

CBU-PIT-2005-00138
Rev. 01
October 5, 2005

KEYWORDS:
Waste Characterization Report
Radionuclides

RETENTION: PERMANENT
CLASSIFICATION: NA
Does not Contain UCNI

Tank Radionuclide Inventories

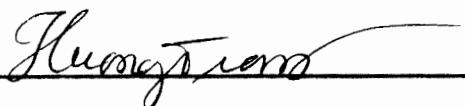
H. Q. Tran

Westinghouse Savannah River Company
Closure Business Unit
Planning Integration & Technology Department
Aiken, SC 29808

Tank Radionuclide Inventories

Approval Page:

Prepared by:



10/5/05

H. Q. Tran, Data Acquisition, Evaluation & Management

Date

Reviewed by:



10/05/05

Q. L. Nguyen, Data Acquisition, Evaluation & Management

Date

Approved by:



10/5/05

P. J. Hill, Manager, Data Acquisition, Evaluation & Management

Date

Distribution List:

W. S. Sanders, 766-H
S. R. Bush, 766-H
T. B. Caldwell, 766-H
M. C. Chandler, 703-H
T. E. Chandler, 704-Z
W. B. Dean, 766-H
V. G. Dickert, 766-H
M. D. Drumm, 766-H
R. L. Fanning, 705-H
E. J. Freed, 703-H
B. A. Hamm, 766-H
P. J. Hill, 766-H
J. R. Kies, 766-H
Q. L. Nguyen, 766-H
J. W. Ray, 704-S
S. H. Reboul, 766-H
S. J. Robertson, 766-H
T. C. Robinson, Jr, 766-H
B. C. Rogers, 766-H
L. B. Romanowski, 766-H
F. M. Smith, 766-H
S. A. Thomas, 766-H
J. R. Vitali, 766-H

Table of Contents

<i>Summary of Revisions</i>	2
1. <i>Introduction</i>	3
2. <i>Discussion</i>	3
2.1 <i>Dried Sludge Tank Inventory</i>	3
2.2 <i>Insoluble Salt Tank Inventory</i>	4
2.3 <i>Soluble Phase Tank Inventory</i>	4
2.3.1 Available WCS data.....	4
2.3.2 Supernate Algorithms	5
2.3.3 Inventory Estimates based on Cs-137.....	6
2.4 <i>Additional Isotopes</i>	7
2.4.1 Na-22.....	7
2.4.2 Al-26	8
2.4.3 Te-125m, Sb-126 and Sb-126m.....	8
2.4.4 Cm-242	9
2.4.5 Decay Chain from Actinides.....	9
2.5 <i>Special Tanks: 17, 18, 19, 20, 23, 48, and 50</i>	10
3. <i>References</i>	11
Appendix A	13

List of Table

Table 1: Supernate Algorithms	5
Table 2: Non-Sludge Tanks and Corresponding Surrogate Tanks	5
Table 3: Soluble Inventory Estimates Based on Solubility	7
Table 4: Dry Sludge Radioisotope Inventory by Tank	14
Table 5: Insoluble Salt Radionuclide Inventory by Tank	18
Table 6: Soluble Radionuclide Inventory by Tank	19
Table 7: Less Conservative Soluble Actinide Inventory by Tank	35

Summary of Revisions

6/2005	Revision 0, initial issue
10/2005	Revision 1: Corrected soluble actinide inventory for non-sludge tanks Added alternate soluble actinide inventory for Type III/IIIA Tanks

1. Introduction

The Waste Characterization System (WCS) is an electronic information system that tracks waste tank data, including projected radionuclide inventories based on sample analyses, process histories, composition studies and theoretical relationships. WCS is used to aid the planning and scheduling of Closure Business Unit activities. In addition to the radionuclides tracked in WCS, additional radioisotopes have been characterized using alternate methods. The purpose of this document is to project radionuclide inventories in each waste tank that will be sent to Saltstone for final disposal. A combination of WCS data and recently published technical information are utilized in projecting the tank radionuclide inventories for the sludge, insoluble salt, and supernate phases. The inventories for the waste tanks are provided in Attachment A and reflect the tank farm inventories as of 5/1/05.

2. Discussion

The tank sludge, salt, and supernate volumes used for calculations in this document are taken directly from the May 2005 WCS monthly inventory report.¹ Also, the May Sludge 1.5 and WCS 1.5 source files are utilized to project radionuclide inventories for each tank. Inputs and assumption from the report are maintained for this document (Evaporator Tank liquid levels [26, 27, 32, 37, 38, and 43] set to level when samples were taken for Curie inventory estimates). Besides reporting the WCS tracked radioisotope inventories, inventories of additional isotopes are also included.² The additional isotopes are Na-22, Al-26, Te-125m, Sb-126, Sb-126m, Sm-151, Eu-152, Eu-155, Ra-226, Ra-228, Ac-227, Th-229, Th-230, Pa-231, Pu-244, Am-243, Cm-242, Cm-243, Cm-247, Cm-248, Bk-249, Cf-249, Cf-251, Cf-252. General methods and computations used to generate curie inventory projections are discussed in five major sections: dried sludge inventory, insoluble salt inventory, supernatant phase inventory, additional isotope computations, and special tanks.

2.1 Dried Sludge Tank Inventory

Inventories of H-3, C-14, Co-60, Ni-59, Ni-63, Se-79, Sr-90, Y-90, Nb-94, Tc-99, Ru-106, Rh-106, Sb-125, Sn-126, I-129, Cs-134, Cs-135, Cs-137, Ba-137m, Ce-144, Pr-144, Pm-147, Eu-154, Th-232, U-232, U-233, U-234, U-235, U-236, U-238, Np-237, Pu-238, Pu-239, Pu-240, Pu-241, Pu-242, Ingrown Am-241, Am-241, Am-242m, Cm-244, Cm-245 for each waste tank are extracted directly from WCS 1.5 (Pred Sludge Ci tab).³ Inventories for the additional isotopes determined by methods described in the Additional Isotopes Section are included in the sludge phase for each tank. Also, the dry sludge mass inventory of each tank shown in the Appendix is extracted from WCS (Formula02, Column HE).

2.2 Insoluble Salt Tank Inventory

Concentrations of C-14, Sr-90, Y-90, Cs-137, Ba-137m, U-235, U-238, Pu-238, and Pu-239 reported in WCS are multiplied by each tank salt volume to obtain tank radionuclide insoluble salt inventories. Except for C-14, the other radionuclides are considered as entrained sludge which will settle from the supernate during dissolution. The C-14 in salt will dissolve during dissolution.

Also, tank inventories of Na-22, Al-26, Ac-227, and Pa-231 are determined for the insoluble salts based on the algorithms described in the Additional Isotopes Section. The Na-22 and Al-26 will dissolve during dissolution. The Ac-227 and Pa-231 are present in entrained sludge and will settle from the supernate during dissolution of the salt.

2.3 Soluble Phase Tank Inventory

In general, the tank supernate phase inventory for each radioisotope is determined by multiplying the tank total supernate volume by soluble radioisotope concentrations. The concentrations are determined from available WCS data, supernate algorithms, and Cs-137 activity inventories. The tank total soluble phase inventory is then divided into free supernate, sludge interstitial liquid and salt interstitial liquid phase inventories.

2.3.1 Available WCS data

WCS tracks soluble inventories of Cs-137, Ba-137m, Th-232, U-232, U-233, U-234, U-235, U-236, U-238, Np-237, Pu-238, Pu-239, Pu-240, Pu-241, Pu-242, Am-241, Am-242m, Cm-244, and Cm-245. The tank Cs/Ba data came from the latest corrosion sample (except for Tanks 23 and 48, see Section 2.5) while inventories of others are based on tank sludge contents and supernate radiological alpha constant. Details of these algorithms can be found in the WCS database. The alpha concentrations reported in WCS are 0.00021 (Ci/gal) for Tanks 1-24, 0.0071 (Ci/gal) for Tanks 25-47, 51, and 0.0000025 (Ci/gal) for Tanks 48-50. The higher alpha concentration of 0.0071 (Ci/gal) for certain tanks are recommended for predicting bounding inventories such as estimates of curies sent to Saltstone. The predicting bounding supernatant actinide inventories are reported in Table 6. Note that some tanks contain no sludge and their actinide supernatant concentrations are assumed from designated surrogate tanks. (See Section 2.3.2)

Even though inventories of Am-241, Am-242m, Cm-244, and Cm-245 are tracked in WCS, it is chosen not to report those values. Instead, their soluble inventories are determined by utilizing solubility factor of 0.001 and ratio of the soluble Cs-137. (See section 2.3.3)

2.3.1.1 Alternate Actinide Supernatant Inventory for Type III/IIIA Tanks

A less conservative supernatant alpha algorithm⁴ of 0.00041 (Ci/gal) (1.09E+05 pCi/mL) obtained from recent actinide analyses of thirteen tanks is utilized to determine an alternate actinide supernatant inventory for type III/IIIA tanks except Tanks 29, 31, 37, and 48-50. This lower alpha constant will reduce the dissolved actinide inventories in these affected Type III/IIIA tanks. Resulting supernatant actinide inventories based on the less conservative algorithm are reported in the last four tables (Table 7). Table 7 actinide values are recommended for use in flowsheet type evaluations.

2.3.2 Supernate Algorithms

Supernate algorithms⁵ listed in Table 1 are used to estimate the supernate inventories of H-3, C-14, Co-60, Ni-63, and Sr-90 (except for special tanks in section 2.5). Note that the WCS predicted I-129 inventory has been updated⁶ that the I-129 soluble inventory is determined by multiplying the tank soluble Cs-137 activity by a constant value of 1.5E-07. These algorithms project conservative estimates for total inventory of these isotopes.

Table 1: Supernate Algorithms

Nuclide	Constant	Algorithms
H-3	1.00E+05	Recommended H-3 concentration (pCi/mL) in supernate.
C-14	1.76E+03	Recommended C-14 concentration (pCi/mL) in supernate.
Co-60	1.03E+03	Recommended Co-60 concentration (pCi/mL) in supernate.
Ni-63	2.50E+03	Recommended Ni-63 concentration (pCi/mL) in supernate.
Sr-90	2.60E-04	Multiplying constant by Supernate Rad Gamma (Ci/gal)
I-129	1.50E-07	Multiplying constant by Supernate Rad Gamma (Ci/gal)

In addition to the H-3 data estimated based on the above supernate algorithm, additional H-3 inventory in the supernate phase is added to Tanks 6 (620 Ci), 7 (9 Ci), 8 (230 Ci), and 33 (123 Ci).⁷

WCS does not track inventories of Th-232, U-232, U-233, U-234, U-235, U-236, U-238, Np-237, Pu-238, Pu-239, Pu-240, Pu-241, and Pu-242 in supernate phase for non-sludge tanks. Surrogate tank concentrations which are tracked in WCS are used to estimate the isotope inventories in the non-sludge tanks.

Table 2: Non-Sludge Tanks and Corresponding Surrogate Tanks

Tank	Surrogate tank
24	26
25	26
27	26
28	26
29	13
31	13
37	13
38	43
44	26
45	26
46	26
49	13
50	13

2.3.3 Inventory Estimates based on Cs-137

Soluble inventories of Ni-59, Nb-94, Ru-106, Rh-106, Sb-125, Cs-134, Cs-135, Ce-144, Pr-144, Pm-147, Eu-154, Am-241, Am-242m, Cm-244, and Cm-245 are determined based on reported solubility factors in Ref. 10 and/or ratio of the supernate and the sludge inventories of similar isotope. The solubility factor for each radioisotope is listed in Table 3 along with sludge, total, and soluble inventories. To determine these soluble inventories for each tank, total soluble inventory for each radionuclide is needed and calculated by multiplying the solubility factor by total dry sludge inventory then divided by the corresponding insoluble factor as listed in Table 3. With this, individual tank radionuclide soluble inventory is determined by multiplying the radionuclide total soluble inventory with the ratio of the individual tank's soluble Cs-137 to the total soluble Cs-137.

The equation for supernate inventory is as follows:

$$A_{i,k} (\text{Supernate} - Ci) = A_{\text{sludge total}-i} \times \frac{f_i}{1-f_i} \times \frac{A_{\text{Soluble Cs-137},k} (Ci)}{A_{\text{Soluble Cs-137 Total}} (Ci)} \quad [\text{Eq. 1}]$$

Where:

A: activity, Ci

i: radionuclide

f: solubility factor

k: tank

Total soluble inventories of Se-79 (89 Ci), Tc-99 (3.3E+04 Ci), Sn-126 (450 Ci) have been established⁸ and the individual tank radionuclide soluble inventories are determined by multiplying the radionuclide's total soluble inventory with the ratio of the tank's soluble Cs-137 to the total soluble Cs-137 inventory.

Inventories of additional radioisotopes Sm-151, Eu-152, Eu-155, Am-243, Cm-243, Cm-247, Cm-248, Bk-249, Cf-249, Cf-251, and Cf-252 are determined in a similar manner. To determine these soluble inventories for each tank, total soluble inventory for each radionuclide is needed and calculated by multiplying the solubility factor by the corresponding total tank farm inventory. The chemistry of the transcurium elements is very similar to the rare earths;⁹ their solubility factor of 0.001 is considered the same as of Pm-147. Equations [2, 3] are used with the solubility factors listed in Table 3 to compute the additional radionuclide inventories in sludge and supernate phases.

The equations for sludge and supernate are as follows:

$$A_{i,k} (\text{Sludge} - Ci) = A_{\text{total}-i} \times (1-f_i) \times \frac{A_{\text{Sludge Cs-137},k} (Ci)}{A_{\text{Sludge Cs-137 Total}} (Ci)} \quad [\text{Eq. 2}]$$

$$A_{i,k} (\text{Supernate} - Ci) = A_{\text{total}-i} \times f_i \times \frac{A_{\text{Supernate Cs-137},k} (Ci)}{A_{\text{Supernate Cs-137 Total}} (Ci)} \quad [\text{Eq. 3}]$$

Table 3: Soluble Inventory Estimates Based on Solubility

Nuclide	Solubility Factor, f, Ref. 10	Dry Sludge Total, Ci	Total Inventory, Ci	Soluble Inventory, Ci
Ni-59	9.09E-04*	2.64E+03	n/a	2.40E+00
Nb-94	1.00E-03	6.99E-01	n/a	7.00E-04
Ru-106	2.50E-01	6.83E+03	n/a	2.28E+03
Rh-106	2.50E-01	6.83E+03	n/a	2.28E+03
Sb-125	5.00E-02	1.75E+05	n/a	9.23E+03
Cs-134	9.54E-01**	1.05E+04	n/a	2.27E+05
Cs-135	9.54E-01**	1.79E+01	n/a	3.86E+02
Ce-144	1.00E-03	5.92E+03	n/a	5.93E+00
Pr-144	1.00E-03	5.92E+03	n/a	5.93E+00
Pm-147	1.00E-03	3.83E+06	n/a	3.84E+03
Eu-154	1.00E-03***	9.09E+05	n/a	9.10E+02
Sm-151	1.00E-03***	n/a	4.30E+06	4.30E+03
Eu-152	1.00E-03***	n/a	2.08E+04	2.08E+01
Eu-155	1.00E-03***	n/a	2.43E+05	2.43E+02
Am-241	1.00E-03***	3.63E+05 [@]	n/a	3.63E+02
Am-242m	1.00E-03***	2.09E+02	n/a	2.09E-01
Am-243	1.00E-03***	n/a	6.95E+01	6.95E-02
Cm-243	1.00E-03***	n/a	4.07E+01	4.07E-02
Cm-244	1.00E-03***	1.45E+05	n/a	1.45E+02
Cm-245	1.00E-03***	1.43E+01	n/a	1.43E-02
Cm-247	1.00E-03***	n/a	7.84E-09	7.84E-12
Cm-248	1.00E-03***	n/a	8.17E-09	8.17E-12
Bk-249	1.00E-03***	n/a	5.97E-16	5.97E-19
Cf-249	1.00E-03***	n/a	4.53E-08	4.53E-11
Cf-251	1.00E-03***	n/a	1.55E-09	1.55E-12
Cf-252	1.00E-03***	n/a	5.03E-11	5.03E-14

Note:

* based on Ni-63 ratio between sludge and supernate inventories

** Based on Cs-137 ratio between sludge and supernate inventories

*** Based on rare earths solubility (Pm-147)

@ Sum of ingrown and tank farm received inventories

2.4 Additional Isotopes

2.4.1 Na-22

Na-22 is not currently tracked in WCS 1.5. The entire amount of Na-22 in high level waste is very conservatively estimated to be 5,060 Ci.¹¹ The partitions of Na between the supernate, sludge and salt phases are 39.97 %, 0.22%, and 59.82%, respectively.¹ Therefore, the amount of the Na-22 in the each phase is established by multiplying the total inventory by the appropriate partition value. In order to distribute the total amount to each phase in the various tanks, the ratio of Cs-137 in each tank to the total amount of Cs-137 in the appropriate phase (i.e. 5.24E+06 Ci of Cs-137 in sludge) is used. The equations have been entered directly into the spreadsheet for each of the waste tanks

The equations for sludge, supernate and insoluble salt are as follows:

$$A_{Na-22}(Sludge - Ci) = 0.0022 \times 5,060 Ci \times \frac{A_{Sludge Cs-137}(Ci)}{A_{Sludge Cs-137 Total}(Ci)} \quad [Eq. 4]$$

$$A_{Na-22}(Supernate - Ci) = 0.3997 \times 5,060 Ci \times \frac{A_{Supernate Cs-137}(Ci)}{A_{Supernate Cs-137 Total}(Ci)} \quad [Eq. 5]$$

$$A_{Na-22}(Insolubles - Ci) = 0.5982 \times 5,060 Ci \times \frac{A_{Insoluble Cs-137}(Ci)}{A_{Insoluble Cs-137 Total}(Ci)} \quad [Eq. 6]$$

2.4.2 Al-26

Al-26 is not currently tracked in Sludge 1.5. The entire amount of Al-26 in high level waste is very conservatively estimated to be 29.4 Ci.¹² The partitions of Al between the supernate, sludge and salt phases are 44%, 20%, and 36%, respectively.¹ Therefore, the amount of the Al-26 in each phase is found by multiplying the total inventory by the appropriate partition value. In order to apportion this amount to each phase in the various tanks, the ratio of Cs-137 in each tank to the total amount of Cs-137 in the appropriate phase is used. The equations have been entered directly into the spreadsheet for each of the waste tanks

The equations for sludge, supernate and insoluble salt are as follows:

$$A_{Al-26}(Sludge - Ci) = 0.2 \times 29.4 Ci \times \frac{A_{Sludge Cs-137}(Ci)}{A_{Sludge Cs-137 Total}(Ci)} \quad [Eq. 7]$$

$$A_{Al-26}(Supernate - Ci) = 0.44 \times 29.4 Ci \times \frac{A_{Supernate Cs-137}(Ci)}{A_{Supernate Cs-137 Total}(Ci)} \quad [Eq. 8]$$

$$A_{Al-26}(Insolubles - Ci) = 0.36 \times 29.4 Ci \times \frac{A_{Insoluble Cs-137}(Ci)}{A_{Insoluble Cs-137 Total}(Ci)} \quad [Eq. 9]$$

2.4.3 Te-125m, Sb-126 and Sb-126m

The Te-125m, Sb-126, and Sb-126m are not currently tracked in WCS 1.5. However, methods to estimate inventories of these radionuclides have been developed based on the activity of other nuclides.² The basis is that Sb-126m is in secular equilibrium with Sn-126, fourteen percent of Sb-126m decays to Sb-126 and approximately 25% of the Sb-125 decays to Te-125m. The equations for the activity of each

of these nuclides have been entered directly into the spreadsheet for each of the waste tanks. The equations are as follows:

$$A_{Sb-126m}(t) = A_{Sn-126}(t) \quad [\text{Eq. 10}]$$

$$A_{Sb-126}(t) = 0.14 \times A_{Sb-126m}(t) \quad [\text{Eq. 11}]$$

$$A_{Te-125m}(t) = A_{Sb-125}(t) / 4.095 \quad [\text{Eq. 12}]$$

2.4.4 Cm-242

Cm-242 is not currently tracked in WCS 1.5. Based on decay chain information,² the Cm-242 inventory is set equal to 82% of the Am-242m inventory which is tracked in WCS for sludge and supernate phases. The equations for the sludge and supernate phase estimates have been entered directly into the spreadsheet for each of the 51 waste tanks.

$$A_{Cm-242}(Ci) = 0.83 \times A_{Am-242m}(Ci) \quad [\text{Eq. 13}]$$

2.4.5 Decay Chain from Actinides

Actinide inventories for Ra-226, Ra-228, Ac-227, Th-229, Th-230, and Pa-231 are not currently tracked in WCS. The equations for radioactive decay series are utilized to estimate the inventories of these actinides.¹³ The equations for daughter and granddaughter products are written in terms of the appropriate parent nuclide. The age of the waste, t, is assumed to be 30 years old. The equations for the activity of each of these nuclides have been entered directly into the spreadsheet for each of the waste tanks.

Th-230 and Ra-226

Th-230 and Ra-226 are respectively the daughter and granddaughter of U-234 which is tracked in WCS. The inventories of these progeny are estimated by using the following equations and the activity of U-234 in each waste phase.

$$A_{Th-230}(t) = 1.442 A_{U-234}(t) \left[1 - \left(\frac{1}{2} \right)^{9.1976 \times 10^{-6} t} \right] \quad [\text{Eq. 14}]$$

$$A_{Ra-226}(t) = 1.4514 A_{U-234}(t) \left[1 - 1.015 \left(\frac{1}{2} \right)^{9.1976 \times 10^{-6} t} + 0.015 \left(\frac{1}{2} \right)^{6.2133 \times 10^{-4} t} \right] \quad [\text{Eq. 15}]$$

Ra-228

Ra-228 is in secular equilibrium with Th-232 which is tracked in WCS. The Ra-228 activity is set to equal the Th-232 activity

$$A_{Ra-228}(t) = A_{Th-232}(t) \quad [Eq. 16]$$

Th-229

Th-229 is the daughter of U-233 which is tracked in WCS. The inventory is estimated by using the following equation.

$$A_{Th-229}(t) = 1.0481 A_{U-233}(t) \left[1 - \left(\frac{1}{2} \right)^{1.307 \times 10^{-4} t} \right] \quad [Eq. 17]$$

Pa-231 and Ac-227

Pa-231 and Ac-227 are, respectively, the daughter and granddaughter of U-235 which is tracked in WCS. The inventories are estimated by using equations [5] and [6].

$$A_{Pa-231}(t) = A_{U-235}(t) \left[1 - \left(\frac{1}{2} \right)^{3.0488 \times 10^{-5} t} \right] \quad [Eq. 18]$$

$$A_{Ac-227}(t) = A_{U-235}(t) \left[1 - 1.00066 \left(\frac{1}{2} \right)^{3.0488 \times 10^{-5} t} + 6.6 \times 10^{-4} \left(\frac{1}{2} \right)^{4.5926 \times 10^{-2} t} \right] \quad [Eq. 19]$$

Pu-244

The Pu-244 predicted sludge inventory is bound (on a mass basis) by the Pu-242 sludge inventory.¹⁴ The inventory is determined using the following equation:

$$A_{Pu-244}(t) = A_{Pu-242}(t) \times \frac{kg_{Pu-24}}{3.82 Ci_{Pu-242}} \times \frac{1 kg_{Pu-242}}{1 kg_{Pu-244}} \times \frac{1.81 \times 10^{-2} Ci_{Pu-244}}{kg_{Pu-244}} \quad [Eq. 20]$$

2.5 Special Tanks: 17, 18, 19, 20, 23, 48, and 50

Tanks 17, 18, 19, and 20

Since this document projects tank radionuclide inventories that will be sent to saltstone for final disposal, closed (Tanks 17, 20) and ready to be closed tanks (Tanks 18, 19) residual radionuclide inventories are not included. Complete characterization of the tank residual material can be found in References 15, 16, 17, 18.

Tank 23

WCS reports zero inventories of major sludge radionuclides in Tank 23 except for Co-60, Cs-134, and Cs-137. Data of Tank 23 WAC sample analysis¹⁹ are utilized in estimating soluble inventory for certain

analyzed radionuclides. Predicted soluble inventory based on the WAC sample Cs-137 inventory is selected when it is smaller than the less than detectable inventory.

Tank 48

Tank 48 contains 238,000 gal of slurry which is the product of the in-tank-precipitation process. The slurry is different from the typical sludge found in other tanks, in that its slurry can not be divided into two distinct phases of sludge and supernate. Inventories of Sr-90, Cs-137, U-233, U-234, U-235, U-236, U-238, Np-237, Pu-238, and Pu-239 are based on slurry sample analysis.²⁰ Slurry concentrations were not analyzed for Tc-99, Pu-240, and Pu-241; since it is not feasible to portion the sludge and supernate appropriately, these values are not utilized in estimating the slurry radionuclide inventory. Instead, the analyzed Cs-137, U-234, and U-235 are used for computing (as described in the Supernate Section) the slurry inventory for other nuclides.

Tank 50

Data from the Tank 50 WAC sample analysis²¹ are utilized in estimating soluble inventories for certain analyzed radionuclides. Predicted soluble inventory based on the WAC sample Cs-137 inventory is selected when it is smaller than the less than detectable inventory. The tank solids radionuclide inventory is not tracked in WCS.

Other radionuclide inventories in these tanks are determined in a similar fashion as described in the Supernate Section with exception that sample result inventory of Cs-137 (except Tank 50) are used instead of the corresponding WCS inventories.

3. *References*

-
- ¹. Tran, H. Q., 5/1/05 - May Monthly WCS Curie and Volume Inventory Report, CBU-PIT-2005-00108, Rev. 0, May 1, 2005.
 - ². Tran, H. Q., Compilation of Additional Radionuclide Data for SRS HLW Sludge to be Included in Waste Characterization System (WCS II), CBU-PIT-2005-00034, Rev. 0, March 1, 2005.
 - ³. Hester, J. R., High Level Waste Characterization System (WCS), WSRC-TR-96-0264, February 1997.
 - ⁴. Hester, J. R., WCS Supernate Radionuclide Concentration Algorithms, X-ESR-G-00004, Rev. A, August 31, 2004.
 - ⁵. Rios-Armstrong, M. A., Waste Characterization System (WCS) Supernate Baseline Composition Development in Support of Integrated Flowsheet Modeling Efforts, WSRC-TR-2004-00375, Rev. 1, September 2004.
 - ⁶. Tran, H. Q., Supernatant Phase Iodine-129 Inventory, CBU-PIT-2005-00050, Rev. 0, February 28, 2005.
 - ⁷. Nguyen, Q. L., Tracking Tritium Curies Originally Transferred from K-Reactor, CBU-PIT-2005-00049, March 15, 2005.
 - ⁸. Hill, P. J., Soluble Phase Selenium-79, Technetium-99, and Tin-126 Inventories, CBU-PIT-2005-00127, May 23, 2005.
 - ⁹. <http://library.lanl.gov/cgi-bin/getfile?rc000055.pdf>

-
- ¹⁰. Georgeton, G. K., and Hester, J. R., Characterization of Radionuclides in HLW Sludge Based on Isotopic Distribution in Irradiated Assemblies, WSRC-TR-94-0562, Rev. 1, January 27, 1995.
 - ¹¹. Hutchens, G. J., Estimate of Na-22 Abundance in SRS High Level Waste, CBU-PIT-2005-00097, Rev. 0, April 21, 2005.
 - ¹². Hutchens, G. J., Estimate of Al-26 Abundance in SRS High Level Waste, CBU-PIT-2005-00041, Rev. 0, March 30, 2005.
 - ¹³. Hutchens, G. J., Estimate of Actinide Concentration by Radioactive Decay, CBU-PIT-2005-00040, Rev. 0, March 15, 2005
 - ¹⁴. Hutchens, G. J., Estimate of Pu-244 Abundance in SRS High Level Waste Sludge, CBU-PIT-2005-00039, Rev. 0, March 10, 2005
 - ¹⁵. d'Entremont, P. D., *et al.*, Characterization of Tank 17 Residual Waste, WSRC-TR-97-0066, Rev. 1, September 1997.
 - ¹⁶. Tran, H. Q., Tank 18F Residual Material Radionuclide Inventories, CBU-PIT-2005-00067, Rev. 2, April 18, 2005.
 - ¹⁷. Tran, H. Q., Tank 19F Residual Material Radionuclide Inventories, CBU-PIT-2005-00068, Rev. 3, March 31, 2005.
 - ¹⁸. d'Entremont, P. D., and J. R. Hester, Characterization of Tank 20 Residual Waste, WSRC-TR-96-0267, Rev. 0, March 1997.
 - ¹⁹. Oji, L. N., Characterization of Tank 23H Supernate Per Saltstone Waste Acceptance Criteria Analysis Requirements - 2005, WSRC-TR-2005-00192, Rev. 0, May 5, 2005.
 - ²⁰. Kentusky, E. T., Tank 48 Radionuclide Characterization, CBU-PIT-2005-00046, Rev. 0, February 24, 2005.
 - ²¹. Oji, L. N., and McCabe, D. J., Characterization of Tank 50H Material Per Saltstone Waste Acceptance Criteria Analysis Requirements - 2005, WSRC-TR-2004-00625, Rev. 2, March 16, 2005.

Appendix A

Radioisotope Inventories by Tank for dry sludge, insoluble salt, and soluble phases.

