Based on Revision 1/30/96, GA Whyatt, File inv_10yr.xls															
SWITS INVENTORY THROUGH DECEMBER 1996. Primary Source: SWITS Data Base, run date 1/4/97															
		Non-decayed	**Total**	**ORIGEN2 Run for Average N/single pass reactor Fuel, values are Ci per kg of U fuel taken at 10 year except where noted.**											
		Post-1970	**Non-segregated**												
	Unsegregated	**Segregated**	**Plus Non-TRU**	**H-3**	**C-14**	**C-14**	**Cl-36**	**Se-79**	**Tc-99**	**I-129**	**Ru-106**	**Ni-59**	**Co-60**	**Ni-63**	**Sr-90**
	Non-decayed	**Non-TRU**	**Segregated**	**7.07E-03**	**1.27E-04**	**100 Area**	**8.33E-06**	**1.02E-05**	**3.43E-04**	**6.77E-07**	**1.21E-02**	**1.84E-05**	**8.11E-04**	**2.12E-03**	**1.65E+00**
Facility Identifier	**Cs-137, Ci**	**Cs-137, Ci**	**Cs-137, Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**
	updated(b)	updated(b)													
200 East Area															
218e1	2.12E+00		2.12E+00	7.77E-03	1.40E-04		9.15E-06	1.12E-05	3.78E-04	7.45E-07	1.33E-02	2.02E-05	8.92E-04	2.33E-03	1.81E+00
218e10	3.86E+03	1.18E+06	1.18E+06	4.32E+03	7.78E+01	4.56E+01(a)	5.09E+00	6.20E+00	2.10E+02	4.14E-01	7.42E+03	1.12E+01	4.95E+02	1.30E+03	1.01E+06
218e12a	1.89E+01		1.89E+01	6.91E-02	1.25E-03		8.14E-05	9.93E-05	3.36E-03	6.63E-06	1.19E-01	1.80E-04	7.93E-03	2.08E-02	1.61E+01
218e12b	1.35E+02	3.09E+04	3.10E+04	1.14E+02	2.05E+00		1.34E-01	1.63E-01	5.52E+00	1.98E-02(a)	1.95E+02	2.96E-01	1.30E+01	3.41E+01	2.64E+04
218e14 (purex tunnel#1)	1.87E+03		1.87E+03	6.82E+00	1.23E-01		8.04E-03	9.80E-03	3.31E-01	6.54E-04	1.17E+01	1.78E-02	7.83E-01	2.05E+00	1.59E+03
218e15 (purex tunnel#2)	9.04E+03		9.04E+03	3.31E+01	5.96E-01		3.89E-02	4.75E-02	1.61E+00	3.17E-03	5.68E+01	8.61E-02	3.79E+00	9.93E+00	7.70E+03
218e2	5.31E+02		5.31E+02	1.94E+00	3.50E-02		2.29E-03	2.79E-03	9.44E-02	1.86E-04	3.34E+00	5.06E-03	2.23E-01	5.83E-01	4.52E+02
218e4	2.12E-01		2.12E-01	7.77E-04	1.40E-05		9.15E-07	1.12E-06	3.78E-05	7.45E-08	1.33E-03	2.02E-06	8.92E-05	2.33E-04	1.81E-01
218e5	1.59E+02		1.59E+02	5.83E-01	1.05E-02		6.86E-04	8.37E-04	2.83E-02	5.59E-05	1.00E+00	1.52E-03	6.69E-02	1.75E-01	1.36E+02
218e5a	3.51E+02		3.51E+02	1.28E+00	2.31E-02		1.51E-03	1.84E-03	6.23E-02	1.23E-04	2.20E+00	3.34E-03	1.47E-01	3.85E-01	2.99E+02
218e8	2.12E-01		2.12E-01	7.77E-04	1.40E-05		9.15E-07	1.12E-06	3.78E-05	7.45E-08	1.33E-03	2.02E-06	8.92E-05	2.33E-04	1.81E-01
222b vaults	1.27E+01		1.27E+01	4.66E-02	8.40E-04		5.49E-05	6.69E-05	2.26E-03	4.47E-06	8.01E-02	1.21E-04	5.35E-03	1.40E-02	1.09E+01
218ec9	0.00E+00	7.97E+00	7.97E+00	2.92E-02	5.26E-04		3.44E-05	4.19E-05	1.42E-03	2.80E-06	5.01E-02	7.60E-05	3.35E-03	8.76E-03	6.79E+00
C-14 subtotals					8.07E+01	4.56E+01									
total East area	1.60E+04	1.21E+06	1.22E+06	4.48E+03	1.26E+02		5.27E+00	6.43E+00	2.17E+02	4.29E-01	7.69E+03	1.17E+01	5.14E+02	1.34E+03	1.04E+06
200 West Area															
218W1	4.25E+00		4.25E+00	1.55E-02	2.80E-04		1.83E-05	2.23E-05	7.55E-04	1.49E-06	2.67E-02	4.05E-05	1.78E-03	4.67E-03	3.62E+00
218w11	2.12E-03		2.12E-03	7.77E-06	1.40E-07		9.15E-09	1.12E-08	3.78E-07	7.45E-10	1.33E-05	2.02E-08	8.92E-07	2.33E-06	1.81E-03
218w1A	1.02E+03		1.02E+03	3.73E+00	6.73E-02		4.40E-03	5.36E-03	1.81E-01	3.58E-04	6.41E+00	9.72E-03	4.28E-01	1.12E+00	8.69E+02
218w2	1.06E+01		1.06E+01	3.89E-02	7.00E-04		4.58E-05	5.58E-05	1.89E-03	3.72E-06	6.67E-02	1.01E-04	4.46E-03	1.17E-02	9.05E+00
218w2A	4.99E+03	5.43E+02	5.54E+03	2.03E+01	3.65E-01		2.39E-02	2.91E-02	9.84E-01	1.94E-03	3.48E+01	5.28E-02	2.32E+00	6.08E+00	4.72E+03
218W3	1.91E+01		1.91E+01	6.99E-02	1.26E-03		8.24E-05	1.00E-04	3.40E-03	6.70E-06	1.20E-01	1.82E-04	8.03E-03	2.10E-02	1.63E+01
218W3A	1.66E+02	3.05E+05	3.06E+05	1.12E+03	2.01E+01	2.86E+02(a)	1.32E+00	1.61E+00	5.43E+01	1.07E-01	1.92E+03	2.91E+00	1.28E+02	3.36E+02	2.60E+05
218W3AE		4.87E+04	4.87E+04	1.78E+02	3.21E+00	4.12E+01(a)	2.10E-01	2.56E-01	9.93E+00(d)	1.45E-02(d)	3.06E+02	4.64E-01	2.05E+01	5.36E+01	4.15E+04
218W4A	7.04E+01		7.04E+01	2.58E-01	4.64E-03		3.03E-04	3.70E-04	1.16E-02(d)	2.47E-05	4.42E-01	6.71E-04	2.96E-02	7.74E-02	6.00E+01
218W4B-caisson	1.65E+03	2.13E+03	3.77E+03	1.38E+01	2.49E-01	1.25E+00(a)	1.63E-02	1.98E-02	6.71E-01	1.32E-03	2.37E+01	3.60E-02	1.58E+00	4.15E+00	3.22E+03
218W4B- non caisson	5.75E+02	7.25E+03	7.83E+03	2.86E+01	5.16E-01	4.10E+00(a)	3.37E-02	4.11E-02	1.39E+00	5.00E-01(a)	4.92E+01	7.46E-02	3.29E+00	8.60E+00	6.67E+03
218W4C		3.37E+03	3.37E+03	1.23E+01	3.81E+00(a)	1.20E+00(a)	1.45E-02	2.87E-02(d)	2.69E+00(d)	3.45E-03(d)	2.12E+01	3.21E-02	1.42E+00	3.71E+00	2.87E+03
218W5		3.18E+03	3.18E+03	1.16E+01	4.44E+00(a)	1.10E+00(a)	1.37E-02	1.67E-02	7.10E-01(d)	3.33E-02(d)	2.00E+01	3.03E-02	1.34E+00	3.50E+00	2.71E+03
218w9	2.12E-03		2.12E-03	7.77E-06	1.40E-07		9.15E-09	1.12E-08	3.78E-07	7.45E-10	1.33E-05	2.02E-08	8.92E-07	2.33E-06	1.81E-03
				0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
221T, T Plant				0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
222s vaults	8.56E+01		8.56E+01	3.13E-01	5.64E-03		3.69E-04	4.50E-04	1.52E-02	3.00E-05	5.38E-01	8.16E-04	3.59E-02	9.41E-02	7.29E+01
222T vaults	1.64E+01		1.64E+01	5.98E-02	1.08E-03		7.05E-05	8.59E-05	2.91E-03	5.73E-06	1.03E-01	1.56E-04	6.86E-03	1.80E-02	1.39E+01
241T Facility			0.00E+00	0.00E+00	0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRUSAF		1.31E-02	1.31E-02	4.80E-05	8.66E-07		5.66E-08	6.90E-08	2.33E-06	4.60E-09	8.25E-05	1.25E-07	5.51E-06	1.44E-05	1.12E-02
Z plant, PFP		1.21E-03	1.21E-03	4.44E-06	8.00E-08		5.23E-09	6.37E-09	2.16E-07	4.25E-10	7.62E-06	1.16E-08	5.09E-07	1.33E-06	1.03E-03
cen. wst cmplx buildings, numerous		2.15E+02	2.15E+02	7.88E-01	5.74E-01(a)		9.29E-04	1.13E-03	3.69E+00(a)	1.83E-03(a)	1.35E+00	2.05E-03	9.05E-02	2.37E-01	1.84E+02
2706T		2.40E+01	2.40E+01	8.77E-02	1.58E-03		1.03E-04	1.26E-04	2.34E-02(a)	1.64E-03(a)	1.51E-01	2.28E-04	1.01E-02	2.63E-02	2.04E+01
Alk Metal Waste Storage units 1,2,3,4		7.43E-02	7.43E-02	2.72E-04	4.90E-06		3.20E-07	3.90E-07	1.32E-05	2.61E-08	4.67E-04	7.08E-07	3.12E-05	8.17E-05	6.33E-02
Flammable storage units 1 through 20		8.67E-01	8.67E-01	3.17E-03	7.38E-02(a)		3.73E-06	4.55E-06	1.32E-02(a)	1.00E-02(a)	5.45E-03	8.26E-06	3.64E-04	9.52E-04	7.38E-01
C-14 subtotals					3.35E+01	3.35E+02									
west area total	8.61E+03	3.71E+05	3.79E+05	1.39E+03	3.69E+02		1.64E+00	2.00E+00	7.46E+01	6.76E-01	2.38E+03	3.62E+00	1.59E+02	4.17E+02	3.23E+05

