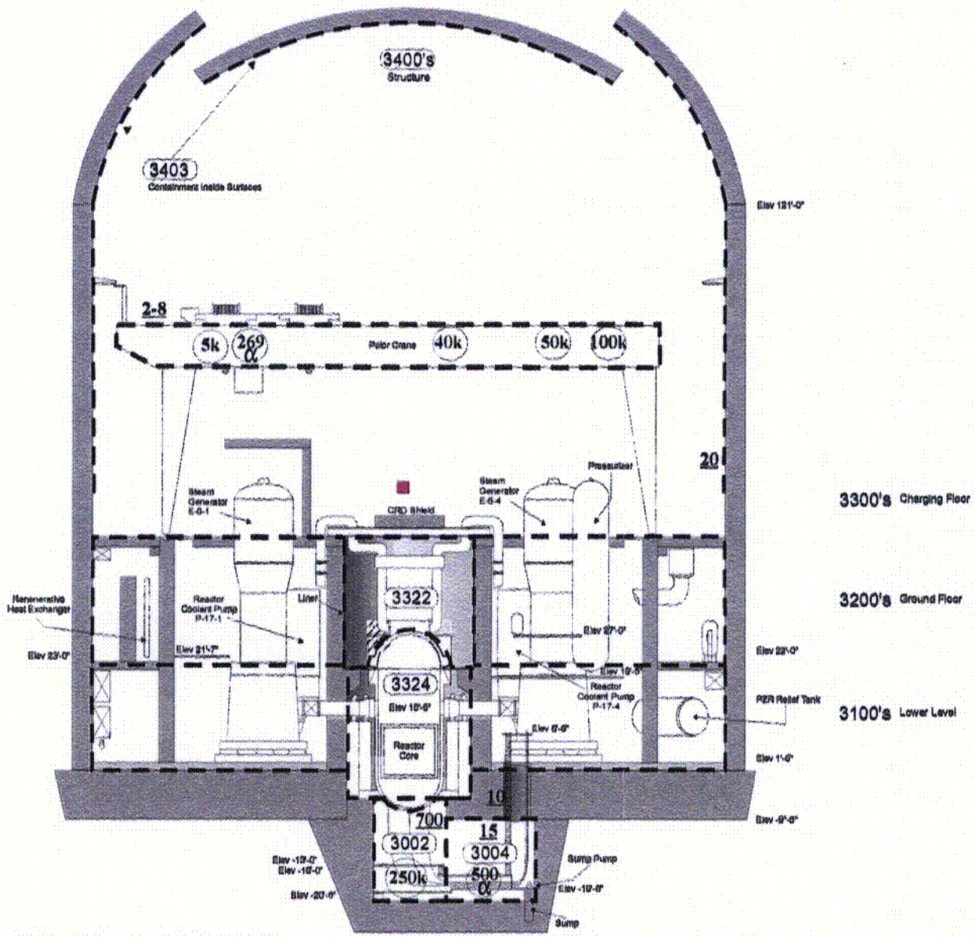
Isotope Identification: Predominant Isotopes: Co-60, Cs-137

■ **Core Sample Location.**
(Ref. CY-98026 6/29/99)

Core Bore Samples: A qualitative isotopic analysis of the core bore specimens indicated Co-60 as the predominant gamma-emitting isotope, with a Co-60 to Cs-137 ratio of approximately 6.9:1. Eu-152 was identified in one the core samples.

◯ **Indicates removable contamination levels-dpm/100cm2.**

XX Indicates dose rates-mR/hr.



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Containment Building Profile
All elevations (Page 2 of 2)
GAD 3001

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
3002	Containment Enclosure Under Reactor Vessel	1	10	>100	5000	>100000	ND (<14.82)	400
3004	Containment Enclosure Sump Area Under Reactor Vessel	1	10	>100	1000	>100000	ND (<14.82)	>500
3403	Containment Enclosure Inside Surfaces	2	<1	20				

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

Radiation Range: Gamma Radiation <1mR/hr to >100 mR/hr.

General area dose rates in the filter area (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 Area 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/100cm2 (Area 2308). Alpha emitters up to 581 dpm/100cm2 (Area 2304).

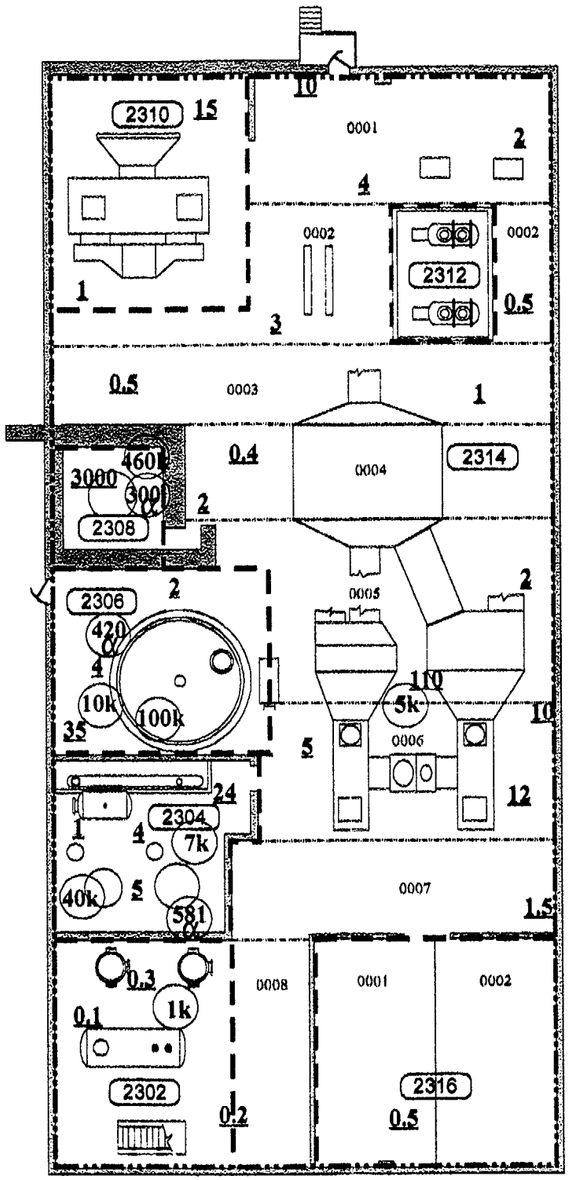
The general area was maintained as a non-contaminated, (i.e. no removable contamination greater than 1000 dpm/100cm2). Contaminated areas have existed at times in the Boric Acid Mix Tank area (Area 2306), the filter housings (Area 2314) and evaporator area (Area 2304). Typically, 25% of swipe survey samples have been analyzed for alpha emitting nuclides. No alpha contamination greater than 100 dpm/100cm2 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 effect on the gross DCGL is minimal.

◯ **Indicates removable contamination levels-dpm/100cm2.**

XX Indicates dose rates-mR/hr.



Elevation 35'-6"

Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels Beta/Gamma DPM/100cm2 Min	Max	Contamination Levels Alpha DPM/100cm2 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	>500
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	>100000	<20	300
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	5000		<15.2
2316	Auxiliary Building Boric Acid Storage Room	1	0.2	0.5		<1000		<20

Millennium Services Inc.

Primary Auxiliary Building. Elevation 21'-6" (Page 1 of 2) GAD 2000

Radiation Range: Gamma Radiation 0.1mR/hr to >100 mR/hr

General area dose rates in the hallway range from 0.5 mR/hr to 4 mR/hr. Maximum dose rates in the various cubicles range from 2 mR/hr in the Component Cooling Area to 600 mR/hr in the Boric Acid Mix Tank Area. Dose rates in excess of approximately 0.1 mR/hr prohibit the determination of total surface contamination.

Removable Contamination Range: Beta emitters up to >100,000 dpm/100cm2. Alpha emitters up to >500-dpm/100 cm2 with a maximum of 4000-dpm/100 cm2.

The Hallway Area was maintained as a non-contaminated area, (i.e. no removable contamination greater than 1000 dpm/100 cm2). Contaminated areas have existed at times in each of the cubicles on this elevation. Typically, 25% of swipe surveys samples have been analyzed for alpha emitting nuclides. No detectable alpha contamination has been identified in the Hallway, Component Cooling Area, "A" Charging Pump Area, Purification Pump Area, Primary Water Transfer Pump Area, Steam Generator Blowdown Room Area, and the LPSI Cubicle Area. Note that fixed contamination measurements are limited by the background dose rates from equipment and systems that will be removed prior to final characterization.

Isotope Identification: Predominant Isotopes: Co-60, Cs-137, and Am-241.

Isotopic analyses of samples from the PAB indicate the predominant isotopes impacting the dose from residual radioactivity are Co-60 and Cs-137. The ratio of these isotopes varies from 7:1 Cs-137 to Co-60 to greater than 90% C0-60. Am-241 has been detected in the soil samples from the area below the Drumming Room Area floor. Cs-137 is the predominant isotope (>93%) in the soil sample.

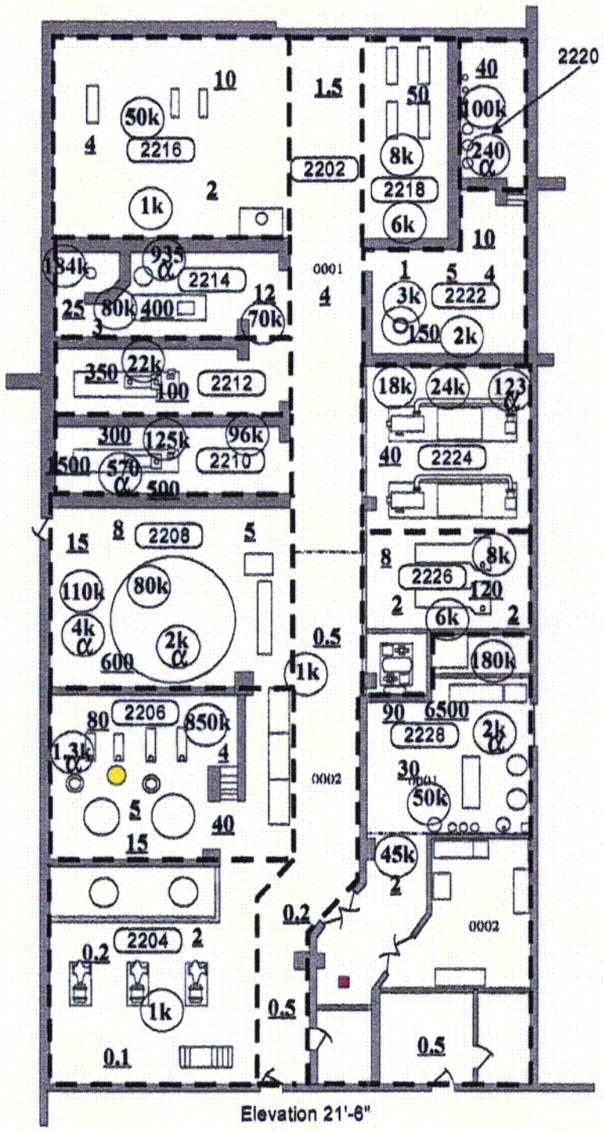
■ **Soil Sample Location.**
(Ref. GTS Duratek Inc. 1/27/99)

Subsurface Soil Samples: Samples of soils from below the Drumming Room floor (Area 2228) identified contamination including Cs-137 at 126.6 pCi/gm, Co-60 at 8.73 pCi/gm and Am-241 at 0.29 pCi/gm.

● **Smear Location.**
(Ref. Thermo NUtech, DAW-A6, N7-06-061 4/11/97)

○ **Indicates removable contamination levels-dpm/100cm2.**

XX Indicates dose rates-mR/hr.



● **Area 2206 Smear Analysis**

Nuclide	µCi/Sample
H-3	7.025 E-05
Fe-55	7.846 E-04
Ni-63	1.786 E-04
Sr-90	1.811 E-05
Pu-238	9.089 E-07
Pu-239, 240	3.569 E-07
Pu-241	3.090 E-05
Am-241	7.750 E-07
Cm-243, 244	4.215 E-07
Co-60	2.972 E-04
Cs-134	1.093 E-04
Cs-137	8.837 E-04
Gross Beta	1.027 E-03

Continued on next page.

C14

Primary Auxiliary Building.
Elevation 21'-6" (Page 2 of 2)
GAD 2000

Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels Beta/Gamma DPM/100cm2 Min	Max	Contamination Levels Alpha DPM/100cm2 Min	Max
2202	Auxiliary Building Hallway	1	0.5	4	ND (< 57.2)	1000		ND (<20)
2204	Auxiliary Building Component Cooling Area	1	0.1	2	ND (< 57.2)	1000		ND (<20)
2206	Auxiliary Building Boric Acid Evaporator Area	1	1	80	ND (< 57.2)	>100000	22	>500
2208	Auxiliary Building Boric Acid Mix Tank Area	1	0.5	>100	ND (< 57.2)	>100000	22	>500
2210	Auxiliary Building "B" Charging Pump Area	1	1	>100	ND (< 57.2)	>100000	ND (<20)	>500
2212	Auxiliary Building "A" Charging Pump Area	1	<1	>100	ND (< 57.2)	22000	ND (<20)	
2214	Auxiliary Building Metering Pump Area	1	5	>100	ND (< 57.2)	>100000	ND (<20)	>500
2216	Auxiliary Building Purification Pump Area	1	<1	10	ND (< 57.2)	50000	ND (<20)	
2218	Auxiliary Building Primary Water Transfer Pump Area	1	0.5	50	ND (< 57.2)	8000	ND (<20)	
2220	Auxiliary Building Sample Room	1	1	40	143	>100000	ND (<8.89)	240
2222	Auxiliary Building Steam Generator Blowdown Room	1	0.5	15	ND (< 57.2)	24000	ND (<20)	
2224	Auxiliary Building HPSI Cubicle Area	1	1	40	ND (< 57.2)	24000	ND (<20)	123
2226	Auxiliary Building LPSI Cubicle Area	1	2	>100	ND (< 57.2)	8000	ND (<20)	
2228	Auxiliary Building Drumming Room	1	0. 5	>100	ND (< 57.2)	>100000	ND (<20)	>500

Primary Auxiliary Building. Elevation 19'-0", 15'-6", Pipe Chase and Pipe Trench (Page 1 of 2) GAD 2000

Radiation Range: Gamma Radiation 1mR/hr to >100 mR/hr

Many of the areas have been posted high radiation areas (>100 mR/hr). Maximum dose rates have exceeded locked high radiation area criteria (>1 R/hr). Minimal areas contained dose rates below 2 mR/hr. Dose rates in excess of approximately 0.1 mR/hr prohibit the determination of total surface contamination.

Removable Contamination Range: The general areas have recorded removable beta contamination levels of >100,000 dpm/100cm2. Removable alpha contamination of >500-dpm/100 cm2 was typical of most areas. High dose rates in the area made decontamination efforts impractical.

Isotope Identification: Predominant Isotopes: Co-60, Cs-137, and Am-241.

■ **Core Sample Location.**
(Ref. GTS Duratek Inc. 1/27/99)

Core Bore Samples: Isotopic analyses of samples from the PAB indicate the predominant isotopes impacting the dose from residual radioactivity are Co-60 and Cs-137. The ratio of these isotopes varies from 2:1 Cs-137 to Co-60, to 2.5:1 Co-60 to Cs-137. No Am-241 was identified in the core bore samples. The sample for Area 2002 was taken from a wall that was spayed with contaminated liquid. In the first 0.5" of core sample the reported results were Co-60 at 6.93 pCi/gm, and Cs-137 at 5.38 pCi/gm. For Area 2008, the first 0.5" of the core sample was 2.5-mR/hr on contact and not sent for gamma analysis. The 0.5''-1" section of the core sample contained Co-60 at 13.10pCi/g, Cs-134 at 0.63 pCi/gm, and Cs-137 at 5.38 pCi/g. For Area 2104, the 0-0.5" section of the core of sample contained Co-60 at 34.10pCi/g, Cs-134 at 5.18 pCi/gm, and Cs-137 at 74.00 pCi/g.

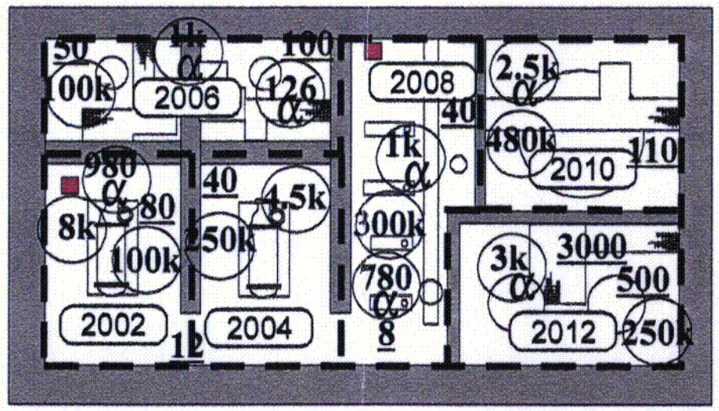
● **Smear Location**
(Ref. Thermo NUtech, DAW-A8, N7-06-061 4/16/97)

○ **Indicates removable contamination levels-dpm/100cm2**

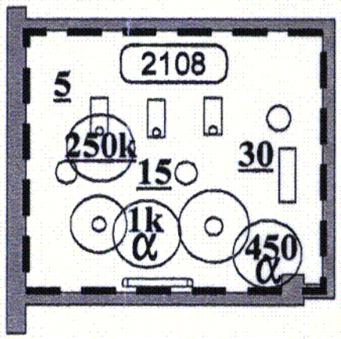
XX Indicates dose rates-mR/hr.

Areas Not Shown

2104	PAB Pipe Chase Under Hallway ■
2106	PAB Pipe Chase Under Valve Room
2110	PAB East & West Outside Pipe Trench ●



Elevation 19'-0"



Elevation 15'-6"

● Area 2110 Smear Analysis

Nuclide	µCi/Sample
H-3	1.953 E-04
C-14	3.268 E-3
Fe-55	5.867 E-01
Ni-59	3.017 E-4
Ni-63	3.984 E-02
Sr-90	5.606 E-04
Pu-238	9.355 E-04
Pu-239, 240	3.199 E-04
Pu-241	2.620 E-02
Am-241	1.004 E-03
Cm-242	8.654 E-06
Cm-243, 244	3.763 E-04
Mn-54	1.099 E-03
Co-60	9.530 E-02
Cs-134	2.099 E-02
Cs-137	1.832 E-01
Gross Alpha	3.414 E-03
Gross Beta	3.087 E-01

Continued on next page.