Dry Sludge Inventory: Table 4

Insoluble Salt Inventory: Table 5

Soluble Inventory: Table 6

Less Conservative Soluble Actinide Inventory: Table 7

Table 4: Dry Sludge Radioisotope Inventory by Tank

Tank	Sludge Volume, gal	H-3 (Ci)	C-14 (Ci)	Co-60 (Ci)	Ni-59 (Ci)	Ni-63 (Ci)	Se-79 (Ci)	Sr-90 (Ci)	Y-90 (Ci)	Nb-94 (Ci)	Tc-99 (Ci)	Ru-106 (Ci)	Rh-106 (Ci)	Sb-125 (Ci)	Sn-126 (Ci)	I-129 (Ci)	Cs-134 (Ci)	Cs-135 (Ci)	Cs-137 (Ci)	
1	7.05E+03	-	1.20E-02	1.87E+02	2.16E+01	1.77E+03	1.50E+01	5.20E+05	5.20E+05	1.13E-02	2.60E+02	4.48E-06	4.48E-06	1.14E+01	2.80E+01	1.24E-03	1.07E-02	1.74E-01	3.68E+04	
2	4.07E+03	-	2.86E-03	1.36E+01	3.37E+00	2.68E+02	2.31E+00	7.11E+04	7.11E+04	1.73E-03	3.99E+01	3.09E-09	3.09E-09	3.34E-01	4.29E+00	1.90E-04	1.60E-04	2.67E-02	5.07E+03	
3	4.07E+03	-	2.40E-03	1.50E+01	2.82E+00	2.27E+02	1.93E+00	6.24E+04	6.24E+04	1.45E-03	3.34E+01	2.04E-08	2.04E-08	5.01E-01	3.59E+00	1.59E-04	3.03E-04	2.24E-02	4.44E+03	
4	1.27E+05	-	3.34E-03	4.21E+03	1.00E+02	8.77E+03	7.16E+01	3.16E+06	3.16E+06	5.37E-02	1.24E+03	2.09E-01	2.09E-01	1.41E+03	1.33E+02	5.90E-03	4.22E+00	8.29E-01	2.21E+05	
5	3.06E+04	-	4.43E-02	1.34E+03	9.82E+01	8.23E+03	6.86E+01	2.58E+06	2.58E+06	5.14E-02	1.19E+03	2.10E-04	2.10E-04	1.25E+02	1.28E+02	5.66E-03	1.56E-01	7.95E-01	1.82E+05	
6	2.49E+04	-	-	2.00E+03	9.30E+01	8.01E+03	6.66E+01	2.74E+06	2.74E+06	4.99E-02	1.15E+03	1.30E-03	1.30E-03	2.54E+02	1.24E+02	5.49E-03	3.88E-01	7.71E-01	1.93E+05	
7	1.97E+04	-	5.39E-02	1.13E+02	9.73E+00	8.22E+02	4.96E+00	1.84E+05	1.84E+05	3.66E-03	8.58E+01	6.44E-04	6.44E-04	1.81E+01	9.23E+00	4.09E-04	3.62E-02	5.74E-02	1.30E+04	
8	4.10E+03	-	1.96E-03	2.80E+01	1.03E+00	8.98E+01	6.62E-01	2.84E+04	2.84E+04	4.94E-04	1.14E+01	2.18E-04	2.18E-04	5.56E+00	1.23E+00	5.45E-05	1.17E-02	7.66E-03	1.99E+03	
9	2.71E+03	-	3.09E-03	1.46E+01	3.64E+00	2.89E+02	2.49E+00	7.66E+04	7.66E+04	1.86E-03	4.31E+01	3.27E-09	3.27E-09	3.58E-01	4.63E+00	2.05E-04	1.71E-04	2.88E-02	5.47E+03	
10	2.71E+03	-	3.16E-04	1.65E+00	3.72E-01	2.97E+01	2.55E-01	7.98E+03	7.98E+03	1.91E-04	4.41E+00	6.20E-10	6.20E-10	4.46E-02	4.74E-01	2.10E-05	2.28E-05	2.95E-03	5.69E+02	
11	1.98E+04	-	2.00E-02	1.30E+03	2.24E+01	1.98E+03	1.24E+01	7.00E+05	7.00E+05	3.14E-03	2.10E+02	3.28E-03	3.28E-03	5.62E+01	1.14E+01	7.28E-04	2.60E+00	1.41E-01	3.86E+04	
12	1.43E+05	-	2.51E-01	9.26E+03	2.78E+02	2.39E+04	1.56E+02	7.77E+06	7.77E+06	4.89E-02	2.66E+03	1.05E-03	1.05E-03	2.32E+02	1.61E+02	9.61E-03	7.06E+00	1.78E+00	4.40E+05	
13	2.52E+05	-	1.74E-01	5.07E+03	2.60E+02	2.17E+04	1.65E+02	6.92E+06	6.92E+06	7.56E-02	2.82E+03	5.26E-04	5.26E-04	1.24E+02	2.19E+02	1.14E-02	3.27E+00	1.89E+00	4.19E+05	
14	2.80E+04	-	1.17E-03	5.56E+01	7.35E+00	5.96E+02	5.05E+00	1.76E+05	1.76E+05	3.38E-03	8.72E+01	7.17E-08	7.17E-08	1.45E+00	8.64E+00	3.97E-04	3.93E-03	5.83E-02	1.19E+04	
15	3.12E+05	-	2.25E-01	6.96E+03	2.50E+02	2.13E+04	1.38E+02	6.79E+06	6.79E+06	3.51E-02	2.35E+03	1.67E-03	1.67E-03	1.50E+02	1.27E+02	8.12E-03	4.45E+00	1.57E+00	3.77E+05	
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
21	6.09E+03	-	3.01E-03	1.35E+02	1.03E+00	9.45E+01	7.79E-01	5.43E+04	5.43E+04	1.44E-04	1.34E+01	2.17E-01	2.17E-01	1.28E+01	7.13E-01	4.81E-05	1.28E+00	8.81E-03	3.07E+03	
22	9.98E+03	-	-	2.61E+02	2.13E+00	1.96E+02	1.66E+00	1.06E+05	1.06E+05	2.97E-04	2.80E+01	2.47E-03	2.47E-03	2.21E+01	1.51E+00	9.70E-05	1.29E+00	1.87E-02	5.80E+03	
23	5.61E+04	-	-	3.72E-01	-	-	-	-	-	-	-	-	-	-	-	-	1.12E-02	-	4.23E+02	
24	3.54E+03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
26	2.59E+05	-	5.46E-01	9.31E+02	3.21E+01	3.14E+03	2.66E+00	1.72E+05	1.72E+05	1.41E-03	4.61E+01	6.59E+01	6.59E+01	1.24E+03	4.93E+00	2.19E-04	9.94E+00	3.08E-02	1.18E+04	
27	3.86E+03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
30	6.32E+02	-	7.80E-04	3.20E+02	8.56E-01	8.41E+01	4.71E-01	3.81E+04	3.81E+04	1.20E-04	7.98E+00	1.93E-01	1.93E-01	6.23E+01	4.31E-01	2.76E-05	7.26E+00	5.33E-03	2.06E+03	
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
32	9.85E+04	-	2.45E-01	3.51E+04	2.70E+02	2.48E+04	1.49E+02	9.56E+06	9.56E+06	3.79E-02	2.53E+03	1.22E+01	1.22E+01	4.19E+03	1.36E+02	8.74E-03	4.30E+02	1.69E+00	5.23E+05	
33	8.42E+04	-	1.25E-01	5.00E+04	1.65E+02	1.63E+04	1.13E+02	7.62E+06	7.62E+06	8.47E-02	1.96E+03	3.94E+03	3.94E+03	8.24E+04	2.10E+02	9.32E-03	7.22E+02	1.31E+00	5.20E+05	
34	2.02E+04	-	-	3.26E+04	1.66E+02	1.61E+04	1.19E+02	7.37E+06	7.37E+06	8.92E-02	2.06E+03	2.22E+02	2.22E+02	2.323E+04	2.21E+02	9.80E-03	1.97E+02	1.38E+00	5.06E+05	
35	6.32E+04	-	2.03E-01	3.99E+04	2.23E+02	2.10E+04	1.23E+02	8.55E+06	8.55E+06	3.12E-02	2.08E+03	1.41E+01	1.41E+01	4.82E+03	1.12E+02	7.18E-03	4.67E+02	1.39E+00	4.65E+05	
36	1.86E+02	-	2.34E-04	3.42E+01	2.57E-01	2.39E+01	1.41E-01	9.45E+03	9.45E+03	3.60E-05	2.39E+00	2.82E-04	2.82E-04	2.56E+00	1.29E-01	8.28E-06	1.57E-01	1.60E-03	5.16E+02	
37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
39	1.04E+05	-	2.40E-01	1.24E+05	2.64E+02	2.60E+04	1.46E+02	1.20E+07	1.20E+07	3.70E-02	2.47E+03	2.48E+03	2.48E+03	4.10E+04	1.33E+02	8.54E-03	7.75E+03	1.65E+00	6.46E+05	
40	4.39E+05	-	5.26E-01	2.39E+03	1.46E+02	1.23E+04	8.35E+01	3.28E+06	3.23E+06	5.77E-02	1.44E+03	2.15E+00	1.31E-02	3.11E+02	1.47E+02	6.68E-03	2.50E+00	9.64E-01	2.25E+05	
41	2.67E+03	-	-	4.78E-01	2.07E-01	1.97E+01	1.61E-01	1.17E+04	1.17E+04	2.89E-05	2.72E+00	3.10E-03	3.10E-03	6.80E+00	1.47E-01	9.43E-06	5.49E-01	1.82E-03	6.33E+02	
42	1.76E+04	-	1.96E-02	3.33E+02	1.07E+01	9.20E+02	5.74E+00	2.87E+05	2.87E+05	1.44E-03	9.72E+01	1.05E-03	1.05E-03	1.24E+01	5.30E+00	3.38E-04	5.51E-01	6.50E-02	1.59E+04	
43	2.42E+05	-	1.95E-02	1.85E+04	3.43E+01	3.41E+03	2.18E+01	1.84E+06	1.84E+06	4.80E-03	3.69E+02	9.73E+01	9.73E+01	5.63E+03	1.99E+01	1.28E-03	8.81E+02	2.47E-01	9.90E+04	
44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
47	2.48E+05	-	4.32E-01	5.43E+02	2.54E+01	2.45E+03	2.10E+00	1.30E+05	1.30E+05	1.11E-03	3.65E+01	1.18E+00	1.18E+00	4.63E+02	3.90E+00	1.73E-04	2.44E+00	2.43E-02	8.91E+03	
48	1.81E+04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
51	1.39E+05	-	1.54E-01	8.68E+03	1.48E+02	5.69E+03	8.22E+01	4.60E+06	4.60E+06	1.03E-02	1.39E+03	1.52E-01	2.67E-02	3.91E+02	7.78E+01	4.88E-03	1.86E+01	9.32E-01	2.55E+05	
Phase Totals		2.80E+06	-	3.31E+00	3.44E+05	2.64E+03	2.30E+05	1.56E+03	8.74E+07	8.74E+07	6.99E-01	2.67E+04	6.83E+03	6.83E+03	1.75E+05	2.04E+03	1.07E-01	1.05E+04	1.79E+01	5.24E+06

Tank Radionuclide Inventories

CBU-PIT-2005-00138

Rev. 1

October 5, 2005

Table 4: Dry Sludge Radioisotope Inventory by Tank, continued

Tank	Sludge Volume, gal	Ba-137m (Ci)	Ce-144 (Ci)	Pr-144 (Ci)	Pm-147 (Ci)	Eu-154 (Ci)	Th-232 (Ci)	U-232 (Ci)	U-233 (Ci)	U-234 (Ci)	U-235 (Ci)	U-236 (Ci)	U-238 (Ci)	Np-237 (Ci)	Pu-238 (Ci)	Pu-239 (Ci)	Pu-240 (Ci)	Pu-241 (Ci)	Pu-242 (Ci)
1	7.05E+03	3.48E+04	4.72E-09	4.72E-09	1.58E+02	8.69E+02	-	1.14E-02	-	-	1.76E-02	-	4.39E-01	6.41E-01	4.97E+02	1.33E+02	2.97E+01	1.63E+02	6.12E-03
2	4.07E+03	4.80E+03	4.35E-13	4.35E-13	4.27E+00	8.82E+01	-	1.69E-03	-	-	8.12E-04	-	2.02E-02	2.12E-01	1.38E+02	1.98E+01	4.42E+00	1.85E+01	9.08E-04
3	4.07E+03	4.20E+03	7.13E-12	7.13E-12	6.59E+00	8.64E+01	-	1.44E-03	-	-	2.03E-03	-	5.06E-02	3.78E-01	1.66E+02	2.38E+01	5.31E+00	2.69E+01	1.09E-03
4	1.27E+05	2.09E+05	3.76E-03	3.76E-03	2.27E+04	9.86E+03	-	5.92E-02	-	-	7.77E-02	-	3.34E+00	2.98E+00	6.05E+02	5.98E+02	1.34E+02	1.13E+03	2.75E-02
5	3.06E+04	1.72E+05	4.13E-07	4.13E-07	1.79E+03	5.20E+03	-	5.38E-02	-	-	1.05E-01	-	2.48E+00	4.19E+00	2.89E+03	4.82E+02	1.15E+02	7.71E+02	3.40E-02
6	2.49E+04	1.82E+05	4.73E-06	4.73E-06	3.75E+03	6.64E+03	-	5.38E-02	-	-	6.65E-02	-	2.49E+00	8.63E-01	-	2.55E+02	8.84E+01	9.93E+02	1.74E-01
7	1.97E+04	1.23E+04	1.03E-05	1.03E-05	2.75E+02	3.85E+02	-	4.36E-03	-	-	2.04E-02	-	7.06E-01	3.51E-01	1.72E+03	3.10E+02	7.61E+01	7.28E+02	7.05E-02
8	4.10E+03	1.88E+03	3.62E-06	3.62E-06	8.53E+01	7.86E+01	-	5.63E-04	-	-	1.49E-03	-	6.84E-02	3.11E-02	8.90E+01	1.95E+01	4.60E+00	4.38E+01	5.80E-03
9	2.71E+03	5.17E+03	4.56E-13	4.56E-13	4.58E+00	9.49E+01	-	1.82E-03	-	-	1.18E-03	-	2.94E-02	2.01E-01	4.37E+01	6.24E+00	1.39E+00	5.79E+00	2.87E-04
10	2.71E+03	5.38E+02	1.13E-13	1.13E-13	5.75E-01	1.03E+01	-	1.87E-04	-	-	2.28E-04	-	5.69E-03	4.35E-02	2.21E+01	3.16E+00	7.06E-01	3.14E+00	1.45E-04
11	1.98E+04	3.65E+04	2.93E-04	2.93E-04	1.43E+03	6.73E+03	2.00E-03	-	2.85E-01	2.34E-01	4.41E-03	3.61E-02	8.17E-03	1.54E-01	2.09E+04	2.07E+02	1.30E+02	7.46E+03	2.77E-01
12	1.43E+05	4.16E+05	1.87E-05	1.87E-05	5.57E+03	5.78E+04	1.36E+00	1.37E-02	3.83E+01	3.58E+00	6.74E-02	2.84E-01	6.79E-01	7.94E+00	1.38E+05	2.32E+03	1.28E+03	3.25E+04	1.85E+00
13	2.52E+05	3.97E+05	1.06E-05	1.06E-05	2.82E+03	3.66E+04	1.98E-01	5.27E-02	4.06E+01	5.73E+00	1.57E-01	5.91E-01	1.83E+00	1.47E+01	5.39E+04	1.46E+03	6.03E+02	1.06E+04	4.00E-01
14	2.80E+04	1.13E+04	1.33E-10	1.33E-10	2.09E+01	3.92E+02	1.06E-02	3.14E-03	3.74E-01	5.13E-02	4.15E-03	4.41E-03	7.91E-02	5.48E-01	2.45E+02	6.04E+01	1.95E+01	9.88E+01	3.57E-03
15	3.12E+05	3.57E+05	1.29E-04	1.29E-04	3.60E+03	4.79E+04	1.13E+00	-	1.39E+01	3.79E+00	6.12E-02	3.59E-01	1.40E-03	3.55E+00	5.70E+04	1.22E+03	5.90E+02	1.22E+04	4.45E-01
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	6.09E+03	2.90E+03	3.09E-01	1.89E-04	3.60E+03	6.61E+02	5.67E-06	-	1.79E-01	1.91E-01	3.03E-03	3.50E-02	1.79E-02	1.58E-01	9.51E+02	1.40E+01	4.76E+00	8.35E+01	5.33E-04
22	9.98E+03	5.49E+03	1.99E-04	1.99E-04	5.78E+02	1.34E+03	-	-	1.07E+00	3.86E-01	5.91E-03	6.36E-02	1.31E-01	2.35E-01	1.59E+03	-	-	-	-
23	5.61E+04	4.00E+02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	3.54E+03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	2.59E+05	1.11E+04	3.11E+01	3.11E+01	2.25E+04	1.14E+03	-	8.82E-03	2.69E-08	8.57E-08	2.54E-02	3.27E-03	3.04E+00	7.85E-03	1.62E+04	2.54E+03	5.68E+02	1.34E+04	1.13E-01
27	3.86E+03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	6.32E+02	1.95E+03	6.72E-02	6.72E-02	1.78E+03	7.98E+02	-	-	-	1.83E-02	3.25E-04	3.37E-03	1.20E-05	8.25E-03	3.52E+03	3.06E+01	2.20E+01	2.26E+03	5.26E-02
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9.85E+04	4.94E+05	4.96E+00	4.96E+00	1.17E+05	1.26E+05	-	-	-	2.77E+00	3.97E-02	6.22E-01	1.86E-02	1.15E+00	4.02E+05	3.53E+03	2.62E+03	1.80E+05	5.53E+00
33	8.42E+04	4.92E+05	1.32E+03	1.32E+03	1.51E+06	5.59E+04	-	1.12E-01	5.39E-07	1.11E-02	2.09E-01	1.16E-01	3.02E+01	9.48E+00	1.55E+04	8.44E+03	1.48E+03	4.40E+04	8.57E-02
34	2.02E+04	4.78E+05	2.95E+01	2.95E+01	5.68E+05	4.46E+04	-	1.13E-01	-	-	1.14E-01	-	8.05E+00	6.22E+00	-	1.30E+03	2.91E+02	6.01E+03	6.03E-02
35	6.32E+04	4.40E+05	7.21E+00	7.21E+00	1.34E+05	1.31E+05	-	-	-	2.72E+00	4.72E-02	8.02E-01	2.79E-02	9.83E-01	4.07E+05	3.29E+03	2.52E+03	1.96E+05	5.66E+00
36	1.86E+02	4.88E+02	1.91E-05	1.91E-05	6.76E+01	1.29E+02	-	-	-	7.26E-03	1.41E-04	2.56E-03	4.60E-05	2.03E-03	6.29E+02	4.90E+00	3.90E+00	2.55E+02	8.42E-03
37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	1.04E+05	6.11E+05	4.44E+03	4.44E+03	1.24E+06	2.71E+05	-	-	-	1.12E+01	1.62E-01	1.93E+00	3.42E-02	7.05E+00	6.25E+05	7.78E+03	4.83E+03	5.55E+05	1.03E+01
40	4.39E+05	2.10E+05	9.04E-01	4.22E-04	5.05E+03	1.29E+04	5.67E-02	6.30E-02	1.61E+00	1.55E+00	2.93E-01	3.87E-01	9.17E+00	3.20E+01	2.93E+04	9.45E+03	3.58E+03	5.03E+04	1.81E+00
41	2.67E+03	5.99E+02	4.25E-04	4.25E-04	1.86E+02	1.92E+02	-	-	-	1.23E-02	1.43E-04	3.54E-03	9.78E-06	3.69E-02	2.02E+02	-	-	-	-
42	1.76E+04	1.51E+04	9.41E-05	9.41E-05	3.06E+02	2.15E+03	4.36E-02	1.54E-04	6.14E-01	2.26E-01	5.33E-03	3.02E-02	9.35E-02	1.86E-01	2.94E+03	1.05E+02	3.76E+01	6.43E+02	3.44E-02
43	2.42E+05	9.37E+04	8.95E+01	8.95E+01	1.67E+05	4.32E+04	-	-	-	3.41E+00	4.70E-02	6.49E-01	3.82E-03	3.63E+00	8.26E+04	3.26E+02	2.75E+02	7.07E+04	4.06E+00
44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	2.48E+05	8.43E+03	8.35E-02	8.35E-02	8.00E+03	7.67E+02	-	6.86E-03	-	-	1.86E-02	-	1.48E+00	-	1.58E+04	2.26E+03	5.06E+02	9.84E+03	1.04E-01
48	1.81E+04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51	1.39E+05	2.41E+05	5.57E-02	2.60E-03	9.94E+03	4.44E+04	1.52E-02	2.22E-03	1.84E+00	1.53E+00	3.99E-02	2.48E-01	3.64E-01	1.24E+00	1.34E+05	1.79E+03	1.01E+03	5.07E+04	1.83E+00
Phase Totals	2.80E+06	4.95E+06	5.92E+03	5.92E+03	3.83E+06	9.09E+05	2.82E+00	5.64E-01	9.87E+01	3.75E+01	1.60E+00	6.17E+00	6.49E+01	9.92E+01	2.01E+06	4.80E+04	2.08E+04	1.25E+06	3.29E+01

Tank Radionuclide Inventories

CBU-PIT-2005-00138

Rev. 1

October 5, 2005

Table 4: Dry Sludge Radioisotope Inventory by Tank, continued

Tank	Sludge Volume, gal	Am-241 (Ci)	Am-242m (Ci)	Cm-244 (Ci)	Cm-245 (Ci)	Na-22 (Ci)	Al-26 (Ci)	Te-125m (Ci)	Sb-126 (Ci)	Sb-126m (Ci)	Sm-151 (Ci)	Eu-152 (Ci)	Eu-155 (Ci)	Ra-226 (Ci)	Ra-228 (Ci)	Ac-227 (Ci)	Th-229 (Ci)	Th-230 (Ci)	Pa-231 (Ci)
1	7.05E+03	1.98E+03	2.43E+00	3.51E-01	4.27E-07	7.83E-02	4.13E-02	2.78E+00	3.91E+00	2.80E+01	3.02E+04	1.46E+02	1.71E+03	-	-	4.03E-06	-	-	1.12E-05
2	4.07E+03	3.01E+02	3.64E-01	4.47E-02	6.55E-08	1.08E-02	5.69E-03	8.16E-02	6.01E-01	4.29E+00	4.16E+03	2.01E+01	2.35E+02	-	-	1.85E-07	-	-	5.15E-07
3	4.07E+03	2.55E+02	3.08E-01	4.03E-02	5.49E-08	9.43E-03	4.98E-03	1.22E-01	5.03E-01	3.59E+00	3.64E+03	1.76E+01	2.06E+02	-	-	4.63E-07	-	-	1.29E-06
4	1.27E+05	1.00E+04	1.21E+01	1.59E+04	6.90E-01	4.69E-01	2.48E-01	3.45E+02	1.86E+01	1.33E+02	1.81E+05	8.75E+02	1.02E+04	-	-	1.77E-05	-	-	4.92E-05
5	3.06E+04	9.10E+03	1.13E+01	1.83E+00	1.95E-06	3.87E-01	2.04E-01	3.04E+01	1.79E+01	1.28E+02	1.49E+05	7.22E+02	8.44E+03	-	-	2.39E-05	-	-	6.64E-05
6	2.49E+04	8.96E+03	1.12E+01	1.38E+03	1.89E-06	4.09E-01	2.16E-01	6.21E+01	1.73E+01	1.24E+02	1.58E+05	7.64E+02	8.93E+03	-	-	1.52E-05	-	-	4.21E-05
7	1.97E+04	7.38E+02	7.70E-01	1.01E+03	8.89E-03	2.76E-02	1.46E-02	4.41E+00	1.29E+00	9.23E+00	1.06E+04	5.15E+01	6.01E+02	-	-	4.65E-06	-	-	1.29E-05
8	4.10E+03	1.02E+02	1.10E-01	1.83E+02	3.35E-03	4.22E-03	2.23E-03	1.36E+00	1.72E-01	1.23E+00	1.63E+03	7.89E+00	9.21E+01	-	-	3.39E-07	-	-	9.42E-07
9	2.71E+03	3.20E+02	3.93E-01	4.82E+02	7.07E-08	1.16E-02	6.14E-03	8.75E-02	6.48E-01	4.63E+00	4.48E+03	2.17E+01	2.53E+02	-	-	2.69E-07	-	-	7.47E-07
10	2.71E+03	3.36E+01	4.04E-02	5.07E-03	7.24E-09	1.21E-03	6.39E-04	1.09E-02	6.63E-02	4.74E-01	4.67E+02	2.26E+00	2.64E+01	-	-	5.21E-08	-	-	1.45E-07
11	1.98E+04	1.84E+03	1.15E+00	1.17E+02	7.47E-04	8.20E-02	4.33E-02	1.37E+01	1.59E+00	1.14E+01	3.16E+04	1.53E+02	1.79E+03	5.26E-07	2.00E-03	1.01E-06	8.09E-04	6.44E-05	2.79E-06
12	1.43E+05	1.78E+04	1.56E+01	2.16E+03	8.29E-03	9.34E-01	4.93E-01	5.67E+01	2.25E+01	1.61E+02	3.60E+05	1.74E+03	2.04E+04	8.08E-06	1.36E+00	1.54E-05	1.09E-01	9.89E-04	4.27E-05
13	2.52E+05	1.83E+04	1.93E+01	2.56E+03	5.61E-03	8.91E-01	4.71E-01	3.03E+01	3.06E+01	2.19E+02	3.44E+05	1.66E+03	1.94E+04	1.29E-05	1.98E-01	3.57E-05	1.15E-01	1.58E-03	9.93E-05
14	2.80E+04	6.34E+02	7.52E-01	3.57E-01	4.88E-05	2.54E-02	1.34E-02	3.54E-01	1.21E+00	8.64E+00	9.78E+03	4.73E+01	5.53E+02	1.16E-07	1.06E-02	9.47E-07	1.06E-03	1.41E-05	2.63E-06
15	3.12E+05	1.34E+04	1.25E+01	8.80E+02	8.32E-03	8.01E-01	4.23E-01	3.67E+01	1.77E+01	1.27E+02	3.09E+05	1.50E+03	1.75E+04	8.55E-06	1.13E+00	1.40E-05	3.95E-02	1.05E-03	3.88E-05
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	6.09E+03	5.92E+01	3.98E-01	1.38E+02	1.81E-02	6.52E-03	3.44E-03	3.12E+00	9.98E-02	7.13E-01	2.52E+03	1.22E+01	1.42E+02	4.30E-07	5.67E-06	6.91E-07	5.09E-04	5.26E-05	1.92E-06
22	9.98E+03	9.36E+01	1.12E-01	9.91E-01	9.94E-05	1.23E-02	6.52E-03	5.39E+00	2.12E-01	1.51E+00	4.76E+03	2.30E+01	2.69E+02	8.71E-07	-	1.35E-06	3.06E-03	1.07E-04	3.74E-06
23	5.61E+04	-	-	-	-	8.99E-04	4.75E-04	-	-	-	3.47E+02	1.68E+00	1.96E+01	-	-	-	-	-	-
24	3.54E+03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	2.59E+05	5.74E+02	-	1.64E-01	7.62E-08	2.50E-02	1.32E-02	3.04E+02	6.91E-01	4.93E+00	9.64E+03	4.66E+01	5.45E+02	1.93E-13	-	5.79E-06	7.64E-11	2.36E-11	1.61E-05
27	3.86E+03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	6.32E+02	1.48E+02	4.70E-02	4.05E-01	2.83E-05	4.37E-03	2.31E-03	1.52E+01	6.03E-02	4.31E-01	1.69E+03	8.17E+00	9.54E+01	4.12E-08	-	7.41E-08	-	5.04E-06	2.06E-07
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9.85E+04	2.69E+04	1.42E+01	8.95E+01	8.96E-03	1.11E+00	5.87E-01	1.02E+03	1.91E+01	1.36E+02	4.29E+05	2.07E+03	2.42E+04	6.25E-06	-	9.05E-06	-	7.65E-04	2.51E-05
33	8.42E+04	1.58E+04	2.07E+01	7.53E+00	3.21E-06	1.11E+00	5.84E-01	2.01E+04	2.95E+01	2.10E+02	4.27E+05	2.06E+03	2.41E+04	2.50E-08	-	4.76E-05	1.53E-09	3.06E-06	1.32E-04
34	2.02E+04	1.50E+05	2.15E+01	6.94E+00	3.38E-06	1.07E+00	5.68E-01	7.90E+03	3.10E+01	2.21E+02	4.15E+05	2.01E+03	2.34E+04	-	-	2.60E-05	-	-	7.23E-05
35	6.32E+04	2.44E+04	1.19E+01	8.37E+01	7.36E-03	9.89E-01	5.22E-01	1.18E+03	1.57E+01	1.12E+02	3.82E+05	1.85E+03	2.16E+04	6.13E-06	-	1.08E-05	-	7.50E-04	2.99E-05
36	1.86E+02	3.32E+01	1.36E-02	9.01E-02	8.49E-06	1.10E-03	5.79E-04	6.25E-01	1.81E-02	1.29E-01	4.23E+02	2.05E+00	2.39E+01	1.64E-08	-	3.21E-08	-	2.00E-06	8.91E-08
37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	1.04E+05	3.29E+04	1.45E+01	1.29E+02	8.75E-03	1.37E+00	7.26E-01	1.00E+04	1.87E+01	1.33E+02	5.30E+05	2.56E+03	3.00E+04	2.53E-05	-	3.70E-05	-	3.10E-03	1.03E-04
40	4.39E+05	1.26E+04	2.65E+01	1.14E+05	1.28E+01	4.78E-01	2.53E-01	7.60E+01	2.06E+01	1.47E+02	1.85E+05	8.93E+02	1.04E+04	3.50E-06	5.67E-02	6.68E-05	4.58E-03	4.28E-04	1.85E-04
41	2.67E+03	9.18E+00	1.12E-02	1.17E-01	9.66E-06	1.35E-03	7.11E-04	1.66E+00	2.06E-02	1.47E-01	5.19E+02	2.51E+00	2.93E+01	2.78E-08	-	3.26E-08	-	3.40E-06	9.05E-08
42	1.76E+04	5.59E+02	5.06E-01	2.41E+02	3.42E-04	3.39E-02	1.79E-02	3.03E+00	7.42E-01	5.30E+00	1.31E+04	6.32E+01	7.39E+02	5.09E-07	4.36E-02	1.22E-06	1.75E-03	6.23E-05	3.38E-06
43	2.42E+05	2.60E+03	1.90E+00	2.01E+01	1.31E-03	2.11E-01	1.11E-01	1.37E+03	2.79E+00	1.99E+01	8.12E+04	3.93E+02	4.59E+03	7.68E-06	-	1.07E-05	-	9.40E-04	2.98E-05
44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	2.48E+05	5.67E+02	-	1.21E-01	6.03E-08	1.89E-02	1.00E-02	1.13E+02	5.47E-01	3.90E+00	7.31E+03	3.53E+01	4.13E+02	-	-	4.25E-06	-	-	1.18E-05
48	1.81E+04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51	1.39E+05	1.21E+04	8.59E+00	6.83E+03	7.48E-01	5.42E-01	2.86E-01	9.55E+01	1.09E+01	7.78E+01	2.09E+05	1.01E+03	1.18E+04	3.45E-06	1.52E-02	9.11E-06	5.25E-03	4.22E-04	2.53E-05
Phase Totals	2.80E+06	3.63E+05	2.09E+02	1.45E+05	1.43E+01	1.11E+01	5.88E+00	4.28E+04	2.85E+02	2.04E+03	4.30E+06	2.08E+04	2.43E+05	8.44E-05	2.82E+00	3.64E-04	2.81E-01	1.03E-02	1.01E-03