Notes:

218E-12B inventories of C-14, Tc-99, I-129 and Se-79 neglect offsite sources to exclude reactor compartments from inventory.

218W4C excludes 74.8 Ci of C-14 and and 14.62 Ci Tc-99 which is immobilized in grouted containers. The C-14 was shown in SWITS report, Tc-99 was not.

(a) Values indicate entries where SWITS reported inventory exceeds projected inventory based on Cs-137 activity and results of ORIGEN2 run for single pass and N reactors

(b) Indicate SWITS data input columns.

(c) Indicate that the inventory projection is based on the maximum ingrowth amount predicted by ORIGEN2 between 1 and 3000 years.

(d) Entries identify instances where the inventory calculated by M. I. Wood (from an electronic mail message sent by M. I. Wood of Waste Management Federal Services of Hanford to G. A. Whyatt on December 19, 1996, Subject - Waste Area Burial Ground Inventories) based on total beta exceeded that based on ORIGEN2 run. The larger of the two estimates was used.

	Based on Revision 1/30/96, GA Whyatt, File inv_10yr.xls														
	SWITS INVENTORY THROUGH DECEMBER 1996. Primary Source: SWITS Data Base, run date 1/4/97														
			ORIGEN2 Run for Average N/single pass reactor Fuel, values are Ci per kg of U fuel taken at 10 year except where noted.												
Zr-93		**Nb-93m**	**Nb-94**	**Pd-107**	**Sn-126**	**Cs-135**	**Cs-137**	**Ce-141**	**Ce-144**	**Sm-147**	**Sm-151**	**Eu-152**	**Eu-154**	**Eu-155**	**Pb-205**
4.72E-05		**4.48E-05(c)**	**1.55E-09**	**1.21E-06**	**1.65E-05**	**8.33E-06**	**1.93E+00**	**0.00E+00**	**9.74E-03**	**2.38E-10(c)**	**4.14E-02**	**3.88E-05**	**6.74E-03**	**1.60E-02**	**8.04E-14**
Ci	**Facility Identifier**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**
	200 East Area														
5.19E-05	218e1	4.93E-05	1.70E-09	1.33E-06	1.81E-05	9.15E-06	2.12E+00	0.00E+00	1.07E-02	2.61E-10	4.55E-02	4.26E-05	7.41E-03	1.75E-02	8.84E-14
2.88E+01	218e10	2.74E+01	9.47E-04	7.37E-01	1.01E+01	5.09E+00	1.18E+06	0.00E+00	5.95E+03	1.45E-04	2.53E+04	2.37E+01	4.12E+03	9.75E+03	4.91E-08
4.62E-04	218e12a	4.39E-04	1.52E-08	1.18E-05	1.61E-04	8.14E-05	1.89E+01	0.00E+00	9.52E-02	2.33E-09	4.05E-01	3.79E-04	6.59E-02	1.56E-01	7.87E-13
7.58E-01	218e12b	7.20E-01	2.49E-05	1.94E-02	2.65E-01	1.34E-01	3.10E+04	0.00E+00	1.56E+02	3.82E-06	6.65E+02	6.23E-01	1.08E+02	2.56E+02	1.29E-09
4.56E-02	218e14 (purex tunnel#1)	4.33E-02	1.50E-06	1.16E-03	1.59E-02	8.04E-03	1.87E+03	0.00E+00	9.40E+00	2.30E-07	3.99E+01	3.74E-02	6.51E+00	1.54E+01	7.76E-11
2.21E-01	218e15 (purex tunnel#2)	2.10E-01	7.25E-06	5.64E-03	7.72E-02	3.89E-02	9.04E+03	0.00E+00	4.55E+01	1.11E-06	1.94E+02	1.81E-01	3.15E+01	7.46E+01	3.76E-10
1.30E-02	218e2	1.23E-02	4.26E-07	3.31E-04	4.53E-03	2.29E-03	5.31E+02	0.00E+00	2.68E+00	6.54E-08	1.14E+01	1.07E-02	1.85E+00	4.39E+00	2.21E-11
5.19E-06	218e4	4.93E-06	1.70E-10	1.33E-07	1.81E-06	9.15E-07	2.12E-01	0.00E+00	1.07E-03	2.61E-11	4.55E-03	4.26E-06	7.41E-04	1.75E-03	8.84E-15
3.89E-03	218e5	3.70E-03	1.28E-07	9.94E-05	1.36E-03	6.86E-04	1.59E+02	0.00E+00	8.03E-01	1.96E-08	3.41E+00	3.20E-03	5.56E-01	1.32E+00	6.63E-12
8.56E-03	218e5a	8.13E-03	2.81E-07	2.19E-04	2.99E-03	1.51E-03	3.51E+02	0.00E+00	1.77E+00	4.31E-08	7.51E+00	7.03E-03	1.22E+00	2.90E+00	1.46E-11
5.19E-06	218e8	4.93E-06	1.70E-10	1.33E-07	1.81E-06	9.15E-07	2.12E-01	0.00E+00	1.07E-03	2.61E-11	4.55E-03	4.26E-06	7.41E-04	1.75E-03	8.84E-15
3.11E-04	222b vaults	2.96E-04	1.02E-08	7.95E-06	1.09E-04	5.49E-05	1.27E+01	0.00E+00	6.42E-02	1.57E-09	2.73E-01	2.56E-04	4.44E-02	1.05E-01	5.30E-13
1.95E-04	218ec9	1.85E-04	6.40E-09	4.98E-06	6.81E-05	3.44E-05	7.97E+00	0.00E+00	4.02E-02	9.81E-10	1.71E-01	1.60E-04	2.78E-02	6.59E-02	3.32E-13
	C-14 subtotals														