Primary Auxiliary Building.
Elevation 19'-0", 15'-6", Pipe Chase and Pipe Trench (Page 2 of 2)
GAD 2000

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
2002	Auxiliary Building RHR Pump Room A	1	12	80	8000	>100000	ND (<20)	480
2004	Auxiliary Building RHR Pump Room B	1	12	40	4500	>100000	ND (<20)	>500
2006	Auxiliary Building RHR Heat Exchangers	1	20	>100	4000	100000	ND (<20)	>500
2008	Auxiliary Building Primary Drain Tank Pump Room	1	10	40	16000	>100000	ND (<20)	>500
2010	Auxiliary Building Primary Drain Tank Room	1	100	>100	10000	>100000	ND (<20)	>500
2012	Auxiliary Building Aerated Drain Tank Room	1	50	>100	10000	>100000	ND (<20)	>500
2104	Auxiliary Building Pipe Chase Under Hallway	1	<1	3	ND (<1000)	>100000	18	>500
2106	Auxiliary Building Pipe Chase Under Valve Room	1	1	>100	4000	>100000	6	>500
2108	Auxiliary Building Boric Acid Evaporator Area TK EV1-1A, EV2-1A	1	4	30	ND (< 57.2)	>100000	20	>500
2110	Auxiliary Building Pipe Chase East & West Outside	1	<2	>100	ND (< 57.2)	>100000	ND (<20)	>500

Spent Fuel Building
Elevation 47'-0"
GAD 1000

Radiation Range: Gamma Radiation <0.1mR/hr to 20 mR/hr

General radiation levels ranged from <1mR/hr to 20 mR/hr. Maximum radiation levels have been associated with areas immediately adjacent to the spent fuel pool or materials in the areas. The patio area (Area 1302) has radiation levels <0.2 mR/hr. Dose rates in excess of approximately 0.1 mR/hr prohibit the determination of total surface contamination.

Removable Contamination Range: Beta emitters up to >100,000 dpm/100 cm2. Alpha emitters up to >500-dpm/100 cm2

The survey areas have typically been maintained as non-contaminated areas (i.e. removable beta contamination <1000 dpm/100 cm2, removable alpha contamination <20 dpm/100 cm2). Contamination events have occurred that resulted recorded removable beta contamination levels of >100,000 dpm/100cm2 (Areas 1306, 1308). Removable alpha contamination of >500-dpm/100 cm2 measured in one area (Area 1308). Remediation efforts have reduced the levels to non-contaminated area levels.

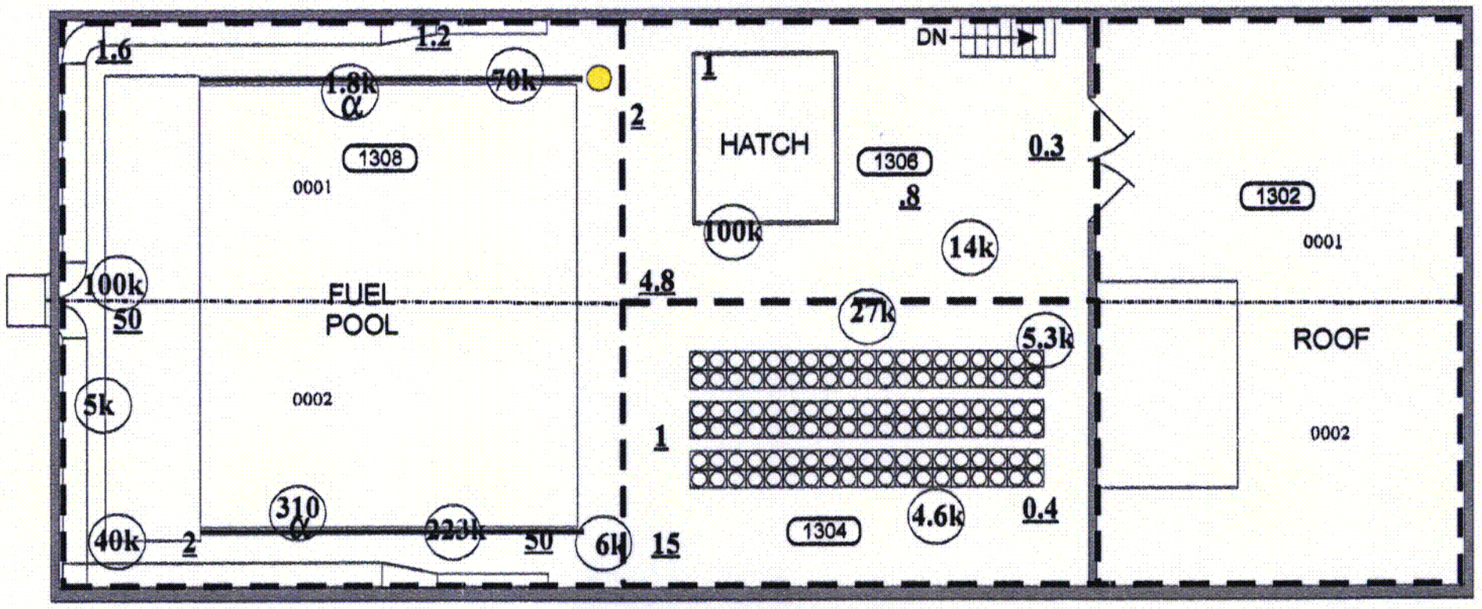
Isotope Identification: Predominant Isotopes: Co-60, Cs-137.

Isotopic analyses of swipe samples indicate the predominant isotopes impacting the dose from residual radioactivity are Co-60 and Cs-137. The ratio of these isotopes varies from 5:1 Cs-137 to Co-60, to 1:1.

Smear Location.
(Ref. Thermo NUtech, DAW-A5, N7-06-061 4/09/97)

Indicates removable contamination levels-dpm/100cm2.

XX Indicates dose rates-mR/hr.



FUEL BLDG. EL. 47'-0"

Spent Fuel Floor Smear Analysis

Nuclide	µCi/Sample
Ni-63	2.571 E-04
Sr-90	7.603 E-06
Pu-238	5.673 E-07
Pu-239, 240	2.322 E-07
Am-241	1.191 E-06
Cm-243, 244	5.099 E-07
Co-60	1.183 E-04
Nb-95	1.190 E-04
Cs-134	1.650 E-04
Cs-137	1.669 E-03
Ag-110m	5.666 E-05
Gross Beta	1.821 E-03

Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels Beta/Gamma DPM/100cm2 Min	Max	Contamination Levels Alpha DPM/100cm2 Min	Max
1302	Fuel Building Patio Area	1		<0.2	ND (<42.0)			ND (<8.92)
1304	Fuel Building New Fuel Storage Area	1	<1	15	ND (< 57.2)	27000		ND (<14.1)
1306	Fuel Building Cask Laydown Area	1	<1	4.8	ND (< 57.2)	>100000		ND (<14.1)
1308	Fuel Building Spent Fuel Pool Pit	1	<1	50	ND (< 57.2)	>100000	ND (<14.1)	>500

C16

Spent Fuel Building
Elevation 35'-0" and Roof.
GAD 1000

Radiation Range: Gamma Radiation <1mR/hr to 10 mR/hr

General radiation levels ranged from <1mR/hr to 10 mR/hr. Maximum radiation levels have been associated with areas adjacent to the spent fuel pool or materials in the areas. The roof area had radiation levels up to 0.2 mR/hr. Dose rates in excess of approximately 0.1 mR/hr prohibit the determination of total surface contamination.

Removable Contamination Range: Beta emitters up to 10,000-dpm/100 cm2. Alpha emitters <20-dpm/100 cm2.

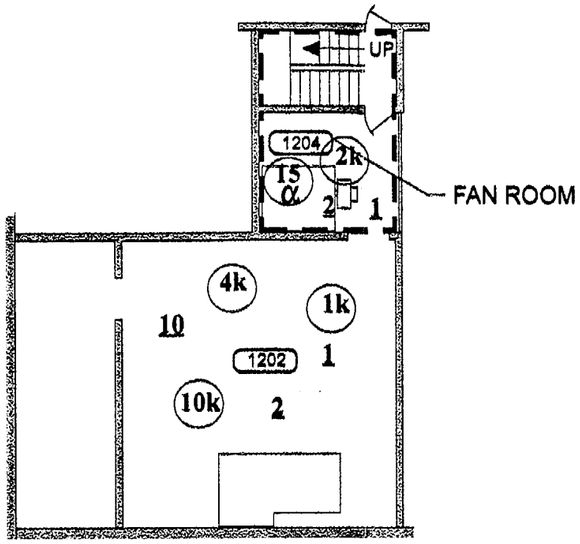
The survey areas have typically been maintained as non-contaminated areas (i.e. removable beta contamination <1000 dpm/100 cm2, removable alpha contamination <20 dpm/100 cm2). Contamination events have occurred that resulted recorded removable beta contamination levels of 10,000 dpm/100cm2 (Area 1202). Decontamination efforts have reduced the levels to non-contaminated area levels. Removable alpha contamination less than 20 dpm/100 cm2 have been measured in 3 areas (Area 1202, 1204, 1404).

Isotope Identification: Predominant Isotopes: Co-60, Cs-137.

Isotopic analyses of swipe samples indicate the predominant isotopes impacting the dose from residual radioactivity are Co-60 and Cs-137. The ratio of these isotopes varies from 10:1 Cs-137 to Co-60, to 1:1.

◯ **Indicates removable contamination levels-dpm/100cm2.**

XX Indicates dose rates-mR/hr.



FUEL BLDG. EL. 35'-0"

Areas Not Shown

1404 Fuel Building Roof

Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels Beta/Gamma DPM/100cm2 Min	Max	Contamination Levels Alpha DPM/100cm2 Min	Max
1202	Fuel Building New Fuel Storage Area	1	<1	10	ND (< 57.2)	10000		ND (<14.1)
1204	Fuel Building Exhaust Filters and Fan	1	<1	2	ND (< 57.2)	2000	ND (<14.1)	15
1404	Fuel Building Roof Area	1	<0.1	0.2	ND (<58.1)	71		ND (<14.4)

Spent Fuel Building
Elevation 21'-6"
GAD 1000

Radiation Range: Gamma Radiation <1mR/hr to >100 mR/hr

Radiation Levels have varied greatly based on the spent fuel pool processing operations and the time period since the most recent refueling outage. General radiation levels ranged from <1mR/hr to 15 mR/hr. Maximum radiation have been with process equipment (Area 1106) or stored material (Area 1102). Dose rates in excess of approximately 0.1 mR/hr prohibit the determination of total surface contamination.

Removable Contamination Range: Beta emitters up to >100,000 dpm/100 cm2. Alpha emitters up to 350-dpm/100 cm2.

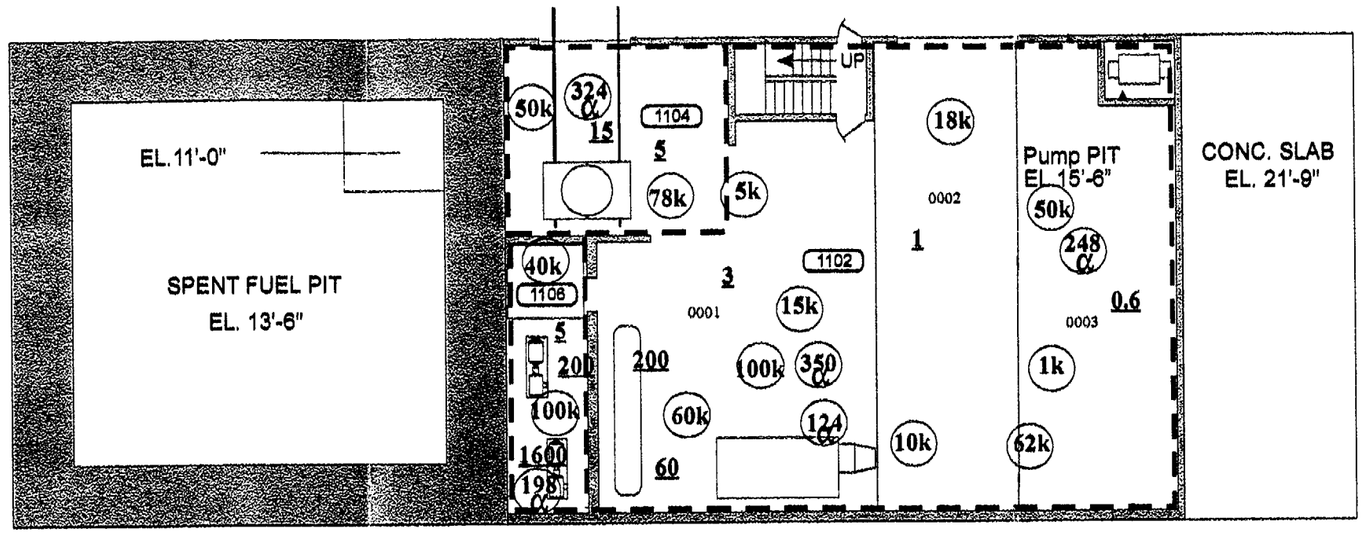
The survey areas have typically been maintained as non-contaminated areas (i.e. removable beta contamination <1000 dpm/100 cm2, removable alpha contamination <20 dpm/100 cm2). Contamination events have occurred that resulted recorded removable beta contamination levels of >100,000 dpm/100cm2 (Areas 1102, 1104, 1106). Removable alpha contamination greater than 20-dpm/100 cm2 has been measured in 3 areas (Area 1102, 1104, 1106). Decontamination efforts have reduced the levels to non-contaminated area levels.

Isotope Identification: Predominant Isotopes: Co-60, Cs-137.

Isotopic analyses of swipe samples indicate the predominant isotopes impacting the dose from residual radioactivity are Co-60 and Cs-137. The ratio of these isotopes varies from 10:1 Cs-137 to Co-60, to 1:1.

◯ **Indicates removable contamination levels-dpm/100cm2.**

XX Indicates dose rates-mR/hr.

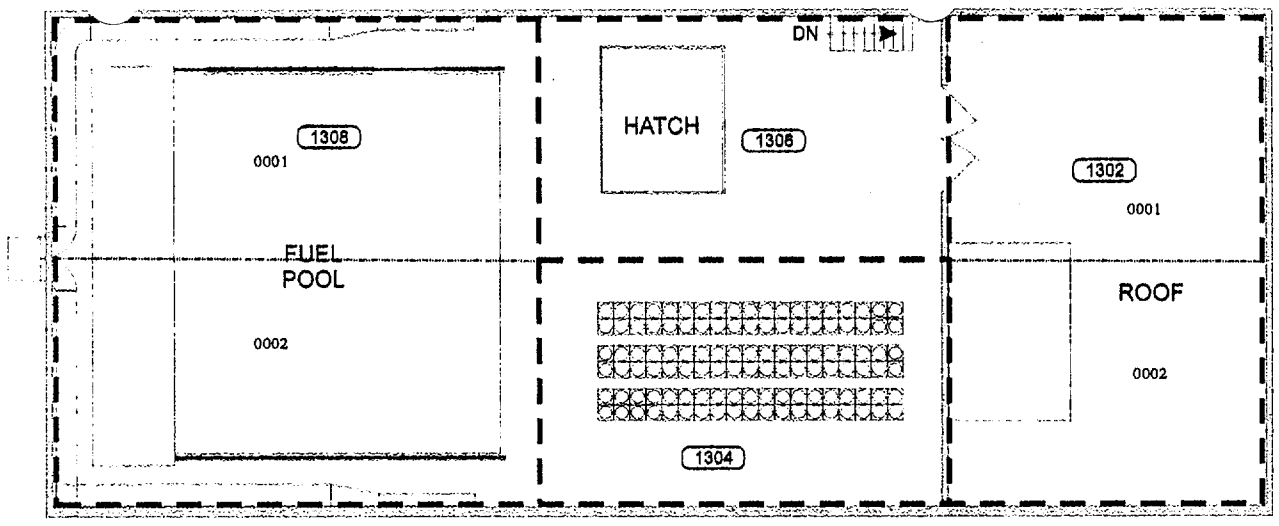


FUEL BLDG. EL. 21'-6"

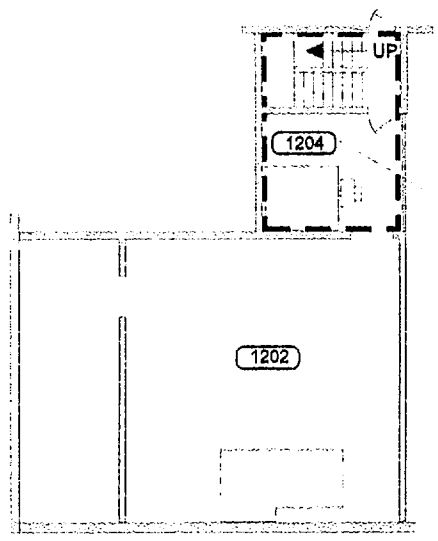
Survey Area Code	Survey Area Description	Class	Radiation Levels mR/hour Min	Max	Contamination Levels Beta/Gamma DPM/100cm2 Min	Max	Contamination Levels Alpha DPM/100cm2 Min	Max
1102	Fuel Building Laydown Area	1	<1	>100	ND (< 57.2)	>100000	ND (<14.1)	350
1104	Fuel Building Fuel Cask Decon Area	1	<1	15	ND (< 57.2)	78000	57	324
1106	Fuel Building Skimmer Pump and Sump Area	1	<1	>100	ND (< 57.2)	>100000	ND (<14.1)	198

Millennium Services Inc.