Tank Radionuclide Inventories

CBU-PIT-2005-00138

Rev. 1

October 5, 2005

Table 4: Dry Sludge Radioisotope Inventory by Tank, continued

Tank	Sludge Volume, gal	Pu-244 (Ci)	Am-243 (Ci)	Cm-242 (Ci)	Cm-243 (Ci)	Cm-247 (Ci)	Cm-248 (Ci)	Bk-249 (Ci)	Cf-249 (Ci)	Cf-251 (Ci)	Cf-252 (Ci)	Dry Sludge Transferred Mass (Kg)	Sludge Interstitial Fraction
1	7.05E+03	2.80E-05	4.88E-01	2.02E+00	2.86E-01	5.51E-11	5.74E-11	4.19E-18	3.18E-10	1.09E-11	3.53E-13	1.13E+04	0.70
2	4.07E+03	4.15E-06	6.72E-02	3.02E-01	3.94E-02	7.58E-12	7.90E-12	5.77E-19	4.38E-11	1.50E-12	4.86E-14	1.58E+03	0.70
3	4.07E+03	5.00E-06	5.88E-02	2.55E-01	3.44E-02	6.63E-12	6.91E-12	5.05E-19	3.83E-11	1.31E-12	4.26E-14	3.06E+03	0.70
4	1.27E+05	1.26E-04	2.92E+00	1.01E+01	1.71E+00	3.30E-10	3.44E-10	2.51E-17	1.91E-09	6.52E-11	2.12E-12	6.55E+04	0.70
5	3.06E+04	1.55E-04	2.41E+00	9.36E+00	1.41E+00	2.72E-10	2.84E-10	2.07E-17	1.57E-09	5.38E-11	1.75E-12	5.76E+04	0.56
6	2.49E+04	7.96E-04	2.55E+00	9.26E+00	1.49E+00	2.88E-10	3.00E-10	2.19E-17	1.66E-09	5.69E-11	1.85E-12	3.87E+04	0.70
7	1.97E+04	3.22E-04	1.72E-01	6.39E-01	1.01E-01	1.94E-11	2.02E-11	1.48E-18	1.12E-10	3.84E-12	1.24E-13	4.09E+04	0.70
8	4.10E+03	2.65E-05	2.63E-02	9.13E-02	1.54E-02	2.97E-12	3.10E-12	2.26E-19	1.72E-11	5.88E-13	1.91E-14	1.80E+03	0.70
9	2.71E+03	1.31E-06	7.25E-02	3.26E-01	4.24E-02	8.17E-12	8.52E-12	6.22E-19	4.72E-11	1.62E-12	5.24E-14	1.52E+03	0.70
10	2.71E+03	6.64E-07	7.54E-03	3.35E-02	4.42E-03	8.51E-13	8.87E-13	6.48E-20	4.92E-12	1.68E-13	5.46E-15	3.14E+02	0.70
11	1.98E+04	1.27E-03	5.11E-01	9.53E-01	2.99E-01	5.77E-11	6.01E-11	4.39E-18	3.33E-10	1.14E-11	3.70E-13	1.73E+04	0.70
12	1.43E+05	8.45E-03	5.83E+00	1.30E+01	3.41E+00	6.57E-10	6.85E-10	5.01E-17	3.80E-09	1.30E-10	4.22E-12	1.90E+05	0.53
13	2.52E+05	1.83E-03	5.56E+00	1.60E+01	3.25E+00	6.27E-10	6.53E-10	4.77E-17	3.62E-09	1.24E-10	4.02E-12	4.18E+05	0.70
14	2.80E+04	1.63E-05	1.58E-01	6.24E-01	9.26E-02	1.78E-11	1.86E-11	1.36E-18	1.03E-10	3.53E-12	1.14E-13	4.12E+03	0.70
15	3.12E+05	2.03E-03	5.00E+00	1.04E+01	2.93E+00	5.64E-10	5.87E-10	4.29E-17	3.26E-09	1.11E-10	3.62E-12	1.66E+05	0.48
16	-	-	-	-	-	-	-	-	-	-	-	-	0.70
21	6.09E+03	2.44E-06	4.07E-02	3.30E-01	2.38E-02	4.59E-12	4.78E-12	3.49E-19	2.65E-11	9.07E-13	2.94E-14	6.39E+03	0.70
22	9.98E+03	-	7.69E-02	9.32E-02	4.51E-02	8.68E-12	9.05E-12	6.61E-19	5.02E-11	1.72E-12	5.57E-14	1.70E+04	0.70
23	5.61E+04	-	5.61E-03	-	3.28E-03	6.33E-13	6.59E-13	4.82E-20	3.66E-12	1.25E-13	4.06E-15	4.03E+04	0.70
24	3.54E+03	-	-	-	-	-	-	-	-	-	-	-	0.70
25	-	-	-	-	-	-	-	-	-	-	-	-	0.70
26	2.59E+05	5.17E-04	1.56E-01	-	9.13E-02	1.76E-11	1.83E-11	1.34E-18	1.02E-10	3.48E-12	1.13E-13	1.59E+05	0.70
27	3.86E+03	-	-	-	-	-	-	-	-	-	-	-	0.70
28	-	-	-	-	-	-	-	-	-	-	-	-	0.70
29	-	-	-	-	-	-	-	-	-	-	-	-	0.70
30	6.32E+02	2.41E-04	2.73E-02	3.90E-02	1.60E-02	3.08E-12	3.21E-12	2.34E-19	1.78E-11	6.09E-13	1.97E-14	5.44E+02	0.70
31	-	-	-	-	-	-	-	-	-	-	-	-	0.70
32	9.85E+04	2.53E-02	6.93E+00	1.18E+01	4.06E+00	7.82E-10	8.14E-10	5.95E-17	4.52E-09	1.55E-10	5.01E-12	1.96E+05	0.70
33	8.42E+04	3.92E-04	6.90E+00	1.72E+01	4.04E+00	7.78E-10	8.11E-10	5.93E-17	4.50E-09	1.54E-10	4.99E-12	2.42E+05	0.70
34	2.02E+04	2.76E-04	6.70E+00	1.79E+01	3.93E+00	7.56E-10	7.88E-10	5.76E-17	4.37E-09	1.50E-10	4.85E-12	7.71E+04	0.70
35	6.32E+04	2.59E-02	6.17E+00	9.87E+00	3.61E+00	6.96E-10	7.25E-10	5.30E-17	4.02E-09	1.38E-10	4.46E-12	1.39E+05	0.70
36	1.86E+02	3.85E-05	6.84E-03	1.13E-02	4.00E-03	7.71E-13	8.04E-13	5.87E-20	4.46E-12	1.52E-13	4.95E-15	1.63E+02	0.70
37	-	-	-	-	-	-	-	-	-	-	-	-	0.70
38	-	-	-	-	-	-	-	-	-	-	-	-	0.70
39	1.04E+05	4.71E-02	8.57E+00	1.21E+01	5.02E+00	9.66E-10	1.01E-09	7.36E-17	5.58E-09	1.91E-10	6.20E-12	1.17E+05	0.70
40	4.39E+05	8.26E-03	2.98E+00	2.20E+01	1.75E+00	3.37E-10	3.51E-10	2.56E-17	1.94E-09	6.65E-11	2.16E-12	4.04E+05	0.70
41	2.67E+03	-	8.39E-03	9.28E-03	4.92E-03	9.47E-13	9.87E-13	7.21E-20	5.47E-12	1.87E-13	6.08E-15	2.36E+03	0.70
42	1.76E+04	1.57E-04	2.11E-01	4.20E-01	1.24E-01	2.38E-11	2.48E-11	1.81E-18	1.38E-10	4.71E-12	1.53E-13	1.80E+04	0.80
43	2.42E+05	1.86E-02	1.31E+00	1.58E+00	7.69E-01	1.48E-10	1.54E-10	1.13E-17	8.56E-10	2.93E-11	9.50E-13	9.21E+04	0.70
44	-	-	-	-	-	-	-	-	-	-	-	-	0.70
45	-	-	-	-	-	-	-	-	-	-	-	-	0.70
46	-	-	-	-	-	-	-	-	-	-	-	-	0.70
47	2.48E+05	4.76E-04	1.18E-01	-	6.92E-02	1.33E-11	1.39E-11	1.01E-18	7.70E-11	2.63E-12	8.55E-14	1.38E+05	0.70
48	1.81E+04	-	-	-	-	-	-	-	-	-	-	-	0.70
49	-	-	-	-	-	-	-	-	-	-	-	-	0.70
50	-	-	-	-	-	-	-	-	-	-	-	-	0.70
51	1.39E+05	8.37E-03	3.38E+00	7.13E+00	1.98E+00	3.81E-10	3.97E-10	2.90E-17	2.20E-09	7.54E-11	2.45E-12	1.24E+05	0.80
Phase Totals	2.80E+06	1.51E-01	6.94E+01	1.74E+02	4.07E+01	7.83E-09	8.16E-09	5.96E-16	4.53E-08	1.55E-09	5.02E-11	2.79E+06	-

Table 5: Insoluble Salt Radionuclide Inventory by Tank

Tank	Salt Volume, gal	H-3 (Ci)	C-14 (Ci)	Sr-90 (Ci)	Y-90 (Ci)	Cs-137 (Ci)	Ba-137m (Ci)	U-235 (Ci)	U-238 (Ci)	Pu-238 (Ci)	Pu-239 (Ci)	Na-22 (Ci)	Al-26 (Ci)	Ac-227 (Ci)	Pa-231 (Ci)
1	4.80E+05	-	1.10E+01	1.71E+05	1.71E+05	7.63E+03	7.22E+03	6.72E-03	1.51E-01	2.18E+03	7.27E+01	8.96E+01	3.13E-01	1.53E-06	4.26E-06
2	5.36E+05	-	1.23E+01	1.91E+05	1.91E+05	8.52E+03	8.06E+03	7.51E-03	1.68E-01	2.43E+03	8.12E+01	1.00E+02	3.50E-01	1.71E-06	4.76E-06
3	5.36E+05	-	1.23E+01	1.91E+05	1.91E+05	8.52E+03	8.06E+03	7.51E-03	1.68E-01	2.43E+03	8.12E+01	1.00E+02	3.50E-01	1.71E-06	4.76E-06
4	3.39E+04	-	7.75E-01	1.21E+04	1.21E+04	5.39E+02	5.09E+02	4.74E-04	1.06E-02	1.54E+02	5.13E+00	6.32E+00	2.21E-02	1.08E-07	3.01E-07
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	5.34E+05	-	1.22E+01	1.90E+05	1.90E+05	8.49E+03	8.03E+03	7.48E-03	1.68E-01	2.43E+03	8.08E+01	9.97E+01	3.49E-01	1.71E-06	4.74E-06
10	2.11E+05	-	4.83E+00	7.52E+04	7.52E+04	3.36E+03	3.18E+03	2.96E-03	6.64E-02	9.60E+02	3.20E+01	3.95E+01	1.38E-01	6.76E-07	1.88E-06
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	6.00E+04	-	1.37E+00	2.13E+04	2.13E+04	9.54E+02	9.02E+02	8.40E-04	1.89E-02	2.73E+02	9.08E+00	1.12E+01	3.92E-02	1.92E-07	5.33E-07
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	1.30E+05	-	2.96E+00	4.61E+04	4.61E+04	2.06E+03	1.95E+03	1.81E-03	4.07E-02	5.88E+02	1.96E+01	2.42E+01	8.45E-02	4.14E-07	1.15E-06
15	1.50E+05	-	3.42E+00	5.32E+04	5.32E+04	2.38E+03	2.25E+03	2.09E-03	4.70E-02	6.79E+02	2.26E+01	2.79E+01	9.76E-02	4.78E-07	1.33E-06
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	1.10E+06	-	2.51E+01	3.91E+05	3.91E+05	1.75E+04	1.65E+04	1.54E-02	3.45E-01	4.99E+03	1.66E+02	2.05E+02	7.17E-01	3.51E-06	9.75E-06
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	6.00E+05	-	1.37E+01	2.14E+05	2.14E+05	9.54E+03	9.03E+03	8.41E-03	1.89E-01	2.73E+03	9.09E+01	1.12E+02	3.92E-01	1.92E-06	5.33E-06
28	1.03E+06	-	2.35E+01	3.66E+05	3.66E+05	1.64E+04	1.55E+04	1.44E-02	3.24E-01	4.68E+03	1.56E+02	1.92E+02	6.72E-01	3.29E-06	9.14E-06
29	1.02E+06	-	2.34E+01	3.64E+05	3.64E+05	1.63E+04	1.54E+04	1.43E-02	3.21E-01	4.65E+03	1.55E+02	1.91E+02	6.68E-01	3.27E-06	9.08E-06
30	2.50E+05	-	5.71E+00	8.88E+04	8.88E+04	3.97E+03	3.75E+03	3.50E-03	7.84E-02	1.13E+03	3.78E+01	4.66E+01	1.63E-01	7.98E-07	2.22E-06
31	1.15E+06	-	2.62E+01	4.08E+05	4.08E+05	1.82E+04	1.72E+04	1.61E-02	3.60E-01	5.21E+03	1.74E+02	2.14E+02	7.49E-01	3.66E-06	1.02E-05
32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	2.94E+05	-	6.72E+00	1.05E+05	1.05E+05	4.67E+03	4.42E+03	4.11E-03	9.23E-02	1.33E+03	4.45E+01	5.49E+01	1.92E-01	9.39E-07	2.61E-06
34	1.91E+05	-	4.37E+00	6.81E+04	6.81E+04	3.04E+03	2.88E+03	2.68E-03	6.01E-02	8.69E+02	2.90E+01	3.57E+01	1.25E-01	6.11E-07	1.70E-06
35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	1.04E+06	-	2.37E+01	3.68E+05	3.68E+05	1.65E+04	1.56E+04	1.45E-02	3.25E-01	4.70E+03	1.57E+02	1.93E+02	6.76E-01	3.31E-06	9.19E-06
37	1.14E+06	-	2.62E+01	4.07E+05	4.07E+05	1.82E+04	1.72E+04	1.60E-02	3.60E-01	5.20E+03	1.73E+02	2.14E+02	7.47E-01	3.66E-06	1.02E-05
38	8.28E+05	-	1.89E+01	2.95E+05	2.95E+05	1.32E+04	1.25E+04	1.16E-02	2.60E-01	3.76E+03	1.25E+02	1.55E+02	5.41E-01	2.65E-06	7.35E-06
39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	1.09E+06	-	2.50E+01	3.89E+05	3.89E+05	1.74E+04	1.64E+04	1.53E-02	3.43E-01	4.96E+03	1.65E+02	2.04E+02	7.13E-01	3.49E-06	9.70E-06
42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	1.00E+06	-	2.29E+01	3.57E+05	3.57E+05	1.59E+04	1.51E+04	1.40E-02	3.15E-01	4.56E+03	1.52E+02	1.87E+02	6.55E-01	3.21E-06	8.90E-06
45	1.10E+06	-	2.53E+01	3.93E+05	3.93E+05	1.76E+04	1.66E+04	1.55E-02	3.47E-01	5.02E+03	1.67E+02	2.06E+02	7.21E-01	3.53E-06	9.81E-06
46	8.65E+05	-	1.98E+01	3.08E+05	3.08E+05	1.38E+04	1.30E+04	1.21E-02	2.72E-01	3.93E+03	1.31E+02	1.62E+02	5.65E-01	2.76E-06	7.68E-06
47	8.35E+05	-	1.91E+01	2.97E+05	2.97E+05	1.33E+04	1.26E+04	1.17E-02	2.62E-01	3.79E+03	1.26E+02	1.56E+02	5.45E-01	2.67E-06	7.41E-06
48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	2.99E+02	-	6.84E-03	1.06E+02	1.06E+02	4.75E+00	4.50E+00	4.19E-06	9.39E-05	1.36E+00	4.53E-02	5.58E-02	1.95E-04	9.56E-10	2.65E-09
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase Totals	1.62E+07	-	3.71E+02	5.77E+06	5.77E+06	2.58E+05	2.44E+05	2.27E-01	5.09E+00	7.36E+04	2.45E+03	3.03E+03	1.06E+01	5.18E-05	1.44E-04

Tank Radionuclide Inventories

CBU-PIT-2005-00138

Rev. 1

October 5, 2005

Table 6: Soluble Radionuclide Inventory by Tank

Tank	Total Supernate Volume, gal	H-3 (Ci)	C-14 (Ci)	Co-60 (Ci)	Ni-59 (Ci)	Ni-63 (Ci)	Se-79 (Ci)	Sr-90 (Ci)	Y-90 (Ci)	Nb-94 (Ci)	Tc-99 (Ci)	Ru-106 (Ci)	Rh-106 (Ci)	Sb-125 (Ci)	Sn-126 (Ci)	I-129 (Ci)
1	1.66E+05	6.28E+01	1.11E+00	6.47E-01	6.97E-02	1.57E+00	2.58E+00	8.09E+02	8.09E+02	2.03E-05	9.58E+02	6.61E+01	6.61E+01	2.68E+02	1.31E+01	5.17E-01
2	1.64E+05	6.20E+01	1.09E+00	6.38E-01	2.55E-02	1.55E+00	9.45E-01	2.96E+02	2.96E+02	7.43E-06	3.50E+02	2.42E+01	2.42E+01	9.80E+01	4.78E+00	1.89E-01
3	1.64E+05	6.20E+01	1.09E+00	6.38E-01	2.59E-02	1.55E+00	9.58E-01	3.00E+02	3.00E+02	7.53E-06	3.55E+02	2.45E+01	2.45E+01	9.93E+01	4.84E+00	1.92E-01
4	3.99E+05	1.51E+02	2.66E+00	1.55E+00	7.43E-02	3.77E+00	2.75E+00	8.62E+02	8.62E+02	2.16E-05	1.02E+03	7.04E+01	7.04E+01	2.85E+02	1.39E+01	5.50E-01
5	1.71E+04	6.49E+00	1.14E-01	6.69E-02	6.55E-04	1.62E-01	2.43E-02	7.60E+00	7.60E+00	1.91E-07	9.00E+00	6.21E-01	6.21E-01	2.52E+00	1.23E-01	4.85E-03
6	2.71E+05	7.23E+02	1.81E+00	1.06E+00	2.12E-03	2.57E+00	7.87E-02	2.47E+01	2.47E+01	6.19E-07	2.92E+01	2.01E+00	2.01E+00	8.16E+00	3.98E-01	1.57E-02
7	2.90E+05	1.19E+02	1.93E+00	1.13E+00	1.06E-02	2.75E+00	3.92E-01	1.11E+02	1.11E+02	3.09E-06	1.45E+02	1.00E+01	1.00E+01	4.07E+01	1.98E+00	7.84E-02
8	1.02E+04	2.34E+02	6.76E-02	3.96E-02	1.50E-04	9.61E-02	5.54E-03	1.74E+00	1.74E+00	4.36E-08	2.05E+00	1.42E-01	1.42E-01	5.74E-01	2.80E-02	1.11E-03
9	1.75E+05	6.63E+01	1.17E+00	6.83E-01	2.67E-02	1.66E+00	9.91E-01	3.10E+02	3.10E+02	7.79E-06	3.67E+02	2.54E+01	2.53E+01	1.03E+02	5.01E+00	1.98E-01
10	6.53E+04	2.47E+01	4.35E-01	2.55E-01	1.74E-03	6.18E-01	6.45E-02	2.02E+01	2.02E+01	5.07E-07	2.39E+01	1.65E+00	1.65E+00	6.69E+00	3.26E-01	1.29E-02
11	1.56E+05	5.89E+01	1.04E+00	6.07E-01	9.94E-07	1.47E+00	3.68E-05	1.04E-02	1.04E-02	2.90E-10	1.37E-02	9.42E-04	9.42E-04	3.82E-03	1.86E-04	7.36E-06
12	1.18E+05	4.48E+01	7.89E-01	4.62E-01	2.61E-03	1.12E+00	9.66E-02	3.02E+01	3.02E+01	7.59E-07	3.58E+01	2.47E+00	2.47E+00	1.00E+01	4.88E-01	1.93E-02
13	7.54E+05	2.85E+02	5.02E+00	2.94E+00	2.49E-01	7.13E+00	9.24E+00	2.89E+03	2.89E+03	7.27E-05	3.43E+03	2.36E+02	2.36E+02	9.58E+02	4.67E+01	1.85E+00
14	5.95E+04	2.25E+01	3.96E-01	2.32E-01	2.11E-02	5.63E-01	7.81E-01	2.45E+02	2.45E+02	6.14E-06	2.89E+02	2.00E+01	2.00E+01	8.09E+01	3.95E+00	1.56E-01
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1.18E+06	4.47E+02	7.86E+00	4.60E+00	3.32E-05	1.12E+01	1.23E-03	3.85E-01	3.85E-01	9.69E-09	4.57E-01	3.15E-02	3.15E-02	1.28E-01	6.23E-03	2.94E-03
22	1.18E+06	4.45E+02	7.84E+00	4.59E+00	3.61E-05	1.11E+01	1.34E-03	4.16E-01	4.16E-01	1.05E-08	4.97E-01	3.43E-02	3.42E-02	1.39E-01	6.77E-03	2.93E-03
23	1.30E+06	5.06E+00	2.02E-01	4.22E-03	5.56E-06	1.84E-01	2.06E-04	1.57E+00	1.57E+00	1.62E-09	3.29E-01	5.27E-03	5.26E-03	2.13E-02	1.04E-03	2.84E-03
24	8.53E+05	3.23E+02	5.69E+00	3.33E+00	1.00E-02	8.08E+00	3.71E-01	1.16E+02	1.16E+02	2.92E-06	1.38E+02	9.50E+00	9.50E+00	3.85E+01	1.88E+00	2.47E-02
25	3.66E+05	1.39E+02	2.44E+00	1.43E+00	2.93E-02	3.47E+00	1.08E+00	3.40E+02	3.40E+02	8.52E-06	4.02E+02	2.77E+01	2.77E+01	1.12E+02	5.48E+00	2.17E-01
26	7.01E+05	2.65E+02	4.67E+00	2.73E+00	1.06E-01	6.63E+00	3.92E+00	1.28E+03	1.28E+03	3.08E-05	1.45E+03	1.00E+02	1.00E+02	4.06E+02	1.98E+01	7.83E-01
27	7.83E+05	2.96E+02	5.22E+00	3.05E+00	1.34E-01	7.41E+00	4.97E+00	1.54E+03	1.54E+03	3.91E-05	1.84E+03	1.27E+02	1.27E+02	5.16E+02	2.52E+01	9.95E-01
28	4.94E+05	1.87E+02	3.29E+00	1.93E+00	4.68E-02	4.68E+00	1.73E+00	5.43E+02	5.43E+02	1.36E-05	6.43E+02	4.44E+01	4.44E+01	1.80E+02	8.77E+00	3.47E-01
29	4.74E+05	1.79E+02	3.16E+00	1.85E+00	1.00E-02	4.49E+00	3.71E-01	1.16E+02	1.16E+02	2.92E-06	1.38E+02	9.49E+00	9.49E+00	3.85E+01	1.88E+00	7.42E-02
30	9.90E+05	3.75E+02	6.60E+00	3.86E+00	2.25E-01	9.37E+00	8.33E+00	2.61E+03	2.61E+03	6.55E-05	3.09E+03	2.13E+02	2.13E+02	8.63E+02	4.21E+01	1.66E+00
31	4.59E+05	1.74E+02	3.06E+00	1.79E+00	1.10E-01	4.35E+00	4.09E+00	1.28E+03	1.28E+03	3.22E-05	1.52E+03	1.05E+02	1.05E+02	4.24E+02	2.07E+01	8.19E-01
32	9.13E+05	3.46E+02	6.08E+00	3.56E+00	1.51E-01	8.64E+00	5.60E+00	1.51E+03	1.51E+03	4.40E-05	2.07E+03	1.43E+02	1.43E+02	5.80E+02	2.83E+01	1.12E+00
33	9.42E+05	4.80E+02	6.28E+00	3.67E+00	8.09E-02	8.92E+00	3.00E+00	9.39E+02	9.39E+02	2.36E-05	1.11E+03	7.67E+01	7.66E+01	3.11E+02	1.52E+01	5.99E-01
34	6.40E+05	2.42E+02	4.27E+00	2.50E+00	6.69E-02	6.06E+00	2.48E+00	7.76E+02	7.76E+02	1.95E-05	9.19E+02	6.34E+01	6.34E+01	2.57E+02	1.25E+01	4.95E-01
35	4.94E+05	1.87E+02	3.29E+00	1.93E+00	4.24E-02	4.68E+00	1.57E+00	4.92E+02	4.92E+02	1.24E-05	5.82E+02	4.02E+01	4.02E+01	1.63E+02	7.94E+00	3.14E-01
36	5.30E+05	2.01E+02	3.53E+00	2.07E+00	2.35E-01	5.02E+00	8.71E+00	2.73E+03	2.73E+03	6.85E-05	3.23E+03	2.23E+02	2.23E+02	9.03E+02	4.40E+01	1.74E+00
37	4.60E+05	1.74E+02	3.06E+00	1.79E+00	9.27E-02	4.35E+00	3.44E+00	9.85E+02	9.85E+02	2.70E-05	1.27E+03	8.79E+01	8.79E+01	3.56E+02	1.74E+01	6.87E-01
38	4.20E+05	1.59E+02	2.80E+00	1.64E+00	2.90E-03	3.97E+00	1.07E-01	3.36E+01	3.36E+01	8.44E-07	3.98E+01	2.75E+00	2.74E+00	1.11E+01	5.43E-01	2.15E-02
39	7.95E+05	3.01E+02	5.30E+00	3.10E+00	1.89E-02	7.52E+00	6.99E-01	1.64E+02	1.64E+02	5.49E-06	2.59E+02	1.79E+01	1.79E+01	7.24E+01	3.53E+00	1.40E-01
40	6.12E+05	2.32E+02	4.08E+00	2.39E+00	8.77E-04	5.80E+00	3.25E-02	1.06E+01	1.06E+01	2.56E-07	1.21E+01	8.31E-01	8.31E-01	3.37E+00	1.64E-01	6.50E-03
41	3.46E+05	1.31E+02	2.30E+00	1.35E+00	7.76E-03	3.27E+00	2.87E-01	3.17E+01	3.17E+01	2.26E-06	1.07E+02	7.35E+00	7.35E+00	2.98E+01	1.45E+00	5.75E-02
42	1.27E+06	4.80E+02	8.45E+00	4.94E+00	2.60E-01	1.20E+01	9.64E+00	3.02E+03	3.02E+03	7.58E-05	3.57E+03	2.46E+02	2.46E+02	9.99E+02	4.87E+01	1.93E+00
43	9.45E+05	3.58E+02	6.30E+00	3.69E+00	4.09E-03	8.95E+00	1.51E-01	4.10E+01	4.10E+01	1.19E-06	5.62E+01	3.88E+00	3.87E+00	1.57E+01	7.66E-01	3.03E-02
44	5.64E+05	2.14E+02	3.76E+00	2.20E+00	6.34E-02	5.34E+00	2.35E+00	7.35E+02	7.35E+02	1.85E-05	8.71E+02	6.01E+01	6.00E+01	2.43E+02	1.19E+01	4.69E-01
45	5.11E+05	1.93E+02	3.40E+00	1.99E+00	5.43E-02	4.84E+00	2.01E+00	6.30E+02	6.30E+02	1.58E-05	7.45E+02	5.14E+01	5.14E+01	2.08E+02	1.02E+01	4.02E-01
46	6.72E+05	2.55E+02	4.48E+00	2.62E+00	1.07E-01	6.36E+00	3.97E+00	1.24E+03	1.24E+03	3.12E-05	1.47E+03	1.01E+02	1.01E+02	4.11E+02	2.01E+01	7.93E-01
47	5.97E+05	2.26E+02	3.98E+00	2.33E+00	1.76E-02	5.65E+00	6.51E-01	2.04E+02	2.04E+02	5.12E-06	2.41E+02	1.66E+01	1.66E+01	6.74E+01	3.29E+00	1.30E-01
48	2.40E+05	9.10E+01	1.60E+00	9.37E-01	8.69E-03	2.28E+00	3.22E-01	2.98E+02	2.98E+02	2.53E-06	1.19E+02	8.23E+00	8.23E+00	3.34E+01	1.63E+00	6.44E-02
49	1.92E+05	7.26E+01	1.28E+00	7.48E-01	3.15E-04	1.82E+00	1.17E-02	2.68E+01	2.68E+01	9.19E-08	4.33E+00	2.99E-01	2.99E-01	1.21E+00	5.91E-02	2.34E-03
50	4.24E+05	5.67E+00	1.70E-02	8.49E-03	2.28E-07	2.63E-02	8.46E-06	2.65E-03	2.65E-03	6.65E-11	3.14E-03	2.16E-04	2.16E-04	8.77E-04	4.28E-05	3.45E-03
51	6.93E+05	2.62E+02	4.62E+00	2.70E+00	5.46E-03	6.56E+00	2.02E-01	5.07E+01	5.07E+01	1.59E-06	7.50E+01	5.18E+00	5.18E+00	2.10E+01	1.02E+00	4.05E-02
Phase Totals	2.39E+07	9.37E+03	1.48E+02	8.63E+01	2.40E+00	2.10E+02	8.90E+01	2.77E+04	2.77E+04	7.00E-04	3.30E+04	2.28E+03	2.28E+03	9.23E+03	4.50E+02	1.78E+01