2.99E+01	total East area	2.84E+01	9.81E-04	7.64E-01	1.04E+01	5.27E+00	1.22E+06	0.00E+00	6.16E+03	1.51E-04	2.62E+04	2.45E+01	4.27E+03	1.01E+04	5.09E-08
	200 West Area														
1.04E-04	218W1	9.86E-05	3.41E-09	2.65E-06	3.63E-05	1.83E-05	4.25E+00	0.00E+00	2.14E-02	5.23E-10	9.10E-02	8.52E-05	1.48E-02	3.51E-02	1.77E-13
5.19E-08	218w11	4.93E-08	1.70E-12	1.33E-09	1.81E-08	9.15E-09	2.12E-03	0.00E+00	1.07E-05	2.61E-13	4.55E-05	4.26E-08	7.41E-06	1.75E-05	8.84E-17
2.49E-02	218w1A	2.37E-02	8.18E-07	6.37E-04	8.71E-03	4.40E-03	1.02E+03	0.00E+00	5.14E+00	1.26E-07	2.18E+01	2.05E-02	3.56E+00	8.43E+00	4.25E-11
2.59E-04	218w2	2.46E-04	8.52E-09	6.63E-06	9.07E-05	4.58E-05	1.06E+01	0.00E+00	5.35E-02	1.31E-09	2.27E-01	2.13E-04	3.70E-02	8.77E-02	4.42E-13
1.35E-01	218w2A	1.28E-01	4.44E-06	3.46E-03	4.73E-02	2.39E-02	5.54E+03	0.00E+00	2.79E+01	6.81E-07	1.19E+02	1.11E-01	1.93E+01	4.57E+01	2.30E-10
4.67E-04	218W3	4.44E-04	1.53E-08	1.19E-05	1.63E-04	8.24E-05	1.91E+01	0.00E+00	9.63E-02	2.35E-09	4.10E-01	3.84E-04	6.67E-02	1.58E-01	7.96E-13
7.46E+00	218W3A	7.09E+00	2.45E-04	1.91E-01	2.61E+00	1.32E+00	3.06E+05	0.00E+00	1.54E+03	3.76E-05	6.54E+03	6.13E+00	1.07E+03	2.52E+03	1.27E-08
1.19E+00	218W3AE	1.13E+00	3.91E-05	3.04E-02	4.16E-01	2.10E-01	4.87E+04	0.00E+00	2.46E+02	6.00E-06	1.04E+03	9.78E-01	1.70E+02	4.03E+02	2.03E-09
1.72E-03	218W4A	1.63E-03	5.65E-08	4.40E-05	6.01E-04	3.03E-04	7.04E+01	0.00E+00	3.55E-01	8.67E-09	1.51E+00	1.41E-03	2.46E-01	5.82E-01	2.93E-12
9.22E-02	218W4B-caisson	8.76E-02	3.03E-06	2.36E-03	3.22E-02	1.63E-02	3.77E+03	0.00E+00	1.90E+01	4.65E-07	8.08E+01	7.57E-02	1.32E+01	3.12E+01	1.57E-10
1.91E-01	218W4B- non caisson	1.82E-01	6.28E-06	4.89E-03	6.68E-02	3.37E-02	7.83E+03	0.00E+00	3.94E+01	9.63E-07	1.68E+02	1.57E-01	2.73E+01	6.47E+01	3.26E-10
8.24E-02	218W4C	7.82E-02	2.71E-06	2.10E-03	2.88E-02	1.45E-02	3.37E+03	0.00E+00	1.70E+01	4.15E-07	7.22E+01	6.77E-02	1.18E+01	2.79E+01	1.40E-10
7.77E-02	218W5	7.38E-02	2.55E-06	1.99E-03	2.72E-02	1.37E-02	3.18E+03	0.00E+00	1.60E+01	3.92E-07	6.81E+01	6.38E-02	1.11E+01	2.63E+01	1.32E-10
5.19E-08	218w9	4.93E-08	1.70E-12	1.33E-09	1.81E-08	9.15E-09	2.12E-03	0.00E+00	1.07E-05	2.61E-13	4.55E-05	4.26E-08	7.41E-06	1.75E-05	8.84E-17
0.00E+00		0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	221T, T Plant	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2.09E-03	222s vaults	1.99E-03	6.87E-08	5.34E-05	7.31E-04	3.69E-04	8.56E+01	0.00E+00	4.31E-01	1.05E-08	1.83E+00	1.72E-03	2.99E-01	7.07E-01	3.56E-12
3.99E-04	222T vaults	3.79E-04	1.31E-08	1.02E-05	1.40E-04	7.05E-05	1.64E+01	0.00E+00	8.24E-02	2.01E-09	3.50E-01	3.28E-04	5.70E-02	1.35E-01	6.80E-13
0.00E+00	241T Facility	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3.21E-07	TRUSAF	3.05E-07	1.05E-11	8.20E-09	1.12E-07	5.66E-08	1.31E-02	0.00E+00	6.62E-05	1.62E-12	2.81E-04	2.63E-07	4.58E-05	1.08E-04	5.46E-16
2.96E-08	Z plant, PFP	2.81E-08	9.73E-13	7.57E-10	1.04E-08	5.23E-09	1.21E-03	0.00E+00	6.11E-06	1.49E-13	2.60E-05	2.43E-08	4.23E-06	1.00E-05	5.05E-17
5.26E-03	cen. wst cmplx buildings, numerous	5.00E-03	1.73E-07	1.35E-04	1.84E-03	9.29E-04	2.15E+02	0.00E+00	1.09E+00	2.65E-08	4.62E+00	4.32E-03	7.52E-01	1.78E+00	8.97E-12
5.85E-04	2706T	5.56E-04	1.92E-08	1.50E-05	2.05E-04	1.03E-04	2.40E+01	0.00E+00	1.21E-01	2.95E-09	5.13E-01	4.81E-04	8.36E-02	1.98E-01	9.97E-13
1.82E-06	Alk Metal Waste Storage units 1,2,3,4	1.72E-06	5.96E-11	4.64E-08	6.35E-07	3.20E-07	7.43E-02	0.00E+00	3.74E-04	9.15E-12	1.59E-03	1.49E-06	2.59E-04	6.14E-04	3.09E-15
2.12E-05	Flammable storage units 1 through 20	2.01E-05	6.95E-10	5.41E-07	7.40E-06	3.73E-06	8.67E-01	0.00E+00	4.37E-03	1.07E-10	1.86E-02	1.74E-05	3.02E-03	7.16E-03	3.61E-14
	C-14 subtotals														
9.27E+00	west area total	8.80E+00	3.04E-04	2.37E-01	3.24E+00	1.64E+00	3.79E+05	0.00E+00	1.91E+03	4.67E-05	8.13E+03	7.61E+00	1.32E+03	3.13E+03	1.58E-08