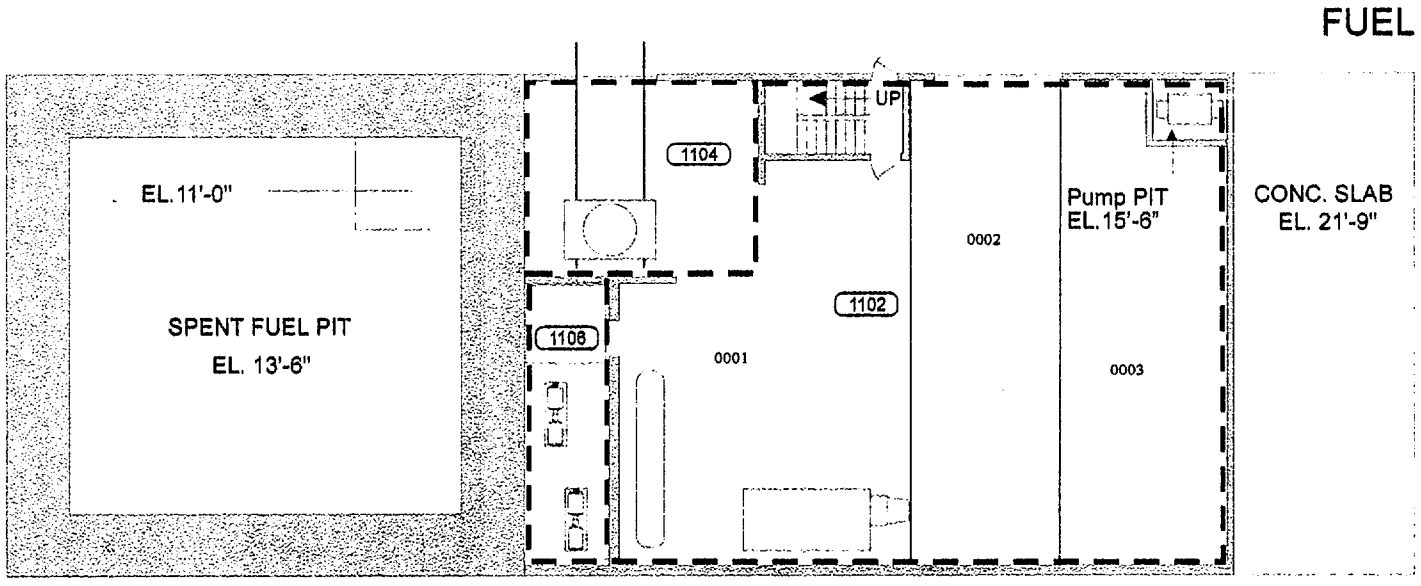
Section A-2 Site Maps



FUEL BLDG. EL. 47'-0"



FUEL BLDG. EL. 35'-0"



Areas Not Shown

1404 Fuel Building Roof

FUEL BLDG. EL. 21'-6"

Plant North

CONNECTICUT YANKEE ATOMIC POWER COMPANY

GENERAL ARRANGEMENT DRAWING

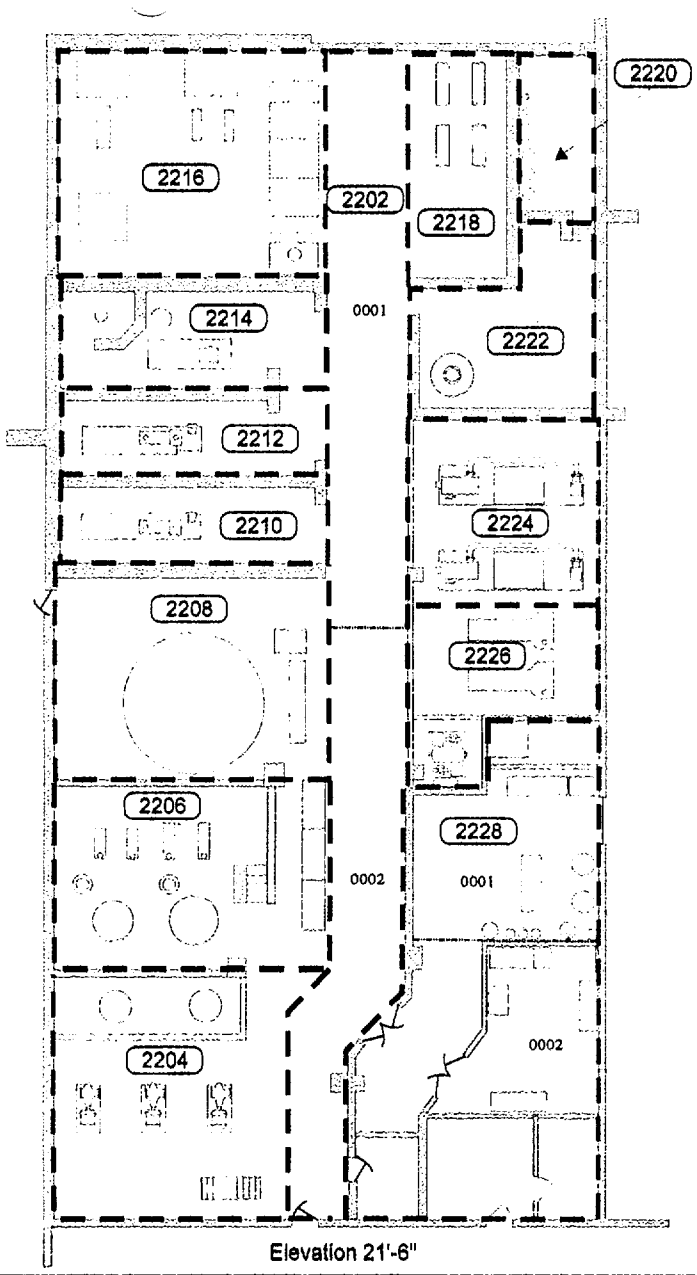
FUEL BUILDING

ELEVATION 21'-6", 35'-0" & 47'-0"

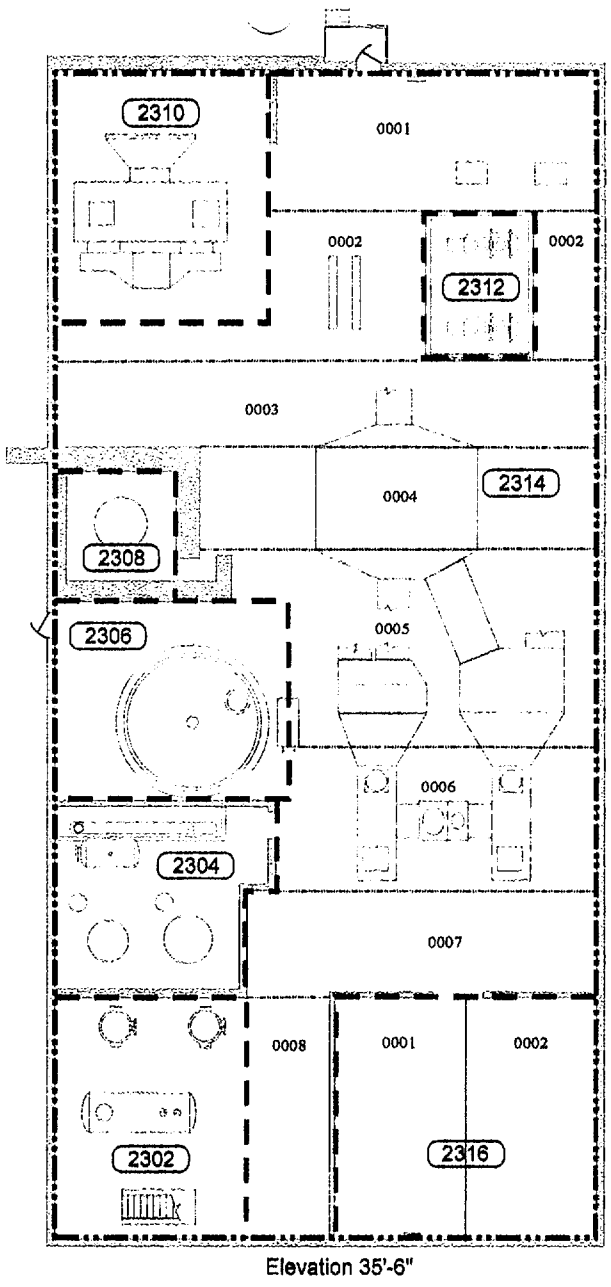
INITIAL CREATION DATE:	05/20/97
REVISION DATE:	06/06/01
REVISION #:	3
MAP #:	GAD1000

LEGEND:

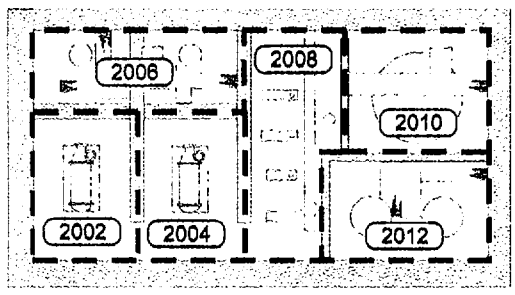
- FLOOR WALL INTERSECTION
- SURVEY AREA BOUNDARY
- SURVEY AREA (#)
- SURVEY UNIT BOUNDARY



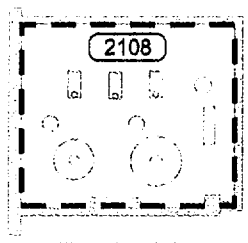
Elevation 21'-6"



Elevation 35'-6"



Elevation 19'-0"



Elevation 15'-6"

Areas Not Shown

2104	PAB Pipe Chase Under Hallway
2106	PAB Pipe Chase Under Valve Room
2110	PAB East & West Outside Pipe Trench

Plant North

CONNECTICUT YANKEE ATOMIC POWER COMPANY

GENERAL ARRANGEMENT DRAWING

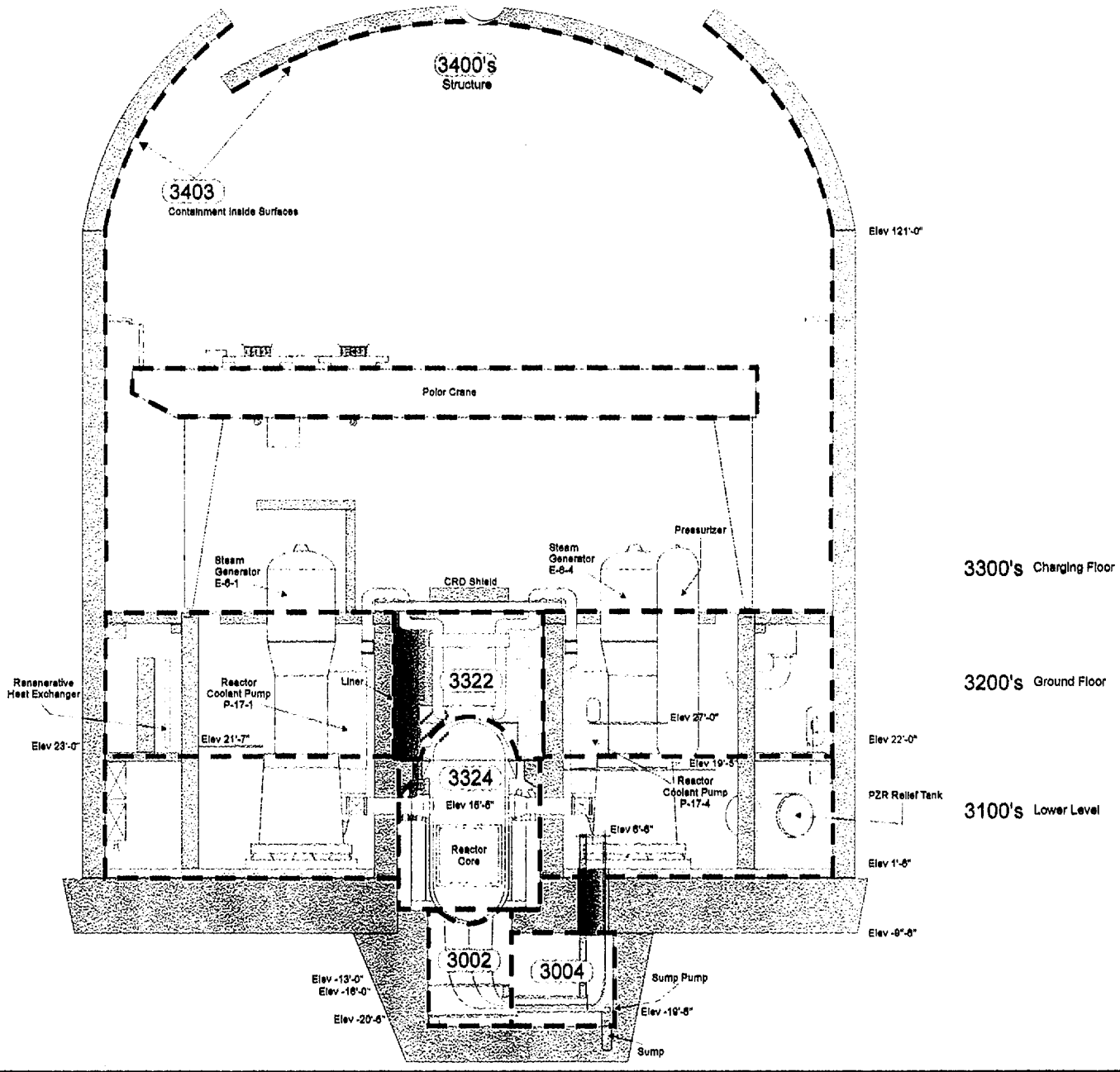
PRIMARY AUXILIARY BUILDING

ELEVATION(s) 15'-6", 19'-0", 21'-6" & 35'-6"

INITIAL CREATION DATE:	06/18/97
REVISION DATE:	06/06/01
REVISION #:	7
MAP #:	GAD2000

LEGEND:

- FLOOR WALL INTERSECTION
- SURVEY AREA BOUNDARY
- SURVEY AREA / SURVEY UNIT BOUNDARY (#)



CONNECTICUT YANKEE ATOMIC POWER COMPANY

GENERAL ARRANGEMENT DRAWING

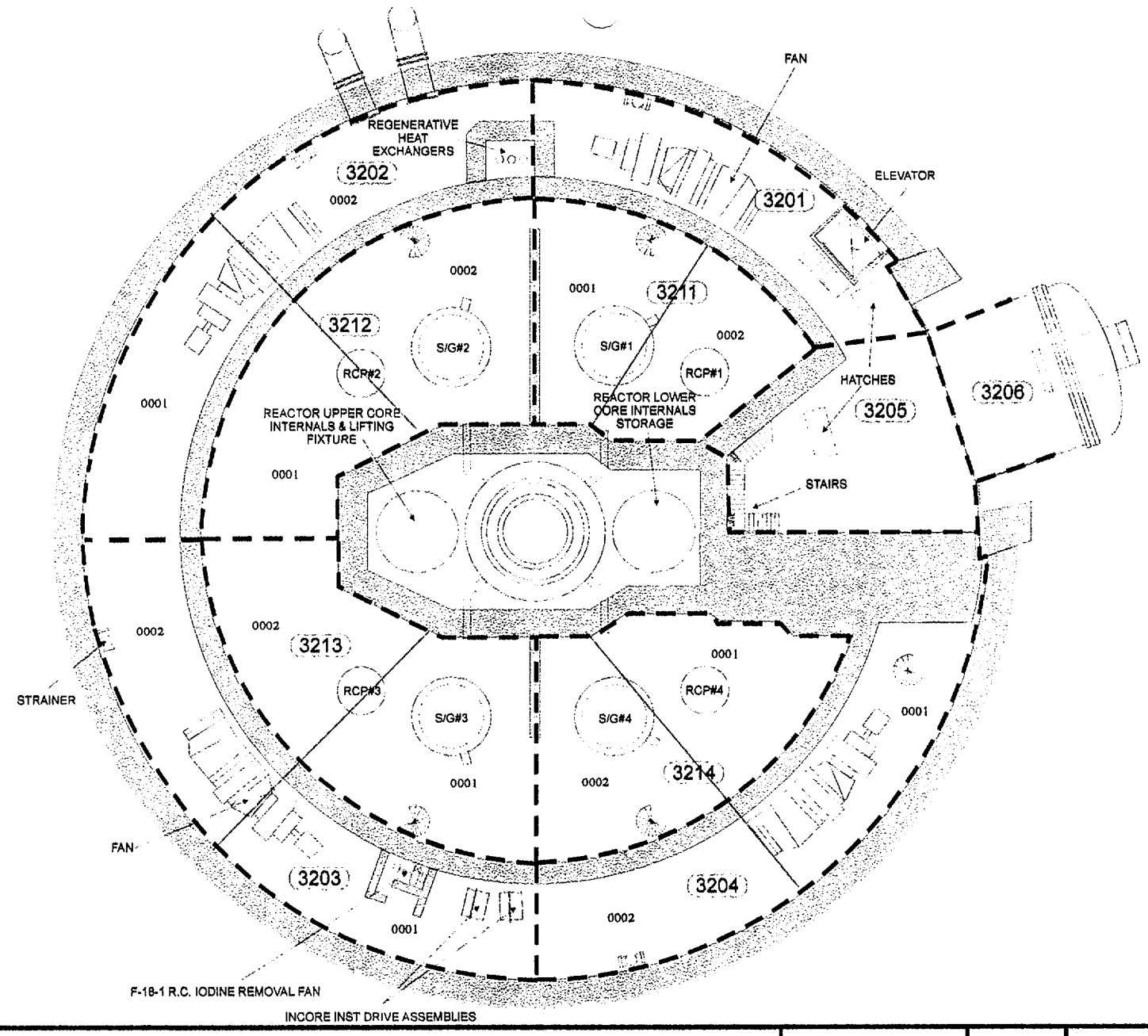
CONTAINMENT BUILDING

ALL ELEVATIONS

INITIAL CREATION DATE:	05/07/97
REVISION DATE:	06/06/01
REVISION #:	3
MAP #:	GAD3001

LEGEND:

- FLOOR WALL INTERSECTION
- SURVEY AREA BOUNDARY
- SURVEY AREA (#)
- SURVEY UNIT BOUNDARY



N

N

CONNECTICUT YANKEE ATOMIC POWER COMPANY

GENERAL ARRANGEMENT DRAWING

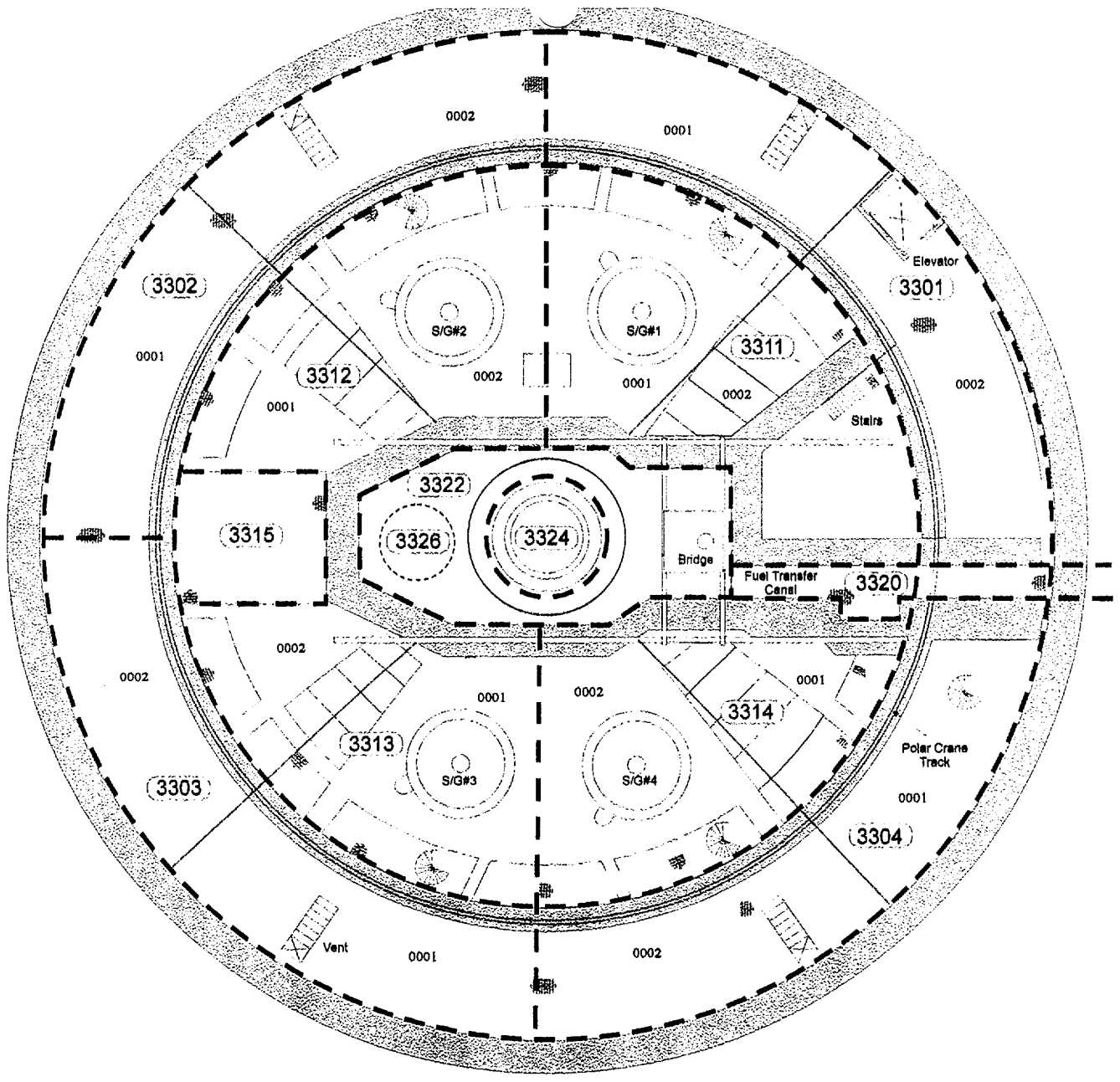
CONTAINMENT BUILDING

ELEVATION 22'-0"

INITIAL CREATION DATE:	05/01/97
REVISION DATE:	06/06/01
REVISION #:	3
MAP #:	GAD3200

LEGEND:

- FLOOR WALL INTERSECTION
- SURVEY AREA BOUNDARY
- SURVEY AREA (#)
- SURVEY UNIT BOUNDARY



N N

CONNECTICUT YANKEE ATOMIC POWER COMPANY

GENERAL ARRANGEMENT DRAWING

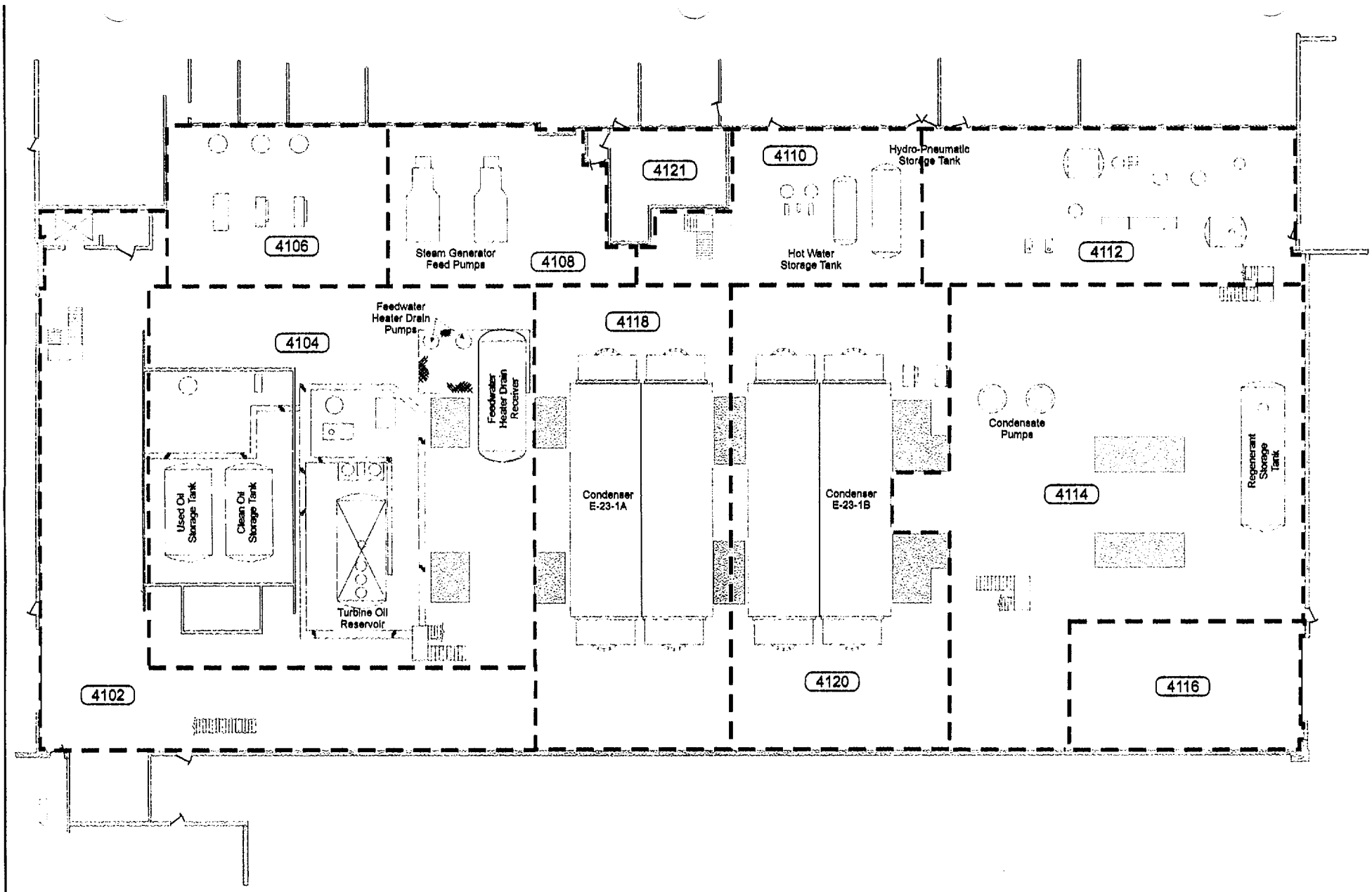
CONTAINMENT BUILDING

ELEVATION 48'-6"

INITIAL CREATION DATE:	05/06/97
REVISION DATE:	06/06/01
REVISION #:	4
MAP #:	GAD3300

LEGEND:

- FLOOR WALL INTERSECTION
- SURVEY AREA BOUNDARY
- SURVEY AREA (#)
- SURVEY UNIT BOUNDARY



Plant North

CONNECTICUT YANKEE ATOMIC POWER COMPANY

GENERAL ARRANGEMENT DRAWING

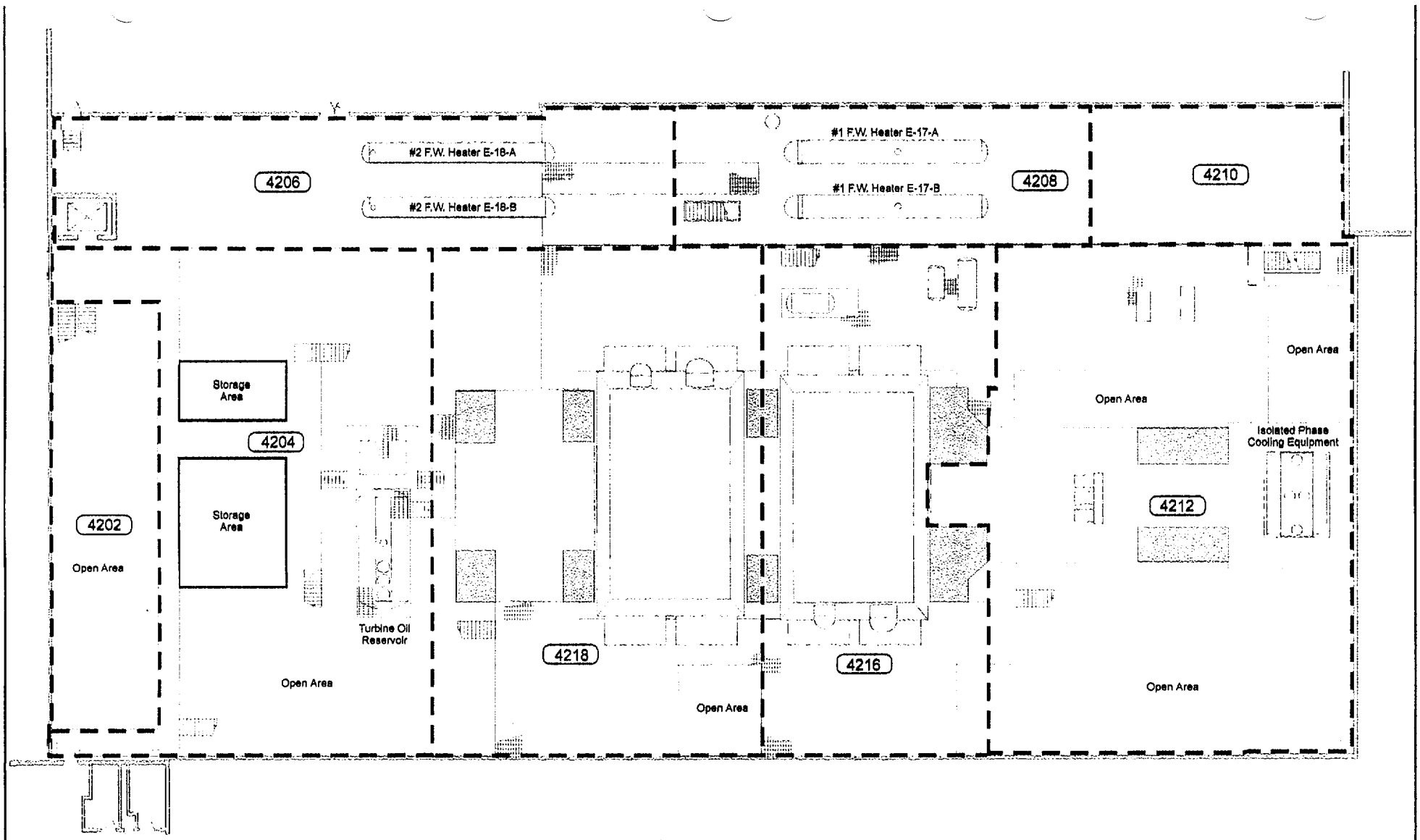
TURBINE BUILDING GROUND FLOOR

ELEVATION 21'-6"

INITIAL CREATION DATE:	05/27/97
REVISION DATE:	06/06/01
REVISION #:	4
MAP #:	GAD4100

LEGEND:

- FLOOR WALL INTERSECTION
- SURVEY AREA BOUNDARY
- SURVEY AREA (#)
- SURVEY UNIT BOUNDARY



Plant North

CONNECTICUT YANKEE ATOMIC POWER COMPANY

GENERAL ARRANGEMENT DRAWING

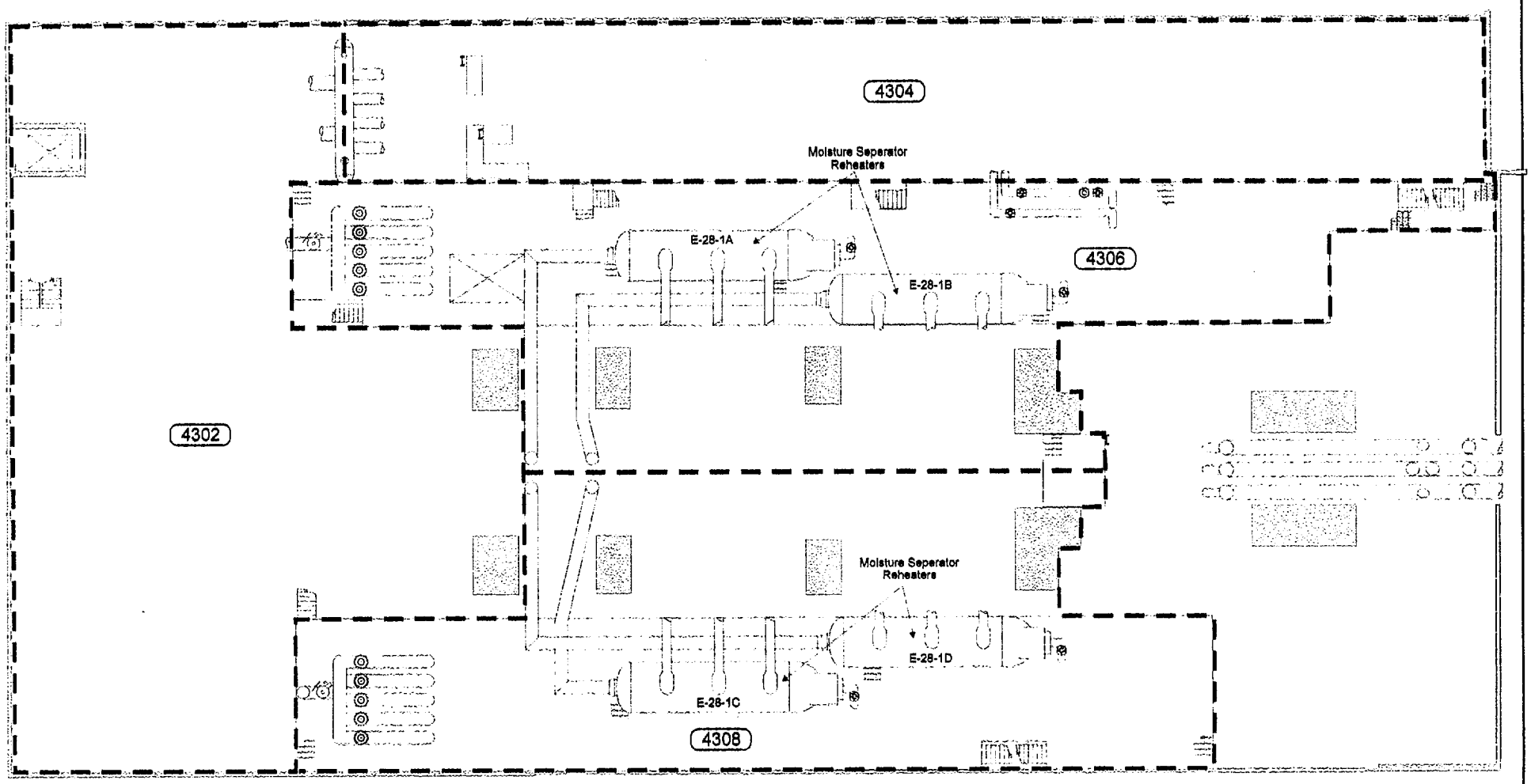
TURBINE BUILDING SECOND FLOOR

ELEVATION 37'-6"

INITIAL CREATION DATE:	05/28/97
REVISION DATE:	06/06/01
REVISION #:	2
MAP #:	GAD4200

LEGEND:

- FLOOR WALL INTERSECTION
- SURVEY AREA BOUNDARY
- SURVEY AREA (#)
- SURVEY UNIT BOUNDARY



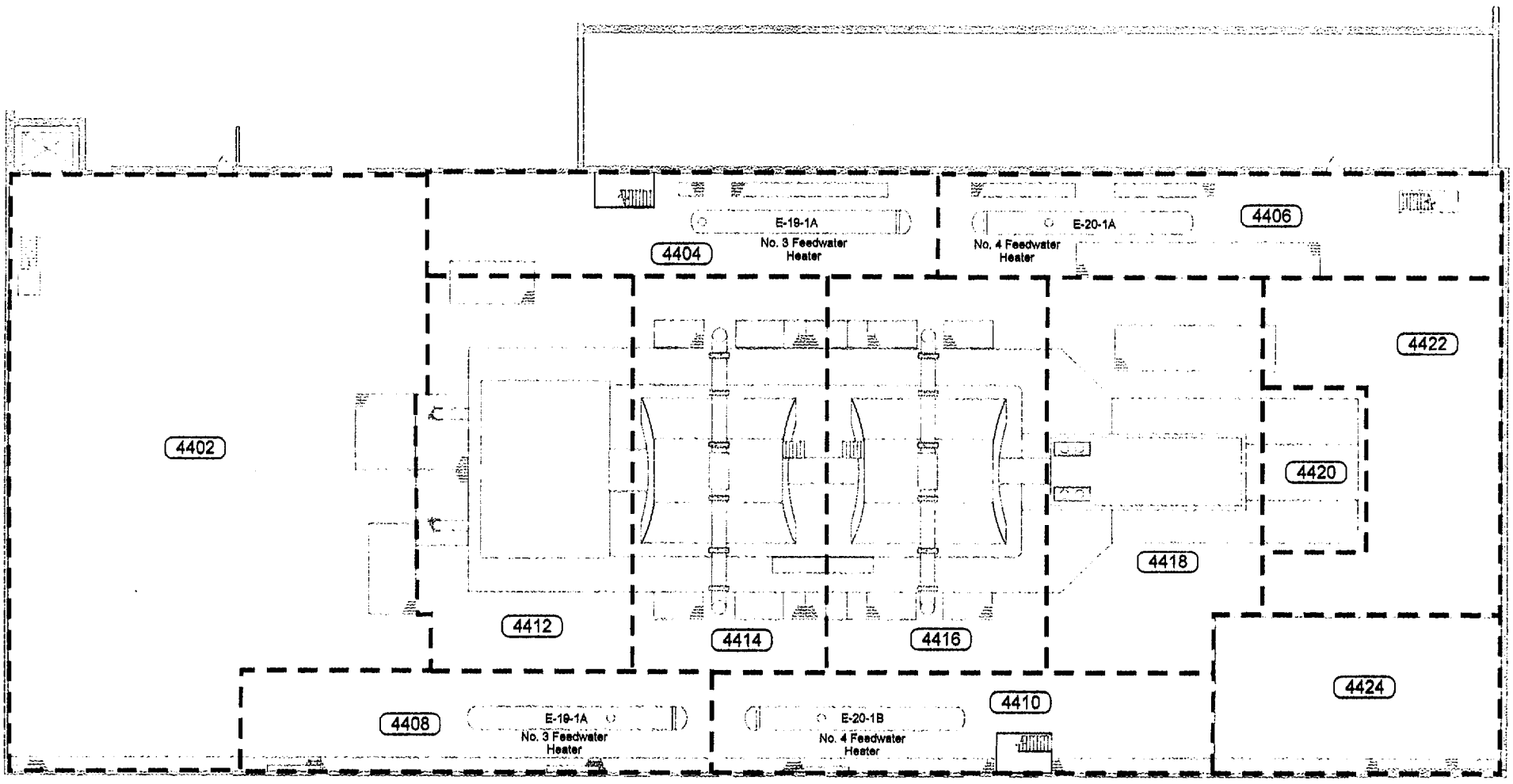
Plant North

CONNECTICUT YANKEE ATOMIC POWER COMPANY
GENERAL ARRANGEMENT DRAWING
TURBINE BUILDING
ELEVATION 47'-0"