Tank Radionuclide Inventories

CBU-PIT-2005-00138

Rev. 1

October 5, 2005

Table 6: Soluble Radionuclide Inventory by Tank, continued

Tank	Total Supernate Volume, gal	Cs-134 (Ci)	Cs-135 (Ci)	Cs-137 (Ci)	Ba-137m (Ci)	Ce-144 (Ci)	Pr-144 (Ci)	Pm-147 (Ci)	Eu-154 (Ci)	Th-232 (Ci)	U-232 (Ci)	U-233 (Ci)	U-234 (Ci)	U-235 (Ci)	U-236 (Ci)	U-238 (Ci)	Np-237 (Ci)
1	1.66E+05	6.60E+03	1.12E+01	3.29E+06	3.11E+06	1.72E-01	1.72E-01	1.11E+02	2.64E+01	-	1.51E-04	-	-	2.33E-04	-	5.79E-03	8.45E-03
2	1.64E+05	2.42E+03	4.10E+00	1.20E+06	1.14E+06	6.30E-02	6.30E-02	4.07E+01	9.66E+00	-	1.25E-04	-	-	6.01E-05	-	1.50E-03	1.57E-02
3	1.64E+05	2.45E+03	4.16E+00	1.22E+06	1.15E+06	6.38E-02	6.38E-02	4.13E+01	9.79E+00	-	1.09E-04	-	-	1.54E-04	-	3.85E-03	2.88E-02
4	3.99E+05	7.04E+03	1.20E+01	3.51E+06	3.32E+06	1.83E-01	1.83E-01	1.19E+02	2.81E+01	-	1.81E-04	-	-	2.38E-04	-	1.02E-02	9.15E-03
5	1.71E+04	6.20E+01	1.05E-01	3.09E+04	2.92E+04	1.62E-03	1.62E-03	1.05E+00	2.48E-01	-	1.54E-05	-	-	2.99E-05	-	7.09E-04	1.20E-03
6	2.71E+05	2.01E+02	3.42E-01	1.00E+05	9.49E+04	5.25E-03	5.25E-03	3.39E+00	8.05E-01	-	2.87E-04	-	-	3.54E-04	-	1.33E-02	4.60E-03
7	2.90E+05	1.00E+03	1.70E+00	5.00E+05	4.73E+05	2.61E-02	2.61E-02	1.69E+01	4.01E+00	-	6.88E-05	-	-	3.22E-04	-	1.11E-02	5.54E-03
8	1.02E+04	1.42E+01	2.41E-02	7.06E+03	6.68E+03	3.69E-04	3.69E-04	2.39E-01	5.66E-02	-	3.02E-06	-	-	7.97E-06	-	3.67E-04	1.67E-04
9	1.75E+05	2.53E+03	4.30E+00	1.26E+06	1.19E+06	6.60E-02	6.60E-02	4.27E+01	1.01E+01	-	1.80E-04	-	-	1.17E-04	-	2.91E-03	1.99E-02
10	6.53E+04	1.65E+02	2.80E-01	8.22E+04	7.77E+04	4.30E-03	4.30E-03	2.78E+00	6.59E-01	-	4.31E-05	-	-	5.25E-05	-	1.31E-03	1.00E-02
11	1.56E+05	9.41E-02	1.60E-04	4.69E+01	4.44E+01	2.45E-06	2.45E-06	1.59E-03	3.76E-04	2.81E-06	-	4.01E-04	3.29E-04	6.22E-06	5.09E-05	1.15E-05	2.18E-04
12	1.18E+05	2.47E+02	4.19E-01	1.23E+05	1.16E+05	6.43E-03	6.43E-03	4.16E+00	9.87E-01	2.09E-04	2.11E-06	5.89E-03	5.51E-04	1.04E-05	4.37E-05	1.04E-04	1.22E-03
13	7.54E+05	2.36E+04	4.01E+01	1.18E+07	1.11E+07	6.16E-01	6.16E-01	3.98E+02	9.44E+01	4.08E-04	1.09E-04	8.37E-02	1.18E-02	3.23E-04	1.22E-03	3.77E-03	3.04E-02
14	5.95E+04	2.00E+03	3.39E+00	9.94E+05	9.40E+05	5.20E-02	5.20E-02	3.37E+01	7.98E+00	1.38E-04	4.08E-05	4.86E-03	6.67E-04	5.39E-05	5.73E-05	1.03E-03	7.12E-03
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1.18E+06	3.15E+00	5.35E-03	1.57E+03	1.48E+03	8.21E-05	8.20E-05	5.31E-02	1.26E-02	1.20E-06	-	3.79E-02	4.05E-02	6.43E-04	7.43E-03	3.80E-03	3.36E-02
22	1.18E+06	3.42E+00	5.82E-03	1.71E+03	1.61E+03	8.92E-05	8.92E-05	5.77E-02	1.37E-02	-	-	1.57E-01	5.65E-02	8.64E-04	9.30E-03	1.92E-02	3.43E-02
23	1.30E+06	1.36E-02	2.01E-02	2.62E+02	2.48E+02	1.37E-05	1.37E-05	8.88E-03	2.10E-03	1.78E-07	-	1.18E-02	1.88E-02	1.05E-04	4.21E-04	3.13E-03	8.69E-04
24	8.53E+05	9.49E+02	1.61E+00	4.73E+05	4.47E+05	2.47E-02	2.47E-02	1.60E+01	3.80E+00	-	2.69E-03	8.18E-09	2.61E-08	7.72E-03	9.97E-04	9.27E-01	2.39E-03
25	3.66E+05	2.77E+03	4.71E+00	1.38E+06	1.31E+06	7.22E-02	7.22E-02	4.67E+01	1.11E+01	-	1.15E-03	3.51E-09	1.12E-08	3.32E-03	4.28E-04	3.98E-01	1.03E-03
26	7.01E+05	1.00E+04	1.70E+01	4.99E+06	4.72E+06	2.61E-01	2.61E-01	1.69E+02	4.00E+01	-	2.21E-03	6.71E-09	2.14E-08	6.34E-03	8.19E-04	7.61E-01	1.96E-03
27	7.83E+05	1.27E+04	2.16E+01	6.33E+06	5.99E+06	3.31E-01	3.31E-01	2.14E+02	5.08E+01	-	2.47E-03	7.50E-09	2.39E-08	7.09E-03	9.15E-04	8.51E-01	2.19E-03
28	4.94E+05	4.43E+03	7.53E+00	2.21E+06	2.09E+06	1.16E-01	1.16E-01	7.48E+01	1.77E+01	-	1.56E-03	4.74E-09	1.51E-08	4.47E-03	5.78E-04	5.37E-01	1.39E-03
29	4.74E+05	9.48E+02	1.61E+00	4.73E+05	4.47E+05	2.47E-02	2.47E-02	1.60E+01	3.79E+00	2.57E-04	6.83E-05	5.26E-02	7.42E-03	2.03E-04	7.66E-04	2.37E-03	1.91E-02
30	9.90E+05	2.13E+04	3.61E+01	1.06E+07	1.00E+07	5.55E-01	5.55E-01	3.59E+02	8.51E+01	-	-	-	3.45E-02	6.13E-04	6.37E-03	2.27E-05	1.56E-02
31	4.59E+05	1.05E+04	1.78E+01	5.21E+06	4.93E+06	2.73E-01	2.73E-01	1.76E+02	4.18E+01	2.49E-04	6.62E-05	5.10E-02	7.19E-03	1.97E-04	7.41E-04	2.30E-03	1.85E-02
32	9.13E+05	1.43E+04	2.43E+01	7.13E+06	6.74E+06	3.73E-01	3.73E-01	2.41E+02	5.72E+01	-	-	-	4.13E-02	5.91E-04	9.27E-03	2.77E-04	1.71E-02
33	9.42E+05	7.66E+03	1.30E+01	3.82E+06	3.61E+06	2.00E-01	2.00E-01	1.29E+02	3.06E+01	-	1.82E-02	8.74E-08	1.80E-03	3.38E-02	1.88E-02	4.90E+00	1.54E+00
34	6.40E+05	6.33E+03	1.08E+01	3.16E+06	2.99E+06	1.65E-01	1.65E-01	1.07E+02	2.53E+01	-	3.38E-03	-	-	3.42E-03	-	2.41E-01	1.87E-01
35	4.94E+05	4.01E+03	6.82E+00	2.00E+06	1.89E+06	1.05E-01	1.05E-01	6.77E+01	1.61E+01	-	-	-	2.18E-02	3.79E-04	6.44E-03	2.24E-04	7.89E-03
36	5.30E+05	2.23E+04	3.78E+01	1.11E+07	1.05E+07	5.80E-01	5.80E-01	3.75E+02	8.90E+01	-	-	-	4.07E-02	7.88E-04	1.44E-02	2.58E-04	1.14E-02
37	4.60E+05	8.78E+03	1.49E+01	4.38E+06	4.14E+06	2.29E-01	2.29E-01	1.48E+02	3.51E+01	2.49E-04	6.63E-05	5.10E-02	7.20E-03	1.97E-04	7.43E-04	2.30E-03	1.85E-02
38	4.20E+05	2.74E+02	4.66E-01	1.37E+05	1.29E+05	7.15E-03	7.15E-03	4.63E+00	1.10E+00	-	-	-	1.18E-01	1.63E-03	2.25E-02	1.33E-04	1.26E-01
39	7.95E+05	1.79E+03	3.03E+00	8.90E+05	8.42E+05	4.65E-02	4.65E-02	3.01E+01	7.14E+00	-	-	-	9.44E-02	1.36E-03	1.62E-02	2.88E-04	5.93E-02
40	6.12E+05	8.31E+01	1.41E-01	4.14E+04	3.92E+04	2.17E-03	2.17E-03	1.40E+00	3.32E-01	1.46E-03	1.63E-03	4.16E-02	4.00E-02	7.55E-03	9.99E-03	2.36E-01	8.26E-01
41	3.46E+05	7.34E+02	1.25E+00	3.66E+05	3.46E+05	1.91E-02	1.91E-02	1.24E+01	2.94E+00	-	-	-	1.44E-01	1.66E-03	4.12E-02	1.14E-04	4.29E-01
42	1.27E+06	2.46E+04	4.18E+01	1.23E+07	1.16E+07	6.42E-01	6.42E-01	4.15E+02	9.85E+01	1.01E-01	3.58E-04	1.43E+00	5.24E-01	1.24E-02	7.01E-02	2.17E-01	4.31E-01
43	9.45E+05	3.87E+02	6.58E-01	1.93E+05	1.83E+05	1.01E-02	1.01E-02	6.53E+00	1.55E+00	-	-	-	2.67E-01	3.68E-03	5.08E-02	2.99E-04	2.84E-01
44	5.64E+05	6.00E+03	1.02E+01	2.99E+06	2.83E+06	1.56E-01	1.56E-01	1.01E+02	2.40E+01	-	1.78E-03	5.41E-09	1.73E-08	5.11E-03	6.59E-04	6.13E-01	1.58E-03
45	5.11E+05	5.14E+03	8.73E+00	2.56E+06	2.42E+06	1.34E-01	1.34E-01	8.67E+01	2.05E+01	-	1.61E-03	4.89E-09	1.56E-08	4.62E-03	5.97E-04	5.55E-01	1.43E-03
46	6.72E+05	1.01E+04	1.72E+01	5.05E+06	4.78E+06	2.64E-01	2.64E-01	1.71E+02	4.06E+01	-	2.12E-03	6.44E-09	2.06E-08	6.08E-03	7.86E-04	7.30E-01	1.88E-03
47	5.97E+05	1.66E+03	2.82E+00	8.29E+05	7.84E+05	4.34E-02	4.34E-02	2.80E+01	6.65E+00	-	1.52E-03	-	-	4.14E-03	-	3.28E-01	-
48	2.40E+05	8.23E+02	1.40E+00	4.10E+05	3.88E+05	2.14E-02	2.14E-02	1.39E+01	3.29E+00	-	-	8.21E-01	2.81E+00	1.89E-03	8.62E-02	1.86E-03	1.80E-01
49	1.92E+05	2.99E+01	5.07E-02	1.49E+04	1.41E+04	7.79E-04	7.78E-04	5.04E-01	1.19E-01	1.04E-04	2.76E-05	2.13E-02	3.00E-03	8.21E-05	3.10E-04	9.60E-04	7.72E-03
50	4.24E+05	1.04E-02	3.52E-02	1.08E+01	1.02E+01	5.64E-07	5.64E-07	3.65E-04	8.65E-05	7.00E-07	6.11E-05	1.09E-03	7.02E-04	1.16E-04	1.45E-04	6.15E-03	7.92E-05
51	6.93E+05	5.17E+02	8.79E-01	2.58E+05	2.44E+05	1.35E-02	1.35E-02	8.73E+00	2.07E+00	4.80E-04	7.05E-05	5.84E-02	4.85E-02	1.26E-03	7.85E-03	1.15E-02	3.91E-02
Phase Totals	2.39E+07	2.27E+05	3.86E+02	1.13E+08	1.07E+08	5.93E+00	5.93E+00	3.84E+03	9.10E+02	1.05E-01	4.24E-02	2.82E+00	4.35E+00	1.24E-01	3.87E-01	1.14E+01	4.44E+00

Table 6: Soluble Radionuclide Inventory by Tank, continued

Tank	Total Supernate Volume, gal	Pu-238 (Ci)	Pu-239 (Ci)	Pu-240 (Ci)	Pu-241 (Ci)	Pu-242 (Ci)	Am-241 (Ci)	Am-242m (Ci)	Cm-244 (Ci)	Cm-245 (Ci)	Na-22 (Ci)	Al-26 (Ci)	Te-125m (Ci)	Sb-126 (Ci)	Sb-126m (Ci)	Sm-151 (Ci)	Eu-152 (Ci)	Eu-155 (Ci)
1	1.66E+05	6.55E+00	1.75E+00	3.92E-01	2.15E+00	8.06E-05	1.05E+01	6.08E-03	4.22E+00	4.16E-04	5.87E+01	3.76E-01	6.54E+01	1.83E+00	1.31E+01	1.25E+02	6.04E-01	7.06E+00
2	1.64E+05	1.02E+01	1.46E+00	3.27E-01	1.37E+00	6.73E-05	3.86E+00	2.22E-03	1.54E+00	1.52E-04	2.15E+01	1.37E-01	2.39E+01	6.69E-01	4.78E+00	4.57E+01	2.21E-01	2.58E+00
3	1.64E+05	1.27E+01	1.81E+00	4.05E-01	2.04E+00	8.32E-05	3.91E+00	2.25E-03	1.57E+00	1.54E-04	2.18E+01	1.39E-01	2.42E+01	6.78E-01	4.84E+00	4.63E+01	2.24E-01	2.62E+00
4	3.99E+05	1.86E+00	1.83E+00	4.09E-01	3.46E+00	8.42E-05	1.12E+01	6.48E-03	4.50E+00	4.43E-04	6.26E+01	4.00E-01	6.97E+01	1.95E+00	1.39E+01	1.33E+02	6.43E-01	7.52E+00
5	1.71E+04	8.26E-01	1.38E-01	3.29E-02	2.21E-01	9.72E-06	9.91E-02	5.71E-05	3.97E-02	3.91E-06	5.52E-01	3.53E-03	6.14E-01	1.72E-02	1.23E-01	1.17E+00	5.67E-03	6.63E-02
6	2.71E+05	-	1.36E+00	4.72E-01	5.29E+00	9.28E-04	3.21E-01	1.85E-04	1.29E-01	1.27E-05	1.79E+00	1.14E-02	1.99E+00	5.57E-02	3.98E-01	3.80E+00	1.84E-02	2.15E-01
7	2.90E+05	2.72E+01	4.89E+00	1.20E+00	1.15E+01	1.11E-03	1.60E+00	9.23E-04	6.41E-01	6.32E-05	8.92E+00	5.70E-02	9.93E+00	2.78E-01	1.98E+00	1.90E+01	9.17E-02	1.07E+00
8	1.02E+04	4.77E-01	1.05E-01	2.46E-02	2.35E-01	3.11E-05	2.26E-02	1.30E-05	9.06E-03	8.92E-07	1.26E-01	8.05E-04	1.40E-01	3.92E-03	2.80E-02	2.68E-01	1.30E-03	1.51E-02
9	1.75E+05	4.31E+00	6.16E-01	1.38E-01	5.72E-01	2.83E-05	4.05E+00	2.33E-03	1.62E+00	1.60E-04	2.25E+01	1.44E-01	2.51E+01	7.02E-01	5.01E+00	4.79E+01	2.32E-01	2.71E+00
10	6.53E+04	5.08E+00	7.26E-01	1.62E-01	7.22E-01	3.34E-05	2.63E-01	1.52E-04	1.05E-01	1.04E-05	1.47E+00	9.38E-03	1.63E+00	4.57E-02	3.26E-01	3.12E+00	1.51E-02	1.76E-01
11	1.56E+05	2.94E+01	2.93E-01	1.84E-01	1.05E+01	3.91E-04	1.50E-04	8.67E-08	6.02E-05	5.93E-09	8.37E-04	5.35E-06	9.32E-04	2.61E-05	1.86E-04	1.78E-03	8.61E-06	1.01E-04
12	1.18E+05	2.12E+01	3.56E-01	1.97E-01	5.00E+00	2.84E-04	3.94E-01	2.27E-04	1.58E-01	1.55E-05	2.19E+00	1.40E-02	2.44E+00	6.84E-02	4.88E-01	4.67E+00	2.26E-02	2.64E-01
13	7.54E+05	1.11E+02	3.00E+00	1.24E+00	2.19E+01	8.25E-04	3.77E+01	2.17E-02	1.51E+01	1.49E-03	2.10E+02	1.34E+00	2.34E+02	6.54E+00	4.67E+01	4.46E+02	2.16E+00	2.52E+01
14	5.95E+04	3.19E+00	7.86E-01	2.54E-01	1.28E+00	4.65E-05	3.19E+00	1.84E-03	1.28E+00	1.26E-04	1.77E+01	1.13E-01	1.98E+01	5.53E-01	3.95E+00	3.77E+01	1.82E-01	2.13E+00
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1.18E+06	2.02E+02	2.97E+00	1.01E+00	1.77E+01	1.13E-04	5.03E-03	2.90E-06	2.01E-03	1.98E-07	2.80E-02	1.79E-04	3.12E-02	8.72E-04	6.23E-03	5.95E-02	2.88E-04	3.36E-03
22	1.18E+06	2.33E+02	-	-	-	-	5.47E-03	3.15E-06	2.19E-03	2.16E-07	3.04E-02	1.95E-04	3.39E-02	9.48E-04	6.77E-03	6.47E-02	3.13E-04	3.66E-03
23	1.30E+06	9.48E-01	3.25E-03	8.10E-04	9.48E-02	4.83E-03	1.24E-02	4.85E-07	3.64E-04	3.31E-08	4.68E-03	2.99E-05	5.21E-03	1.46E-04	1.04E-03	9.95E-03	4.81E-05	5.62E-04
24	8.53E+05	4.94E+03	7.74E+02	1.73E+02	4.07E+03	3.45E-02	1.52E+00	8.74E-04	6.07E-01	5.98E-05	8.44E+00	5.40E-02	9.40E+00	2.63E-01	1.88E+00	1.79E+01	8.68E-02	1.01E+00
25	3.66E+05	2.12E+03	3.32E+02	7.43E+01	1.75E+03	1.48E-02	4.42E+00	2.55E-03	1.77E+00	1.74E-04	2.46E+01	1.58E-01	2.74E+01	7.67E-01	5.48E+00	5.24E+01	2.53E-01	2.96E+00
26	7.01E+05	4.05E+03	6.35E+02	1.42E+02	3.34E+03	2.83E-02	1.60E+01	9.22E-03	6.40E+00	6.31E-04	8.90E+01	5.69E-01	9.92E+01	2.77E+00	1.98E+01	1.89E+02	9.16E-01	1.07E+01
27	7.83E+05	4.53E+03	7.10E+02	1.59E+02	3.74E+03	3.16E-02	2.03E+01	1.17E-02	8.13E+00	8.01E-04	1.13E+02	7.23E-01	1.26E+02	3.52E+00	2.52E+01	2.40E+02	1.16E+00	1.36E+01
28	4.94E+05	2.86E+03	4.48E+02	1.00E+02	2.36E+03	2.00E-02	7.08E+00	4.08E-03	2.84E+00	2.79E-04	3.94E+01	2.52E-01	4.39E+01	1.23E+00	8.77E+00	8.38E+01	4.05E-01	4.74E+00
29	4.74E+05	6.98E+01	1.89E+00	7.82E-01	1.38E+01	5.19E-04	1.51E+00	8.73E-04	6.06E-01	5.97E-05	8.43E+00	5.39E-02	9.39E+00	2.63E-01	1.88E+00	1.79E+01	8.67E-02	1.01E+00
30	9.90E+05	6.65E+03	5.78E+01	4.15E+01	4.27E+03	9.94E-02	3.40E+01	1.96E-02	1.36E+01	1.34E-03	1.89E+02	1.21E+00	2.11E+02	5.89E+00	4.21E+01	4.02E+02	1.95E+00	2.27E+01
31	4.59E+05	6.76E+01	1.83E+00	7.57E-01	1.33E+01	5.02E-04	1.67E+01	9.63E-03	6.69E+00	6.59E-04	9.30E+01	5.95E-01	1.04E+02	2.90E+00	2.07E+01	1.98E+02	9.57E-01	1.12E+01
32	9.13E+05	5.99E+03	5.26E+01	3.90E+01	2.68E+03	8.23E-02	2.28E+01	1.32E-02	9.15E+00	9.01E-04	1.27E+02	8.13E-01	1.42E+02	3.96E+00	2.83E+01	2.70E+02	1.31E+00	1.53E+01
33	9.42E+05	2.51E+03	1.37E+03	2.40E+02	7.13E+03	1.39E-02	1.22E+01	7.05E-03	4.90E+00	4.82E-04	6.81E+01	4.36E-01	7.59E+01	2.12E+00	1.52E+01	1.45E+02	7.00E-01	8.18E+00
34	6.40E+05	-	3.90E+01	8.72E+00	1.80E+02	1.81E-03	1.01E+01	5.83E-03	4.05E+00	3.99E-04	5.63E+01	3.60E-01	6.27E+01	1.75E+00	1.25E+01	1.20E+02	5.79E-01	6.77E+00
35	4.94E+05	3.27E+03	2.64E+01	2.02E+01	1.57E+03	4.54E-02	6.41E+00	3.70E-03	2.57E+00	2.53E-04	3.57E+01	2.28E-01	3.98E+01	1.11E+00	7.94E+00	7.59E-01	3.67E-01	4.29E+00
36	5.30E+05	3.53E+03	2.75E+01	2.19E+01	1.43E+03	4.72E-02	3.55E-01	2.05E-02	1.42E+01	1.40E-03	1.98E+02	1.27E+00	2.20E+02	6.16E+00	4.40E+01	4.21E+02	2.04E+00	2.38E+01
37	4.60E+05	6.77E+01	1.83E+00	7.58E-01	1.34E+01	5.03E-04	1.40E+01	8.09E-03	5.62E+00	5.53E-04	7.81E+01	4.99E-01	8.70E+01	2.43E+00	1.74E+01	1.66E+02	8.03E-01	9.38E+00
38	4.20E+05	2.87E+03	1.13E+01	9.56E+00	2.46E+03	1.41E-01	4.38E-01	2.53E-04	1.75E-01	1.73E-05	2.44E+00	1.56E-02	2.72E+00	7.60E-02	5.43E-01	5.19E+00	2.51E-02	2.93E-01
39	7.95E+05	5.26E+03	6.54E+01	4.07E+01	4.67E+03	8.67E-02	2.85E+00	1.64E-03	1.14E+00	1.12E-04	1.59E+01	1.02E-01	1.77E+01	4.94E-01	3.53E+00	3.38E+01	1.63E-01	1.91E+00
40	6.12E+05	7.55E+02	2.44E+02	9.22E+01	1.30E+03	4.66E-02	1.33E-01	7.65E-05	5.31E-02	5.23E-06	7.39E-01	4.72E-03	8.23E-01	2.30E-02	1.64E-01	1.57E+00	7.60E-03	8.87E-02
41	3.46E+05	2.35E+03	-	-	-	-	1.17E+00	6.76E-04	4.70E-01	4.63E-05	6.53E+00	4.18E-02	7.27E+00	2.03E-01	1.45E+00	1.39E+01	6.72E-02	7.85E-01
42	1.27E+06	6.81E+03	2.43E+02	8.72E+01	1.49E+03	7.98E-02	3.93E+01	2.27E-02	1.57E+01	1.55E-03	2.19E+02	1.40E+00	2.44E+02	6.82E+00	4.87E+01	4.66E+02	2.25E+00	2.63E+01
43	9.45E+05	6.46E+03	2.55E+01	2.15E+01	5.53E+03	3.18E-01	6.18E-01	3.56E-04	2.48E-01	2.44E-05	3.44E+00	2.20E-02	3.83E+00	1.07E-01	7.66E-01	7.32E+00	3.54E-02	4.14E-01
44	5.64E+05	3.26E+03	5.12E+02	1.14E+02	2.69E+03	2.28E-02	9.58E+00	5.53E-03	3.84E+00	3.78E-04	5.34E+01	3.41E-01	5.94E+01	1.66E+00	1.19E+01	1.13E+02	5.49E-01	6.41E+00
45	5.11E+05	2.96E+03	4.63E+02	1.04E+02	2.44E+03	2.06E-02	8.21E+00	4.73E-03	3.29E+00	3.24E-04	4.57E+01	2.92E-01	5.09E+01	1.42E+00	1.02E+01	9.71E+01	4.70E-01	5.49E+00
46	6.72E+05	3.89E+03	6.09E+02	1.36E+02	3.21E+03	2.72E-02	1.62E+01	9.34E-03	6.49E+00	6.39E-04	9.02E+01	5.77E-01	1.00E+02	2.81E+00	2.01E+01	9.21E+02	9.27E-01	1.08E+01
47	5.97E+05	3.50E+03	5.03E+02	1.12E+02	2.18E+03	2.31E-02	2.66E+00	1.53E-03	1.06E+00	1.05E-04	1.48E+01	9.46E-02	1.65E+01	4.61E-01	3.29E+00	3.14E+01	1.52E-01	1.78E+00
48	2.40E+05	1.36E+03	2.46E+00	-	-	-	1.31E+00	7.57E-04	5.26E-01	5.18E-05	7.31E+00	4.68E-02	8.15E+00	2.28E-01	1.63E+00	1.55E+01	7.52E-02	8.79E-01
49	1.92E+05	2.82E+01	7.64E-01	3.16E-01	5.57E+00	2.10E-04	4.77E-02	2.75E-05	1.91E-02	1.88E-06	2.66E-01	1.70E-03	2.96E-01	8.27E-03	5.91E-02	5.65E-01	2.73E-03	3.19E-02
50	4.24E+05	1.62E-02																

Table 6: Soluble Radionuclide Inventory by Tank, continued

Tank	Total Supernate Volume, gal	Ra-226 (Ci)	Ra-228 (Ci)	Ac-227 (Ci)	Th-229 (Ci)	Th-230 (Ci)	Pa-231 (Ci)	Pu-244 (Ci)	Am-243 (Ci)	Cm-242 (Ci)	Cm-243 (Ci)	Cm-247 (Ci)	Cm-248 (Ci)	Bk-249 (Ci)	Cf-249 (Ci)	Cf-251 (Ci)	Cf-252 (Ci)
1	1.66E+05	-	-	5.31E-08	-	-	1.47E-07	3.68E-07	2.02E-03	4.99E-03	1.18E-03	2.28E-13	2.37E-13	1.73E-20	1.32E-12	4.50E-14	1.46E-15
2	1.64E+05	-	-	1.37E-08	-	-	3.81E-08	3.07E-07	7.38E-04	1.82E-03	4.32E-04	8.32E-14	8.67E-14	6.34E-21	4.81E-13	1.65E-14	5.34E-16
3	1.64E+05	-	-	3.52E-08	-	-	9.79E-08	3.80E-07	7.48E-04	1.85E-03	4.38E-04	8.44E-14	8.79E-14	6.43E-21	4.88E-13	1.67E-14	5.41E-16
4	3.99E+05	-	-	5.43E-08	-	-	1.51E-07	3.85E-07	2.15E-03	5.31E-03	1.26E-03	2.42E-13	2.53E-13	1.85E-20	1.40E-12	4.79E-14	1.56E-15
5	1.71E+04	-	-	6.83E-09	-	-	1.90E-08	4.44E-08	1.90E-05	4.68E-05	1.11E-05	2.14E-15	2.23E-15	1.63E-22	1.24E-14	4.23E-16	1.37E-17
6	2.71E+05	-	-	8.09E-08	-	-	2.25E-07	4.24E-06	6.15E-05	1.52E-04	3.60E-05	6.94E-15	7.23E-15	5.28E-22	4.01E-14	1.37E-15	4.45E-17
7	2.90E+05	-	-	7.34E-08	-	-	2.04E-07	5.09E-06	3.06E-04	7.57E-04	1.79E-04	3.46E-14	3.60E-14	2.63E-21	2.00E-13	6.83E-15	2.22E-16
8	1.02E+04	-	-	1.82E-09	-	-	5.05E-09	1.42E-07	4.33E-06	1.07E-05	2.53E-06	4.88E-16	5.09E-16	3.72E-23	2.82E-15	9.65E-17	3.13E-18
9	1.75E+05	-	-	2.66E-08	-	-	7.39E-08	1.30E-07	7.74E-04	1.91E-03	4.53E-04	8.73E-14	9.10E-14	6.65E-21	5.04E-13	1.73E-14	5.60E-16
10	6.53E+04	-	-	1.20E-08	-	-	3.33E-08	1.53E-07	5.04E-05	1.24E-04	2.95E-05	5.68E-15	5.92E-15	4.33E-22	3.28E-14	1.12E-15	3.65E-17
11	1.56E+05	7.42E-10	2.81E-06	1.42E-09	1.14E-06	9.08E-08	3.94E-09	1.79E-06	2.88E-08	7.11E-08	1.68E-08	3.24E-18	3.38E-18	2.47E-25	1.87E-17	6.41E-19	2.08E-20
12	1.18E+05	1.24E-09	2.09E-04	2.37E-09	1.67E-05	1.52E-07	6.57E-09	1.30E-06	7.54E-05	1.86E-04	4.42E-05	8.51E-15	8.86E-15	6.48E-22	4.92E-14	1.68E-15	5.46E-17
13	7.54E+05	2.66E-08	4.08E-04	7.37E-08	2.38E-04	3.26E-06	2.05E-07	3.77E-06	7.22E-03	1.78E-02	4.23E-03	8.14E-13	8.48E-13	6.20E-20	4.70E-12	1.61E-13	5.22E-15
14	5.95E+04	1.50E-09	1.38E-04	1.23E-08	1.38E-05	1.84E-07	3.42E-08	2.12E-07	6.10E-04	1.51E-03	3.57E-04	6.88E-14	7.17E-14	5.24E-21	3.97E-13	1.36E-14	4.41E-16
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1.18E+06	9.13E-08	1.20E-06	1.47E-07	1.08E-04	1.12E-05	4.07E-07	5.17E-07	9.62E-07	2.38E-06	5.63E-07	1.08E-16	1.13E-16	8.26E-24	6.27E-16	2.14E-17	6.96E-19
22	1.18E+06	1.27E-07	-	1.97E-07	4.47E-04	1.56E-05	5.48E-07	-	1.05E-06	2.58E-06	6.13E-07	1.18E-16	1.23E-16	8.98E-24	6.82E-16	2.33E-17	7.57E-19
23	1.30E+06	1.30E+01	1.78E-07	2.39E-08	3.37E-05	3.42E-02	6.63E-08	4.91E-05	1.61E-07	3.97E-07	9.42E-08	1.81E-17	1.89E-17	1.38E-24	1.05E-16	3.59E-18	1.16E-19
24	8.53E+05	5.88E-14	-	1.76E-06	2.33E-11	7.19E-12	4.89E-06	1.58E-04	2.90E-04	7.17E-04	1.70E-04	3.27E-14	3.41E-14	2.49E-21	1.89E-13	6.47E-15	2.10E-16
25	3.66E+05	2.52E-14	-	7.57E-07	9.99E-12	3.09E-12	2.10E-06	6.76E-05	8.46E-04	2.09E-03	4.96E-04	9.55E-14	9.95E-14	7.27E-21	5.52E-13	1.89E-14	6.13E-16
26	7.01E+05	4.83E-14	-	1.45E-06	1.91E-11	5.91E-12	4.02E-06	1.29E-04	3.06E-03	7.56E-03	1.79E-03	3.45E-13	3.60E-13	2.63E-20	1.99E-12	6.82E-14	2.21E-15
27	7.83E+05	5.40E-14	-	1.62E-06	2.13E-11	6.60E-12	4.49E-06	1.45E-04	3.88E-03	9.60E-03	2.27E-03	4.38E-13	4.57E-13	3.34E-20	2.53E-12	8.66E-14	2.81E-15
28	4.94E+05	3.41E-14	-	1.02E-06	1.35E-11	4.17E-12	2.83E-06	9.12E-05	1.35E-03	3.35E-03	7.93E-04	1.53E-13	1.59E-13	1.16E-20	8.83E-13	3.02E-14	9.80E-16
29	4.74E+05	1.67E-08	2.57E-04	4.63E-08	1.50E-04	2.05E-06	1.29E-07	2.37E-06	2.90E-04	7.16E-04	1.70E-04	3.27E-14	3.41E-14	2.49E-21	1.89E-13	6.46E-15	2.10E-16
30	9.90E+05	7.78E-08	-	1.40E-07	-	9.52E-06	3.88E-07	4.54E-04	6.50E-03	1.61E-02	3.81E-03	7.33E-13	7.64E-13	5.58E-20	4.24E-12	1.45E-13	4.71E-15
31	4.59E+05	1.62E-08	2.49E-04	4.49E-08	1.45E-04	1.98E-06	1.25E-07	2.30E-06	3.20E-03	7.90E-03	1.87E-03	3.61E-13	3.76E-13	2.75E-20	2.08E-12	7.13E-14	2.31E-15
32	9.13E+05	9.31E-08	-	1.35E-07	-	1.14E-05	3.74E-07	3.76E-04	4.37E-03	1.08E-02	2.56E-03	4.93E-13	5.14E-13	3.75E-20	2.85E-12	9.75E-14	3.16E-15
33	9.42E+05	4.06E-09	-	7.72E-06	2.49E-10	4.97E-07	2.14E-05	6.36E-05	2.34E-03	5.78E-03	1.37E-03	2.64E-13	2.75E-13	2.01E-20	1.53E-12	5.22E-14	1.69E-15
34	6.40E+05	-	-	7.80E-07	-	-	2.17E-06	8.27E-06	1.94E-03	4.78E-03	1.13E-03	2.18E-13	2.27E-13	1.66E-20	1.26E-12	4.32E-14	1.40E-15
35	4.94E+05	4.91E-08	-	8.65E-08	-	6.01E-06	2.40E-07	2.07E-04	1.23E-03	3.03E-03	7.18E-04	1.38E-13	1.44E-13	1.05E-20	7.99E-13	2.73E-14	8.88E-16
36	5.30E+05	9.17E-08	-	1.80E-07	-	1.12E-05	5.00E-07	2.16E-04	6.80E-03	1.68E-02	3.98E-03	7.67E-13	7.99E-13	5.84E-20	4.43E-12	1.52E-13	4.92E-15
37	4.60E+05	1.62E-08	2.49E-04	4.49E-08	1.45E-04	1.99E-06	1.25E-07	2.30E-06	2.68E-03	6.63E-03	1.57E-03	3.03E-13	3.15E-13	2.30E-20	1.75E-12	5.98E-14	1.94E-15
38	4.20E+05	2.67E-07	-	3.73E-07	-	3.26E-05	1.03E-06	6.45E-04	8.38E-05	2.07E-04	4.91E-05	9.45E-15	9.85E-15	7.20E-22	5.46E-14	1.87E-15	6.07E-17
39	7.95E+05	2.13E-07	-	3.11E-07	-	2.60E-05	8.64E-07	3.96E-04	5.46E-04	1.35E-03	3.19E-04	6.15E-14	6.41E-14	4.69E-21	3.56E-13	1.22E-14	3.95E-16
40	6.12E+05	9.02E-08	1.46E-03	1.72E-06	1.18E-04	1.10E-05	4.78E-06	2.13E-04	2.54E-05	6.27E-05	1.49E-05	2.86E-15	2.98E-15	2.18E-22	1.65E-14	5.66E-16	1.84E-17
41	3.46E+05	3.24E-07	-	3.79E-07	-	3.96E-05	1.05E-06	-	2.24E-04	5.55E-04	1.31E-04	2.53E-14	2.64E-14	1.93E-21	1.46E-13	5.00E-15	1.62E-16
42	1.27E+06	1.18E-06	1.01E-01	2.82E-06	4.05E-03	1.45E-04	7.84E-06	3.65E-04	7.52E-03	1.86E-02	4.41E-03	8.49E-13	8.85E-13	6.46E-20	4.90E-12	1.68E-13	5.45E-15
43	9.45E+05	6.01E-07	-	8.39E-07	-	7.35E-05	2.33E-06	1.45E-03	1.18E-04	2.92E-04	6.93E-05	1.33E-14	1.39E-14	1.02E-21	7.71E-14	2.64E-15	8.56E-17
44	5.64E+05	3.89E-14	-	1.16E-06	1.54E-11	4.76E-12	3.24E-06	1.04E-04	1.83E-03	4.53E-03	1.07E-03	2.07E-13	2.16E-13	1.57E-20	1.20E-12	4.09E-14	1.33E-15
45	5.11E+05	3.52E-14	-	1.05E-06	1.39E-11	4.31E-12	2.93E-06	9.43E-05	1.57E-03	3.88E-03	9.19E-04	1.77E-13	1.85E-13	1.35E-20	1.02E-12	3.50E-14	1.14E-15
46	6.72E+05	4.63E-14	-	1.39E-06	1.83E-11	5.67E-12	3.86E-06	1.24E-04	3.10E-03	7.66E-03	1.81E-03	3.50E-13	3.64E-13	2.66E-20	2.02E-12	6.91E-14	2.24E-15
47	5.97E+05	-	-	9.45E-07	-	-	2.62E-06	1.06E-04	5.08E-04	1.26E-03	2.98E-04	5.73E-14	5.97E-14	4.36E-21	3.31E-13	1.13E-14	3.68E-16
48	2.40E+05	6.34E-06	-	4.31E-07	2.33E-03	7.76E-04	1.20E-06	-	2.51E-04	6.21E-04	1.47E-04	2.84E-14	2.95E-14	2.16E-21	1.64E-13	5.61E-15	1.82E-16
49	1.92E+05	6.77E-09	1.04E-04	1.87E-08	6.06E-05	8.28E-07	5.21E-08	9.59E-07	9.12E-06	2.25E-05	5.34E-06	1.03E-15	1.07E-15	7.84E-23	5.95E-15	2.03E-16	6.60E-18
50	4.24E+05	1.50E-08	7.00E-07	2.64E-08	1.34E-04	1.83E-06	7.33E-08	1.96E-06	6.61E-09	1.63E-08	3.87E-09	7.45E-19	7.77E-19	5.68E-26	4.31E-18	1.47E-19	4.78E-21
51	6.93E+05	1.09E-07	4.80E-04	2.89E-07	1.66E-04	1.34E-05	8.01E-07	2.65E-04	1.58E-04	3.91E-04	9.26E-05	1.78E-14	1.86E-14	1.36E-21	1.03E-13	3.52E-15	1.14E-16
Phase Totals	2.39E+07	1.30E+01	1.05E-01	2.84E-05	8.17E-03	3.54E-02	7.88E-05	5.76E-03	6.95E-02	1.72E-01	4.07E-02	7.84E-12	8.17E-12	5.97E-19	4.53E-11	1.55E-12	5.03E-14