Notes:

218E-12B inventories of C-14, Tc-99, I-129 and Se-79 neglect offsite sources to exclude reactor compartments from inventory

218W4C excludes 74.8 Ci of C-14 and and 14.62 Ci Tc-99 which is immobilized in grouted containers. The C-14 was shown in SWITS report, Tc-99 was not.

(a) Values indicate entries where SWITS reported inventory exceeds projected inventory based on Cs-137 activity and results of ORIGEN2 run for single pass and N reactors

(b) Cells indicate SWITS data input columns.

(c) Cells indicate that the inventory projection is based on the maximum ingrowth amount predicted by ORIGEN2 between 1 and 3000 years.

(d) Entries identify instances where the inventory calculated by M. I. Wood (from an electronic mail message sent by M. I. Wood of Waste Management Federal Services of Hanford to G. A. Whyatt on December 19, 1996, Subject - Waste Area Burial Ground Inventories) based on total beta exceeded that based on ORIGEN2 run. The larger of the two estimates was used.

							Actinides and Daughters from ORIGEN2 Run equivalent to 1 kg total Uranium (991.6 g U-238, 991.8 g all U product).									
	SWIT Inventories through CY 1995						U-232	U-233	U-234	U-235	U-236	U-237	U-238	U-240	Np-237	Pa-231
	in grams						4.30E-08(c)	1.03E-07(c)	3.49E-04	1.44E-05(c)	9.41E-06(c)	7.63E-06(d)	3.34E-04	2.45E-15(d)	8.54E-06(c)	8.80E-07(c)
	Non-Segregated		Segregated, Non-TRU		Totals, grams											
Facility Identifier	U	Pu	U	Pu	U	Pu	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci
	updated(a)	updated(a)	updated(a)	updated(a)												
200 East Area																
218e1	4.00E+05	9.00E+02			4.00E+05	9.00E+02	1.73E-05	4.15E-05	1.41E-01	5.81E-03	3.80E-03	3.08E-03	1.35E-01	9.88E-13	3.45E-03	3.55E-04
218e10	8.01E+05	4.01E+03	1.50E+01	9.31E+02	8.01E+05	4.94E+03	3.47E-05	8.32E-05	2.82E-01	1.16E-02	7.60E-03	6.16E-03	2.69E-01	1.98E-12	6.90E-03	7.11E-04
218e12a	9.90E+05	8.93E+03			9.90E+05	8.93E+03	4.29E-05	1.03E-04	3.48E-01	1.44E-02	9.39E-03	7.62E-03	3.33E-01	2.45E-12	8.53E-03	8.78E-04
218e12b	7.08E+03	1.39E+03	2.43E+05	1.06E+00	2.50E+05	1.39E+03	1.08E-05	2.60E-05	8.79E-02	3.63E-03	2.37E-03	1.92E-03	8.40E-02	6.17E-13	2.15E-03	2.22E-04
218e14 (purex tunnel#1)	0.00E+00	0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
218e15 (purex tunnel#2)	0.00E+00	5.00E+02			0.00E+00	5.00E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
218e2	3.00E+05	8.00E+02			3.00E+05	8.00E+02	1.30E-05	3.12E-05	1.06E-01	4.36E-03	2.85E-03	2.31E-03	1.01E-01	7.41E-13	2.58E-03	2.66E-04
218e4	1.00E+03	1.00E+01			1.00E+03	1.00E+01	4.34E-08	1.04E-07	3.52E-04	1.45E-05	9.49E-06	7.69E-06	3.36E-04	2.47E-15	8.61E-06	8.87E-07
218e5	1.20E+05	6.20E+02			1.20E+05	6.20E+02	5.20E-06	1.25E-05	4.22E-02	1.74E-03	1.14E-03	9.23E-04	4.04E-02	2.96E-13	1.03E-03	1.06E-04
218e5a	1.20E+05	1.38E+03			1.20E+05	1.38E+03	5.20E-06	1.25E-05	4.22E-02	1.74E-03	1.14E-03	9.23E-04	4.04E-02	2.96E-13	1.03E-03	1.06E-04
218e8	2.00E+03	2.00E+01			2.00E+03	2.00E+01	8.67E-08	2.08E-07	7.04E-04	2.90E-05	1.90E-05	1.54E-05	6.73E-04	4.94E-15	1.72E-05	1.77E-06
222b vaults	1.00E+03	1.00E+00			1.00E+03	1.00E+00	4.34E-08	1.04E-07	3.52E-04	1.45E-05	9.49E-06	7.69E-06	3.36E-04	2.47E-15	8.61E-06	8.87E-07
218ec9			0.00E+00	1.00E-04	0.00E+00	1.00E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
C-14 subtotals																
total East area	2.74E+06	1.86E+04	2.43E+05	9.32E+02	2.98E+06	1.95E+04	1.29E-04	3.10E-04	1.05E+00	4.33E-02	2.83E-02	2.30E-02	1.00E+00	7.37E-12	2.57E-02	2.65E-03
200 West Area																
218W1	7.00E+05	9.40E+04			7.00E+05	9.40E+04	3.03E-05	7.27E-05	2.46E-01	1.02E-02	6.64E-03	5.39E-03	2.35E-01	1.73E-12	6.03E-03	6.21E-04
218w11	0.00E+00	0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
218w1A	9.00E+05	2.00E+03			9.00E+05	2.00E+03	3.90E-05	9.35E-05	3.17E-01	1.31E-02	8.54E-03	6.92E-03	3.03E-01	2.22E-12	7.75E-03	7.99E-04