INITIAL CREATION DATE:	06/03/97
REVISION DATE:	06/06/01
REVISION #:	2
MAP #:	GAD4300

LEGEND:

- FLOOR WALL INTERSECTION
- SURVEY AREA BOUNDARY
- SURVEY AREA (#)



Plant North

CONNECTICUT YANKEE ATOMIC POWER COMPANY

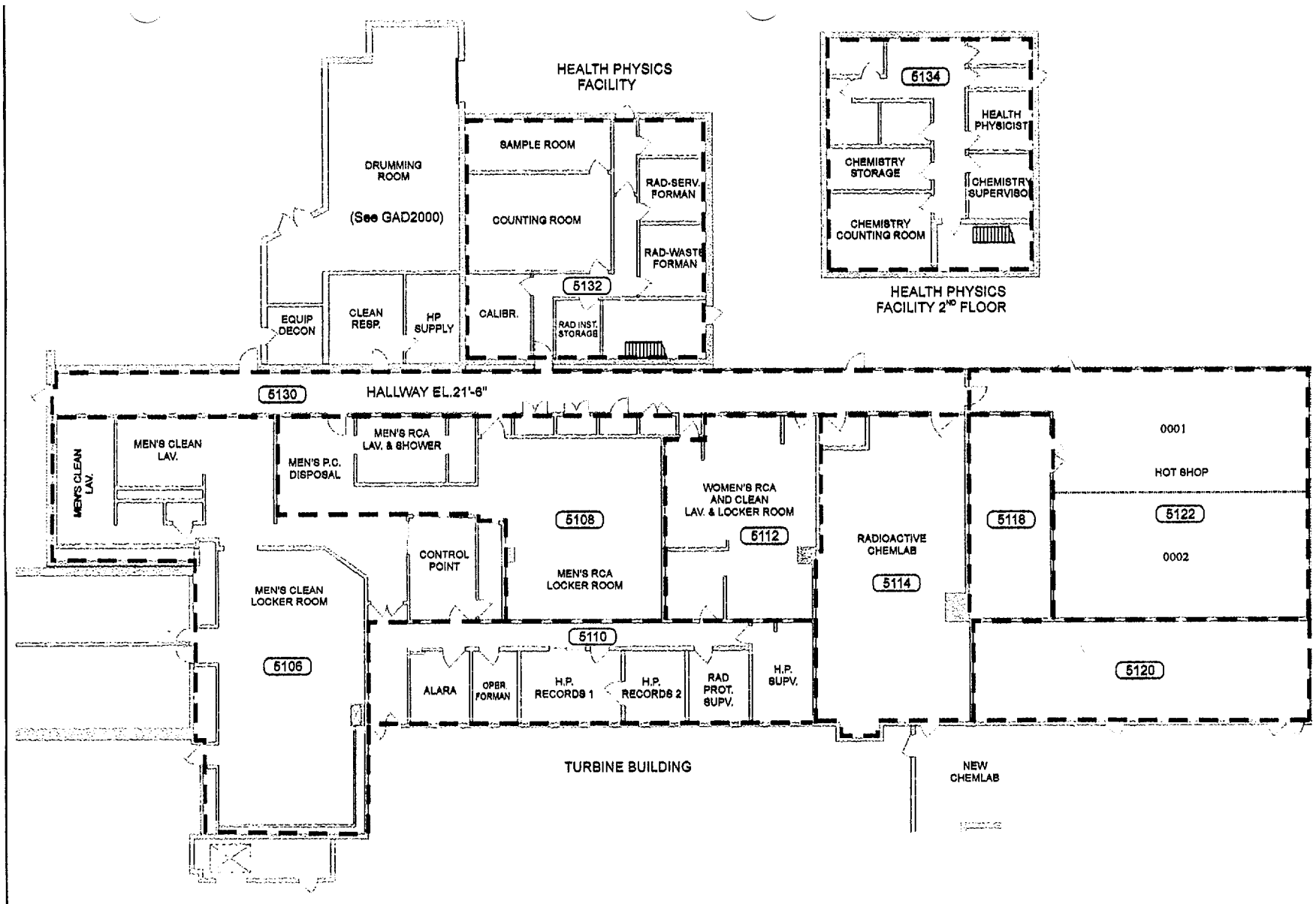
GENERAL ARRANGEMENT DRAWING

TURBINE BUILDING
ELEVATION 59'-6"

INITIAL CREATION DATE:	06/05/97
REVISION DATE:	06/06/01
REVISION #:	2
MAP #:	GAD4400

LEGEND:

- FLOOR WALL INTERSECTION
- SURVEY AREA BOUNDARY
- SURVEY AREA / SURVEY UNIT BOUNDARY (#)



Plant North

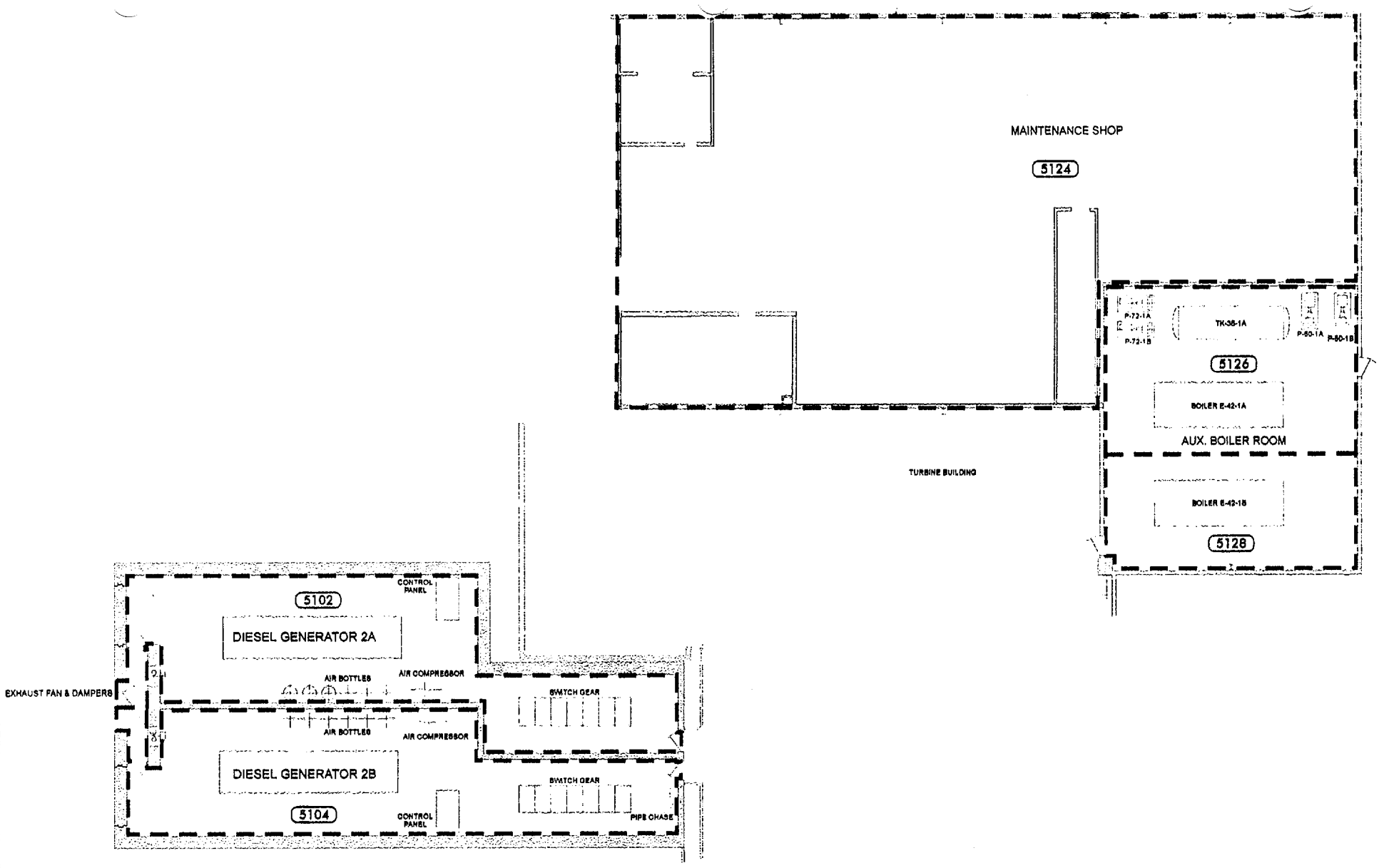
CONNECTICUT YANKEE ATOMIC POWER COMPANY
GENERAL ARRANGEMENT DRAWING

SERVICE BUILDING
ELEVATION 21'-6" & 35'-4"

INITIAL CREATION DATE:	05/15/97
REVISION DATE:	06/06/01
REVISION #:	5
MAP #:	GAD5100

LEGEND:

- FLOOR WALL INTERSECTION
- SURVEY AREA BOUNDARY
- SURVEY AREA (#)
- SURVEY UNIT BOUNDARY



Plant North

CONNECTICUT YANKEE ATOMIC POWER COMPANY

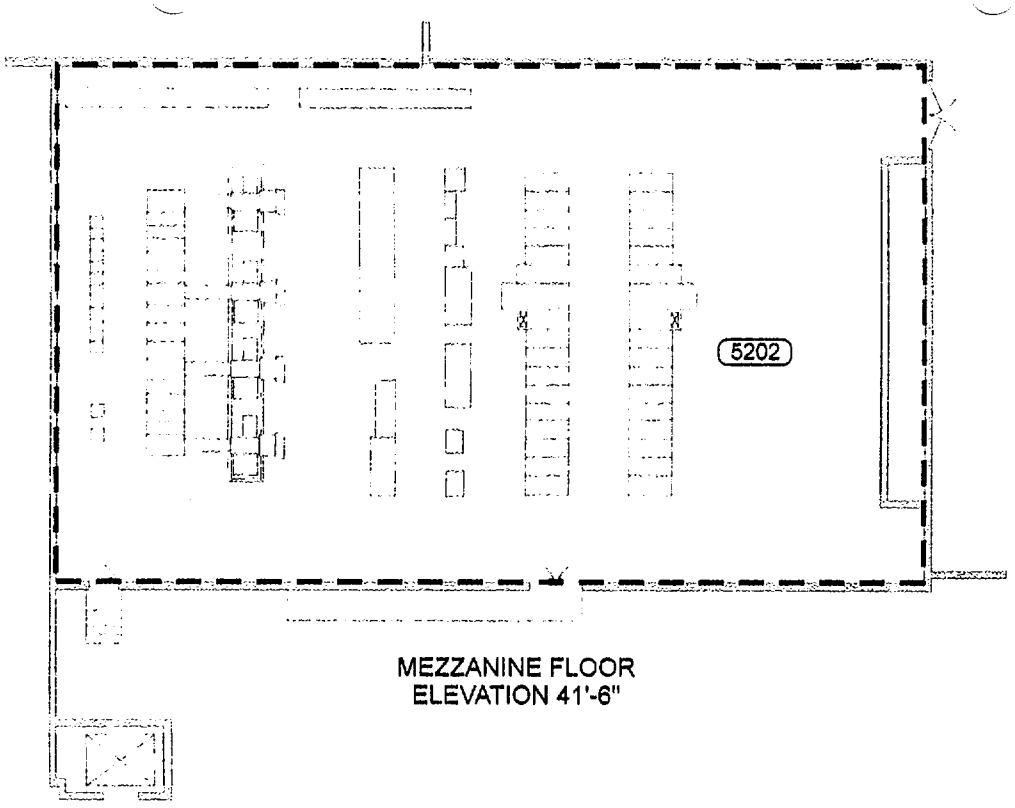
GENERAL ARRANGEMENT DRAWING

AUX BOILER ROOM & DIESEL GENERATOR BLDG ELEVATION 21'-6"

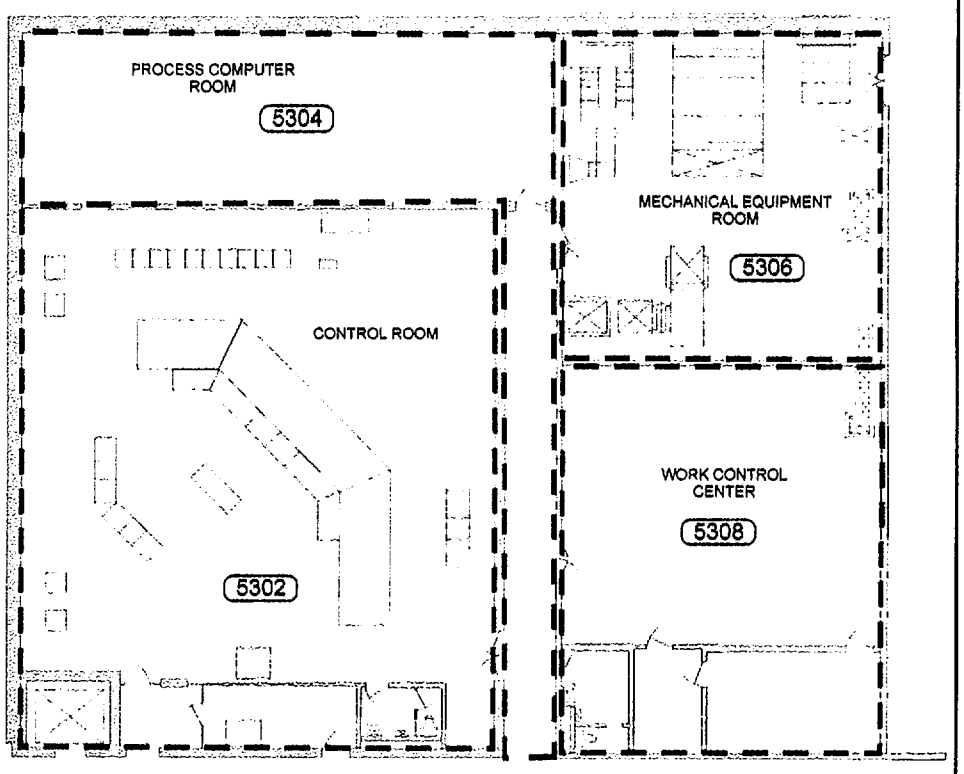
INITIAL CREATION DATE:	05/22/97
REVISION DATE:	06/06/01
REVISION #:	2
MAP #:	GAD5101

LEGEND:

- FLOOR WALL INTERSECTION
- SURVEY AREA BOUNDARY
- SURVEY AREA (#)



MEZZANINE FLOOR
ELEVATION 41'-6"



OPERATING FLOOR
ELEVATION 59'-6"

Plant North

CONNECTICUT YANKEE ATOMIC POWER COMPANY

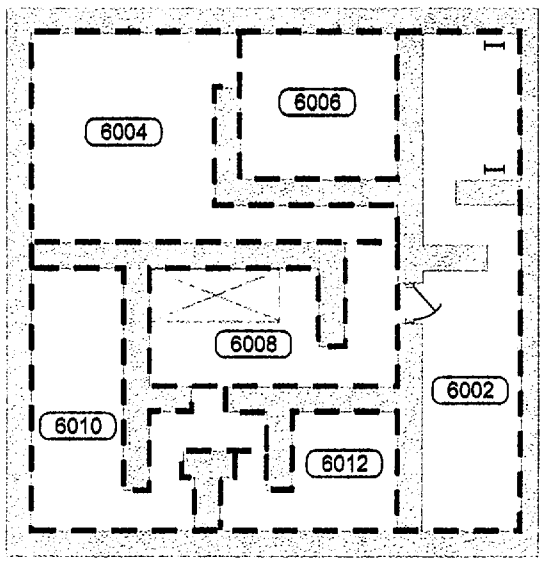
GENERAL ARRANGEMENT DRAWING

SERVICE BUILDING
MEZZANINE & OPERATING FLOORS
ELEVATION 41'-6" & 59'-6"

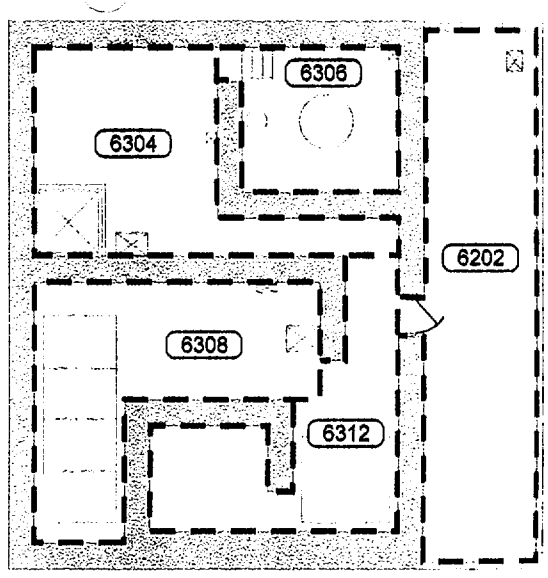
INITIAL CREATION DATE:	06/04/97
REVISION DATE:	06/06/01
REVISION #:	2
MAP #:	GAD5200

LEGEND:

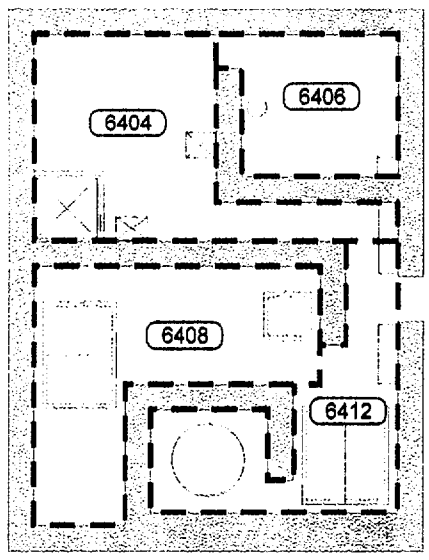
- FLOOR WALL INTERSECTION
- SURVEY AREA BOUNDARY
- SURVEY AREA (#)
- SURVEY UNIT BOUNDARY