Table 6: Soluble Radionuclide Inventory by Tank, continued

Tank	Free Supernate Volume, gal	H-3 (Ci)	C-14 (Ci)	Co-60 (Ci)	Ni-59 (Ci)	Ni-63 (Ci)	Se-79 (Ci)	Sr-90 (Ci)	Y-90 (Ci)	Nb-94 (Ci)	Tc-99 (Ci)	Ru-106 (Ci)	Rh-106 (Ci)	Sb-125 (Ci)	Sn-126 (Ci)	I-129 (Ci)
1	1.71E+04	6.46E+00	1.14E-01	6.66E-02	7.17E-03	1.62E-01	2.66E-01	8.33E+01	8.33E+01	2.09E-06	9.86E+01	6.80E+00	6.80E+00	2.76E+01	1.34E+00	5.31E-02
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	2.99E+05	1.13E+02	2.00E+00	1.17E+00	5.58E-02	2.83E+00	2.07E+00	6.48E+02	6.48E+02	1.63E-05	7.67E+02	5.29E+01	5.29E+01	2.14E+02	1.05E+01	4.14E-01
5	3.64E-12	1.38E-15	2.42E-17	1.42E-17	1.39E-19	3.44E-17	5.15E-18	1.61E-15	1.61E-15	4.05E-23	1.91E-15	1.32E-16	1.32E-16	5.34E-16	2.60E-17	1.03E-18
6	2.54E+05	6.76E+02	1.69E+00	9.90E-01	1.99E-03	2.40E+00	7.37E-02	2.31E+01	2.31E+01	5.79E-07	2.73E+01	1.88E+00	1.88E+00	7.64E+00	3.72E-01	1.47E-02
7	2.76E+05	1.13E+02	1.84E+00	1.08E+00	1.01E-02	2.62E+00	3.74E-01	1.05E+02	1.05E+02	2.94E-06	1.39E+02	9.56E+00	9.56E+00	3.87E+01	1.89E+00	7.47E-02
8	7.28E+03	1.68E+02	4.85E-02	2.84E-02	1.07E-04	6.89E-02	3.97E-03	1.25E+00	1.25E+00	3.13E-08	1.47E+00	1.02E-01	1.02E-01	4.12E-01	2.01E-02	7.95E-04
9	1.30E+04	4.92E+00	8.67E-02	5.07E-02	1.99E-03	1.23E-01	7.36E-02	2.31E+01	2.31E+01	5.79E-07	2.73E+01	1.88E+00	1.88E+00	7.63E+00	3.72E-01	1.47E-02
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	1.42E+05	5.36E+01	9.44E-01	5.53E-01	9.05E-07	1.34E+00	3.35E-05	9.47E-03	9.47E-03	2.64E-10	1.24E-02	8.58E-04	8.58E-04	3.48E-03	1.70E-04	6.71E-06
12	2.46E+04	9.33E+00	1.64E-01	9.61E-02	5.42E-04	2.33E-01	2.01E-02	6.29E+00	6.29E+00	1.58E-07	7.45E+00	5.14E-01	5.14E-01	2.08E+00	1.02E-01	4.02E-03
13	5.78E+05	2.19E+02	3.85E+00	2.25E+00	1.91E-01	5.47E+00	7.08E+00	2.22E+03	2.22E+03	5.57E-05	2.62E+03	1.81E+02	1.81E+02	7.34E+02	3.58E+01	1.42E+00
14	1.05E+03	3.97E-01	7.00E-03	4.09E-03	3.72E-04	9.94E-03	1.38E-02	4.32E+00	4.32E+00	1.08E-07	5.11E+00	3.52E-01	3.52E-01	1.43E+00	6.97E-02	2.75E-03
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1.18E+06	4.45E+02	7.83E+00	4.58E+00	3.31E-05	1.11E+01	1.23E-03	3.83E-01	3.83E-01	9.65E-09	4.55E-01	3.14E-02	3.14E-02	1.27E-01	6.20E-03	2.93E-03
22	1.17E+06	4.43E+02	7.79E+00	4.56E+00	3.59E-05	1.11E+01	1.33E-03	4.13E-01	4.13E-01	1.05E-08	4.94E-01	3.41E-02	3.40E-02	1.38E-01	6.73E-03	2.91E-03
23	1.26E+06	4.90E+00	1.96E-01	4.10E-03	5.39E-06	1.79E-01	2.00E-04	1.52E+00	1.52E+00	1.57E-09	3.20E-01	5.11E-03	5.11E-03	2.07E-02	1.01E-03	2.76E-03
24	8.51E+05	3.22E+02	5.67E+00	3.32E+00	9.99E-03	8.05E+00	3.70E-01	1.16E+02	1.16E+02	2.91E-06	1.37E+02	9.47E+00	9.47E+00	3.84E+01	1.87E+00	2.47E-02
25	3.69E+04	1.40E+01	2.46E-01	1.44E-01	2.94E-03	3.49E-01	1.09E-01	3.41E+01	3.41E+01	8.57E-07	4.04E+01	2.79E+00	2.79E+00	1.13E+01	5.51E-01	2.18E-02
26	5.19E+05	1.96E+02	3.46E+00	2.02E+00	7.83E-02	4.91E+00	2.90E+00	9.51E+02	9.51E+02	2.28E-05	1.08E+03	7.42E+01	7.42E+01	3.01E+02	1.47E+01	5.80E-01
27	6.00E+05	2.27E+02	4.00E+00	2.34E+00	1.03E-01	5.68E+00	3.81E+00	1.18E+03	1.18E+03	3.00E-05	1.41E+03	9.75E+01	9.75E+01	3.95E+02	1.93E+01	7.62E-01
28	1.85E+05	7.02E+01	1.23E+00	7.23E-01	1.76E-02	1.75E+00	6.50E-01	2.04E+02	2.04E+02	5.12E-06	2.41E+02	1.66E+01	1.66E+01	6.74E+01	3.29E+00	1.30E-01
29	1.67E+05	6.32E+01	1.11E+00	6.51E-01	3.53E-03	1.58E+00	1.31E-01	4.10E+01	4.10E+01	1.03E-06	4.85E+01	3.35E+00	3.34E+00	1.36E+01	6.61E-01	2.61E-02
30	9.15E+05	3.46E+02	6.10E+00	3.57E+00	2.08E-01	8.66E+00	7.69E+00	2.41E+03	2.41E+03	6.05E-05	2.85E+03	1.97E+02	1.97E+02	7.97E+02	3.89E+01	1.54E+00
31	1.15E+05	4.36E+01	7.67E-01	4.49E-01	2.77E-02	1.09E-02	1.03E+00	3.22E+02	3.22E+02	8.07E-06	3.81E+02	2.63E+01	2.62E+01	1.06E+02	5.19E+00	2.05E-01
32	8.44E+05	3.20E+02	5.63E+00	3.29E+00	1.40E-01	7.99E+00	5.17E+00	1.40E+03	1.40E+03	4.07E-05	1.92E+03	1.32E+02	1.32E+02	5.36E+02	2.62E+01	1.03E+00
33	7.95E+05	4.05E+02	5.30E+00	3.10E+00	6.83E-02	7.52E+00	2.53E+00	7.92E+02	7.92E+02	1.99E-05	9.38E+02	6.47E+01	6.47E+01	2.62E+02	1.28E+01	5.06E-01
34	5.69E+05	2.15E+02	3.79E+00	2.22E+00	5.94E-02	5.38E+00	2.20E+00	6.90E+02	6.90E+02	1.73E-05	8.16E+02	5.63E+01	5.63E+01	2.28E+02	1.11E+01	4.40E-01
35	4.50E+05	1.70E+02	3.00E+00	1.75E+00	3.86E-02	4.26E+00	1.43E+00	4.48E+02	4.48E+02	1.12E-05	5.30E+02	3.66E+01	3.66E+01	1.48E+02	7.23E+00	2.86E-01
36	2.20E+05	8.32E+01	1.46E+00	8.57E-01	9.74E-02	2.08E+00	3.61E+00	1.13E+03	1.13E+03	2.84E-05	1.34E+03	9.23E+01	9.22E+01	3.74E+02	1.82E+01	7.21E-01
37	1.16E+05	4.40E+01	7.75E-01	4.54E-01	2.35E-02	1.10E+00	8.69E-01	2.49E+02	2.49E+02	6.84E-06	3.22E+02	2.22E+01	2.22E+01	9.01E+01	4.39E+00	1.74E-01
38	1.71E+05	6.49E+01	1.14E+00	6.68E-01	1.18E-03	1.62E+00	4.38E-02	1.37E+01	1.37E+01	3.45E-07	1.62E+01	1.12E+00	1.12E+00	4.54E+00	2.22E-01	8.76E-03
39	7.22E+05	2.73E+02	4.81E+00	2.82E+00	1.71E-02	6.84E+00	6.35E-01	1.49E+02	1.49E+02	4.99E-06	2.35E+02	1.62E+01	1.62E+01	6.58E+01	3.21E+00	1.27E-01
40	3.05E+05	1.15E+02	2.03E+00	1.19E+00	4.37E-04	2.89E+00	1.62E-02	5.28E+00	5.28E+00	1.27E-07	6.00E+00	4.14E-01	4.14E-01	1.68E+00	8.18E-02	3.24E-03
41	1.24E+05	4.70E+01	8.28E-01	4.84E-01	2.79E-03	1.18E+00	1.03E-01	1.14E+01	1.14E+01	8.12E-07	3.83E+01	2.64E+00	2.64E+00	1.07E+01	5.22E-01	2.06E-02
42	1.25E+06	4.75E+02	8.36E+00	4.89E+00	2.57E-01	1.19E+01	9.53E+00	2.98E+03	2.98E+03	7.49E-05	3.53E+03	2.44E+02	2.44E+02	9.88E+02	4.82E+01	1.91E+00
43	7.76E+05	2.94E+02	5.17E+00	3.03E+00	3.36E-03	7.34E+00	1.24E-01	3.37E+01	3.37E+01	9.78E-07	4.61E+01	3.18E+00	3.18E+00	1.29E+01	6.29E-01	2.49E-02
44	2.63E+05	9.97E+01	1.75E+00	1.03E+00	2.96E-02	2.49E+00	1.10E+00	3.43E+02	3.43E+02	8.62E-06	4.06E+02	2.80E+01	2.80E+01	1.14E+02	5.54E+00	2.19E-01
45	1.80E+05	6.79E+01	1.20E+00	7.00E-01	1.91E-02	1.70E+00	7.06E-01	2.21E+02	2.21E+02	5.55E-06	2.62E+02	1.81E+01	1.81E+01	7.32E+01	3.57E+00	1.41E-01
46	4.13E+05	1.56E+02	2.75E+00	1.61E+00	6.58E-02	3.91E+00	2.44E+00	7.63E+02	7.63E+02	1.92E-05	9.03E+02	6.23E+01	6.23E+01	2.53E+02	1.23E+01	4.87E-01
47	1.73E+05	6.55E+01	1.15E+00	6.74E-01	5.09E-03	1.64E+00	1.88E-01	5.90E+01	5.90E+01	1.48E-06	6.99E+01	4.82E+00	4.82E+00	1.95E+01	9.53E-01	3.77E-02
48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	1.92E+05	7.26E+01	1.28E+00	7.47E-01	3.15E-04	1.81E+00	1.17E-02	2.68E+01	2.68E+01	9.18E-08	4.33E+00	2.99E-01	2.99E-01	1.21E+00	5.90E-02	2.34E-03
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51	5.82E+05	2.20E+02	3.88E+00	2.27E+00	4.59E-03	5.51E+00	1.70E-01	4.25E+01	4.25E+01	1.34E-06	6.30E+01	4.35E+00	4.35E+00	1.76E+01	8.59E-01	3.40E-02
Phase Totals	1.66E+07	6.73E+03	1.03E+02	6.04E+01	1.55E+00	1.47E+02	5.75E+01	1.77E+04	1.77E+04	4.53E-04	2.13E+04	1.47E+03	1.47E+03	5.96E+03	2.91E+02	1.15E+01

Table 6: Soluble Radionuclide Inventory by Tank, continued

Tank	Free Supernate Volume, gal	Cs-134 (Ci)	Cs-135 (Ci)	Cs-137 (Ci)	Ba-137m (Ci)	Ce-144 (Ci)	Pr-144 (Ci)	Pm-147 (Ci)	Eu-154 (Ci)	Th-232 (Ci)	U-232 (Ci)	U-233 (Ci)	U-234 (Ci)	U-235 (Ci)	U-236 (Ci)	U-238 (Ci)	Np-237 (Ci)
1	1.71E+04	6.79E+02	1.15E+00	3.39E+05	3.20E+05	1.77E-02	1.77E-02	1.15E+01	2.72E+00	-	1.55E-05	-	-	2.39E-05	-	5.96E-04	8.69E-04
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	2.99E+05	5.29E+03	8.98E+00	2.63E+06	2.49E+06	1.38E-01	1.38E-01	8.92E+01	2.11E+01	-	1.36E-04	-	-	1.79E-04	-	7.70E-03	6.87E-03
5	3.64E-12	1.32E-14	2.24E-17	6.56E-12	6.20E-12	3.43E-19	3.43E-19	2.22E-16	5.26E-17	-	3.27E-21	-	-	6.35E-21	-	1.50E-19	2.54E-19
6	2.54E+05	1.88E+02	3.20E-01	9.38E+04	8.88E+04	4.91E-03	4.91E-03	3.18E+00	7.53E-01	-	2.68E-04	-	-	3.32E-04	-	1.24E-02	4.30E-03
7	2.76E+05	9.55E+02	1.62E+00	4.76E+05	4.50E+05	2.49E-02	2.49E-02	1.61E+01	3.82E+00	-	6.56E-05	-	-	3.07E-04	-	1.06E-02	5.28E-03
8	7.28E+03	1.02E+01	1.73E-02	5.06E+03	4.79E+03	2.65E-04	2.65E-04	1.71E-01	4.06E-02	-	2.16E-06	-	-	5.72E-06	-	2.63E-04	1.19E-04
9	1.30E+04	1.88E+02	3.20E-01	9.38E+04	8.87E+04	4.91E-03	4.91E-03	3.17E+00	7.53E-01	-	1.34E-05	-	-	8.66E-06	-	2.16E-04	1.48E-03
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	1.42E+05	8.57E-02	1.46E-04	4.27E+01	4.04E+01	2.24E-06	2.23E-06	1.45E-03	3.43E-04	2.56E-06	-	3.66E-04	3.00E-04	5.66E-06	4.64E-05	1.05E-05	1.98E-04
12	2.46E+04	5.13E+01	8.72E-02	2.56E+04	2.42E+04	1.34E-03	1.34E-03	8.66E-01	2.05E-01	4.35E-05	4.38E-07	1.22E-03	1.15E-04	2.16E-06	9.09E-06	2.17E-05	2.54E-04
13	5.78E+05	1.81E+04	3.07E+01	9.01E+06	8.53E+06	4.72E-01	4.72E-01	3.05E+02	7.23E+01	3.13E-04	8.32E-05	6.41E-02	9.05E-03	2.47E-04	9.33E-04	2.89E-03	2.33E-02
14	1.05E+03	3.52E+01	5.98E-02	1.75E+04	1.66E+04	9.18E-04	9.18E-04	5.94E-01	1.41E-01	2.43E-06	7.20E-07	8.57E-05	1.18E-05	9.52E-07	1.01E-06	1.82E-05	1.26E-04
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1.18E+06	3.14E+00	5.33E-03	1.56E+03	1.48E+03	8.18E-05	8.18E-05	5.29E-02	1.25E-02	1.20E-06	-	3.78E-02	4.04E-02	6.40E-04	7.40E-03	3.79E-03	3.35E-02
22	1.17E+06	3.40E+00	5.78E-03	1.70E+03	1.60E+03	8.87E-05	8.87E-05	5.74E-02	1.36E-02	-	-	1.56E-01	5.62E-02	8.59E-04	9.25E-03	1.91E-02	3.41E-02
23	1.26E+06	1.32E-02	1.95E-02	2.54E+02	2.41E+02	1.33E-05	1.33E-05	8.61E-03	2.04E-03	1.72E-07	-	1.15E-02	1.82E-02	1.01E-04	4.09E-04	3.04E-03	8.43E-04
24	8.51E+05	9.46E+02	1.61E+00	4.72E+05	4.46E+05	2.47E-02	2.47E-02	1.60E+01	3.79E+00	-	2.68E-03	8.15E-09	2.60E-08	7.70E-03	9.94E-04	9.24E-01	2.38E-03
25	3.69E+04	2.79E+02	4.73E-01	1.39E+05	1.31E+05	7.26E-03	7.26E-03	4.70E+00	1.11E+00	-	1.16E-04	3.53E-10	1.13E-09	3.33E-04	4.31E-05	4.00E-02	1.03E-04
26	5.19E+05	7.42E+03	1.26E+01	3.70E+06	3.50E+06	1.93E-01	1.93E-01	1.25E+02	2.97E+01	-	1.63E-03	4.97E-09	1.59E-08	4.70E-03	6.06E-04	5.64E-01	1.45E-03
27	6.00E+05	9.75E+03	1.66E+01	4.86E+06	4.59E+06	2.54E-01	2.54E-01	1.64E+02	3.90E+01	-	1.89E-03	5.75E-09	1.84E-08	5.43E-03	7.02E-04	6.52E-01	1.68E-03
28	1.85E+05	1.66E+03	2.82E+00	8.28E+05	7.84E+05	4.33E-02	4.33E-02	2.80E+01	6.65E+00	-	5.83E-04	1.78E-09	5.67E-09	1.68E-03	2.17E-04	2.01E-01	5.19E-04
29	1.67E+05	3.34E+02	5.68E-01	1.67E+05	1.58E+05	8.71E-03	8.71E-03	5.64E+00	1.34E+00	9.05E-05	2.41E-05	1.85E-02	2.62E-03	7.16E-05	2.70E-04	8.37E-04	6.73E-03
30	9.15E+05	1.97E+04	3.34E+03	9.80E+06	9.27E+06	5.13E-01	5.12E-01	3.32E+02	7.86E+01	-	-	3.19E-02	5.66E-04	5.89E-03	2.10E-05	1.44E-02	-
31	1.15E+05	2.62E+03	4.46E+00	1.31E+06	1.24E+06	6.84E-02	6.84E-02	4.43E+01	1.05E+01	6.24E-05	1.66E-05	1.28E-02	1.80E-03	4.93E-05	1.86E-04	5.76E-04	4.64E-03
32	8.44E+05	1.32E+04	2.25E+01	6.59E+06	6.23E+06	3.45E-01	3.45E-01	2.23E+02	5.29E+01	-	-	-	3.82E-02	5.46E-04	8.57E-03	2.57E-04	1.58E-02
33	7.95E+05	6.46E+03	1.10E+01	3.22E+06	3.05E+06	1.69E-01	1.68E-01	1.09E+02	2.59E+01	-	1.54E-02	7.38E-08	1.52E-03	2.85E-02	1.58E-02	4.13E+00	1.30E+00
34	5.69E+05	5.63E+03	9.56E+00	2.80E+06	2.65E+06	1.47E-01	1.47E-01	9.49E+01	2.25E+01	-	3.01E-03	-	-	3.04E-03	-	2.15E-01	1.66E-01
35	4.50E+05	3.65E+03	6.21E+00	1.82E+06	1.72E+06	9.53E-02	9.53E-02	6.16E+01	1.46E+01	-	-	-	1.99E-02	3.45E-04	5.86E-03	2.04E-04	7.18E-03
36	2.20E+05	9.22E+03	1.57E+01	4.59E+06	4.35E+06	2.40E-01	2.40E-01	1.56E+02	3.69E+01	-	-	-	1.69E-02	3.27E-04	5.95E-03	1.07E-04	4.72E-03
37	1.16E+05	2.22E+03	3.77E+00	1.11E+06	1.05E+06	5.79E-02	5.79E-02	3.75E+01	8.88E+00	6.30E-05	1.68E-05	1.29E-02	1.82E-03	4.98E-05	1.88E-04	5.82E-04	4.69E-03
38	1.71E+05	1.12E+02	1.90E-01	5.58E+04	5.28E+04	2.92E-03	2.92E-03	1.89E+00	4.48E-01	-	-	-	4.83E-02	6.67E-04	9.20E-03	5.41E-05	5.15E-02
39	7.22E+05	1.62E+03	2.76E+00	8.09E+05	7.65E+05	4.23E-02	4.23E-02	2.74E+01	6.49E+00	-	-	-	8.58E-02	1.24E-03	1.47E-02	2.62E-04	5.39E-02
40	3.05E+05	4.14E+01	7.03E-02	2.06E+04	1.95E+04	1.08E-03	1.08E-03	6.98E-01	1.65E-01	7.28E-04	8.09E-04	2.07E-02	1.99E-02	3.76E-03	4.97E-03	1.18E-01	4.11E-01
41	1.24E+05	2.64E+02	4.48E-01	1.31E+05	1.24E+05	6.88E-03	6.88E-03	4.45E+00	1.06E+00	-	-	-	5.16E-02	5.97E-04	1.48E-02	4.09E-05	1.54E-01
42	1.25E+06	2.44E+04	4.14E+01	1.21E+07	1.15E+07	6.35E-01	6.35E-01	4.11E+02	9.74E+01	1.00E-01	3.54E-04	1.41E+00	5.19E-01	1.22E-02	6.93E-02	2.15E-01	4.27E-01
43	7.76E+05	3.18E+02	5.40E-01	1.58E+05	1.50E+05	8.29E-03	8.28E-03	5.36E+00	1.27E+00	-	-	-	2.19E-01	3.02E-03	4.17E-02	2.45E-04	2.33E-01
44	2.63E+05	2.80E+03	4.76E+00	1.40E+06	1.32E+06	7.30E-02	7.30E-02	4.72E+01	1.12E+01	-	8.29E-04	2.52E-09	8.05E-09	2.38E-03	3.08E-04	2.86E-01	7.38E-04
45	1.80E+05	1.81E+03	3.07E+00	8.99E+05	8.51E+05	4.71E-02	4.70E-02	3.04E+01	7.22E+00	-	5.65E-04	1.72E-09	5.49E-09	1.62E-03	2.10E-04	1.95E-01	5.03E-04
46	4.13E+05	6.23E+03	1.06E+01	3.10E+06	2.94E+06	1.62E-01	1.62E-01	1.05E+02	2.49E+01	-	1.30E-03	3.95E-09	1.26E-08	3.74E-03	4.82E-04	4.48E-01	1.16E-03
47	1.73E+05	4.82E+02	8.18E-01	2.40E+05	2.27E+05	1.26E-02	1.26E-02	8.13E+00	1.93E+00	-	4.41E-04	-	-	1.20E-03	-	9.50E-02	-
48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	1.92E+05	2.98E+01	5.07E-02	1.49E+04	1.41E+04	7.78E-04	7.78E-04	5.03E-01	1.19E-01	1.04E-04	2.76E-05	2.13E-02	3.00E-03	8.21E-05	3.10E-04	9.60E-04	7.72E-03
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51	5.82E+05	4.34E+02	7.38E-01	2.16E+05	2.05E+05	1.13E-02	1.13E-02	7.33E+00	1.74E+00	4.03E-04	5.91E-05	4.91E-02	4.07E-02	1.06E-03	6.59E-03	9.69E-03	3.29E-02
Phase Totals	1.66E+07	1.47E+05	2.50E+02	7.33E+07	6.93E+07	3.83E+00	3.83E+00	2.48E+03	5.88E+02	1.02E-01	3.03E-02	1.82E+00	1.23E+00	8.77E-02	2.26E-01	8.16E+00	3.01E+00