218w2	1.40E+06	1.26E+05			1.40E+06	1.26E+05	6.07E-05	1.45E-04	4.93E-01	2.03E-02	1.33E-02	1.08E-02	4.71E-01	3.46E-12	1.21E-02	1.24E-03
218w2A	2.00E+06	6.00E+03	6.90E+05	3.84E+02	2.69E+06	6.38E+03	1.17E-04	2.79E-04	9.47E-01	3.91E-02	2.55E-02	2.07E-02	9.05E-01	6.64E-12	2.32E-02	2.39E-03
218W3	7.00E+07	6.80E+04			7.00E+07	6.80E+04	3.03E-03	7.27E-03	2.46E+01	1.02E+00	6.64E-01	5.39E-01	2.35E+01	1.73E-10	6.03E-01	6.21E-02
218W3A	4.36E+06	4.57E+02	5.48E+07	9.54E+01	5.91E+07	5.52E+02	2.56E-03(e)	1.72E+00(e)	2.08E+01(e)	8.61E-01(e)	5.61E-01(e)	4.55E-01	2.00E+01(e)	1.46E-10	5.09E-01	5.25E-02
218W3AE			2.66E+07	1.22E+02	2.66E+07	1.22E+02	1.85E+01(e)	5.60E-02(e)	9.48E+00(e)	1.07E+00(e)	2.83E+00(e)	2.04E-01	6.03E+01(e)	6.56E-11	2.29E-01	2.36E-02
218W4A	3.94E+08	3.54E+04			3.94E+08	3.54E+04	1.71E-02	4.09E-02	1.39E+02	5.72E+00	3.74E+00	3.03E+00	1.33E+02	9.74E-10	3.39E+00	3.50E-01
218W4B-caisson	2.97E+05	1.75E+03	5.00E-02	1.00E-03	2.97E+05	1.75E+03	1.29E-05	3.09E-05	1.05E-01	4.32E-03	2.82E-03	2.29E-03	1.00E-01	7.35E-13	2.56E-03	2.64E-04
218W4B- non caisson	2.94E+06	7.22E+03	9.16E+05	1.00E+01	3.86E+06	7.23E+03	1.67E-04	5.30E-01(e)	1.36E+00	5.60E-02	3.66E-02	2.97E-02	1.30E+00	9.53E-12	3.32E-02	3.42E-03
218W4C			2.34E+06	2.62E+01	5.43E+06(f)	2.62E+01	1.71E-02(e)	4.17E-03(e)	2.21E+01(f)	7.61E-01(f)	5.16E-02(e)	4.17E-02	3.91E+01(f)	1.34E-11	4.67E-02	4.81E-03
218W5			2.65E+07	1.68E+02	2.65E+07	1.68E+02	5.45E+00(e)	4.80E-03(e)	9.44E+00(e)	3.88E-01(e)	5.19E-04(e)	2.04E-01	9.44E+00(e)	6.55E-11	2.28E-01	2.35E-02
218w9	0.00E+00	0.00E+00			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
							0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
221T, T Plant			0.00E+00	1.00E+00	0.00E+00	1.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
222s vaults	7.00E+02	7.00E-01			7.00E+02	7.00E-01	3.03E-08	7.27E-08	2.46E-04	1.02E-05	6.64E-06	5.39E-06	2.35E-04	1.73E-15	6.03E-06	6.21E-07
222T vaults	3.00E+02	3.00E-01			3.00E+02	3.00E-01	1.30E-08	3.12E-08	1.06E-04	4.36E-06	2.85E-06	2.31E-06	1.01E-04	7.41E-16	2.58E-06	2.66E-07
241T Facility					0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRUSAF			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Z plant, PFP							0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
cen. wst cmplx buildings, numerous			4.90E+06	2.32E+01	4.90E+06	2.32E+01	1.13E-03(e)	3.42E-02(e)	1.74E+00(e)	1.53E-01(e)	1.27E-01(e)	3.77E-02	3.95E+00(e)	1.21E-11	4.22E-02	4.35E-03
2706T			0.00E+00	0.00E+00			0.00E+00	0.00E+00	4.75E-06(e)	3.55E-07(e)	2.36E-12(e)	0.00E+00	3.72E-06(e)	0.00E+00	0.00E+00	0.00E+00
Alk Metal Waste Storage units 1,2,3,4			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Flammable storage units 1 through 20			7.66E-01	1.41E-02	7.66E-01	1.41E-02	2.41E-06(e)	1.03E-04(e)	8.19E-05(e)	2.97E-06(e)	1.87E-07(e)	5.90E-09	8.74E-05(e)	1.89E-18	8.66E-04(b)	6.80E-10
C-14 subtotals																
west area total	4.77E+08	3.41E+05	1.17E+08	8.30E+02	5.96E+08	3.42E+05	2.40E+01	2.39E+00	2.30E+02	1.01E+01	8.07E+00	4.59E+00	2.92E+02	1.47E-09	5.14E+00	5.29E-01

Notes:

(a) Cells indicate SWITS data input columns.

(b) Values indicate entries where SWITS reported inventory exceeds projected inventory based on total uranium activity and results of ORIGEN2 run for single pass and N reactors

(c) Cells indicate that the inventory projection is based on the maximum ingrowth amount predicted by ORIGEN2 between 1 and 3000 years.

(d) Cells indicate that the inventory is the maximum ingrowth value from 1 to 3000 years and the nuclide could be treated as a short lived daughter for PA calculations.

(e) Cells (uranium and plutonium) are the sum of a portion of the general uranium or plutonium, split into isotopes using the ORIGEN2 results and specific isotopic information from SWITS where available.