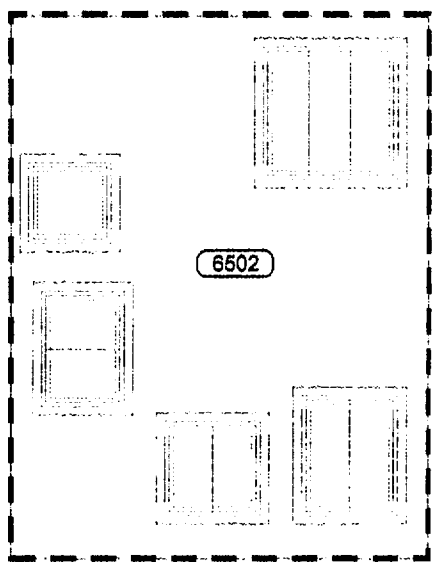
ELEVATION 0'-0"



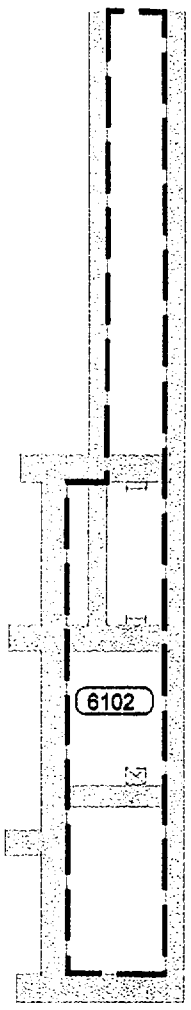
ELEVATION 18'-6" & 12'-6"



ELEVATION 35'-6"



ROOF



Elevation 12'-6"

Plant North

CONNECTICUT YANKEE ATOMIC POWER COMPANY

GENERAL ARRANGEMENT DRAWING

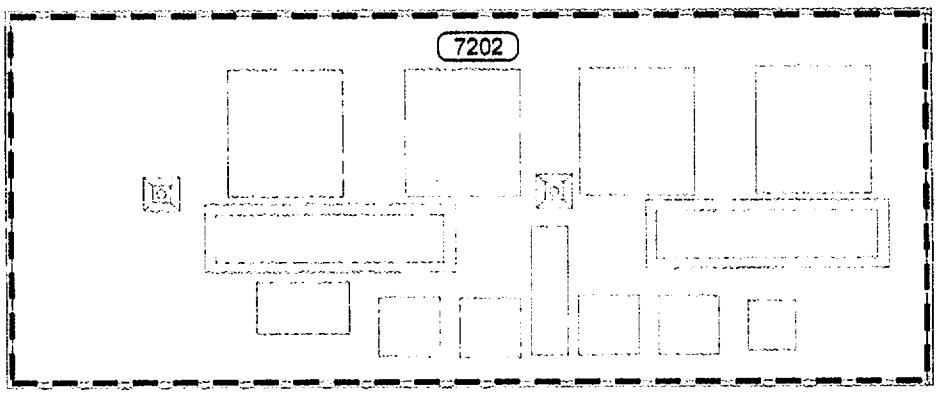
WASTE DISPOSAL BUILDING

ELEVATION(S) 0'-0",12'-6",18'-6",35'-6" & ROOF

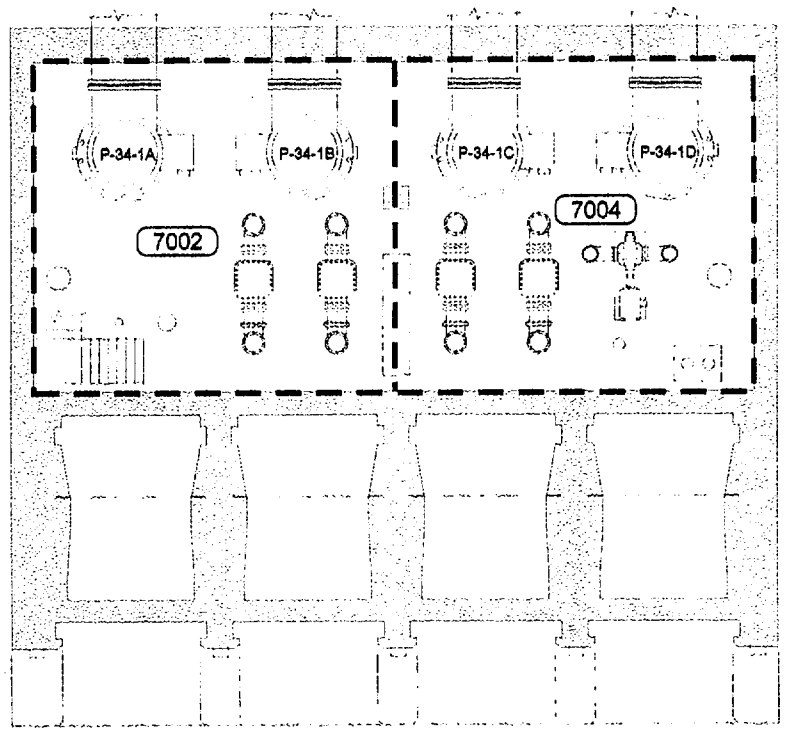
INITIAL CREATION DATE:	06/24/97
REVISION DATE:	06/06/01
REVISION #:	2
MAP #:	GAD6000

LEGEND:

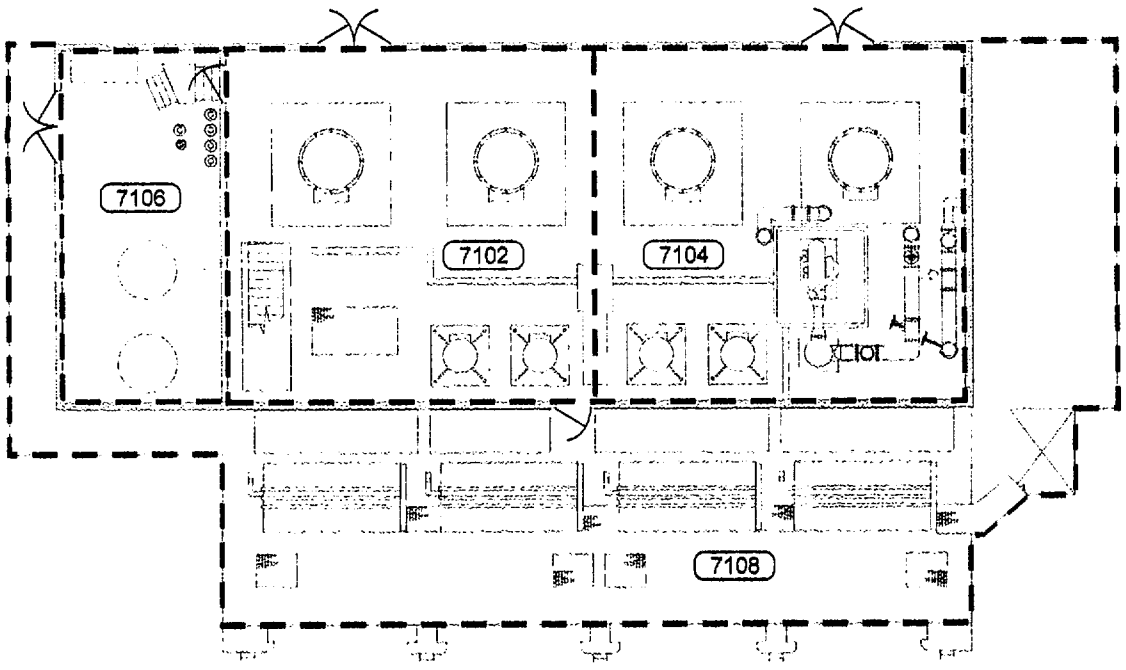
- FLOOR WALL INTERSECTION
- SURVEY AREA BOUNDARY
- SURVEY AREA (#)
- SURVEY UNIT BOUNDARY



ROOF ELEVATION 36'-6"



ELEVATION 8'-0"



ELEVATION 21'-6"

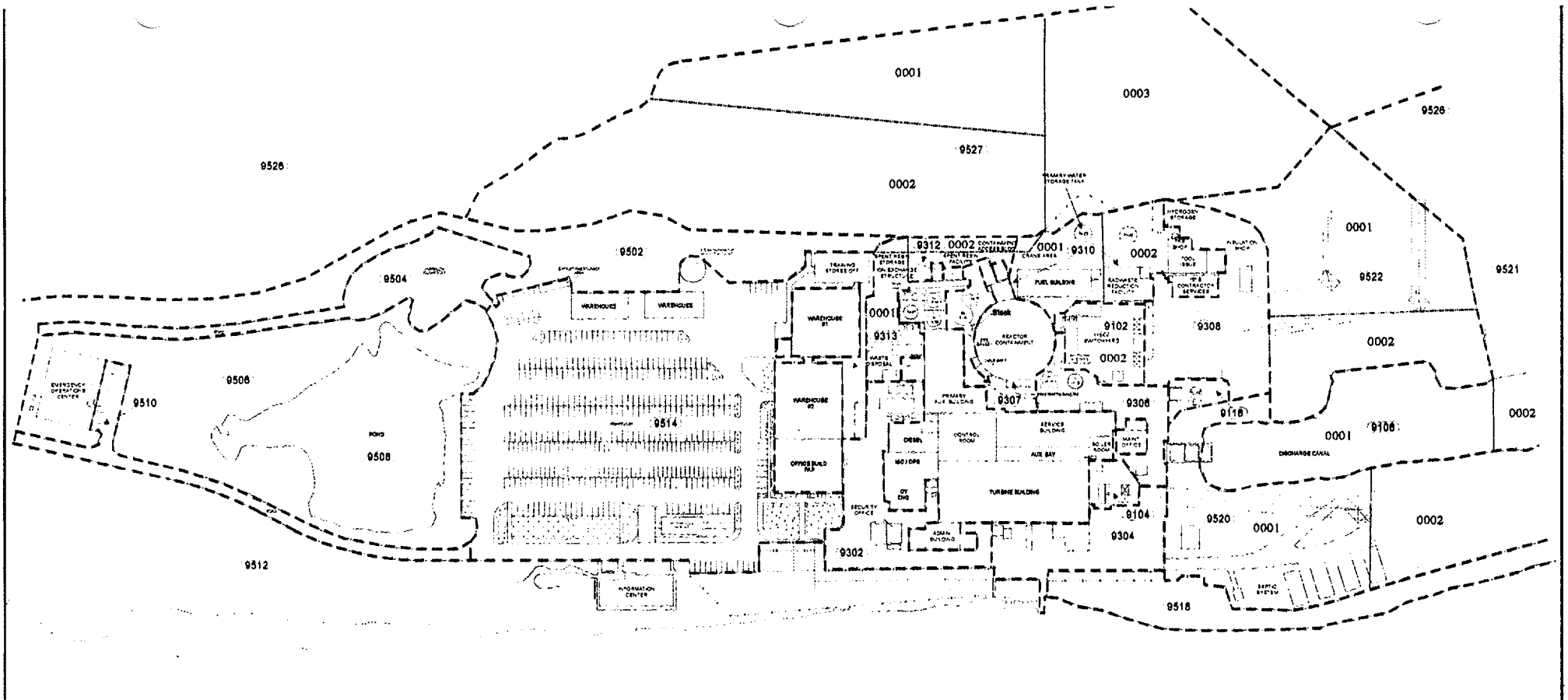
Plant North

CONNECTICUT YANKEE ATOMIC POWER COMPANY
GENERAL ARRANGEMENT DRAWING
SCREENWELL BUILDING
ELEVATION(S) 8'-0", 21'-6" & 36'-6"

INITIAL CREATION DATE:	06/19/97
REVISION DATE:	06/06/01
REVISION #:	2
MAP #:	GAD7000

LEGEND:

- FLOOR WALL INTERSECTION
- SURVEY AREA BOUNDARY
- SURVEY AREA (#)



CONNECTICUT RIVER

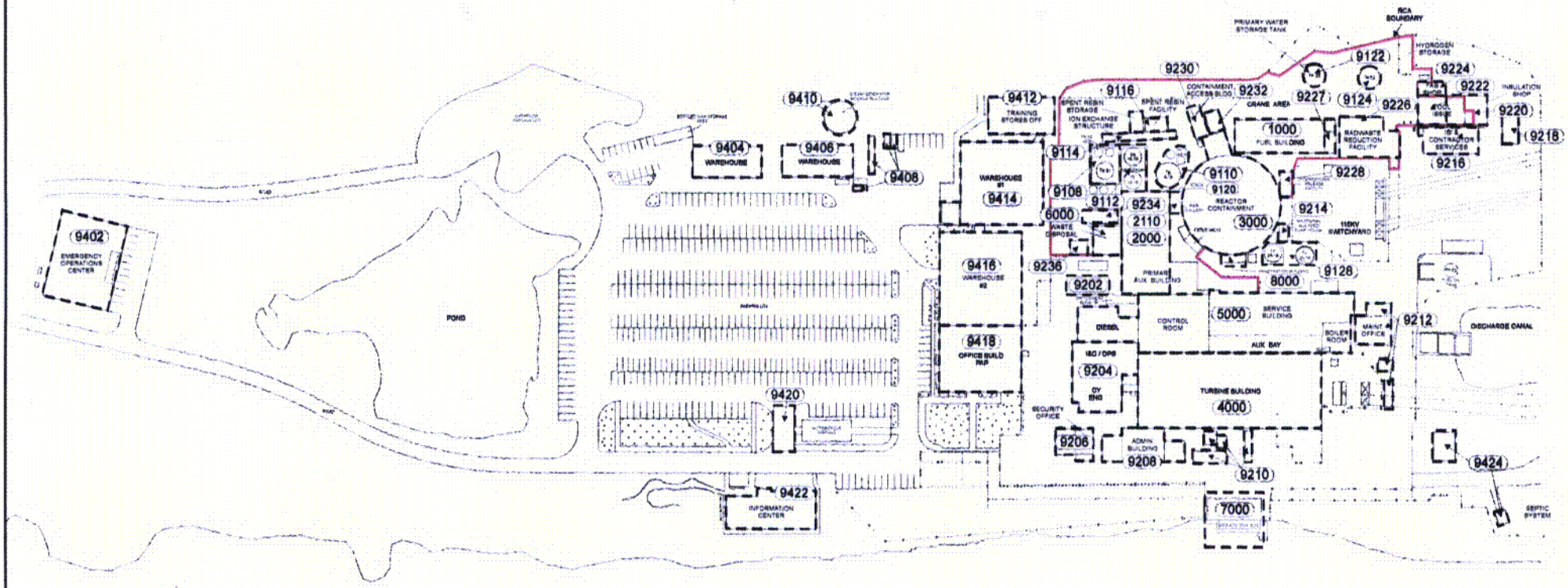
Plant North

CONNECTICUT YANKEE ATOMIC POWER COMPANY
GENERAL ARRANGEMENT DRAWING
SITE GROUNDS

INITIAL CREATION DATE:	04/25/97
REVISION DATE:	06/06/01
REVISION #:	16
MAP #:	GAD9000

LEGEND:

- FLOOR WALL INTERSECTION
- SURVEY AREA BOUNDARY
- SURVEY AREA / SURVEY UNIT BOUNDARY (#)



Buildings

C17

Plant North

CONNECTICUT YANKEE ATOMIC POWER COMPANY

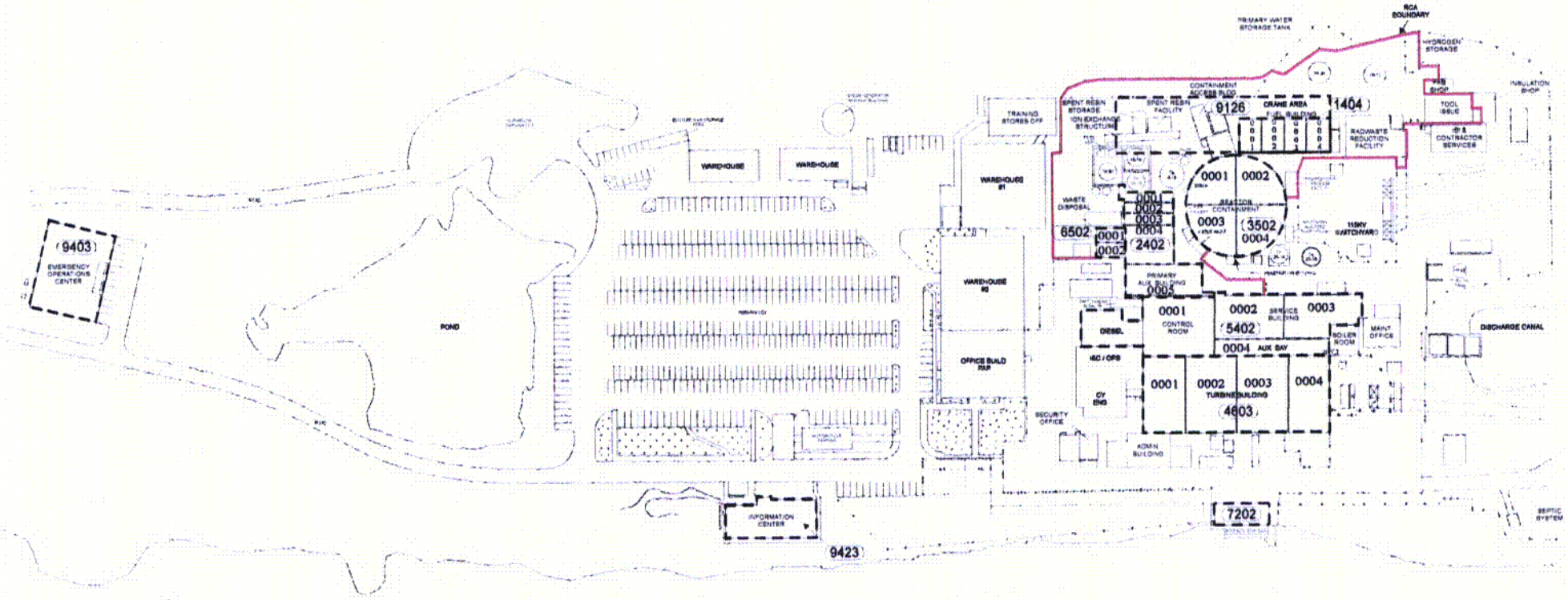
GENERAL ARRANGEMENT DRAWING

SITE BUILDINGS

INITIAL CREATION DATE:	05/08/97
REVISION DATE:	06/06/01
REVISION #:	8
MAP #:	GAD9001

LEGEND:

- RCA BOUNDARY
- FLOOR WALL INTERSECTION
- SURVEY AREA BOUNDARY
- SURVEY AREA
- SURVEY UNIT BOUNDARY



Buildings

C18

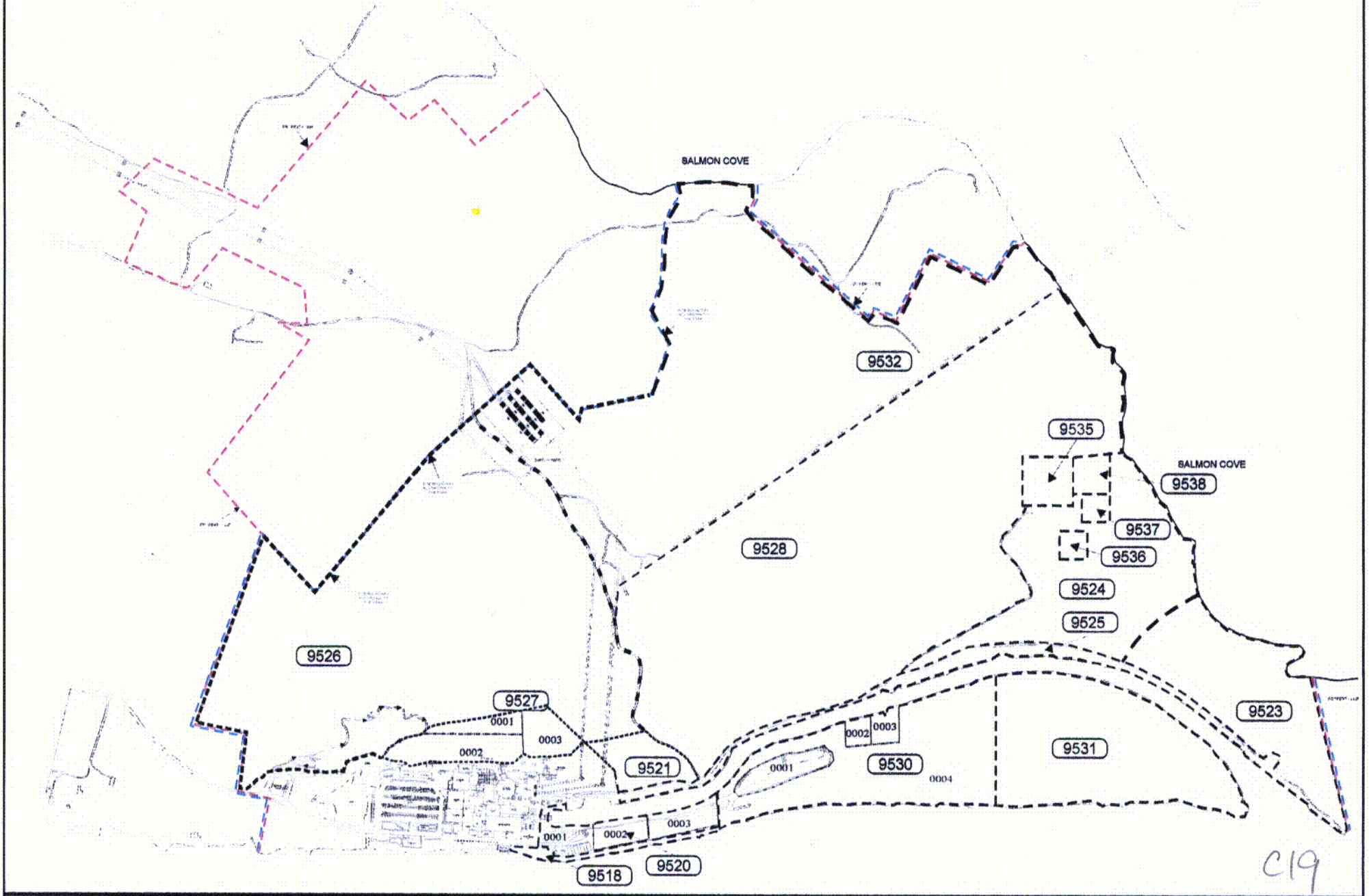
Plant North

CONNECTICUT YANKEE ATOMIC POWER COMPANY
GENERAL ARRANGEMENT DRAWING
STRUCTURE EXTERIORS

INITIAL CREATION DATE:	09/08/97
REVISION DATE:	06/06/01
REVISION #:	6
MAP #:	GAD9002

LEGEND:

- RCA BOUNDARY
- FLOOR WALL INTERSECTION
- SURVEY AREA BOUNDARY
- SURVEY AREA / SURVEY UNIT BOUNDARY (#)



C19

Plant North

CONNECTICUT YANKEE ATOMIC POWER COMPANY
GENERAL ARRANGEMENT DRAWING
OPEN LAND AREAS

INITIAL CREATION DATE:	09/24/97
REVISION DATE:	06/06/01
REVISION #:	9
MAP #:	GAD9003

LEGEND:

- SITE PROPERTY LINE
- SITE BOUNDARY
- SURVEY AREA BOUNDARY
- SURVEY AREA (#)
- SURVEY UNIT BOUNDARY

Section A-3 10CFR50.75(g) Index

10CFR50.75(g)-HSA Event Index

Date:	Primary CY Doc #:	Survey Area #:	Event Description:
5/3/69	AO 69-6	9110	Approximately two hundred gallons (200 gallons) spilled from the boron recovery evaporator distillate test tank to the surrounding area (asphalt-covered) due to an improper valve line-up. 6.54E-5uci/cc beta/gamma and 2.31 uCi/cc H3.
5/6/69	AO 69-7	2108 2206 2304	Approximately five hundred gallons (500 gallons) of liquid was discharged from the Boron Recovery First Stage Evaporator to the floor of the Boron Recovery Evaporator area. About 5% of the solution was assumed to flash and result in a release.
5/28/69	CYA-342	9310 9308	Drums containing high level activity were inadvertently placed near the security fence. Radiations levels in an unrestricted area in excess of ten times the limit set forth in Section 20.105(b) were identified.
7/2/69	LTR / Drawing	9310 9308 9306 9520	Plan to relocate South perimeter Fence (compare CYA-342). Reference made to contaminated shower drains, a janitors deep sink and Hp area sinks draining to the "tile field" or leaching bed (upper peninsula 9520).
7/2/69	LTR / Drawing	9520 9308	Reference made to contaminated shower drains, a janitors deep sink and Hp area sinks draining to the "tile field" or leaching bed (upper peninsula 9520). See also CYA-342.
5/10/71	CYH-1686	3000	Iodine release to Containment following disconnect of the reactor vessel head instrument penetration conseal connections during refueling. Subsequent documentation indicates that principle radionuclides were Xe-133, Xe-135, I-131, I-133, Rb-88 and H-3.
5/19/72	AO 72-2	N/A	Unplanned airborne release from demineralizer due to operator error.
12/12/72	PIR 72-121	9312	Breaking up rock for fire main relocation. Portal monitor alarms. At least two men contaminated, one persons clothing and a spot on one persons face. A jack-hammer and a shovel were also found to be contaminated.
12/13/72	LTR / Drawing	9310 9308	Install 150ft. Of 15" concrete storm drain Pipe. Both ends open so present drainage will flow through. Possibly connect storm drain at later date. SEE CY-TS-97-0640 LTR and Drawing.

10CFR50.75(g)-HSA Event Index

Date:	Primary CY Doc #:	Survey Area #:	Event Description:
1/15/73	PIR 73-18	9110 5502	RWST Thermo siphon heater leak.
1/17/73	DEP Notif.	9106 5502	Routine discharge report to the State. Maximum reported volume discharged was 2.86E4 gal/day.
4/26/73	PIR 73-134	3111 5502	High RMS Alarm - Air Ejector Monitor R-15.
5/18/73	PIR 73-154	N/A	Abnormal inleakage to ADT from open SFP filter drain valve.
6/21/73	AO 73-6	9114	500 gal. leaked to the aerated drains tank. Gas release of approx. 0.3 curies. Within MPC values. 0.238 curies released.
6/21/73	AO 73-7	2104	20 gal. spill from valve to pipe trench of PAB. Gas release of 0.011 curies. Total release below MPC values.
11/1/73	AO 73-11	9110 2110 95220004 9106	270 liters of liquid released to storm drain, diluted w/ 6000 gal. of service water. Gross activity 1.3E-3 cc/cc.
4/26/74	AO 74-7	N/A	Leaking seal on volume control tank hydrogen regulator causes gas release. Xe-133 3.73E-11uci/cc max value.
6/9/74	PIR 74-108	9110	2 gal. spill from hole on top of "A" TT during transfer from "A" ADT.
10/15/74	PIR 74-180	2222	SG Blowdown Tank Rupture Disk actuates.
12/30/75	PIR 75-204	2222	SG Blowdown Tank Rupture Disk actuates.
1/28/76	PIR 76-15	9108	15 gal. of water leaks from "A" Test Tank to diked area.
2/27/76	PIR 76-30	9124	5 gal. leak from TSH valve.
3/30/76	LER-76-8/3-L	N/A	Waste Gas Decay Tank Rupture Disc failed.

10CFR50.75(g)-HSA Event Index

Date:	Primary CY Doc #:	Survey Area #:	Event Description:
5/13/76	PIR 76-66	2228	Waste discharge pipe erosion allows spill below drumming room floor.
5/22/76	LER 76-13/990	2228	See LER 77-1/3L.
6/29/76	PIR 76-79	N/A	Rupture disk actuates after switching from "A" WGDT to "B" WGDT.
6/29/76	LER 76-15/3L	N/A	Rupture disk actuates after switching from "A"WGDT to "B" WGDT (see LER 76-8/3L).
10/19/76	Survey	9310	Peastone area 0.8-1.0 mR.
12/1/76	PIR 76-233	2202 2208 2214 2220 2226 2204 2210 2216 2222 2228 2206 2212 2218 2224	Backup of drains contaminates floors.
12/14/76	PIR 76-138	2228	Waste discharge pipe erosion allows spill below drumming room floor.
12/20/76	PIR 76-140	9110	Spill from weld to blacktop. An area 4' in diameter was affected.
12/29/76	PIR 76-142	9108 9112	"A" BWST heater leaks to heater well and diked area.
2/24/77	LER 77-2/3L	9108	1000 gal. of radioactive water released to diked area around tank.
6/9/77	PIR 77-45	9310	Particle discovered during routine survey next to 115kV switchyard (114.17 uCi).

10CFR50.75(g)-HSA Event Index

Date:	Primary CY Doc #:	Survey Area #:	Event Description:
7/29/77	PIR 77-82	9307	Background increase detected above Weir Box (approximately 3 mR).
9/6/77	PIR 77-83	1106 5502 9106	5400gal. To RTT to RPWST, to SFB sump to ADT, to BWST 2400 gal. To River. RPWST contaminated. See PIR 87-67 & 93-222.
9/18/77	LER 77-21/1P	N/A	"A" Waste Gas Decay Tank rupture disk actuates.
11/4/77	CHY 77-382	9106 5502	223,200 gallons of processed waste liquids containing 7.54 x10-1 curies of fission and activation products, 1.17 x 10-1dissolved noble gases and 2.66 x10+2 curies of tritium were discharged. See ETS/NR 50-213/77-8P.
11/4/77	LER 77-07	5502 9106	Tritium activity was observed in river water near the discharge area. The discharge exceeded the control station (Middletown) by greater than a factor of ten.
1/30/78	PIR 78-23	9108	Unknown amount of liquid spills from tank to sump.
1/31/78	PIR 78-24	9110	Spill from Thermosyphon Heater.
3/17/78	PIR 78-33	2228	Waste discharge pipe erosion allows spill below drumming room floor.
5/4/78	LER 78-07/3L	N/A	Gas release through stack [5.03 curies of noble gas - see PIR 78-33].
11/2/78	PIR 78-119	N/A	Steam Generator Rupture Disk actuates.
11/25/78	PIR 78-120	5502 9106	Leak from the thermosyphon heater contaminates condensate system.
11/29/78	PIR 78-122	1102 9112 5108 9310	Guard reports shoes contaminated after rounds on Hot side (BWST).
1/1/79	LER 79-06	N/A	Unplanned radioactive gas release from the degasifier to the environment via the stack. Rupture disc actuates.

10CFR50.75(g)-HSA Event Index

Date:	Primary CY Doc #:	Survey Area #:	Event Description:
1/10/79	PIR 79-04	9110	Valve diaphragm ruptures causing steam and water leak from hole in handwheel.
2/14/79	LER 79-01	N/A	Abnormal degradation of fuel cladding in Batch 8 fuel assemblies. 13 non-compliance's in HP program.
2/19/79	LER 79-03/3L	9110	Total activity in the RWST greater than TS Limits.
2/23/79	PIR 79-27	9307 9106 9522	Rupture disk activates, 20 gal. stack to yard via manway.
3/6/79	PIR 79-38	9120 9307 9106 9522	Rupture diaphragm activates. Water leaks from hatch .
5/9/79	PIR 79-63	9112	Sampling indicated that the "B" BWST siphon heater was leaking.
6/4/79	PIR 79-57	1308 1204	Fuel pool water overflowed into ventilation duct during cavity drain operation.
6/11/79	Survey	9514	Contamination found outside the RCA.
6/20/79	79-620	9310 9308	Four barrels of contaminated soil remediated adjacent to the RCA. Extensive site survey performed.
6/30/79	Survey	9310 9308	Four 55 gal drums of soil removed by Hydrogen bank outside the RCA. Analysis indicated possible failed fuel.
7/23/79	PIR 79-83	9120 9307	Liquid dripping from ventilation system flange to main stack.
8/10/79	PIR 79-92	9307	Disjointed section of piping causes spill during excavation, contaminated soil identified.
8/22/79	NEE-80-RA-0298	9120	See page 3-6, 3-7 and Table 3-1of documents. See attached surveys both pre and post event.

10CFR50.75(g)-HSA Event Index

Date:	Primary CY Doc #:	Survey Area #:	Event Description:
8/22/79	PIR 79-96	1404 5402 9307 2402	Sandblasting the stack causes airborne activity.
8/22/79	Survey	3206 9310	Contamination identified at Containment Bldg ramp with reference to water run off.
9/21/79	NEE-RA-116	N/A	This document has calculation for Max. Ind. Dose, and curies released for 11 events from 1972 through 1978. LER-77-08/4T was not retrievable from NDS.
9/29/79	PIR 79-105	9307 2004 2002 2310 2216 2402 2006	50 gal. spill to RCA yard, 500 gal. to PAB floor.
11/27/79	PIR 79-126	N/A	Contaminated staging sent to MP from CY. Lack of material control.
11/28/79	PIR 79-122	5502 9106	Contaminated water enters feed and condensate system.
12/16/79	PIR 79-125	9307 2402 9120 1404 2402 5402 6502 9423	Degasifier fills w/ reactor coolant. Spill at stack and yard drain hold tank.
12/16/79	LTR 3/16/80	2402	Contamination on PAB roof is fixed by asphalt base sealer [see PIR 79-125].

10CFR50.75(g)-HSA Event Index

Date:	Primary CY Doc #:	Survey Area #:	Event Description:
1/20/80	LER 80-15	6004 6006 6002 6008 6012	Identified 6" of water on waste disposal bldg. Floor.
2/3/80	LER 80-05	9112	Leak in "B" BWST Thermo Siphon heater.
2/14/80	PIR 80-26	2228	Activity found after sampling the yard storm drain.
2/27/80	PIR 80-34	2228	Contaminated sand was found in the river effluent pit.
2/27/80	PIR 80-33	9112	Leaking flange form piping fills BWST diked area with 3 inches of water.
3/10/80	PIR 80-37	9527 9520 9531 9506 9512 9522 9308 9514 5402 2402 9422 6502 4603 9423	Contamination found in uncontrolled areas. As stated in the PIR, small areas of low-level contamination radioactive materials were found on facility grounds through routine testing in a normally non radioactive area.
3/18/80	HP 80-213	9520	Concrete slab reading 3mr/hr found on peninsula [see PIR80-37].
4/19/80	PIR 80-54	2402	12" X 2" split in main stack duct seam leaking to atmosphere.
4/29/80	PIR 80-58	9307	Activity leached out from mud in bottom of yard drain.
5/3/80	EN-149	9307	Venting VCT to Waste Gas Surge Tank received RMS alarm. Water/steam release from blowdown tank through cont. duct work & stack.

10CFR50.75(g)-HSA Event Index

Date:	Primary CY Doc #:	Survey Area #:	Event Description:
5/4/80	PIR 80-62	9307 9310 9312 5402 2402 1404 4603 6502	Steam Generator blowdown tank rupture disk actuates. Steam exits stack.
5/19/80	PIR 80-72	N/A	Lack of material control. Turbine inner casing shipped w/o HP release.
12/8/80	PIR 80-143	9112	Spill from "B" Boron Waste Storage Tank Siphon heater to diked area.
2/9/81	PIR 81-10	9208	Contamination found at three locations.
3/9/81	Various	9312	Contaminated concrete, asphalt and soil remove for construction of SRSA. Permission to dump on peninsula (clean material?) Contaminated material to barrels.
4/22/81	PIR 81-38	9520	Lack of material control. Contaminated reheater tubes shipped off site.
7/2/81	MSM-81-193	9307	Stack deconned after 5/20/81. Old ductwork replaced w/ SS.
7/25/81	PIR 81-82	5502 9106	Primary to secondary leak in steam generator # 2.
9/17/81	PIR 81-98	2402	A 3' section of ductwork seam on the PAB exhaust fan failed.
9/17/81	LER 81-15	2402	Leak from exhaust duct to main stack.
9/22/81	PIR 81-101	9110 9522 9307	15/20 gal leaks from the RWST hatch.
10/3/81	PIR 81-106	9110	Activation of heater causes RWST to overflow to diked area.