Table 6: Soluble Radionuclide Inventory by Tank, continued

Tank	Free Supernate Volume, gal	Pu-238 (Ci)	Pu-239 (Ci)	Pu-240 (Ci)	Pu-241 (Ci)	Pu-242 (Ci)	Am-241 (Ci)	Am-242m (Ci)	Cm-244 (Ci)	Cm-245 (Ci)	Na-22 (Ci)	Al-26 (Ci)	Te-125m (Ci)	Sb-126 (Ci)	Sb-126m (Ci)	Sm-151 (Ci)	Eu-152 (Ci)	Eu-155 (Ci)
1	1.71E+04	6.74E-01	1.80E-01	4.03E-02	2.21E-01	8.29E-06	1.08E+00	6.25E-04	4.34E-01	4.28E-05	6.04E+00	3.86E-02	6.73E+00	1.88E-01	1.34E+00	1.28E+01	6.21E-02	7.26E-01
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	2.99E+05	1.39E+00	1.38E+00	3.08E-01	2.60E+00	6.33E-05	8.44E+00	4.87E-03	3.38E+00	3.33E-04	4.70E+01	3.01E-01	5.24E+01	1.46E+00	1.05E+01	9.99E+01	4.83E-01	5.65E+00
5	3.64E-12	1.75E-16	2.92E-17	6.99E-18	4.68E-17	2.06E-21	2.10E-17	1.21E-20	8.42E-18	8.29E-22	1.17E-16	7.48E-19	1.30E-16	3.64E-18	2.60E-17	2.49E-16	1.20E-18	1.41E-17
6	2.54E+05	-	1.27E+00	4.41E-01	4.95E+00	8.68E-04	3.01E-01	1.73E-04	1.20E-01	1.19E-05	1.67E+00	1.07E-02	1.86E+00	5.21E-02	3.72E-01	3.56E+00	1.72E-02	2.01E-01
7	2.76E+05	2.59E+01	4.66E+00	1.15E+00	1.10E+01	1.06E-03	1.53E+00	8.79E-04	6.11E-01	6.02E-05	8.49E+00	5.43E-02	9.46E+00	2.65E-01	1.89E+00	1.81E+01	8.73E-02	1.02E+00
8	7.28E+03	3.42E-01	7.51E-02	1.77E-02	1.68E-01	2.23E-05	1.62E-02	9.35E-06	6.50E-03	6.40E-07	9.03E-02	5.78E-04	1.01E-01	2.81E-03	2.01E-02	1.92E-01	9.29E-04	1.09E-02
9	1.30E+04	3.21E-01	4.58E-02	1.02E-02	4.25E-02	2.11E-06	3.01E-01	1.73E-04	1.20E-01	1.19E-05	1.67E+00	1.07E-02	1.86E+00	5.21E-02	3.72E-01	3.56E+00	1.72E-02	2.01E-01
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	1.42E+05	2.68E+01	2.66E-01	1.67E-01	9.58E+00	3.56E-04	1.37E-04	7.89E-08	5.48E-05	5.40E-09	7.62E-04	4.88E-06	8.49E-04	2.37E-05	1.70E-04	1.62E-03	7.84E-06	9.16E-05
12	2.46E+04	4.42E+00	7.41E-02	4.09E-02	1.04E+00	5.92E-05	8.20E-02	4.73E-05	3.28E-02	3.23E-06	4.57E-01	2.92E-03	5.09E-01	1.42E-02	1.02E-01	9.71E-01	4.70E-03	5.49E-02
13	5.78E+05	8.51E+01	2.30E+00	9.52E-01	1.68E+01	6.32E-04	2.89E+01	1.67E-02	1.16E+01	1.14E-03	1.61E+02	1.03E+00	1.79E+02	5.01E+00	3.58E+01	3.42E+02	1.65E+00	1.93E+01
14	1.05E+03	5.63E-02	1.39E-02	4.48E-03	2.27E-02	8.20E-07	5.62E-02	3.24E-05	2.25E-02	2.22E-06	3.13E-01	2.00E-03	3.49E-01	9.75E-03	6.97E-02	6.66E-01	3.22E-03	3.76E-02
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1.18E+06	2.01E+02	2.96E+00	1.01E+00	1.77E+01	1.13E-04	5.01E-03	2.89E-06	2.01E-03	1.98E-07	2.79E-02	1.78E-04	3.11E-02	8.69E-04	6.20E-03	5.93E-02	2.87E-04	3.35E-03
22	1.17E+06	2.31E-02	-	-	-	-	5.43E-03	3.13E-06	2.18E-03	2.14E-07	3.03E-02	1.94E-04	3.37E-02	9.42E-04	6.73E-03	6.43E-02	3.11E-04	3.64E-03
23	1.26E+06	9.19E-01	3.15E-03	7.86E-04	9.19E-02	4.68E-03	1.20E-02	4.70E-07	3.53E-04	3.21E-08	4.54E-03	2.90E-05	5.05E-03	1.41E-04	1.01E-03	9.65E-03	4.67E-05	5.45E-04
24	8.51E+05	4.92E+03	7.71E+02	1.72E+02	4.06E+03	3.44E-02	1.51E+00	8.71E-04	6.05E-01	5.96E-05	8.42E+00	5.38E-02	9.37E+00	2.62E-01	1.87E+00	1.79E+01	8.65E-02	1.01E+00
25	3.69E+04	2.13E+02	3.34E+01	7.47E+00	1.76E+02	1.49E-03	4.45E-01	2.57E-04	1.78E-01	1.76E-05	2.48E+00	1.58E-02	2.76E+00	7.72E-02	5.51E-01	5.27E+00	2.55E-02	2.98E-01
26	5.19E+05	3.00E-03	4.71E+02	1.05E+02	2.48E+03	2.10E-02	1.18E+01	6.83E-03	4.74E+00	4.67E-04	6.60E+01	4.22E-01	7.35E+01	2.05E+00	1.47E+01	1.40E+02	6.78E-01	7.92E+00
27	6.00E+05	3.47E-03	5.44E+02	1.22E+02	2.86E+03	2.42E-02	1.56E+01	8.97E-03	6.23E+00	6.14E-04	8.67E+01	5.54E-01	9.65E+01	2.70E+00	1.93E+01	1.84E+02	8.91E-01	1.04E+01
28	1.85E+05	1.07E+03	1.68E+02	3.76E+01	8.84E+02	7.48E-03	2.65E+00	1.53E-03	1.06E+00	1.05E-04	1.48E+01	9.45E-02	1.65E+01	4.60E-01	3.29E+00	3.14E+01	1.52E-01	1.78E+00
29	1.67E+05	2.46E+01	6.66E-01	2.75E-01	4.85E+00	1.83E-04	5.34E-01	3.08E-04	2.14E-01	2.11E-05	2.97E+00	1.90E-02	3.31E+00	9.26E-02	6.61E-01	6.32E+00	3.06E-02	3.57E-01
30	9.15E+05	6.15E-03	5.34E+01	3.84E+01	3.95E+03	9.18E-02	3.14E-01	1.81E-02	1.26E+01	1.24E-03	1.75E+02	1.12E+00	1.95E+02	5.45E+00	3.89E+01	3.72E+02	1.80E+00	2.10E+01
31	1.15E+05	1.70E+01	4.59E-01	1.90E-01	3.34E+00	1.26E-04	4.19E+00	2.42E-03	1.68E+00	1.65E-04	2.33E+01	1.49E-01	2.60E+01	7.27E-01	5.19E+00	4.96E+01	2.40E-01	2.80E+00
32	8.44E+05	5.54E+03	4.86E+01	3.61E+01	2.47E+03	7.61E-02	2.11E+01	1.22E-02	8.46E+00	8.33E-04	1.18E+02	7.52E-01	1.31E+02	3.66E+00	2.62E+01	2.50E+02	1.21E+00	1.41E+01
33	7.95E+05	2.12E+03	1.16E+03	2.03E+02	6.02E+03	1.17E-02	1.03E+01	5.95E-03	4.13E+00	4.07E-04	5.75E+01	3.68E-01	6.40E+01	1.79E+00	1.28E+01	1.22E+02	5.91E-01	6.91E+00
34	5.69E+05	-	3.47E+01	7.74E+00	1.60E+02	1.61E-03	8.98E+00	5.18E-03	3.60E+00	3.54E-04	5.00E+01	3.20E+01	5.57E+01	1.56E+00	1.11E+01	1.06E+02	5.14E-01	6.01E+00
35	4.50E+05	2.97E+03	2.41E+01	1.84E+01	1.43E+03	4.13E-02	5.84E+00	3.36E-03	2.34E+00	2.30E-04	3.25E+01	2.08E-01	3.62E+01	1.01E+00	7.23E+00	6.91E+01	3.34E-01	3.90E+00
36	2.20E+05	1.46E+03	1.14E+01	9.05E+00	5.93E+02	1.96E-02	1.47E+01	8.49E-03	5.90E+00	5.81E-04	8.20E+01	5.24E+01	9.13E+01	2.55E+00	1.82E+01	1.74E+02	8.43E-01	9.85E+00
37	1.16E+05	1.71E+01	4.64E-01	1.92E-01	3.38E+00	1.27E-04	3.55E+00	2.05E-03	1.42E+00	1.40E-04	1.98E+01	1.26E-01	2.20E+01	6.15E-01	4.39E+00	4.20E+01	2.03E-01	2.37E+00
38	1.71E+05	1.17E+03	4.63E+00	3.91E+00	1.00E+03	5.76E-02	1.79E-01	1.03E-04	7.16E-02	7.05E-06	9.96E-01	6.37E-03	1.11E+00	3.10E-02	2.22E-01	2.12E+00	1.02E-02	1.20E-01
39	7.22E+05	4.78E+03	5.95E+01	3.69E+01	4.24E+03	7.88E-02	2.59E+00	1.49E-03	1.04E+00	1.02E-04	1.44E+01	9.23E-02	1.61E+01	4.49E-01	3.21E+00	3.07E+01	1.48E-01	1.73E+00
40	3.05E+05	3.76E+02	1.21E+02	4.59E+01	6.46E+02	2.32E-02	6.60E-02	3.81E-05	2.64E-02	2.61E-06	3.68E-01	2.35E-03	4.10E-01	1.15E-02	8.18E-02	7.82E-01	3.78E-03	4.42E-02
41	1.24E+05	8.43E+02	-	-	-	-	4.21E-01	2.43E-04	1.69E-01	1.66E-05	2.35E+00	1.50E-02	2.61E+00	7.31E-02	5.22E-01	4.99E+00	2.41E-02	2.82E-01
42	1.25E+06	6.74E-03	2.40E+02	8.62E+01	1.48E+03	7.90E-02	3.89E+01	2.24E-02	1.56E+01	1.53E-03	2.17E+02	1.39E+00	2.41E+02	6.75E+00	4.82E+01	4.60E+02	2.23E+00	2.60E+01
43	7.76E+05	5.30E+03	2.09E+01	1.77E+01	4.54E+03	2.61E-01	5.08E-01	2.93E-04	2.03E-01	2.00E-05	2.83E+00	1.81E-02	3.15E+00	8.80E-02	6.29E-01	6.01E+00	2.91E-02	3.40E-01
44	2.63E+05	1.52E+03	2.39E+02	5.34E+01	1.26E+03	1.06E-02	4.47E+00	2.58E-03	1.79E+00	1.76E-04	2.49E+01	1.59E-01	2.77E+01	7.76E-01	5.54E+00	5.29E+01	2.56E-01	2.99E+00
45	1.80E+05	1.04E+03	1.63E+02	3.64E+01	8.56E+02	7.25E-03	2.88E+00	1.66E-03	1.15E+00	1.14E-04	1.60E+01	1.03E-01	1.79E+01	5.00E-01	3.57E+00	3.41E+01	1.65E-01	1.93E+00
46	4.13E+05	2.39E+03	3.74E+02	8.37E+01	1.97E+03	1.67E-02	9.94E+00	5.73E-03	3.98E+00	3.92E-04	5.54E+01	3.54E-01	6.17E+00	1.72E+00	1.23E+01	1.18E+02	5.69E-01	6.65E+00
47	1.73E+05	1.01E+03	1.46E+02	3.25E+01	6.33E+02	6.70E-03	7.69E-01	4.44E-04	3.08E-01	3.03E-05	4.28E+00	2.74E-02	4.77E+00	1.33E-01	9.53E-01	9.11E+00	4.41E-02	5.15E-01
48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
49	1.92E+05	2.82E+01	7.64E-01	3.16E-01	5.57E+00	2.10E-04	4.77E-02	2.75E-05	1.91E-02	1.88E-06	2.65E-01	1.70E-03	2.96E-01	8.27E-03	5.90E-02	5.64E-01	2.73E-03	3.19E-02
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
51	5.82E+05	3.55E+03	4.75E+01	2.70E+01	1.35E+03	4.87E-02	6.94E-01	4.00E-04	2.78E-01	2.74E-05	3.86E+00	2.47E-02	4.30E+00	1.20E-01	8.59E-01	8.21E+00	3.97E-02	4.64E-01
Phase Totals	1.66E+07	6.03E+04	4.75E+03	1.19E+03	4.31E+04	9.29E-01	2.35E+02	1.35E-01	9.40E+01	9.26E-03	1.31E+03	8.36E+00	1.46E+03	4.07E+01	2.91E+02	2.78E+03	1.34E+01	1.57E+02

Table 6: Soluble Radionuclide Inventory by Tank, continued

Tank	Free Supernate Volume, gal	Ra-226 (Ci)	Ra-228 (Ci)	Ac-227 (Ci)	Th-229 (Ci)	Th-230 (Ci)	Pa-231 (Ci)	Pu-244 (Ci)	Am-243 (Ci)	Cm-242 (Ci)	Cm-243 (Ci)	Cm-247 (Ci)	Cm-248 (Ci)	Bk-249 (Ci)	Cf-249 (Ci)	Cf-251 (Ci)	Cf-252 (Ci)
1	1.71E+04	-	-	5.46E-09	-	-	1.52E-08	3.79E-08	2.08E-04	5.13E-04	1.22E-04	2.34E-14	2.44E-14	1.78E-21	1.35E-13	4.63E-15	1.50E-16
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	2.99E+05	-	-	4.08E-08	-	-	1.13E-07	2.89E-07	1.62E-03	3.99E-03	9.46E-04	1.82E-13	1.90E-13	1.39E-20	1.05E-12	3.60E-14	1.17E-15
5	3.64E-12	-	-	1.45E-24	-	-	4.03E-24	9.42E-24	4.02E-21	9.93E-21	2.35E-21	4.54E-31	4.73E-31	3.45E-38	2.62E-30	8.97E-32	2.91E-33
6	2.54E+05	-	-	7.57E-08	-	-	2.10E-07	3.97E-06	5.75E-05	1.42E-04	3.37E-05	6.49E-15	6.76E-15	4.94E-22	3.75E-14	1.28E-15	4.16E-17
7	2.76E+05	-	-	6.99E-08	-	-	1.94E-07	4.85E-06	2.92E-04	7.21E-04	1.71E-04	3.29E-14	3.43E-14	2.51E-21	1.90E-13	6.51E-15	2.11E-16
8	7.28E+03	-	-	1.30E-09	-	-	3.62E-09	1.02E-07	3.10E-06	7.67E-06	1.82E-06	3.50E-16	3.65E-16	2.67E-23	2.02E-15	6.92E-17	2.25E-18
9	1.30E+04	-	-	1.98E-09	-	-	5.49E-09	9.63E-09	5.75E-05	1.42E-04	3.37E-05	6.49E-15	6.76E-15	4.94E-22	3.75E-14	1.28E-15	4.16E-17
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	1.42E+05	6.76E-10	2.56E-06	1.29E-09	1.04E-06	8.28E-08	3.59E-09	1.63E-06	2.62E-08	6.47E-08	1.53E-08	2.95E-18	3.08E-18	2.25E-25	1.71E-17	5.84E-19	1.90E-20
12	2.46E+04	2.58E-10	4.35E-05	4.92E-10	3.48E-06	3.16E-08	1.37E-09	2.70E-07	1.57E-05	3.88E-05	9.19E-06	1.77E-15	1.84E-15	1.35E-22	1.02E-14	3.50E-16	1.14E-17
13	5.78E+05	2.04E-08	3.13E-04	5.64E-08	1.82E-04	2.49E-06	1.57E-07	2.89E-06	5.53E-03	1.37E-02	3.24E-03	6.23E-13	6.50E-13	4.75E-20	3.60E-12	1.23E-13	4.00E-15
14	1.05E+03	2.65E-11	2.43E-06	2.17E-10	2.44E-07	3.25E-09	6.03E-10	3.75E-09	1.08E-05	2.66E-05	6.30E-06	1.21E-15	1.26E-15	9.24E-23	7.01E-15	2.40E-16	7.79E-18
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1.18E+06	9.10E-08	1.20E-06	1.46E-07	1.08E-04	1.11E-05	4.06E-07	5.15E-07	9.58E-07	2.37E-06	5.61E-07	1.08E-16	1.13E-16	8.23E-24	6.25E-16	2.14E-17	6.94E-19
22	1.17E+06	1.27E-07	-	1.96E-07	4.45E-04	1.55E-05	5.45E-07	-	1.04E-06	2.57E-06	6.09E-07	1.17E-16	1.22E-16	8.93E-24	6.78E-16	2.32E-17	7.52E-19
23	1.26E+06	1.26E+01	1.72E-07	2.31E-08	3.26E-05	3.31E-02	6.43E-08	4.76E-05	1.56E-07	3.85E-07	9.13E-08	1.76E-17	1.83E-17	1.34E-24	1.02E-16	3.48E-18	1.13E-19
24	8.51E+05	5.86E-14	-	1.76E-06	2.32E-11	7.17E-12	4.88E-06	1.57E-04	2.89E-04	7.15E-04	1.69E-04	3.26E-14	3.40E-14	2.48E-21	1.88E-13	6.45E-15	2.09E-16
25	3.69E+04	2.54E-15	-	7.61E-08	1.00E-12	3.11E-13	2.11E-07	6.80E-06	8.51E-05	2.10E-04	4.99E-05	9.60E-15	1.00E-14	7.31E-22	5.55E-14	1.90E-15	6.16E-17
26	5.19E+05	3.58E-14	-	1.07E-06	1.41E-11	4.38E-12	2.98E-06	9.58E-05	2.27E-03	5.60E-03	1.33E-03	2.56E-13	2.66E-13	1.95E-20	1.48E-12	5.05E-14	1.64E-15
27	6.00E+05	4.14E-14	-	1.24E-06	1.64E-11	5.06E-12	3.44E-06	1.11E-04	2.98E-03	7.36E-03	1.74E-03	3.36E-13	3.50E-13	2.56E-20	1.94E-12	6.64E-14	2.16E-15
28	1.85E+05	1.28E-14	-	3.83E-07	5.05E-12	1.56E-12	1.06E-06	3.42E-05	5.08E-04	1.26E-03	2.97E-04	5.73E-14	5.97E-14	4.36E-21	3.31E-13	1.13E-14	3.68E-16
29	1.67E+05	5.90E-09	9.05E-05	1.63E-08	5.28E-05	7.22E-07	4.54E-08	8.35E-07	1.02E-04	2.52E-04	5.98E-05	1.15E-14	1.20E-14	8.77E-22	6.66E-14	2.28E-15	7.39E-17
30	9.15E+05	7.19E-08	-	1.29E-07	-	8.80E-06	3.59E-07	4.20E-04	6.01E-03	1.48E-02	3.52E-03	6.78E-13	7.06E-13	5.16E-20	3.92E-12	1.34E-13	4.35E-15
31	1.15E+05	4.06E-09	6.24E-05	1.13E-08	3.64E-05	4.97E-07	3.12E-08	5.76E-07	8.02E-04	1.98E-03	4.69E-04	9.04E-14	9.42E-14	6.89E-21	5.22E-13	1.79E-14	5.80E-16
32	8.44E+05	8.60E-08	-	1.25E-07	-	1.05E-05	3.46E-07	3.48E-04	4.04E-03	9.98E-03	2.37E-03	4.56E-13	4.75E-13	3.47E-20	2.63E-12	9.01E-14	2.92E-15
33	7.95E+05	3.43E-09	-	6.51E-06	2.10E-10	4.19E-07	1.81E-05	5.36E-05	1.97E-03	4.88E-03	1.16E-03	2.23E-13	2.32E-13	1.70E-20	1.29E-12	4.40E-14	1.43E-15
34	5.69E+05	-	-	6.93E-07	-	-	1.93E-06	7.34E-06	1.72E-03	4.25E-03	1.01E-03	1.94E-13	2.02E-13	1.48E-20	1.12E-12	3.83E-14	1.24E-15
35	4.50E+05	4.47E-08	-	7.87E-08	-	5.48E-06	2.19E-07	1.89E-04	1.12E-03	2.76E-03	6.54E-04	1.26E-13	1.31E-13	9.59E-21	7.28E-13	2.49E-14	8.08E-16
36	2.20E+05	3.80E-08	-	7.45E-08	-	4.65E-06	2.07E-07	8.94E-05	2.82E-03	6.96E-03	1.65E-03	3.18E-13	3.31E-13	2.42E-20	1.84E-12	6.28E-14	2.04E-15
37	1.16E+05	4.11E-09	6.30E-05	1.14E-08	3.67E-05	5.02E-07	3.16E-08	5.82E-07	6.79E-04	1.68E-03	3.97E-04	7.66E-14	7.98E-14	5.83E-21	4.42E-13	1.51E-14	4.91E-16
38	1.71E+05	1.09E-07	-	1.52E-07	-	1.33E-05	4.22E-07	2.63E-04	3.42E-05	8.45E-05	2.00E-05	3.86E-15	4.02E-15	2.94E-22	2.23E-14	7.63E-16	2.48E-17
39	7.22E+05	1.93E-07	-	2.83E-07	-	2.37E-05	7.86E-07	3.60E-04	4.96E-04	1.23E-03	2.90E-04	5.59E-14	5.83E-14	4.26E-21	3.23E-13	1.11E-14	3.59E-16
40	3.05E+05	4.49E-08	7.28E-04	8.58E-07	5.89E-05	5.50E-06	2.38E-06	1.06E-04	1.26E-05	3.12E-05	7.40E-06	1.43E-15	1.49E-15	1.09E-22	8.24E-15	2.82E-16	9.15E-18
41	1.24E+05	1.16E-07	-	1.36E-07	-	1.42E-05	3.78E-07	-	8.06E-05	1.99E-04	4.72E-05	9.09E-15	9.48E-15	6.92E-22	5.25E-14	1.80E-15	5.83E-17
42	1.25E+06	1.17E-06	1.00E-01	2.79E-06	4.01E-03	1.43E-04	7.75E-06	3.61E-04	7.44E-03	1.84E-02	4.36E-03	8.39E-13	8.75E-13	6.39E-20	4.85E-12	1.66E-13	5.39E-15
43	7.76E+05	4.93E-07	-	6.89E-07	-	6.04E-05	1.91E-06	1.19E-03	9.71E-05	2.40E-04	5.69E-05	1.10E-14	1.14E-14	8.34E-22	6.33E-14	2.17E-15	7.03E-17
44	2.63E+05	1.81E-14	-	5.44E-07	7.18E-12	2.22E-12	1.51E-06	4.86E-05	8.56E-04	2.11E-03	5.01E-04	9.65E-14	1.01E-13	7.35E-21	5.58E-13	1.91E-14	6.19E-16
45	1.80E+05	1.24E-14	-	3.71E-07	4.89E-12	1.51E-12	1.03E-06	3.31E-05	5.51E-04	1.36E-03	3.23E-04	6.22E-14	6.48E-14	4.74E-21	3.59E-13	1.23E-14	3.99E-16
46	4.13E+05	2.84E-14	-	8.52E-07	1.12E-11	3.48E-12	2.37E-06	7.62E-05	1.90E-03	4.70E-03	1.11E-03	2.15E-13	2.24E-13	1.63E-20	1.24E-12	4.24E-14	1.38E-15
47	1.73E+05	-	-	2.74E-07	-	-	7.60E-07	3.06E-05	1.47E-04	3.64E-04	8.62E-05	1.66E-14	1.73E-14	1.26E-21	9.59E-14	3.28E-15	1.07E-16
48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	1.92E+05	6.77E-09	1.04E-04	1.87E-08	6.05E-05	8.28E-07	5.20E-08	9.58E-07	9.12E-06	2.25E-05	5.34E-06	1.03E-15	1.07E-15	7.83E-23	5.94E-15	2.03E-16	6.60E-18
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51	5.82E+05	9.18E-08	4.03E-04	2.42E-07	1.40E-04	1.12E-05	6.73E-07	2.23E-04	1.33E-04	3.28E-04	7.77E-05	1.50E-14	1.56E-14	1.14E-21	8.65E-14	2.96E-15	9.60E-17
Phase Totals	1.66E+07	1.26E+01	1.02E-01	2.00E-05	5.17E-03	3.35E-02	5.56E-05	4.27E-03	4.49E-02	1.11E-01	2.63E-02	5.07E-12	5.28E-12	3.86E-19	2.93E-11	1.00E-12	3.25E-14

Table 6: Soluble Radionuclide Inventory by Tank, continued

Tank	Sludge IL Volume, gal	H-3 (Ci)	C-14 (Ci)	Co-60 (Ci)	Ni-59 (Ci)	Ni-63 (Ci)	Se-79 (Ci)	Sr-90 (Ci)	Y-90 (Ci)	Nb-94 (Ci)	Tc-99 (Ci)	Ru-106 (Ci)	Rh-106 (Ci)	Sb-125 (Ci)	Sn-126 (Ci)	I-129 (Ci)
1	4.93E+03	1.87E+00	3.29E-02	1.92E-02	2.07E-03	4.67E-02	7.68E-02	2.41E+01	2.41E+01	6.04E-07	2.85E+01	1.96E+00	1.96E+00	7.96E+00	3.88E-01	1.54E-02
2	2.85E+03	1.08E+00	1.90E-02	1.11E-02	4.43E-04	2.69E-02	1.64E-02	5.15E+00	5.15E+00	1.29E-07	6.09E+00	4.20E-01	4.20E-01	1.70E+00	8.31E-02	3.29E-03
3	2.85E+03	1.08E+00	1.90E-02	1.11E-02	4.50E-04	2.69E-02	1.67E-02	5.22E+00	5.22E+00	1.31E-07	6.18E+00	4.26E-01	4.26E-01	1.73E+00	8.42E-02	3.33E-03
4	8.90E+04	3.37E+01	5.93E-01	3.47E-01	1.66E-02	8.42E-01	6.14E-01	1.92E+02	1.92E+02	4.83E-06	2.28E+02	1.57E+01	1.57E+01	6.37E+01	3.11E+00	1.23E-01
5	1.71E+04	6.49E+00	1.14E-01	6.69E-02	6.55E-04	1.62E-01	2.43E-02	7.60E+00	7.60E+00	1.91E-07	9.00E+00	6.21E-01	6.21E-01	2.52E+00	1.23E-01	4.85E-03
6	1.75E+04	4.65E+01	1.16E-01	6.80E-02	1.37E-04	1.65E-01	5.06E-03	1.59E+00	1.59E+00	3.98E-08	1.88E+00	1.30E-01	1.29E-01	5.25E-01	2.56E-02	1.01E-03
7	1.38E+04	5.65E+00	9.19E-02	5.38E-02	5.03E-04	1.31E-01	1.86E-02	5.25E+00	5.25E+00	1.47E-07	6.91E+00	4.77E-01	4.77E-01	1.93E+00	9.43E-02	3.73E-03
8	2.87E+03	6.61E+01	1.91E-02	1.12E-02	4.23E-05	2.72E-02	1.57E-03	4.91E-01	4.91E-01	1.23E-08	5.81E-01	4.01E-02	4.01E-02	1.62E-01	7.92E-03	3.13E-04
9	1.90E+03	7.18E-01	1.26E-02	7.40E-03	2.90E-04	1.80E-02	1.07E-02	3.36E+00	3.36E+00	8.45E-08	3.98E+00	2.75E-01	2.75E-01	1.11E+00	5.43E-02	2.15E-03
10	1.90E+03	7.18E-01	1.26E-02	7.40E-03	5.06E-05	1.80E-02	1.87E-03	5.87E-01	5.87E-01	1.47E-08	6.95E-01	4.79E-02	4.79E-02	1.94E-01	9.48E-03	3.75E-04
11	1.39E+04	5.25E+00	9.24E-02	5.41E-02	8.86E-08	1.31E-01	3.28E-06	9.27E-04	9.27E-04	2.58E-11	1.22E-03	8.39E-05	8.39E-05	3.40E-04	1.66E-05	6.56E-07
12	7.58E+04	2.87E+01	5.05E-01	2.96E-01	1.67E-03	7.17E-01	6.18E-02	1.94E+01	1.94E+01	4.86E-07	2.29E+01	1.58E+00	1.58E+00	6.41E+00	3.12E-01	1.24E-02
13	1.76E+05	6.68E+01	1.18E+00	6.88E-01	5.83E-02	1.67E+00	2.16E+00	6.77E+02	6.77E+02	1.70E-05	8.02E+02	5.53E+01	5.53E+01	2.24E+02	1.09E+01	4.32E-01
14	1.96E+04	7.42E+00	1.31E-01	7.64E-02	6.94E-03	1.85E-01	2.57E-01	8.05E+01	8.05E+01	2.02E-06	9.53E+01	6.58E+00	6.58E+00	2.67E+01	1.30E+00	5.14E-02
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	4.26E+03	1.61E+00	2.84E-02	1.66E-02	1.20E-07	4.03E-02	4.45E-06	1.39E-03	1.39E-03	3.50E-11	1.65E-03	1.14E-04	1.14E-04	4.61E-04	2.25E-05	1.06E-05
22	6.99E+03	2.65E+00	4.66E-02	2.72E-02	2.15E-07	6.61E-02	7.96E-06	2.47E-03	2.47E-03	6.26E-11	2.95E-03	2.04E-04	2.03E-04	8.25E-04	4.02E-05	1.74E-05
23	3.93E+04	1.53E-01	6.11E-03	1.28E-04	1.68E-07	5.58E-03	6.23E-06	4.76E-02	4.76E-02	4.90E-11	9.98E-03	1.59E-04	6.46E-04	3.15E-05	8.61E-05	-
24	2.48E+03	9.38E-01	1.65E-02	9.66E-03	2.91E-05	2.35E-02	1.08E-03	3.38E-01	3.38E-01	8.48E-09	4.00E-01	2.76E-02	2.76E-02	1.12E-01	5.45E-03	7.19E-05
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	1.82E+05	6.87E+01	1.21E+00	7.08E-01	2.74E-02	1.72E+00	1.01E+00	3.33E+02	3.33E+02	7.98E-06	3.76E+02	2.60E+01	2.60E+01	1.05E+02	5.13E+00	2.03E-01
27	2.70E+03	1.02E+00	1.80E-02	1.05E-02	4.63E-04	2.56E-02	1.72E-02	5.31E+00	5.31E+00	1.35E-07	6.36E+00	4.39E-01	4.39E-01	1.78E+00	8.68E-02	3.43E-03
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	4.42E+02	1.67E-01	2.95E-03	1.72E-03	1.00E-04	4.19E-03	3.72E-03	1.16E+00	1.16E+00	2.92E-08	1.38E+00	9.51E-02	9.51E-02	3.85E-01	1.88E-02	7.43E-04
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	6.89E+04	2.61E+01	4.59E-01	2.69E-01	1.14E-02	6.52E-01	4.22E-01	1.14E+02	1.14E+02	3.32E-06	1.57E+02	1.08E+01	1.08E+01	4.38E+01	2.14E+00	8.44E-02
33	5.90E+04	3.00E+01	3.93E-01	2.30E-01	5.06E-03	5.58E-01	1.88E-01	5.88E+01	5.88E+01	1.48E-06	6.96E+01	4.80E+00	4.80E+00	1.94E+01	9.48E-01	3.75E-02
34	1.41E+04	5.35E+00	9.41E-02	5.51E-02	1.48E-03	1.34E-01	5.47E-02	1.71E+01	1.71E+01	4.30E-07	2.03E+01	1.40E+00	1.40E+00	5.67E+00	2.76E-01	1.09E-02
35	4.42E+04	1.67E+01	2.95E-01	1.72E-01	3.79E-03	4.19E-01	1.41E-01	4.40E+01	4.40E+01	1.11E-06	5.21E+01	3.59E+00	3.59E+00	1.46E+01	7.11E-01	2.81E-02
36	1.30E+02	4.93E-02	8.68E-04	5.08E-04	5.77E-05	1.23E-03	2.14E-03	6.70E-01	6.70E-01	1.68E-08	7.93E-01	5.47E-02	5.47E-02	2.22E-01	1.08E-02	4.27E-04
37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	7.25E+04	2.74E+01	4.83E-01	2.83E-01	1.72E-03	6.86E-01	6.37E-02	1.50E+01	1.50E+01	5.01E-07	2.36E+01	1.63E+00	1.63E+00	6.60E+00	3.22E-01	1.27E-02
40	3.07E+05	1.16E+02	2.05E+00	1.20E+00	4.40E-04	2.91E+00	1.63E-02	5.33E+00	5.33E+00	1.28E-07	6.05E+00	4.17E-01	4.17E-01	1.69E+00	8.25E-02	3.26E-03
41	1.87E+03	7.07E-01	1.24E-02	7.28E-03	4.19E-05	1.77E-02	1.55E-03	1.71E-01	1.71E-01	1.22E-08	5.75E-01	3.97E-02	3.97E-02	1.61E-01	7.84E-03	3.10E-04
42	1.40E+04	5.31E+00	9.35E-02	5.47E-02	2.88E-03	1.33E-01	1.07E-01	3.34E+01	3.34E+01	8.39E-07	3.96E+01	2.73E+00	2.73E+00	1.11E+01	5.39E-01	2.13E-02
43	1.69E+05	6.41E+01	1.13E+00	6.60E-01	7.32E-04	1.60E+00	2.71E-02	7.35E+00	7.35E+00	2.13E-07	1.01E+01	6.94E-01	6.94E-01	2.81E+00	1.37E-01	5.43E-03
44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	1.74E+05	6.57E+01	1.16E+00	6.77E-01	5.11E-03	1.64E+00	1.89E-01	5.93E+01	5.93E+01	1.49E-06	7.01E+01	4.84E+00	4.84E+00	1.96E+01	9.56E-01	3.78E-02
48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51	1.11E+05	4.21E+01	7.41E-01	4.34E-01	8.76E-04	1.05E+00	3.25E-02	8.13E+00	8.13E+00	2.55E-07	1.20E+01	8.31E-01	8.30E-01	3.37E+00	1.64E-01	6.49E-03
Phase Totals	1.73E+06	7.52E+02	1.13E+01	6.58E+00	1.50E-01	1.60E+01	5.55E+00	1.73E+03	1.73E+03	4.36E-05	2.06E+03	1.42E+02	1.42E+02	5.75E+02	2.81E+01	1.11E+00