(f) Uranium values estimated by M. I. Wood (from an electronic mail message sent by M. I. Wood of Waste Management Federal Services of Hanford to G. A. Whyatt on December 19, 1996, Subject - Waste Area Burial Ground Inventories) were substantially greater than indicated by the SWITS reports for 218W4C. The reason for the discrepancy is not known but M. I. Wood is highly confident of those numbers. The higher values are used.

		mass U, g												
		991.8												
	Ra-223	Ra-224	Ra-225	Ra-226	Ra-228	Ac-225	Ac-227	Th-227	Th-228	Th-229	Th-230	Th-231	Th-232	Th-234
	8.80E-07(d)	4.00E-08(d)	1.30E-08(d)	4.12E-06(c)	1.30E-12(c)	1.27E-08(d)	8.81E-07(d)	8.69E-07(d)	4.00E-08(c)	1.27E-08(c)	9.32E-06(c)	1.43E-05(d)	1.34E-12(c)	3.34E-04(d)
Facility Identifier	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**
200 East Area														
218e1	3.55E-04	1.61E-05	5.24E-06	1.66E-03	5.24E-10	5.12E-06	3.55E-04	3.50E-04	1.61E-05	5.12E-06	3.76E-03	5.77E-03	5.39E-10	1.35E-01
218e10	7.11E-04	3.23E-05	1.05E-05	3.33E-03	1.05E-09	1.03E-05	7.12E-04	7.02E-04	3.23E-05	1.03E-05	7.53E-03	1.15E-02	1.08E-09	2.70E-01
218e12a	8.78E-04	3.99E-05	1.30E-05	4.11E-03	1.30E-09	1.27E-05	8.79E-04	8.67E-04	3.99E-05	1.27E-05	9.30E-03	1.43E-02	1.33E-09	3.33E-01
218e12b	2.22E-04	1.01E-05	3.28E-06	1.04E-03	3.28E-10	3.20E-06	2.22E-04	2.19E-04	1.01E-05	3.20E-06	2.35E-03	3.60E-03	3.37E-10	8.42E-02
218e14 (purex tunnel#1)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
218e15 (purex tunnel#2)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
218e2	2.66E-04	1.21E-05	3.93E-06	1.25E-03	3.93E-10	3.84E-06	2.66E-04	2.63E-04	1.21E-05	3.84E-06	2.82E-03	4.33E-03	4.04E-10	1.01E-01
218e4	8.87E-07	4.03E-08	1.31E-08	4.15E-06	1.31E-12	1.28E-08	8.88E-07	8.76E-07	4.03E-08	1.28E-08	9.40E-06	1.44E-05	1.35E-12	3.37E-04
218e5	1.06E-04	4.84E-06	1.57E-06	4.98E-04	1.57E-10	1.54E-06	1.07E-04	1.05E-04	4.84E-06	1.54E-06	1.13E-03	1.73E-03	1.62E-10	4.04E-02
218e5a	1.06E-04	4.84E-06	1.57E-06	4.98E-04	1.57E-10	1.54E-06	1.07E-04	1.05E-04	4.84E-06	1.54E-06	1.13E-03	1.73E-03	1.62E-10	4.04E-02
218e8	1.77E-06	8.07E-08	2.62E-08	8.31E-06	2.62E-12	2.56E-08	1.78E-06	1.75E-06	8.07E-08	2.56E-08	1.88E-05	2.88E-05	2.70E-12	6.74E-04
222b vaults	8.87E-07	4.03E-08	1.31E-08	4.15E-06	1.31E-12	1.28E-08	8.88E-07	8.76E-07	4.03E-08	1.28E-08	9.40E-06	1.44E-05	1.35E-12	3.37E-04
218ec9	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
C-14 subtotals														
total East area	2.65E-03	1.20E-04	3.91E-05	1.24E-02	3.91E-09	3.82E-05	2.65E-03	2.62E-03	1.20E-04	3.82E-05	2.80E-02	4.30E-02	4.02E-09	1.01E+00
200 West Area														
218W1	6.21E-04	2.82E-05	9.18E-06	2.91E-03	9.18E-10	8.96E-06	6.22E-04	6.13E-04	2.82E-05	8.96E-06	6.58E-03	1.01E-02	9.44E-10	2.36E-01
218w11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
218w1A	7.99E-04	3.63E-05	1.18E-05	3.74E-03	1.18E-09	1.15E-05	7.99E-04	7.89E-04	3.63E-05	1.15E-05	8.46E-03	1.30E-02	1.21E-09	3.03E-01
218w2	1.24E-03	5.65E-05	1.84E-05	5.82E-03	1.84E-09	1.79E-05	1.24E-03	1.23E-03	5.65E-05	1.79E-05	1.32E-02	2.02E-02	1.89E-09	4.71E-01
218w2A	2.39E-03	1.08E-04	3.53E-05	1.12E-02	3.53E-09	3.44E-05	2.39E-03	2.36E-03	1.08E-04	3.44E-05	2.53E-02	3.88E-02	3.63E-09	9.06E-01
218W3	6.21E-02	2.82E-03	9.18E-04	2.91E-01	9.18E-08	8.96E-04	6.22E-02	6.13E-02	2.82E-03	8.96E-04	6.58E-01	1.01E+00	6.51E+00(b)	2.36E+01
218W3A	5.25E-02	2.38E-03	7.75E-04	2.46E-01	7.75E-08	7.57E-04	5.25E-02	5.18E-02	2.38E-03	7.57E-04	5.56E-01	8.52E-01	1.18E-01(b)	1.99E+01
218W3AE	2.36E-02	1.07E-03	3.48E-04	1.10E-01	3.48E-08	3.40E-04	2.36E-02	2.33E-02	1.07E-03	3.40E-04	2.50E-01	3.83E-01	4.39E-02(b)	8.95E+00
218W4A	3.50E-01	1.59E-02	5.17E-03	1.64E+00	5.17E-07	5.05E-03	3.50E-01	3.45E-01	1.59E-02	5.05E-03	3.70E+00	5.68E+00	2.71E+01(b)	1.33E+02
218W4B-caisson	2.64E-04	1.20E-05	3.90E-06	1.24E-03	3.90E-10	3.81E-06	2.64E-04	2.61E-04	1.20E-05	3.81E-06	2.79E-03	4.29E-03	7.19E-03(b)	1.00E-01
218W4B- non caisson	3.42E-03	1.56E-04	5.06E-05	1.60E-02	5.06E-09	4.94E-05	3.43E-03	3.38E-03	1.56E-04	4.94E-05	3.63E-02	5.56E-02	5.44E-03(b)	1.30E+00
218W4C	4.81E-03	2.19E-04	7.11E-05	2.25E-02	7.11E-09	6.95E-05	4.82E-03	4.75E-03	2.19E-04	6.95E-05	5.10E-02	7.82E-02	3.87E-03(b)	1.83E+00
218W5	2.35E-02	1.07E-03	3.48E-04	1.10E-01	3.48E-08	3.40E-04	2.36E-02	2.32E-02	1.07E-03	3.40E-04	2.49E-01	3.82E-01	2.46E-01(b)	8.93E+00
218w9	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
221T, T Plant	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
222s vaults	6.21E-07	2.82E-08	9.18E-09	2.91E-06	9.18E-13	8.96E-09	6.22E-07	6.13E-07	2.82E-08	8.96E-09	6.58E-06	1.01E-05	9.44E-13	2.36E-04
222T vaults	2.66E-07	1.21E-08	3.93E-09	1.25E-06	3.93E-13	3.84E-09	2.66E-07	2.63E-07	1.21E-08	3.84E-09	2.82E-06	4.33E-06	4.04E-13	1.01E-04
241T Facility	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRUSAF	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Z plant, PFP	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
cen. wst cmplx buildings, numerous	4.35E-03	1.98E-04	6.43E-05	2.04E-02	6.43E-09	6.28E-05	4.36E-03	4.30E-03	1.98E-04	6.28E-05	4.61E-02	7.07E-02	1.26E-03(b)	1.65E+00
2706T	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Alk Metal Waste Storage units 1,2,3,4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Flammable storage units 1 through 20	6.80E-10	3.09E-11	1.00E-11	3.18E-09	1.00E-15	9.81E-12	6.81E-10	6.71E-10	3.09E-11	9.81E-12	7.20E-09	1.10E-08	1.93E-05(b)	2.58E-07
C-14 subtotals														
west area total	5.29E-01	2.41E-02	7.82E-03	2.48E+00	7.82E-07	7.64E-03	5.30E-01	5.23E-01	2.41E-02	7.64E-03	5.61E+00	8.60E+00	3.40E+01	2.01E+02

Notes:

(a) Cells indicate SWITS data input columns.