10CFR50.75(g)-HSA Event Index

Date:	Primary CY Doc #:	Survey Area #:	Event Description:
10/4/81	HP Survey	9310 1104	RCA sample at rails after spill from SFB lower level.
10/19/81	PIR 81-114	2314	Inoperative Waste Liquid Evaporator level indicator causes contamination.
10/11/82	Contract, drawings, Spec. work logs	9514 9418 9416 9414	Parking lot modifications led to the distribution of radioactive materials to offsite locations.
12/31/82	PIR 82-108	9112	Contaminated liquid found by BWST manifold.
3/28/83	PIR 83-37	9520	84 gal. Contaminated H20 from Chem. Lab to Septic Tank.
4/14/83	PIR 83-47	5502 9106	Primary to secondary steam generator tube leak.
4/18/83	PIR 83-42	9522 9307	Yard drain to manway # 5.
7/6/83	Survey	9520	Contaminated strainers located in bone yard.
7/28/83	PIR 83-75	9522 9307	RCA manway overflows to RCA yard and enters # 5 yard drain.
7/31/83	PIR 83-78	2306 2202 2314	Rust & scale from BAMT overflow pipe contaminates personnel shoes.
9/20/83	NE-83-RA-1474	9310 9312 9308	Evaluation and results of buildings and yards in the RCA which could run off and contaminate the clean area. See soil and sediment samples. Analysis indicates activity at all sample locations.
12/13/83	PIR 83-137	9106	400 gal. release via mis-positioned valves.
4/3/84	PIR 84-39	9112 9110	20 gal. liquid spill between "B" BWST and RWST.

10CFR50.75(g)-HSA Event Index

Date:	Primary CY Doc #:	Survey Area #:	Event Description:
4/11/84	PIR 84-43	3107	Water leaking up through the cable vault floor. Tritium detected in the water. Water pumped in the yard sewer system.
5/25/84	PIR 84-72	9307	Chem. Lab drain overflows, ADT drain line plugged causing flow to yard.
8/3/84	Survey	9307	Asphalt applied on contaminated area.
8/21/84	PIR 84-136	3002 3004 3101 3103 3105 3102 3104 3106 3111 3112 3113 3114 3322 3324	The reactor cavity seal ring failed, draining 200,000 gallons of water from the reactor cavity to the lower levels of the containment building.
9/11/84	PIR 84-181	9116 9312	Resin liner overflowed.
9/13/84	PIR 84-182	9116 9312	Resin liner overflowed.
11/6/84	PIR 84-244	5126 5128 9106 5502	Reduction in steam pressure allows water to enter condensate receiver.
11/13/84	PIR 84-242	9106 5502 5126 5128	Condensate receiver contamination verified by Chemistry.

10CFR50.75(g)-HSA Event Index

Date:	Primary CY Doc #:	Survey Area #:	Event Description:
11/15/84	PIR 84-246	3101 3202	Leak on FT-401 Loop 1 flow transmitter.
11/26/84	PIR 84-264	9307	Water from RCA Yard drain cover with possible path to storm drain.
3/20/85	PIR 85-51	9307	Drains 4&5 show activity via Adams filter dike via cond. relief valve via #2 SG.
3/23/85	Survey	9520	4 Bolts at 2 feet long with 100K DPM found on boneyard. Soil under pallets 15K DPM fixed. Plates cut from MSR found in metal waste box found to be 2-5K dpm fixed. 2 sections steam pipe found a 1-6K DPM fixed.
3/25/85	PIR 85-52	9307 9522	ADT drain culvert overflows to RCA yard and yard drain #5.
5/17/85	PIR 85-74	9307	Yard drains # 4&5 show activity from leaking Steam Generator BD valve.
6/3/85	PIR 85-84	9226	3 gal. spill of sodium hydroxide during radwaste presolidification operation.
9/30/85	HP 85-573	9227 9310 9116	A 60R drum within a plastic bad with "dry" speed dry was compacted. The plastic bag breeched and the personnel were externally and internally contaminated. The compactor shed was also contaminated.
1/22/86	PIR 86-23	9312	Broken drain connection on temp. drain line drips to ground.
11/13/86	RA-1142	9530 9531	Dredge Canal .
8/2/87	87-CY-7151	3206 9307 9230	Drain hose spill and water spill at equipment hatch moat.
4/7/88	PIR 88-81	9106 5502	Primary to secondary leak. S/G #2 tube leaks compromises secondary side.
10/11/88	PIR 88-181	9522 9307	1200 Ft/3 of contaminated soil was discovered around MH No. 1.

10CFR50.75(g)-HSA Event Index

Date:	Primary CY Doc #:	Survey Area #:	Event Description:
12/16/88	PIR 88-218	N/A	Leak from corroded cast iron pipe to sump.
2/24/89	PIR 89-35	9102 9522 1102 9520	Contamination outside of RCA. During a normal routine weekly survey, a slight increase in normal radiation level was noted. Further investigation showed high levels of contamination in the 115 kV transformer moat. Subsequent surveys performed in the lowland area east of the Discharge Canal. Additional surveys were performed on the Upper Peninsula where soil was deposited following removal from the east side of the Discharge Canal.
2/28/89	Survey	9520 9530 1102	Activity identified in soil mounds located along the peninsula canal road. Soil was removed from the South Ballfield East of the discharge canal and deposited along the canal road.
3/1/89	CH 89-844	0025	Memo describing a reivew and status of floor drain systems in the Spent Fuel building and the PAB.
10/7/89	PIR 89-170	1308	Spill of approximately 120 gallons of contaminated water on SFB UL.
10/12/89	PIR 89-174	2006 2002 2004	Unknown volume of water spilled from flange in RHR pit.
11/17/89	LER 89-020	N/A	Significant fuel damage.
3/16/90	PIR 90-48	3103	After returning loops 2, 3, and 4 to the drain header water spilled from FVB.
3/22/90	PIR 90-52	9307	330 gal. spill of component cooling water from cracked piping.
4/11/90	PIR 90-65	9110 9307	Contaminated hoses dropped. Service Bldg. to containment blocked.
8/16/90	PIR 90-203	5502 5126 5128 9106	Primary to Secondary steam generator leak.

10CFR50.75(g)-HSA Event Index

Date:	Primary CY Doc #:	Survey Area #:	Event Description:
9/3/90	PIR 90-213	5502 5126 5128 9106	Primary to secondary leak.
9/14/90	PIR 90-239	9110	RWST shows signs of a 6 gal. per day leak.
8/12/91	PIR 91-149	2104	400 gal. spill from RCS via open valve to pipe trench.
10/22/91	NIR #059	N/A	Gaseous release, if allowed to continue would have exceeded yearly tech spec limit for Iodine.
11/17/91	PIR 91-278	9110	RWST flange leaked when RWST was being filled during cavity pump down.
1/21/92	PIR 92-27	9110	Leak RWST to diked area.
3/18/93	CH-93-523	9520	Memo concerning leach field.
11/13/93	PIR 93-222	9122 9124	The PWST and RPWST showed high levels of chlorides, sodium, boron and activity [see PIR 77-83 & 87-67].
4/5/94	LER 94-007	N/A	Potential for radiological release Post LOCA sump recirculation.
4/15/94	PIR 94-076	9522	Discharge from PAB supply heat exchanger enters Adams drain to yard drain.
4/30/94	PIR 94-093	1308	Measurable Cesium present from the liquid in the standpipe next to the SFP. The source term had not been identified as of 10/94.
7/21/94	PIR 94-125	9110	RWST leak produces standing water.
11/23/94	ACR 94-179	9204	Gages with fixed contamination were inadvertently released from the plant site.
2/12/95	PIR 95-067	9522	During sampling activity was found in the yard drains.

10CFR50.75(g)-HSA Event Index

Date:	Primary CY Doc #:	Survey Area #:	Event Description:
8/1/95	ACR 95-250	9313 9306 9307 9102 9308	Fixed contamination found outside RCA in the 115KV switchyard.
11/15/95	ACR 95-472	9310	Lack of material control. Contaminated hose used for hydrolazing.
2/13/96	ACR 96-0158	9414	Lack of material control. Contaminated filters found in warehouse from 1979.
5/20/96	ACR 96-559	N/A	Bomb detector equipment containing source found in trash dumpster.
10/7/96	ACR 96-1185	9522	Tritium found in yard drains. Probable cause is leak in RWST to Yard drain #1.
11/30/96	ACR 95-509	9306 9307 9308 9313	During a routine survey a "particle" was located in the asphalt. Thirteen additional particles located, several particles located outside the RCA.
2/27/97	ACR 97-104	N/A	Contaminated material inadvertently released to an unlicensed vendor.
2/28/97	ACR 97-106	9410	Contaminated equipment found outside the RCA.
6/19/97	TS-RCA-01A,-02A,-03A & Soil at Tank Berm	Unknown	Soil and Asphalt Analysis Report - pre Decommissioning.
7/17/97	ACR 97-450	9535 9536	Contaminated material found outside the protected area. As part of the Site Characterization Survey, contaminated material and soil were identified in the rifle range area. During the implementation of a scoping survey, elevated activity was detected in the landfill adjacent to the rifle range. A subsequent investigation identified two locations of fixed contamination, insulation material and a concrete block.
8/21/97	ACR 97-670	9110	Activity located in sand by RWST. Uncontrolled release path.

10CFR50.75(g)-HSA Event Index

Date:	Primary CY Doc #:	Survey Area #:	Event Description:
8/26/97	CR 97-0686	4210	Two (2) contaminated items located during CY Confirmatory Survey.
8/29/97	ACR 97-694	N/A	Activity detected in "clean" Closed Loop Cooling Water System.
9/3/97	ACR 97-0713	N/A	Potentially radioactive water was shipped to a Hazardous Waste vendor.
9/4/97	ACR 97-0716	9522 9521	Tritium located outside fence at discharge point. Unmonitored release path.
9/9/97	CR 97-0729	5502 9106 5126 5128	Contamination found on "A" & "B" Aux Boilers, both beta/gamma and alpha contamination.
9/12/97	CR 97-0743	9537	Rifle Range HP controls need to be enhanced.
9/16/97	CR 97-0756	4110 4112 5502 9106	Radioactivity identified in North and South Turbine Building Sump.
9/24/97	ACR 97-0785	9535 9536	Follow-up to ACR 97-0450. An assessment of soil indicates that the amount of radioactivity cointed in the soil may exceed the limits of 10 CFR 20.2203,a,3,ii.
11/17/97	ACR 97-0994	9526 9527	Soil sample analysis identified plant related radioactivity on hillside East of plant.
11/24/97	ACR 97-1011	9310 9308 9307 9227	Concrete blocks were returned to site for analysis and found to be contaminated. A press release is to be issued to notify the public that contaminated materials were found at an offsite location. Estimated dose is 1 mrem/year.
11/26/97	ACR 97-1022	9307 9308 9310 9227	Contaminated blocks were found at additional offsite locations. (see ACR 97-1011).

10CFR50.75(g)-HSA Event Index

Date:	Primary CY Doc #:	Survey Area #:	Event Description:
12/1/97	ACR 97-1032	5110	While performing a routine direct frisk survey of the HP Offices a small spot on a carpeted floor was found to be 10,000 ccpm.
12/2/97	ACR 97-1033	9307 9308 9310 9227	A press release identifies a second offsite location which contains low levels of plant related material in the soil. The release also provides an update on the number of concrete blocks identified and surveyed.
12/10/97	CR 97-1046	9110	Liquid found in RWST Siphon Heater Well contains radioactivity.
12/15/97	ACR 97-1055	4106	CYAPCo contracted MSI and SRA to perform radiological surveys in selected areas outside the RCA using new technology developed by SRA. During the survey on the grade level elevation of the Turbine Build a small area of contamination was identified. Three radioactive spots identified. Turbine Bldg. door, Air Comp., GS-1.
1/22/98	CR 98-0049	9106	Dredged spoils from discharge canal contained radioactive material in 1987.
2/4/98	CR 98-0070	9310	Drums reported to be buried west of the Gas Sphere pad. No drums were found during search.
3/23/98	CR 98-0219	3107	Sumps overflow placing 1000 gallons on floor before a permit can be obtained.
3/26/98	ACR 98-0240	9102 9306	Contamination found in sludge at the bottom of electrical manhole (MHS-3) SW of the 115 kV switchyard. Gamma spectroscopy showed the presence of Cs-137, Cs-134, and Co-60. Additionally paint chips from the area showed contamination.
4/8/98	CR 98-0268	5128	Sample Analysis on Aux Boiler "B" identified radioactivity.
4/20/98	ACR 98-0296	9310	Past work in the area may have contaminated the area during the loading of material being stored inside the culvert.
6/1/98	ACR 98-0419	9110	The RWST is apparently leaking through its floor plates as well as from its manway port flanged joint. Water has been collecting around the foundation and trough area at 1 to 8 gallons per hour.

10CFR50.75(g)-HSA Event Index

Date:	Primary CY Doc #:	Survey Area #:	Event Description:
6/10/98	ACR 98-0455	9520	Samples of sludge show Cs137 @ 3 E-8 uCi/ml and Co60 @ 1 E-7 uCi/ml.
6/18/98	Survey	9520	Survey described that "...some valves appeared to have detectable amounts of radiation on them (up to 150 ccpm)."
7/28/98	HP 98-423	3000	Characterize PCB/radioactivity contamination of paints inside containment.
9/4/98	CR 98-0767	9307 2110 2104	Pipe in Pipe Trench leaking.
9/9/98	ACR 98-0778	5114	Chemistry cabinet at offsite location was identified as being radiologically contaminated. Released for the RCA in 1985.
9/30/98	ACR 98-0851	9108 9312	Cracks in diked area has allowed water to leak through the concrete. 2500 to 3000 gals of water leaked through the concrete in 48/60 hrs.
10/14/98	ACR 98-0887	9110	HP identified loose contamination above MDA inside a catch containment at the base of the RWST. Survey on the side of the RWST pedestal indicated loose contamination up to 10,000 dpm/100cm2. The concrete is powdery in this area.
10/23/98	ACR 98-0906	0043	During the removal of the nozzle dams from the cavity approximately 1/2 cup of resin was removed from the spider assembly on 3 Hot Leg [see ACR 98-0698].
10/26/98	Ltr. CY-98-180	9530	Radiologically contaminated dredge spoils from the discharge canal may have been deposited on the peninsula. Boneyard. This area is outside the radiologically controlled area.
10/28/98	CY-98-062	9530	Radioactive dredging spoils deposited on the peninsula.
11/23/98	ACR 98-0973	1106	When draining SFP skimmer pumps and filters the flow exceeded the drain capability resulting In a spill that contaminated the A pedestal and floor.
11/23/98	ACR 98-0972	N/A	An old first stage turbine blade was found to have fixed contamination. This blade was one of approx. 15 to 20 blades recovered from a dumpster in 1996, and used as going away gifts.

10CFR50.75(g)-HSA Event Index

Date:	Primary CY Doc #:	Survey Area #:	Event Description:
11/24/98	HP 98-586	9306 9308	Three samples positive for Co-60 and Cs-137.
11/30/98	HP 98-590	9310 9307 9306 9520	Memo concerning sampling wells spoils analyses.
12/2/98	ACR 98-988	9108 9312	After repairs to the HUT dike area rain water seeped through cracks in the diked area. News paper article reports that water was radioactive.
12/7/98	CR 98-0992	9302 9304 9306 9308	During a non RCA clean-up, surveyed items were being placed in a dumpster for disposal using a front. While loading material, sand was inadvertently scooped up and placed in a dumpster. Follow-up analysis indicated the sand was contaminated.
12/7/98	Shooting Range Landfill Report	9535	See ACR 97-450. Contaminated soil C0-60and Cs-137. Fixed contamination on Concrete block and insulation material.
1/8/99	CR 99-0022	9108 9312	Water leaked from the ADHUT dike area.
1/26/99	E-mail GTS Duratek	9514 9307 2002,	Additional information provided for characterization data tables.
1/28/99	AWO 99 00323	9518 9520	Dig holes to install fence posts [see HP 99-110].
2/15/99	HP 99-056	9306 9308	Soil samples obtained in the trench area.
2/15/99	HP 99-112	9302 9313	Soil samples taken in preparation for excavation of trench. Area 9313 positive for Co-60 and Cs-137.
2/15/99	HP 99-058	9308	Site Cleanup. Sample 79 of 134 Bonanza bags. 32 of 79 show detectable levels of contamination. Soil originated from survey area 9310.
2/15/99	HP 99-113	9514	Soil samples taken at PAP sanitary sump. No activity identified.

10CFR50.75(g)-HSA Event Index

Date:	Primary CY Doc #:	Survey Area #:	Event Description:
2/15/99	HP 99-111	9302 9304 9512 9514	Soil samples obtained and analyzed from proposed trench area.
2/15/99	HP 99-057	Unknown	Analyses of well drilling spoils.
3/11/99	HP 99-114	9510 9520 9530 9307 9312 9310 9306 9118 9302	Several monitoring wells on site show tritium above MDA.
3/11/99	HP 99-109	9308	Soil samples taken from south of the 115kV yard. No detectable activity. However, hole 11 had indications of petroleum contamination.
3/11/99	HP 99-110	9520	Soil samples analysis for fence installation. No positive indications.
3/29/99	HP 99-126	9418	Soil sample collected for lavatory excavation.
3/31/99	CR 99-0208	9310	Bus 10 drain pipe broken during excavation.
4/6/99	HP 99-135	9302 9313	Soil samples obtained from rear of warehouse #2 east to the rear of the Training/Stores Office Building in support of site repowering.
4/16/99	Verbal Doc	5124	A former CY employee (present Contractor) informed Site Char. that the current Maint. Lunch rm. was the former decon. rm. And that when it was converted the sink lines were fill with lead and or concrete to reduce exposure.
5/18/99	Gamma Spec.	9307	Sample from MH # 1.

10CFR50.75(g)-HSA Event Index

Date:	Primary CY Doc #:	Survey Area #:	Event Description:
5/19/99	HP 99-201	9102 9227 9310	Analyses of Soil samples from concrete pad area and adjacent trenches in support of Bus 13 modifications.
5/27/99	HP 99-209	9102 9310	Soil Samples for trench/Contaminated.
7/27/99	HP 99-255	9308	Soil samples obtained from proposed heavy haul Rd. See HP 99-266 B-306 does not contain CY related radioactive material.
8/5/99	HP 99-266	9308	This letter rescinds the statement that bore hole B-306 contains plant related radioactivity.
8/23/99	CR 99-0491	9310	Liquid found leaking out of C-van containing radioactive waste.
9/2/99	CR 99-0535	Unknown	Liquid found leaking out of two separate shipments of radioactive material soil.
11/6/99	CR 99-0718	N/A	R14A Main Stack Monitor exceedance.
1/28/00	CR 00-0086	2220	Spill of potentially contaminated water onto S/G Blowdown room occurred when operator removed pressurized hose.
4/26/00	CR 00-0294	9312	Water collected in the upper internals package. Covering was blown off by the wind, water was collected in the tarp region.
6/14/00	CR 00-0403	6412	A mechanical isolation cap was dislodged from the pipe due to boundary isolation valve leak. The cap failure resulted in approximately one quart liquid spill on floor and wall.