Table 6: Soluble Radionuclide Inventory by Tank, continued

Tank	Sludge IL Volume, gal	Cs-134 (Ci)	Cs-135 (Ci)	Cs-137 (Ci)	Ba-137m (Ci)	Ce-144 (Ci)	Pr-144 (Ci)	Pm-147 (Ci)	Eu-154 (Ci)	Th-232 (Ci)	U-232 (Ci)	U-233 (Ci)	U-234 (Ci)	U-235 (Ci)	U-236 (Ci)	U-238 (Ci)	Np-237 (Ci)	
1	4.93E+03	1.96E+02	3.33E-01	9.78E+04	9.25E+04	5.12E-03	5.12E-03	3.31E+00	7.85E-01	-	4.47E-06	-	-	6.91E-06	-	1.72E-04	2.51E-04	
2	2.85E+03	4.20E+01	7.13E-02	2.09E+04	1.98E+04	1.09E-03	1.09E-03	7.08E-01	1.68E-01	-	2.17E-06	-	-	1.05E-06	-	2.61E-05	2.73E-04	
3	2.85E+03	4.26E+01	7.23E-02	2.12E+04	2.01E+04	1.11E-03	1.11E-03	7.18E-01	1.70E-01	-	1.90E-06	-	-	2.68E-06	-	6.70E-05	5.00E-04	
4	8.90E+04	1.57E+03	2.67E+00	7.83E+05	7.40E+05	4.09E-02	4.09E-02	2.65E+01	6.28E+00	-	4.05E-05	-	-	5.31E-05	-	2.29E-03	2.04E-03	
5	1.71E+04	6.20E+01	1.05E-01	3.09E+04	2.92E+04	1.62E-03	1.62E-03	1.05E+00	2.48E-01	-	1.54E-05	-	-	2.99E-05	-	7.09E-04	1.20E-03	
6	1.75E+04	1.29E+01	2.20E-02	6.45E+03	6.10E+03	3.37E-04	3.37E-04	2.18E-01	5.18E-02	-	1.84E-05	-	-	2.28E-05	-	8.52E-04	2.96E-04	
7	1.38E+04	4.77E+01	8.10E-02	2.37E+04	2.25E+04	1.24E-03	1.24E-03	8.04E-01	1.91E-01	-	3.27E-06	-	-	1.53E-05	-	5.30E-04	2.63E-04	
8	2.87E+03	4.00E+00	6.80E-03	2.00E+03	1.89E+03	1.04E-04	1.04E-04	6.75E-02	1.60E-02	-	8.53E-07	-	-	2.25E-06	-	1.04E-04	4.71E-05	
9	1.90E+03	2.74E+01	4.66E-02	1.37E+04	1.29E+04	7.16E-04	7.15E-04	4.63E-01	1.10E-01	-	1.95E-06	-	-	1.26E-06	-	3.15E-05	2.15E-04	
10	1.90E+03	4.79E+00	8.14E-03	2.39E+03	2.26E+03	1.25E-04	1.25E-04	8.08E-02	1.92E-02	-	1.25E-06	-	-	1.52E-06	-	3.80E-05	2.91E-04	
11	1.39E+04	8.39E-03	1.42E-05	4.18E+00	3.95E+00	2.19E-07	2.19E-07	1.41E-04	3.35E-05	2.51E-07	-	3.58E-05	2.94E-05	5.54E-07	4.54E-06	1.03E-06	1.94E-05	
12	7.58E+04	1.58E+02	2.68E-01	7.87E+04	7.45E+04	4.12E-03	4.12E-03	2.66E+00	6.32E-01	1.34E-04	1.35E-06	3.77E-03	3.53E-04	6.64E-06	2.79E-05	6.68E-05	7.81E-04	
13	1.76E+05	5.53E+03	9.39E+00	2.75E+06	2.60E+06	1.44E-01	1.44E-01	9.32E+01	2.21E+01	9.56E-05	2.54E-05	1.96E-02	2.76E-03	7.55E-05	2.85E-04	8.83E-04	7.10E-03	
14	1.96E+04	6.57E+02	1.12E+00	3.27E+05	3.10E+05	1.71E-02	1.71E-02	1.11E+01	2.63E+00	4.53E-05	1.34E-05	1.60E-03	2.20E-04	1.78E-05	1.89E-05	3.39E-04	2.35E-03	
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
21	4.26E+03	1.14E-02	1.93E-05	5.66E+00	5.36E+00	2.96E-07	2.96E-07	1.92E-04	4.55E-05	4.34E-09	-	1.37E-04	1.46E-04	2.32E-06	2.68E-05	1.37E-05	1.21E-04	
22	6.99E+03	2.03E-02	3.46E-05	1.01E+01	9.59E+00	5.30E-07	5.30E-07	3.43E-04	8.13E-05	-	-	9.34E-04	3.36E-04	5.13E-06	5.53E-05	1.14E-04	2.04E-04	
23	3.93E+04	4.12E-04	6.08E-04	7.94E+00	7.51E+00	4.15E-07	4.15E-07	2.69E-04	6.37E-05	5.38E-09	-	3.58E-04	5.68E-04	3.17E-06	1.28E-05	9.49E-05	2.63E-05	
24	2.48E+03	2.76E+00	4.68E-03	1.37E+03	1.30E+03	7.19E-05	7.18E-05	4.65E-02	1.10E-02	-	7.80E-06	2.37E-11	7.58E-11	2.24E-05	2.90E-06	2.69E-03	6.94E-06	
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
26	1.82E+05	2.59E+03	4.41E+00	1.29E+06	1.22E+06	6.76E-02	6.76E-02	4.38E+01	1.04E+01	-	5.72E-04	1.74E-09	5.55E-09	1.64E-03	2.12E-04	1.97E-01	5.09E-04	
27	2.70E+03	4.39E+01	7.45E-02	2.19E+04	2.07E+04	1.14E-03	1.14E-03	7.40E-01	1.75E-01	-	8.51E-06	2.59E-11	8.26E-11	2.45E-05	3.16E-06	2.94E-03	7.57E-06	
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
30	4.42E+02	9.50E+00	1.61E-02	4.74E+03	4.48E+03	2.48E-04	2.48E-04	1.60E-01	3.80E-02	-	-	-	-	1.54E-05	2.74E-07	2.85E-06	1.02E-08	6.96E-06
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
32	6.89E+04	1.08E+03	1.83E+00	5.38E+05	5.09E+05	2.81E-02	2.81E-02	1.82E+01	4.32E+00	-	-	-	-	3.12E-03	4.46E-05	6.99E-04	2.09E-05	1.29E-03
33	5.90E+04	4.79E+02	8.14E-01	2.39E+05	2.26E+05	1.25E-02	1.25E-02	8.09E+00	1.92E+00	-	1.14E-03	5.47E-09	1.13E-04	2.12E-03	1.17E-03	3.07E-01	9.63E-02	
34	1.41E+04	1.40E+02	2.37E-01	6.96E+04	6.59E+04	3.64E-03	3.64E-03	2.36E+00	5.59E-01	-	7.47E-05	-	-	7.54E-05	-	5.33E-03	4.12E-03	
35	4.42E+04	3.59E+02	6.10E-01	1.79E+05	1.69E+05	9.36E-03	9.36E-03	6.06E+00	1.44E+00	-	-	-	1.95E-03	3.39E-05	5.76E-04	2.00E-05	7.06E-04	
36	1.30E+02	5.46E+00	9.28E-03	2.72E+03	2.58E+03	1.42E-04	1.42E-04	9.22E-02	2.19E-02	-	-	-	9.99E-06	1.94E-07	3.53E-06	6.33E-08	2.79E-06	
37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
39	7.25E+04	1.63E+02	2.77E-01	8.11E+04	7.67E+04	4.24E-03	4.24E-03	2.75E+00	6.51E-01	-	-	-	8.61E-03	1.24E-04	1.48E-03	2.63E-05	5.40E-03	
40	3.07E+05	4.17E+01	7.08E-02	2.08E+04	1.97E+04	1.09E-03	1.09E-03	7.03E-01	1.67E-01	7.34E-04	8.16E-04	2.09E-02	2.01E-02	3.79E-03	5.01E-03	1.19E-01	4.15E-01	
41	1.87E+03	3.96E+00	6.74E-03	1.98E+03	1.87E+03	1.03E-04	1.03E-04	6.69E-02	1.59E-02	-	-	-	7.76E-04	8.97E-06	2.23E-04	6.14E-07	2.32E-03	
42	1.40E+04	2.73E+02	4.63E-01	1.36E+05	1.29E+05	7.11E-03	7.11E-03	4.60E+00	1.09E+00	1.12E-03	3.97E-06	1.58E-02	5.81E-03	1.37E-04	7.76E-04	2.40E-03	4.78E-03	
43	1.69E+05	6.94E+01	1.18E-01	3.46E+04	3.27E+04	1.81E-03	1.81E-03	1.17E+00	2.77E-01	-	-	-	4.78E-02	6.59E-04	9.10E-03	5.35E-05	5.09E-02	
44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
47	1.74E+05	4.83E+02	8.21E-01	2.41E+05	2.28E+05	1.26E-02	1.26E-02	8.15E+00	1.93E+00	-	4.43E-04	-	-	1.20E-03	-	9.53E-02	-	
48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
51	1.11E+05	8.30E+01	1.41E-01	4.14E+04	3.91E+04	2.16E-03	2.16E-03	1.40E+00	3.32E-01	7.71E-05	1.13E-05	9.38E-03	7.78E-03	2.03E-04	1.26E-03	1.85E-03	6.28E-03	
Phase Totals	1.73E+06	1.42E+04	2.41E+01	7.07E+06	6.69E+06	3.70E-01	3.70E-01	2.39E+02	5.67E+01	2.21E-03	3.21E-03	7.38E-02	1.01E-01	1.04E-02	2.10E-02	7.40E-01	6.03E-01	

Table 6: Soluble Radionuclide Inventory by Tank, continued

Tank	Sludge IL Volume, gal (Ci)	Pu-238 (Ci)	Pu-239 (Ci)	Pu-240 (Ci)	Pu-241 (Ci)	Pu-242 (Ci)	Am-241 (Ci)	Am-242m (Ci)	Cm-244 (Ci)	Cm-245 (Ci)	Na-22 (Ci)	Al-26 (Ci)	Te-125m (Ci)	Sb-126 (Ci)	Sb-126m (Ci)	Sm-151 (Ci)	Eu-152 (Ci)	Eu-155 (Ci)
1	4.93E+03	1.95E-01	5.21E-02	1.16E-02	6.39E-02	2.40E-06	3.13E-01	1.81E-04	1.26E-01	1.24E-05	1.74E+00	1.12E-02	1.94E+00	5.44E-02	3.88E-01	3.71E+00	1.79E-02	2.10E-01
2	2.85E+03	1.78E-01	2.54E-02	5.68E-03	2.39E-02	1.17E-06	6.71E-02	3.87E-05	2.69E-02	2.65E-06	3.73E-01	2.39E-03	4.16E-01	1.16E-02	8.31E-02	7.94E-01	3.84E-03	4.49E-02
3	2.85E+03	2.20E-01	3.15E-02	7.03E-03	3.55E-02	1.45E-06	6.80E-02	3.92E-05	2.72E-02	2.68E-06	3.79E-01	2.42E-03	4.22E-01	1.18E-02	8.42E-02	8.05E-01	3.89E-03	4.55E-02
4	8.90E+04	4.14E-01	4.09E-01	9.14E-02	7.73E-01	1.88E-05	2.51E+00	1.45E-03	1.00E+00	9.89E-05	1.40E+01	8.93E-02	1.56E+01	4.35E-01	3.11E+00	2.97E+01	1.44E-01	1.68E+00
5	1.71E+04	8.26E-01	1.38E-01	3.29E-02	2.21E-01	9.72E-06	9.91E-02	5.71E-05	3.97E-02	3.91E-06	5.52E-01	3.53E-03	6.14E-01	1.72E-02	1.23E-01	1.17E+00	5.67E-03	6.63E-02
6	1.75E+04	-	8.73E-02	3.03E-02	3.40E-01	5.97E-05	2.07E-02	1.19E-05	8.28E-03	8.15E-07	1.15E-01	7.36E-04	1.28E-01	3.58E-03	2.56E-02	2.45E-01	1.18E-03	1.38E-02
7	1.38E+04	1.29E+00	2.33E-01	5.72E-02	5.46E-01	5.29E-05	7.61E-02	4.39E-05	3.05E-02	3.00E-06	4.24E-01	2.71E-03	4.72E-01	1.32E-02	9.43E-02	9.01E-01	4.36E-03	5.09E-02
8	2.87E+03	1.35E-01	2.96E-02	6.97E-03	6.63E-02	8.79E-06	6.39E-03	3.69E-06	2.56E-03	2.52E-07	3.56E-02	2.28E-04	3.97E-02	1.11E-03	7.92E-03	7.57E-02	3.66E-04	4.28E-03
9	1.90E+03	4.68E-02	6.68E-03	1.49E-03	6.20E-03	3.07E-07	4.38E-02	2.53E-05	1.76E-02	1.73E-06	2.44E-01	1.56E-03	2.72E-01	7.60E-03	5.43E-02	5.19E-01	2.51E-03	2.93E-02
10	1.90E+03	1.48E-01	2.11E-02	4.71E-03	2.10E-02	9.70E-07	7.65E-03	4.41E-06	3.06E-03	3.02E-07	4.26E-02	2.72E-04	4.74E-02	1.33E-03	9.48E-03	9.05E-02	4.38E-04	5.12E-03
11	1.39E+04	2.62E+00	2.61E-02	1.64E-02	9.38E-01	3.49E-05	1.34E-05	7.72E-09	5.36E-06	5.28E-10	7.46E-05	4.77E-07	8.31E-05	2.32E-06	1.66E-05	1.59E-04	7.67E-07	8.96E-06
12	7.58E+04	1.36E+01	2.28E-01	1.26E-01	3.20E+00	1.82E-04	2.52E-01	1.45E-04	1.01E-01	9.95E-06	1.40E+00	8.98E-03	1.56E+00	4.37E-02	3.12E-01	2.99E+00	1.44E-02	1.69E-01
13	1.76E+05	2.60E+01	7.03E-01	2.91E-01	5.12E+00	1.93E-04	8.82E+00	5.09E-03	5.35E+00	3.48E-04	4.91E+01	3.14E-01	5.47E+01	1.53E+00	1.09E+01	1.04E+02	5.05E-01	5.90E+00
14	1.96E+04	1.05E+00	2.59E-01	8.36E-02	4.23E-01	1.53E-05	1.05E+00	6.05E-04	4.20E-01	4.14E-05	5.84E+00	3.74E-02	6.51E+00	1.82E-01	1.30E+00	1.24E+01	6.01E-02	7.02E-01
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
21	4.26E+03	7.29E-01	1.07E-02	3.65E-03	6.40E-02	4.08E-07	1.82E-05	1.05E-08	7.27E-06	7.16E-10	1.01E-04	6.46E-07	1.13E-04	3.15E-06	2.25E-05	2.15E-04	1.04E-06	1.21E-05
22	6.99E+03	1.38E+00	-	-	-	-	3.25E-05	1.87E-08	1.30E-05	1.28E-09	1.81E-04	1.16E-06	2.01E-04	5.63E-06	4.02E-05	3.84E-04	1.86E-06	2.17E-05
23	3.93E+04	2.87E-02	9.84E-05	2.45E-05	2.87E-03	1.46E-04	3.76E-04	1.47E-08	1.10E-05	1.00E-09	1.42E-04	9.06E-07	1.58E-04	4.41E-06	3.15E-05	3.01E-04	1.46E-06	1.70E-05
24	2.48E+03	1.43E+01	2.25E+00	5.02E-01	1.18E+01	1.00E-04	4.40E-03	2.54E-06	1.76E-03	1.74E-07	2.45E-02	1.57E-04	2.73E-02	7.63E-04	5.45E-03	5.21E-02	2.52E-04	2.94E-03
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
26	1.82E+05	1.05E+03	1.65E+02	3.68E+01	8.66E+02	7.33E-03	4.14E+00	2.39E-03	1.66E+00	1.63E-04	2.31E+01	1.48E-01	2.57E+01	7.18E-01	5.13E+00	4.90E+01	2.37E-01	2.77E+00
27	2.70E+03	1.56E+01	2.45E+00	5.48E-01	1.29E+01	1.09E-04	7.01E-02	4.04E-05	2.81E-02	2.76E-06	3.90E-01	2.49E-03	4.35E-01	1.22E-02	8.68E-02	8.29E-01	4.01E-03	4.69E-02
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
30	4.42E+02	2.97E+00	2.58E-02	1.85E-02	1.91E+00	4.44E-05	1.52E-02	8.75E-06	6.08E-03	5.99E-07	8.45E-02	5.40E-04	9.41E-02	2.63E-03	1.88E-02	1.80E-01	8.69E-04	1.02E-02
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
32	6.89E+04	4.52E+02	3.97E+00	2.95E+00	2.02E+02	6.21E-03	1.72E+00	9.94E-04	6.90E-01	6.80E-05	9.60E+00	6.14E-02	1.07E+01	2.99E-01	2.14E+00	2.04E+01	9.87E-02	1.15E+00
33	5.90E+04	1.57E+02	8.57E+01	1.50E+01	4.46E+02	8.70E-04	7.66E-01	4.41E-04	3.07E-01	3.02E-05	4.26E+00	2.73E-02	4.75E+00	1.33E-01	9.48E-01	9.06E+00	4.38E-02	5.12E-01
34	1.41E+04	-	8.61E-01	1.92E-01	3.98E+00	3.99E-05	2.23E-01	1.29E-04	8.94E-02	8.80E-06	1.24E+00	7.95E-03	1.38E+00	3.87E-02	2.76E-01	2.64E+00	1.28E-02	1.49E-01
35	4.42E+04	2.92E+02	2.36E+00	1.81E+00	1.40E+02	4.06E-03	5.74E-01	3.31E-04	2.30E-01	2.26E-05	3.19E+00	2.04E-02	3.56E+00	9.95E-02	7.11E-01	6.79E+00	3.28E-02	3.84E-01
36	1.30E+02	8.67E-01	6.75E-03	5.37E-03	3.51E-01	1.16E-05	8.73E-03	5.03E-06	3.49E-03	3.44E-07	4.86E-02	3.11E-04	5.41E-02	1.51E-03	1.08E-02	1.03E-01	5.00E-04	5.84E-03
37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
39	7.25E+04	4.80E+02	5.97E+00	3.71E+00	4.26E+02	7.90E-03	2.60E-01	1.50E-04	1.04E-01	1.03E-05	1.45E+00	9.26E-03	1.61E+00	4.51E-02	3.22E-01	3.08E+00	1.49E-02	1.74E-01
40	3.07E+05	3.79E+02	1.22E+02	4.63E+01	6.52E+02	2.34E-02	6.66E-02	3.84E-05	2.67E-02	2.63E-06	3.71E-01	2.37E-03	4.13E-01	1.16E-02	8.25E-02	7.88E-01	3.81E-03	4.46E-02
41	1.87E+03	1.27E+01	-	-	-	6.33E-03	3.65E-06	2.54E-03	2.50E-07	3.53E-02	2.25E-04	3.93E-02	1.10E-03	7.84E-03	7.50E-02	3.63E-04	4.24E-03	-
42	1.40E+04	7.54E+01	2.69E+00	9.65E-01	1.65E+01	8.84E-04	4.35E-01	2.51E-04	1.74E-01	1.72E-05	2.42E+00	1.55E-02	2.70E+00	7.55E-02	5.39E-01	5.15E+00	2.49E-02	2.91E-01
43	1.69E+05	1.16E+03	4.57E+00	3.86E+00	9.91E+02	5.69E-02	1.11E-01	6.39E-05	4.44E-02	4.37E-06	6.17E-01	3.94E-03	6.87E-01	1.92E-02	1.37E-01	1.31E+00	6.34E-03	7.41E-02
44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
47	1.74E+05	1.02E+03	1.46E+02	3.27E+01	6.35E+02	6.72E-03	7.72E-01	4.45E-04	3.09E-01	3.05E-05	4.30E+00	2.75E-02	4.79E+00	1.34E-01	9.56E-01	9.14E+00	4.42E-02	5.16E-01
48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
51	1.11E+05	6.79E+02	9.08E+00	5.15E+00	2.58E+02	9.31E-03	1.33E-01	7.64E-05	5.31E-02	5.23E-06	7.38E-01	4.72E-03	8.22E-01	2.30E-02	1.64E-01	1.57E+00	7.59E-03	8.87E-02
Phase Totals	1.73E+06	5.84E+03	5.56E+02	1.51E+02	4.68E+03	1.25E-01	2.26E+01	1.31E-02	9.07E+00	8.93E-04	1.26E+02	8.07E-01	1.40E+02	3.93E+00	2.81E+01	2.68E+02	1.30E+00	1.52E+01

Table 6: Soluble Radionuclide Inventory by Tank, continued

Tank	Sludge IL Volume, gal	Ra-226 (Ci)	Ra-228 (Ci)	Ac-227 (Ci)	Th-229 (Ci)	Th-230 (Ci)	Pa-231 (Ci)	Pu-244 (Ci)	Am-243 (Ci)	Cm-242 (Ci)	Cm-243 (Ci)	Cm-247 (Ci)	Cm-248 (Ci)	Bk-249 (Ci)	Cf-249 (Ci)	Cf-251 (Ci)	Cf-252 (Ci)
1	4.93E+03	-	-	1.58E-09	-	-	4.38E-09	1.09E-08	6.00E-05	1.48E-04	3.51E-05	6.76E-15	7.05E-15	5.15E-22	3.91E-14	1.34E-15	4.34E-17
2	2.85E+03	-	-	2.39E-10	-	-	6.63E-10	5.35E-09	1.28E-05	3.17E-05	7.51E-06	1.45E-15	1.51E-15	1.10E-22	8.36E-15	2.86E-16	9.29E-18
3	2.85E+03	-	-	6.13E-10	-	-	1.70E-09	6.62E-09	1.30E-05	3.21E-05	7.62E-06	1.47E-15	1.53E-15	1.12E-22	8.48E-15	2.90E-16	9.41E-18
4	8.90E+04	-	-	1.21E-08	-	-	3.37E-08	8.59E-08	4.80E-04	1.19E-03	2.81E-04	5.41E-14	5.64E-14	4.12E-21	3.13E-13	1.07E-14	3.47E-16
5	1.71E+04	-	-	6.83E-09	-	-	1.90E-08	4.44E-08	1.90E-05	4.68E-05	1.11E-05	2.14E-15	2.23E-15	1.63E-22	1.24E-14	4.23E-16	1.37E-17
6	1.75E+04	-	-	5.20E-09	-	-	1.44E-08	2.73E-07	3.95E-06	9.77E-06	2.32E-06	4.46E-16	4.65E-16	3.40E-23	2.58E-15	8.82E-17	2.86E-18
7	1.38E+04	-	-	3.49E-09	-	-	9.69E-09	2.42E-07	1.46E-05	3.60E-05	8.53E-06	1.64E-15	1.71E-15	1.25E-22	9.49E-15	3.25E-16	1.05E-17
8	2.87E+03	-	-	5.14E-10	-	-	1.43E-09	4.02E-08	1.22E-06	3.02E-06	7.16E-07	1.38E-16	1.44E-16	1.05E-23	7.97E-16	2.73E-17	8.85E-19
9	1.90E+03	-	-	2.88E-10	-	-	8.00E-10	1.40E-09	8.39E-06	2.07E-05	4.91E-06	9.46E-16	9.86E-16	7.20E-23	5.47E-15	1.87E-16	6.07E-18
10	1.90E+03	-	-	3.48E-10	-	-	9.66E-10	4.43E-09	1.46E-06	3.62E-06	8.57E-07	1.65E-16	1.72E-16	1.26E-23	9.54E-16	3.26E-17	1.06E-18
11	1.39E+04	6.62E-11	2.51E-07	1.26E-10	1.02E-07	8.10E-09	3.51E-10	1.59E-07	2.56E-09	6.33E-09	1.50E-09	2.89E-19	3.01E-19	2.20E-26	1.67E-18	5.72E-20	1.85E-21
12	7.58E+04	7.95E-10	1.34E-04	1.51E-09	1.07E-05	9.73E-08	4.21E-09	8.32E-07	4.83E-05	1.19E-04	2.83E-05	5.44E-15	5.67E-15	4.15E-22	3.15E-14	1.08E-15	3.49E-17
13	1.76E+05	6.23E-09	9.56E-05	1.72E-08	5.57E-05	7.62E-07	4.79E-08	8.82E-07	1.69E-03	4.17E-03	9.89E-04	1.90E-13	1.98E-13	1.45E-20	1.10E-12	3.77E-14	1.22E-15
14	1.96E+04	4.95E-10	4.53E-05	4.05E-09	4.55E-06	6.06E-08	1.13E-08	7.00E-08	2.01E-04	4.96E-04	1.18E-04	2.27E-14	2.36E-14	1.72E-21	1.31E-13	4.48E-15	1.45E-16
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	4.26E+03	3.30E-10	4.34E-09	5.30E-10	3.90E-07	4.03E-08	1.47E-09	1.87E-09	3.47E-09	8.58E-09	2.03E-09	3.92E-19	4.08E-19	2.98E-26	2.26E-18	7.75E-20	2.51E-21
22	6.99E+03	7.57E-10	-	1.17E-09	2.66E-06	9.26E-08	3.25E-09	-	6.21E-09	1.54E-08	3.64E-09	7.01E-19	7.30E-19	5.34E-26	4.05E-18	1.39E-19	4.50E-21
23	3.93E+04	3.93E-01	5.38E-09	7.23E-10	1.02E-06	1.03E-03	2.01E-09	1.49E-06	4.87E-09	1.20E-08	2.85E-09	5.49E-19	5.72E-19	4.18E-26	3.17E-18	1.09E-19	3.52E-21
24	2.48E+03	1.71E-16	-	5.12E-09	6.75E-14	2.09E-14	1.42E-08	4.57E-07	8.42E-07	2.08E-06	4.93E-07	9.50E-17	9.90E-17	7.23E-24	5.49E-16	1.88E-17	6.09E-19
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	1.82E+05	1.25E-14	-	3.75E-07	4.95E-12	1.53E-12	1.04E-06	3.35E-05	7.93E-04	1.96E-03	4.64E-04	8.94E-14	9.32E-14	6.81E-21	5.17E-13	1.77E-14	5.74E-16
27	2.70E+03	1.86E-16	-	5.58E-09	7.37E-14	2.28E-14	1.55E-08	4.99E-07	1.34E-05	3.31E-05	7.85E-06	1.51E-15	1.58E-15	1.15E-22	8.74E-15	2.99E-16	9.70E-18
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	4.42E+02	3.47E-11	-	6.25E-11	-	4.25E-09	1.73E-10	2.03E-07	2.90E-06	7.17E-06	1.70E-06	3.28E-16	3.41E-16	2.49E-23	1.89E-15	6.48E-17	2.10E-18
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	6.89E+04	7.02E-09	-	1.02E-08	-	8.59E-07	2.83E-08	2.84E-05	3.30E-04	8.15E-04	1.93E-04	3.72E-14	3.88E-14	2.83E-21	2.15E-13	7.35E-15	2.39E-16
33	5.90E+04	2.54E-10	-	4.83E-07	1.56E-11	3.11E-08	1.34E-06	3.98E-06	1.46E-04	3.62E-04	8.58E-05	1.65E-14	1.72E-14	1.26E-21	9.55E-14	3.27E-15	1.06E-16
34	1.41E+04	-	-	1.72E-08	-	-	4.78E-08	1.82E-07	4.27E-05	1.06E-04	2.50E-05	4.82E-15	5.02E-15	3.67E-22	2.78E-14	9.52E-16	3.09E-17
35	4.42E+04	4.40E-09	-	7.74E-09	-	5.38E-07	2.15E-08	1.86E-05	1.10E-04	2.71E-04	6.43E-05	1.24E-14	1.29E-14	9.43E-22	7.15E-14	2.45E-15	7.94E-17
36	1.30E+02	2.25E-11	-	4.42E-11	-	2.76E-09	1.23E-10	5.30E-08	1.67E-06	4.13E-06	9.78E-07	1.88E-16	1.96E-16	1.43E-23	1.09E-15	3.72E-17	1.21E-18
37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	7.25E+04	1.94E-08	-	2.84E-08	-	2.37E-06	7.88E-08	3.61E-05	4.97E-05	1.23E-04	2.91E-05	5.61E-15	5.85E-15	4.27E-22	3.24E-14	1.11E-15	3.60E-17
40	3.07E+05	4.53E-08	7.34E-04	8.65E-07	5.94E-05	5.54E-06	2.40E-06	1.07E-04	1.27E-05	3.15E-05	7.46E-06	1.44E-15	1.50E-15	1.09E-22	8.31E-15	2.84E-16	9.22E-18
41	1.87E+03	1.75E-09	-	2.05E-09	-	2.14E-07	5.69E-09	-	1.21E-06	2.99E-06	7.09E-07	1.37E-16	1.42E-16	1.04E-23	7.90E-16	2.70E-17	8.77E-19
42	1.40E+04	1.31E-08	1.12E-03	3.12E-08	4.49E-05	1.60E-06	8.68E-08	4.04E-06	8.33E-05	2.06E-04	4.88E-05	9.40E-15	9.79E-15	7.16E-22	5.43E-14	1.86E-15	6.03E-17
43	1.69E+05	1.08E-07	-	1.50E-07	-	1.32E-05	4.17E-07	2.60E-04	2.12E-05	5.24E-05	1.24E-05	2.39E-15	2.49E-15	1.82E-22	1.38E-14	4.73E-16	1.53E-17
44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	1.74E+05	-	-	2.75E-07	-	-	7.63E-07	3.07E-05	1.48E-04	3.65E-04	8.65E-05	1.67E-14	1.74E-14	1.27E-21	9.63E-14	3.29E-15	1.07E-16
48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51	1.11E+05	1.75E-08	7.71E-05	4.63E-08	2.67E-05	2.15E-06	1.29E-07	4.26E-05	2.54E-05	6.27E-05	1.49E-05	2.86E-15	2.98E-15	2.18E-22	1.65E-14	5.66E-16	1.84E-17
Phase Totals	1.73E+06	3.93E-01	2.21E-03	2.36E-06	2.10E-04	1.06E-03	6.56E-06	5.74E-04	4.33E-03	1.07E-02	2.54E-03	4.89E-13	5.09E-13	3.72E-20	2.82E-12	9.66E-14	3.14E-15