(b) Values indicate entries where SWITS reported inventory exceeds projected inventory based on total uranium activity and results of ORIGEN2 run for single pass and N reactors.

(c) Cells indicate that the inventory projection is based on the maximum ingrowth amount predicted by ORIGEN2 between 1 and 3000 years.

(d) Cells indicate that the inventory is the maximum ingrowth value from 1 to 3000 years and the nuclide could be treated as a short lived daughter for PA calculations.

(e) Cells (uranium and plutonium) are the sum of a portion of the general uranium or plutonium, split into isotopes using the ORIGEN2 results and specific isotopic information from SWITS where available.

(f) Uranium values estimated by M. I. Wood (from an electronic mail message sent by M. I. Wood of Waste Management Federal Services of Hanford to G. A. Whyatt on December 19, 1996, Subject - Waste Area Burial Ground Inventories) were substantially greater than indicated by the SWITS reports for 218W4C. The reason for the discrepancy is not known but M. I. Wood is highly confident of those numbers. The higher values are used.

	Pu factors are Ci isotope per g total Pu																
	Ratios to Pu Inventories Determined Using ORIGEN2 Run For Isotopic Distribution																
	Pu-236	**Pu-237**	**Pu-238**	**Pu-239**	**Pu-240**	**Pu-241**	**Pu-242**	**Pu-243**	**Pu-244**	**Am-241**	**Am-242m**	**Am-242**	**Am-243**	**Cm-242**	**Cm-244**	**Cm-245**	**Cm-246**
	8.72E-07	**3.97E-06**	**1.27E+00**	**6.27E-02**	**1.34E-02**	**6.47E-01**	**6.14E-07**	**5.91E-02(d)**	**3.21E-15**	**1.47E-02(c)**	**6.67E-07**	**6.63E-07(d)**	**1.58E-07**	**5.49E-07**	**1.09E-05**	**8.32E-11**	**6.92E-13**
Facility Identifier	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**	**Ci**
200 East Area																	
218e1	7.85E-04	3.57E-03	1.14E+03	5.64E+01	1.21E+01	5.82E+02	5.53E-04	5.32E+01	2.89E-12	5.93E+00	2.69E-04	2.67E-04	6.37E-05	2.21E-04	4.40E-03	3.35E-08	2.79E-10
218e10	4.31E-03	1.96E-02	6.28E+03	3.10E+02	6.62E+01	3.20E+03	3.03E-03	2.92E+02	1.59E-11	1.19E+01	5.39E-04	5.35E-04	1.28E-04	4.43E-04	8.82E-03	6.72E-08	5.59E-10
218e12a	7.79E-03	3.55E-02	1.13E+04	5.60E+02	1.20E+02	5.78E+03	5.48E-03	5.28E+02	2.87E-11	1.47E+01	6.66E-04	6.62E-04	1.58E-04	5.48E-04	1.09E-02	8.30E-08	6.90E-10
218e12b	1.21E-03	5.50E-03	1.76E+03	8.69E+01	1.86E+01	8.97E+02	8.51E-04	8.19E+01	4.45E-12	3.70E+00	1.68E-04	1.67E-04	3.98E-05	1.38E-04	2.75E-03	2.10E-08	1.74E-10
218e14 (purex tunnel#1)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
218e15 (purex tunnel#2)	4.36E-04	1.99E-03	6.35E+02	3.14E+01	6.70E+00	3.24E+02	3.07E-04	2.96E+01	1.61E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
218e2	6.98E-04	3.18E-03	1.02E+03	5.02E+01	1.07E+01	5.18E+02	4.91E-04	4.73E+01	2.57E-12	4.45E+00	2.02E-04	2.01E-04	4.78E-05	1.66E-04	3.30E-03	2.52E-08	2.09E-10
218e4	8.72E-06	3.97E-05	1.27E+01	6.27E-01	1.34E-01	6.47E+00	6.14E-06	5.91E-01	3.21E-14	1.48E-02	6.73E-07	6.68E-07	1.59E-07	5.53E-07	1.10E-05	8.39E-11	6.97E-13
218e5	5.41E-04	2.46E-03	7.87E+02	3.89E+01	8.31E+00	4.01E+02	3.81E-04	3.66E+01	1.99E-12	1.78E+00	8.07E-05	8.02E-05	1.91E-05	6.64E-05	1.32E-03	1.01E-08	8.37E-11
218e5a	1.20E-03	5.48E-03	1.75E+03	8.65E+01	1.85E+01	8.93E+02	8.47E-04	8.16E+01	4.43E-12	1.78E+00	8.07E-05	8.02E-05	1.91E-05	6.64E-05	1.32E-03	1.01E-08	8.37E-11
218e8	1.74E-05	7.94E-05	2.54E+01	1.25E+00	2.68E-01	1.29E+01	1.23E-05	1.18E+00	6.42E-14	2.96E-02	1.35E-06	1.34E-06	3.19E-07	1.11E-06	2.20E-05	1.68E-10	1.39E-12
222b vaults	8.72E-07	3.97E-06	1.27E+00	6.27E-02	1.34E-02	6.47E-01	6.14E-07	5.91E-02	3.21E-15	1.48E-02	6.73E-07	6.68E-07	1.59E-07	5.53E-07	1.10E-05	8.39E-11	6.97E-13
218ec9	8.72E-11	3.97E-10	1.27E-04	6.27E-06	1.34E-06	6.47E-05	6.14E-11	5.91E-06	3.21E-19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
C-14 subtotals																	
total East area	1.70E-02	7.74E-02	2.47E+04	1.22E+03	2.61E+02	1.26E+04	1.20E-02	1.15E+03	6.26E-11	4.42E+01	2.01E-03	2.00E-03	4.76E-04	1.65E-03	3.29E-02	2.50E-07	2.08E-09
200 West Area																	
218W1	8.20E-02	3.73E-01	1.19E+05	5.90E+03	1.26E+03	6.08E+04	5.77E-02	5.56E+03	3.02E-10	1.04E+01	4.71E-04	4.68E-04	1.12E-04	3.87E-04	7.71E-03	5.87E-08	4.88E-10
218w11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
218w1A	1.74E-03	7.94E-03	2.54E+03	1.25E+02	2.68E+01	1.29E+03	1.23E-03	1.18E+02	6.42E-12	1.33E+01	6.05E-04	6.02E-04	1.43E-04	4.98E-04	9.91E-03	7.55E-08	6.28E-10
218w2	1.10E-01	5.00E-01	1.60E+05	7.90E+03	1.69E+03	8.15E+04	7.74E-02	7.45E+03	4.04E-10	2.08E+01	9.42E-04	9.36E-04	2.23E-04	7.75E-04	1.54E-02	1.17E-07	9.76E-10
218w2A	5.57E-03	2.53E-02	8.11E+03	4.00E+02	8.55E+01	4.13E+03	3.92E-03	3.77E+02	2.05E-11	3.99E+01	1.81E-03	1.80E-03	4.29E-04	1.49E-03	2.96E-02	2.26E-07	1.88E-09
218W3	5.93E-02	2.70E-01	8.64E+04	4.26E+03	9.11E+02	4.40E+04	4.18E-02	4.02E+03	2.18E-10	1.04E+03	4.71E-02	4.68E-02	1.12E-02	3.87E-02	7.71E-01	5.87E-06	4.88E-08
218W3A	4.81E-04	2.19E-03	7.10E+02(e)	3.50E+01(e)	7.83E+00(e)	3.83E+02(e)	3.47E-04(e)	3.26E+01	1.77E-12	8.76E+02	3.98E-02	3.95E-02	9.42E-03	3.27E-02	6.51E-01	4.96E-06	4.12E-08
218W3AE	1.07E-04	4.85E-04	1.62E+02(e)	1.51E+01(e)	4.95E+00(e)	1.40E+02(e)	3.30E-04(e)	7.22E+00	1.10E-05(e)	3.94E+02	1.79E-02	1.78E-02	4.23E-03	1.47E-02	2.93E-01	2.23E-06	1.85E-08
218W4A	3.09E-02	1.40E-01	4.49E+04	2.22E+03	4.74E+02	2.29E+04	2.17E-02	2.09E+03	1.14E-10	5.84E+03	2.65E-01	2.63E-01	6.28E-02	2.18E-01	4.34E+00	3.30E-05	2.75E-07
218W4B-caisson	1.52E-03	6.94E-03	2.22E+03(e)	1.10E+02	2.34E+01	1.13E+03	1.07E-03	1.03E+02	5.61E-12	4.41E+00	2.00E-04	1.99E-04	4.74E-05	1.65E-04	3.27E-03	2.49E-08	2.07E-10
218W4B- non caisson	6.30E-03	2.87E-02	9.18E+03	4.53E+02	9.69E+01	4.68E+03	4.44E-03	4.27E+02	2.32E-11	5.72E+01	2.60E-03	2.58E-03	6.15E-04	2.14E-03	4.25E-02	3.24E-07	2.69E-09
218W4C	2.28E-05	1.04E-04	3.37E+01(e)	3.52E+00(e)	6.14E-01(e)	1.90E+01(e)	1.85E-04(e)	1.55E+00	1.90E-12(e)	8.04E+01	3.65E-03	3.63E-03	8.64E-04	3.00E-03	5.97E-02	4.55E-07	3.78E-09
218W5	1.47E-04	6.67E-04	2.29E+02(e)	1.15E+01(e)	2.78E+00(e)	1.62E+02(e)	6.75E-04(e)	9.93E+00	2.97E-06(e)	3.93E+02	1.78E-02	1.77E-02	4.22E-03	1.47E-02	2.92E-01	2.22E-06	1.85E-08
218w9	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
221T, T Plant	8.72E-07	3.97E-06	1.27E+00	6.27E-02	1.34E-02	6.47E-01	6.14E-07	5.91E-02	3.21E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
222s vaults	6.10E-07	2.78E-06	8.89E-01	4.39E-02	9.38E-03	4.53E-01	4.30E-07	4.14E-02	2.25E-15	1.04E-02	4.71E-07	4.68E-07	1.12E-07	3.87E-07	7.71E-06	5.87E-11	4.88E-13
222T vaults	2.62E-07	1.19E-06	3.81E-01	1.88E-02	4.02E-03	1.94E-01	1.84E-07	1.77E-02	9.63E-16	4.45E-03	2.02E-07	2.01E-07	4.78E-08	1.66E-07	3.30E-06	2.52E-11	2.09E-13
241T Facility	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
TRUSAF	0.00E+00	0.00E+00	1.04E-02(e)	1.28E-02(e)	3.12E-03(e)	1.74E-01(e)	4.68E-07(e)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Z plant, PFP	0.00E+00	0.00E+00	5.98E-07(e)	7.08E-06(e)	1.58E-06(e)	5.16E-05(e)	9.35E-11(e)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
cen. wst cmplx buildings, numerous	2.02E-05	9.20E-05	3.20E+01(e)	2.12E+00(e)	4.29E-01(e)	1.98E+01(e)	2.81E-05(e)	1.37E+00	2.73E-04(e)	7.27E+01	3.30E-03	3.28E-03	7.81E-04	2.71E-03	5.40E-02	4.11E-07	3.42E-09
2706T	0.00E+00	0.00E+00	3.89E-05(e)	9.64E-04(e)	1.85E-04(e)	4.88E+01(e)	8.66E-09(e)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Alk Metal Waste Storage units 1,2,3,4	0.00E+00	0.00E+00	0.00E+00	5.22E-07(e)	1.16E-07(e)	4.29E-06(e)	6.92E-12(e)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Flammable storage units 1 through 20	1.23E-08	5.61E-08	2.04E-02(e)	1.50E-03(e)	2.02E-04(e)	9.40E-03(e)	2.21E-08(e)	8.35E-04	4.54E-17	1.14E-05	5.15E-10	5.12E-10	1.22E-10	4.24E-10	8.44E-09	6.43E-14	5.34E-16
C-14 subtotals																	
west area total	2.98E-01	1.36E+00	4.34E+05	2.14E+04	4.58E+03	2.21E+05	2.11E-01	2.02E+04	2.87E-04	8.84E+03	4.01E-01	3.99E-01	9.50E-02	3.30E-01	6.57E+00	5.00E-05	4.16E-07

Notes:

(a) Cells indicate SWITS data input columns.

(b) Values indicate entries where SWITS reported inventory exceeds projected inventory based on total uranium activity and results of ORIGEN2 run for single pass and N reactors.

(c) Cells indicate that the inventory projection is based on the maximum ingrowth amount predicted by ORIGEN2 between 1 and 3000 years.

(d) Cells indicate that the inventory is the maximum ingrowth value from 1 to 3000 years and the nuclide could be treated as a short lived daughter for PA calculations.

(e) Cells (uranium and plutonium) are the sum of a portion of the general uranium or plutonium, split into isotopes using the ORIGEN2 results and specific isotopic information from SWITS where available.

(f) Uranium values estimated by M. I. Wood (from an electronic mail message sent by M. I. Wood of Waste Management Federal Services of Hanford to G. A. Whyatt on December 19, 1996, Subject - Waste Area Burial Ground Inventories) were substantially greater than indicated by the SWITS reports for 218W4C. The reason for the discrepancy is not known but M. I. Wood is highly confident of those numbers. The higher values are used.