Table 6: Soluble Radionuclide Inventory by Tank, continued

Tank	Salt IL Volume, gal	H-3 (Ci)	C-14 (Ci)	Co-60 (Ci)	Ni-59 (Ci)	Ni-63 (Ci)	Se-79 (Ci)	Sr-90 (Ci)	Y-90 (Ci)	Nb-94 (Ci)	Tc-99 (Ci)	Ru-106 (Ci)	Rh-106 (Ci)	Sb-125 (Ci)	Sn-126 (Ci)	I-129 (Ci)
1	1.44E+05	5.45E+01	9.59E-01	5.61E-01	6.05E-02	1.36E+00	2.24E+00	7.02E+02	7.02E+02	1.76E-05	8.31E+02	5.73E+01	5.73E+01	2.32E+02	1.13E+01	4.48E-01
2	1.61E+05	6.09E+01	1.07E+00	6.27E-01	2.51E-02	1.52E+00	9.29E-01	2.91E+02	2.91E+02	7.30E-06	3.44E+02	2.38E+01	2.37E+01	9.63E+01	4.70E+00	1.86E-01
3	1.61E+05	6.09E+01	1.07E+00	6.27E-01	2.54E-02	1.52E+00	9.41E-01	2.95E+02	2.95E+02	7.40E-06	3.49E+02	2.41E+01	2.41E+01	9.76E+01	4.76E+00	1.88E-01
4	1.02E+04	3.85E+00	6.77E-02	3.96E-02	1.89E-03	9.62E-02	7.02E-02	2.20E+01	2.20E+01	5.52E-07	2.60E+01	1.80E+00	1.79E+00	7.28E+00	3.55E-01	1.40E-02
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	1.60E+05	6.06E+01	1.07E+00	6.24E-01	2.45E-02	1.52E+00	9.07E-01	2.84E+02	2.84E+02	7.13E-06	3.36E+02	2.32E+01	2.32E+01	9.40E+01	4.58E+00	1.81E-01
10	6.34E+04	2.40E+01	4.22E-01	2.47E-01	1.69E-03	6.00E-01	6.26E-02	1.96E+01	1.96E+01	4.93E-07	2.32E+01	1.60E+00	1.60E+00	6.49E+00	3.17E-01	1.25E-02
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	1.80E+04	6.81E+00	1.20E-01	7.02E-02	3.96E-04	1.70E-01	1.47E-02	4.60E+00	4.60E+00	1.15E-07	5.44E+00	3.75E-01	3.75E-01	1.52E+00	7.42E-02	2.93E-03
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	3.89E+04	1.47E+01	2.59E-01	1.51E-01	1.38E-02	3.68E-01	5.10E-01	1.60E+02	1.60E+02	4.01E-06	1.89E+02	1.30E+01	1.30E+01	5.28E+01	2.58E+00	1.02E-01
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	3.30E+05	1.25E+02	2.20E+00	1.29E+00	2.63E-02	3.12E+00	9.75E-01	3.05E+02	3.05E+02	7.67E-06	3.61E+02	2.49E+01	2.49E+01	1.01E+02	4.93E+00	1.95E-01
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	1.80E+05	6.82E+01	1.20E+00	7.02E-01	3.09E-02	1.70E+00	1.14E+00	3.54E+02	3.54E+02	9.00E-06	4.24E+02	2.93E+01	2.92E+01	1.19E+02	5.78E+00	2.29E-01
28	3.09E+05	1.17E+02	2.06E+00	1.20E+00	2.93E-02	2.92E+00	1.08E+00	3.40E+02	3.40E+02	8.53E-06	4.02E+02	2.77E+01	2.77E+01	1.12E+02	5.48E+00	2.17E-01
29	3.07E+05	1.16E+02	2.05E+00	1.20E+00	6.48E-03	2.90E+00	2.40E-01	7.53E+01	7.53E+01	1.89E-06	8.91E+01	6.15E+00	6.14E+00	2.49E+01	1.21E+00	4.80E-02
30	7.49E+04	2.83E+01	4.99E-01	2.92E-01	1.70E-02	7.09E-01	6.30E-01	1.97E+02	1.97E+02	4.95E-06	2.33E+02	1.61E+01	1.61E+01	6.53E+01	3.18E+00	1.26E-01
31	3.44E+05	1.30E+02	2.29E+00	1.34E+00	8.28E-02	3.26E+00	3.07E+00	9.61E+02	9.61E+02	2.41E-05	1.14E+03	7.85E+01	7.84E+01	3.18E+02	1.55E+01	6.13E-01
32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	8.81E+04	4.49E+01	5.87E-01	3.44E-01	7.57E-03	8.34E-01	2.80E-01	8.78E+01	8.78E+01	2.20E-06	1.04E+02	7.17E+00	7.17E+00	2.91E+01	1.42E+00	5.61E-02
34	5.74E+04	2.17E+01	3.82E-01	2.24E-01	5.99E-03	5.43E-01	2.22E-01	6.96E+01	6.96E+01	1.75E-06	8.24E+01	5.68E+00	5.68E+00	2.30E+01	1.12E+00	4.44E-02
35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	3.11E+05	1.18E+02	2.07E+00	1.21E+00	1.38E-01	2.94E+00	5.10E+00	1.60E+03	1.60E+03	4.01E-05	1.89E+03	1.30E+02	1.30E+02	5.29E+02	2.58E+01	1.02E+00
37	3.43E+05	1.30E+02	2.29E+00	1.34E+00	6.93E-02	3.25E+00	2.57E+00	7.36E+02	7.36E+02	2.02E-05	9.52E+02	6.57E+01	6.56E+01	2.66E+02	1.30E+01	5.13E-01
38	2.48E+05	9.40E+01	1.65E+00	9.69E-01	1.71E-03	2.35E+00	6.35E-02	1.99E+01	1.99E+01	4.99E-07	2.35E+01	1.62E+00	1.62E+00	6.58E+00	3.21E-01	1.27E-02
39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	2.20E+05	8.32E+01	1.46E+00	8.57E-01	4.93E-03	2.08E+00	1.83E-01	2.02E+01	2.02E+01	1.44E-06	6.77E+01	4.67E+00	4.67E+00	1.89E+01	9.23E-01	3.65E-02
42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	3.01E+05	1.14E+02	2.00E+00	1.17E+00	3.38E-02	2.85E+00	1.25E+00	3.92E+02	3.92E+02	9.85E-06	4.64E+02	3.20E+01	3.20E+01	1.30E+02	6.33E+00	2.50E-01
45	3.31E+05	1.25E+02	2.21E+00	1.29E+00	3.52E-02	3.14E-00	1.30E+00	4.08E+02	4.08E+02	1.03E-05	4.84E+02	3.34E+01	3.33E+01	1.35E+02	6.59E+00	2.61E-01
46	2.60E+05	9.83E+01	1.73E+00	1.01E+00	4.13E-02	2.46E+00	1.53E+00	4.80E+02	4.80E+02	1.20E-05	5.68E+02	3.92E+01	3.92E+01	1.59E+02	7.75E+00	3.06E-01
47	2.50E+05	9.48E+01	1.67E+00	9.77E-01	7.37E-03	2.37E+00	2.73E-01	8.55E+01	8.55E+01	2.15E-06	1.01E+02	6.98E+00	6.98E+00	2.83E+01	1.38E+00	5.46E-02
48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	8.97E+01	3.40E-02	5.98E-04	3.50E-04	1.47E-07	8.49E-04	5.46E-06	1.25E-02	1.25E-02	4.30E-11	2.03E-03	1.40E-04	1.40E-04	5.66E-04	2.76E-05	1.09E-06
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase Totals	4.71E+06	1.79E+03	3.14E+01	1.84E+01	6.91E-01	4.46E+01	2.56E+01	7.91E+03	7.91E+03	2.01E-04	9.49E+03	6.55E+02	6.54E+02	2.65E+03	1.29E+02	5.12E+00

Table 6: Soluble Radionuclide Inventory by Tank, continued

Tank	Salt IL Volume, gal	Cs-134 (Ci)	Cs-135 (Ci)	Cs-137 (Ci)	Ba-137m (Ci)	Ce-144 (Ci)	Pr-144 (Ci)	Pm-147 (Ci)	Eu-154 (Ci)	Th-232 (Ci)	U-232 (Ci)	U-233 (Ci)	U-234 (Ci)	U-235 (Ci)	U-236 (Ci)	U-238 (Ci)	Np-237 (Ci)
1	1.44E+05	5.73E+03	9.73E+00	2.85E+06	2.70E+06	1.49E-01	1.49E-01	9.66E+01	2.29E+01	-	1.31E-04	-	-	2.02E-04	-	5.02E-03	7.33E-03
2	1.61E+05	2.37E+03	4.03E+00	1.18E+06	1.12E+06	6.19E-02	6.19E-02	4.00E+01	9.49E+00	-	1.23E-04	-	-	5.91E-05	-	1.47E-03	1.54E-02
3	1.61E+05	2.41E+03	4.09E+00	1.20E+06	1.13E+06	6.27E-02	6.27E-02	4.06E+01	9.62E+00	-	1.08E-04	-	-	1.52E-04	-	3.78E-03	2.83E-02
4	1.02E+04	1.79E+02	3.05E-01	8.94E+04	8.46E+04	4.68E-03	4.68E-03	3.03E+00	7.17E-01	-	4.63E-06	-	-	6.07E-06	-	2.61E-04	2.33E-04
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	1.60E+05	2.32E+03	3.94E+00	1.15E+06	1.09E+06	6.04E-02	6.04E-02	3.91E+01	9.27E+00	-	1.64E-04	-	-	1.07E-04	-	2.66E-03	1.82E-02
10	6.34E+04	1.60E+02	2.72E-01	7.98E+04	7.55E+04	4.17E-03	4.17E-03	2.70E+00	6.40E-01	-	4.18E-05	-	-	5.10E-05	-	1.27E-03	9.72E-03
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	1.80E+04	3.75E+01	6.37E-02	1.87E+04	1.77E+04	9.78E-04	9.78E-04	6.33E-01	1.50E-01	3.18E-05	3.20E-07	8.95E-04	8.38E-05	1.58E-06	6.64E-06	1.59E-05	1.85E-04
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	3.89E+04	1.30E+03	2.21E+00	6.49E+05	6.14E+05	3.40E-02	3.40E-02	2.20E+01	5.21E+00	8.99E-05	2.67E-05	3.17E-03	4.35E-04	3.52E-05	3.74E-05	6.72E-04	4.65E-03
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	3.30E+05	2.49E+03	4.23E+00	1.24E+06	1.17E+06	6.50E-02	6.49E-02	4.20E+01	9.96E+00	-	1.04E-03	3.16E-09	1.01E-08	2.98E-03	3.85E-04	3.58E-01	9.24E-04
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	1.80E+05	2.92E+03	4.97E+00	1.46E+06	1.38E+06	7.62E-02	7.62E-02	4.93E+01	1.17E+01	-	5.67E-04	1.73E-09	5.51E-09	1.63E-03	2.10E-04	1.96E-01	5.05E-04
28	3.09E+05	2.77E+03	4.71E+00	1.38E+06	1.31E+06	7.23E-02	7.22E-02	4.67E+01	1.11E+01	-	9.73E-04	2.96E-09	9.44E-09	2.80E-03	3.61E-04	3.36E-01	8.66E-04
29	3.07E+05	6.14E+02	1.04E+00	3.06E+05	2.89E+05	1.60E-02	1.60E-02	1.04E+01	2.46E+00	1.66E-04	4.42E-05	3.41E-02	4.81E-03	1.31E-04	4.96E-04	1.54E-03	1.24E-02
30	7.49E+04	1.61E+03	2.73E+00	8.02E+05	7.58E+05	4.20E-02	4.19E-02	2.71E+01	6.44E+00	-	-	-	-	2.61E-03	4.64E-05	4.82E-04	1.72E-06
31	3.44E+05	7.84E+03	1.33E+01	3.91E+06	3.70E+06	2.04E-01	2.04E-01	1.32E+02	3.14E+01	1.86E-04	4.96E-05	3.82E-02	5.39E-03	1.47E-04	5.56E-04	1.72E-03	1.39E-02
32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	8.81E+04	7.17E+02	1.22E+00	3.57E+05	3.38E+05	1.87E-02	1.87E-02	1.21E+01	2.87E+00	-	1.71E-03	8.18E-09	1.69E-04	3.16E-03	1.75E-03	4.58E-01	1.44E-01
34	5.74E+04	5.68E+02	9.64E-01	2.83E+05	2.68E+05	1.48E-02	1.48E-02	9.57E+00	2.27E+00	-	3.03E-04	-	-	3.06E-04	-	2.16E-02	1.67E-02
35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	3.11E+05	1.30E+04	2.21E+01	6.49E+06	6.14E+06	3.40E-01	3.40E-01	2.20E+02	5.21E+01	-	-	-	-	2.38E-02	4.62E-04	8.41E-03	1.51E-04
37	3.43E+05	6.56E+03	1.11E+01	3.27E+06	3.09E+06	1.71E-01	1.71E-01	1.11E+02	2.62E+01	-	-	-	-	5.38E-03	1.47E-04	5.55E-04	1.72E-03
38	2.48E+05	1.62E+02	2.76E-01	8.09E+04	7.65E+04	4.23E-03	4.23E-03	2.74E+00	6.49E-01	-	-	-	-	7.01E-02	9.66E-04	1.33E-02	7.85E-05
39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	2.20E+05	4.67E+02	7.93E-01	2.33E+05	2.20E+05	1.22E-02	1.22E-02	7.87E+00	1.87E+00	-	-	-	-	9.13E-02	1.06E-03	2.62E-02	7.23E-05
42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	3.01E+05	3.20E+03	5.44E+00	1.59E+06	1.51E+06	8.34E-02	8.34E-02	5.40E+01	1.28E+01	-	9.47E-04	2.88E-09	9.20E-09	2.72E-03	3.52E-04	3.27E-01	8.43E-04
45	3.31E+05	3.33E+03	5.66E+00	1.66E+06	1.57E+06	8.69E-02	8.69E-02	5.62E+01	1.33E+01	-	1.04E-03	3.18E-09	1.01E-08	3.00E-03	3.87E-04	3.60E-01	9.29E-04
46	2.60E+05	3.92E+03	6.65E+00	1.95E+06	1.85E+06	1.02E-01	1.02E-01	6.60E+01	1.57E+01	-	8.17E-04	2.49E-09	7.93E-09	2.35E-03	3.03E-04	2.82E-01	7.27E-04
47	2.50E+05	6.98E+02	1.19E+00	3.48E+05	3.29E+05	1.82E-02	1.82E-02	1.18E+01	2.79E+00	-	6.39E-04	-	-	1.74E-03	-	1.38E-01	-
48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	8.97E+01	1.40E-02	2.37E-05	6.96E+00	6.58E+00	3.64E-07	3.64E-07	2.36E-04	5.59E-05	4.86E-08	1.29E-08	9.96E-06	1.40E-06	3.84E-08	1.45E-07	4.49E-07	3.61E-06
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase Totals	4.71E+06	6.54E+04	1.11E+02	3.26E+07	3.08E+07	1.71E+00	1.70E+00	1.10E+03	2.62E+02	6.60E-04	8.78E-03	1.14E-01	2.04E-01	2.43E-02	5.38E-02	2.50E+00	6.45E-01

Table 6: Soluble Radionuclide Inventory by Tank, continued

Tank	Salt IL Volume, gal (Ci)	Pu-238 (Ci)	Pu-239 (Ci)	Pu-240 (Ci)	Pu-241 (Ci)	Pu-242 (Ci)	Am-241 (Ci)	Am-242m (Ci)	Cm-244 (Ci)	Cm-245 (Ci)	Na-22 (Ci)	Al-26 (Ci)	Te-125m (Ci)	Sb-126 (Ci)	Sb-126m (Ci)	Sm-151 (Ci)	Eu-152 (Ci)	Eu-155 (Ci)
1	1.44E+05	5.68E+00	1.52E+00	3.40E-01	1.87E+00	6.99E-05	9.15E+00	5.27E-03	3.66E+00	3.61E-04	5.09E+01	3.26E-01	5.67E+01	1.59E+00	1.13E+01	1.08E+02	5.24E-01	6.12E+00
2	1.61E+05	1.01E+01	1.44E+00	3.21E-01	1.35E+00	6.61E-05	3.79E+00	2.19E-03	1.52E+00	1.49E-04	2.11E+01	1.35E-01	2.35E+01	6.57E-01	4.70E+00	4.49E+01	2.17E-01	2.54E+00
3	1.61E+05	1.25E+01	1.78E+00	3.98E-01	2.01E+00	8.18E-05	3.84E+00	2.22E-03	1.54E+00	1.52E-04	2.14E+01	1.37E-01	2.38E+01	6.66E-01	4.76E+00	4.55E+01	2.20E-01	2.57E+00
4	1.02E+04	4.73E-02	4.67E-02	1.04E-02	8.83E-02	2.15E-06	2.86E-01	1.65E-04	1.15E-01	1.13E-05	1.59E+00	1.02E-02	1.78E+00	4.97E-02	3.55E-01	3.39E+00	1.64E-02	1.92E-01
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	1.60E+05	3.95E+00	5.64E-01	1.26E-01	5.23E-01	2.59E-05	3.70E+00	2.13E-03	1.48E+00	1.46E-04	2.06E+01	1.32E-01	2.30E+01	6.42E-01	4.58E+00	4.38E+01	2.12E-01	2.48E+00
10	6.34E+04	4.94E+00	7.05E-01	1.58E-01	7.01E-01	3.24E-05	2.56E-01	1.47E-04	1.02E-01	1.01E-05	1.42E+00	9.11E-03	1.59E+00	4.43E-02	3.17E-01	3.03E+00	1.46E-02	1.71E-01
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	1.80E+04	3.23E+00	5.41E-02	2.99E-02	7.59E-01	4.32E-05	5.99E-02	3.45E-05	2.40E-02	2.36E-06	3.34E-01	2.13E-03	3.72E-01	1.04E-02	7.42E-02	7.09E-01	3.43E-03	4.01E-02
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	3.89E+04	2.08E+00	5.13E-01	1.66E-01	8.38E-01	3.03E-05	2.08E+00	1.20E-03	8.33E-01	8.21E-05	1.16E+01	7.41E-02	1.29E+01	3.61E-01	2.58E+00	2.46E+01	1.19E-01	1.39E+00
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	3.30E+05	1.91E+03	2.99E+02	6.68E+01	1.57E+03	1.33E-02	3.98E+00	2.29E-03	1.59E+00	1.57E-04	2.22E+01	1.42E-01	2.47E+01	6.90E-01	4.93E+00	4.71E+01	2.28E-01	2.66E+00
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	1.80E+05	1.04E+03	1.63E+02	3.65E+01	8.59E+02	7.27E-03	4.67E+00	2.69E-03	1.87E+00	1.84E-04	2.60E+01	1.66E-01	2.90E+01	8.10E-01	5.78E+00	5.53E+01	2.67E-01	3.12E+00
28	3.09E+05	1.79E+03	2.80E+02	6.26E+01	1.47E+03	1.25E-02	4.43E+00	2.55E-03	1.77E+00	1.75E-04	2.46E+01	1.58E-01	2.74E+01	7.68E-01	5.48E+00	5.24E+01	2.53E-01	2.96E+00
29	3.07E+05	4.52E+01	1.22E+00	5.06E-01	8.92E+00	3.36E-04	9.81E-01	5.65E-04	3.93E-01	3.87E-05	5.46E+00	3.49E-02	6.08E+00	1.70E-01	1.21E+00	1.16E+01	5.62E-02	6.56E-01
30	7.49E+04	5.03E+02	4.37E+00	3.14E+00	3.23E+02	7.52E-03	2.57E+00	1.48E-03	1.03E+00	1.01E-04	1.43E+01	9.15E-02	1.59E+01	4.46E-01	3.18E+00	3.04E+01	1.47E-01	1.72E+00
31	3.44E+05	5.07E+01	1.37E+00	5.67E-01	9.99E+00	3.76E-04	1.25E+01	7.22E-03	5.01E+00	4.94E-04	6.97E+01	4.46E-01	7.76E+01	2.17E+00	1.55E+01	1.48E+02	7.17E-01	8.37E+00
32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	8.81E+04	2.35E+02	1.28E+02	2.25E+01	6.67E+02	1.30E-03	1.14E+00	6.60E-04	4.58E-01	4.51E-05	6.37E+00	4.08E-02	7.10E+00	1.98E-01	1.42E+00	1.35E+01	6.55E-02	7.66E-01
34	5.74E+04	-	3.50E+00	7.81E-01	1.62E+01	1.62E-04	9.07E-01	5.23E-04	3.63E-01	3.58E-05	5.05E+00	3.23E-02	5.62E+00	1.57E-01	1.12E+00	1.07E+01	5.19E-02	6.06E-01
35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	3.11E+05	2.07E+03	1.61E+01	1.28E+01	8.38E+02	2.77E-02	2.08E+01	1.20E-02	8.33E+00	8.21E-04	1.16E+02	7.41E-01	1.29E+02	3.61E+00	2.58E+01	2.46E+02	1.19E+00	1.39E+01
37	3.43E+05	5.06E+01	1.37E+00	5.66E-01	9.98E+00	3.76E-04	1.05E+01	6.04E-03	4.20E+00	4.13E-04	5.83E+01	3.73E-01	6.50E+01	1.82E+00	1.30E+01	1.24E+02	6.00E-01	7.01E+00
38	2.48E+05	1.70E+03	6.70E+00	5.66E+00	1.45E+03	8.35E-02	2.59E-01	1.49E-04	1.04E-01	1.02E-05	1.44E+00	9.23E-03	1.61E+00	4.50E-02	3.21E-01	3.07E+00	1.48E-02	1.73E-01
39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	2.20E+05	1.49E+03	-	-	-	-	7.45E-01	4.30E-04	2.98E-01	2.94E-05	4.15E+00	2.65E-02	4.62E+00	1.29E-01	9.23E-01	8.82E+00	4.27E-02	4.99E-01
42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	3.01E+05	1.74E+03	2.73E+02	6.10E+01	1.44E+03	1.22E-02	5.11E+00	2.95E-03	2.05E+00	2.02E-04	2.85E+01	1.82E-01	3.17E+01	8.86E-01	6.33E+00	6.05E+01	2.93E-01	3.42E+00
45	3.31E+05	1.92E+03	3.00E+02	6.72E+01	1.58E+03	1.34E-02	5.32E+00	3.07E-03	2.13E+00	2.10E-04	2.96E+01	1.90E-01	3.30E+01	9.23E-01	6.59E+00	6.30E+01	3.05E-01	3.56E+00
46	2.60E+05	1.50E+03	2.35E+02	5.26E+01	1.24E+03	1.05E-02	6.25E+00	3.60E-03	2.50E+00	2.47E-04	3.48E+01	2.23E-01	3.88E+01	1.08E+00	7.75E+00	7.40E+01	3.58E-01	4.18E+00
47	2.50E+05	1.47E+03	2.11E+02	4.71E+01	9.16E+02	9.70E-03	1.11E+00	6.42E-04	4.46E-01	4.39E-05	6.20E+00	3.97E-02	6.91E+00	1.93E-01	1.38E+00	1.32E+01	6.38E-02	7.45E-01
48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	8.97E+01	1.32E-02	3.58E-04	1.48E-04	2.61E-03	9.81E-08	2.23E-05	1.29E-08	8.93E-06	8.80E-10	1.24E-04	7.94E-07	1.38E-04	3.87E-06	2.76E-05	2.64E-04	1.28E-06	1.49E-05
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase Totals	4.71E+06	1.75E+04	1.93E+03	4.42E+02	1.24E+04	2.00E-01	1.04E+02	6.02E-02	4.18E+01	4.12E-03	5.82E+02	3.72E+00	6.48E+02	1.81E+01	1.29E+02	1.24E+03	5.98E+00	6.99E+01

Table 6: Soluble Radionuclide Inventory by Tank, continued

Tank	Salt IL Volume, gal	Ra-226 (Ci)	Ra-228 (Ci)	Ac-227 (Ci)	Th-229 (Ci)	Th-230 (Ci)	Pa-231 (Ci)	Pu-244 (Ci)	Am-243 (Ci)	Cm-242 (Ci)	Cm-243 (Ci)	Cm-247 (Ci)	Cm-248 (Ci)	Bk-249 (Ci)	Cf-249 (Ci)	Cf-251 (Ci)	Cf-252 (Ci)
1	1.44E+05	-	-	4.60E-08	-	-	1.28E-07	3.20E-07	1.75E-03	4.33E-03	1.03E-03	1.97E-13	2.06E-13	1.50E-20	1.14E-12	3.90E-14	1.27E-15
2	1.61E+05	-	-	1.35E-08	-	-	3.74E-08	3.02E-07	7.25E-04	1.79E-03	4.25E-04	8.18E-14	8.52E-14	6.23E-21	4.73E-13	1.62E-14	5.25E-16
3	1.61E+05	-	-	3.46E-08	-	-	9.62E-08	3.74E-07	7.35E-04	1.82E-03	4.30E-04	8.29E-14	8.64E-14	6.31E-21	4.79E-13	1.64E-14	5.32E-16
4	1.02E+04	-	-	1.39E-09	-	-	3.85E-09	9.82E-09	5.48E-05	1.35E-04	3.21E-05	6.18E-15	6.44E-15	4.71E-22	3.57E-14	1.22E-15	3.97E-17
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	1.60E+05	-	-	2.43E-08	-	-	6.76E-08	1.19E-07	7.08E-04	1.75E-03	4.15E-04	7.99E-14	8.32E-14	6.08E-21	4.61E-13	1.58E-14	5.12E-16
10	6.34E+04	-	-	1.16E-08	-	-	3.23E-08	1.48E-07	4.89E-05	1.21E-04	2.86E-05	5.52E-15	5.75E-15	4.20E-22	3.19E-14	1.09E-15	3.54E-17
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	1.80E+04	1.89E-10	3.18E-05	3.60E-10	2.54E-06	2.31E-08	9.99E-10	1.98E-07	1.15E-05	2.83E-05	6.71E-06	1.29E-15	1.35E-15	9.84E-23	7.47E-15	2.56E-16	8.29E-18
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	3.89E+04	9.81E-10	8.99E-05	8.04E-09	9.02E-06	1.20E-07	2.23E-08	1.39E-07	3.98E-04	9.84E-04	2.33E-04	4.49E-14	4.68E-14	3.42E-21	2.59E-13	8.88E-15	2.88E-16
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	3.30E+05	2.27E-14	-	6.80E-07	8.98E-12	2.78E-12	1.89E-06	6.08E-05	7.61E-04	1.88E-03	4.46E-04	8.59E-14	8.95E-14	6.54E-21	4.96E-13	1.70E-14	5.51E-16
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	1.80E+05	1.24E-14	-	3.72E-07	4.91E-12	1.52E-12	1.03E-06	3.32E-05	8.93E-04	2.21E-03	5.23E-04	1.01E-13	1.05E-13	1.76E-21	5.82E-13	1.99E-14	6.46E-16
28	3.09E+05	2.13E-14	-	6.38E-07	8.42E-12	2.60E-12	1.77E-06	5.70E-05	8.47E-04	2.09E-03	4.96E-04	9.55E-14	9.95E-14	7.27E-21	5.52E-13	1.89E-14	6.13E-16
29	3.07E+05	1.08E-08	1.66E-04	3.00E-08	9.69E-05	1.33E-06	8.33E-08	1.53E-06	1.88E-04	4.64E-04	1.10E-04	2.12E-14	2.21E-14	1.61E-21	1.22E-13	4.18E-15	1.36E-16
30	7.49E+04	5.88E-09	-	1.06E-08	-	7.20E-07	2.94E-08	3.44E-05	4.92E-04	1.21E-03	2.88E-04	5.55E-14	5.78E-14	4.22E-21	3.20E-13	1.10E-14	3.56E-16
31	3.44E+05	1.21E-08	1.86E-04	3.36E-08	1.09E-04	1.49E-06	9.34E-08	1.72E-06	2.40E-03	5.92E-03	1.40E-03	2.70E-13	2.82E-13	2.06E-20	1.56E-12	5.34E-14	1.73E-15
32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	8.81E+04	3.80E-10	-	7.22E-07	2.33E-11	4.65E-08	2.01E-06	5.95E-06	2.19E-04	5.41E-04	1.28E-04	2.47E-14	2.57E-14	1.88E-21	1.43E-13	4.88E-15	1.58E-16
34	5.74E+04	-	-	6.99E-08	-	-	1.94E-07	7.41E-07	1.73E-04	4.29E-04	1.02E-04	1.96E-14	2.04E-14	1.49E-21	1.13E-13	3.87E-15	1.26E-16
35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	3.11E+05	5.37E-08	-	1.05E-07	-	6.57E-06	2.93E-07	1.26E-04	3.98E-03	9.84E-03	2.33E-03	4.49E-13	4.68E-13	3.42E-20	2.60E-12	8.88E-14	2.88E-15
37	3.43E+05	1.21E-08	1.86E-04	3.36E-08	1.08E-04	1.48E-06	9.32E-08	1.72E-06	2.00E-03	4.95E-03	1.17E-03	2.26E-13	2.36E-13	1.72E-20	1.31E-12	4.47E-14	1.45E-15
38	2.48E+05	1.58E-07	-	2.20E-07	-	1.93E-05	6.12E-07	3.82E-04	4.96E-05	1.23E-04	2.90E-05	5.59E-15	5.83E-15	4.26E-22	3.23E-14	1.11E-15	3.59E-17
39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	2.20E+05	2.06E-07	-	2.41E-07	-	2.52E-05	6.69E-07	-	1.43E-04	3.52E-04	8.35E-05	1.61E-14	1.68E-14	1.22E-21	9.29E-14	3.18E-15	1.03E-16
42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	3.01E+05	2.07E-14	-	6.21E-07	8.20E-12	2.54E-12	1.73E-06	5.55E-05	9.78E-04	2.42E-03	5.73E-04	1.10E-13	1.15E-13	8.40E-21	6.37E-13	2.18E-14	7.08E-16
45	3.31E+05	2.28E-14	-	6.84E-07	9.03E-12	2.79E-12	1.90E-06	6.12E-05	1.02E-03	2.52E-03	5.96E-04	1.15E-13	1.20E-13	8.75E-21	6.64E-13	2.27E-14	7.37E-16
46	2.60E+05	1.79E-14	-	5.36E-07	7.07E-12	2.19E-12	1.49E-06	4.79E-05	1.20E-03	2.96E-03	7.00E-04	1.35E-13	1.41E-13	1.03E-20	7.80E-13	2.67E-14	8.66E-16
47	2.50E+05	-	-	3.96E-07	-	-	1.10E-06	4.43E-05	2.13E-04	5.27E-04	1.25E-04	2.40E-14	2.51E-14	1.83E-21	1.39E-13	4.75E-15	1.54E-16
48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	8.97E+01	3.17E-12	4.86E-08	8.77E-12	2.83E-08	3.87E-10	2.43E-11	4.48E-10	4.27E-09	1.05E-08	2.50E-09	4.81E-19	5.02E-19	3.67E-26	2.78E-18	9.52E-20	3.09E-21
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phase Totals	4.71E+06	4.60E-07	6.60E-04	5.53E-06	3.26E-04	5.63E-05	1.54E-05	9.16E-04	2.00E-02	4.94E-02	1.17E-02	2.25E-12	2.35E-12	1.72E-19	1.30E-11	4.46E-13	1.45E-14

Table 7: Less Conservative Soluble Actinide Inventory by Tank

Tank	Total Supernate Volume, gal	Th-232 (Ci)	U-232 (Ci)	U-233 (Ci)	U-234 (Ci)	U-235 (Ci)	U-236 (Ci)	U-238 (Ci)	Np-237 (Ci)	Pu-238 (Ci)	Pu-239 (Ci)	Pu-240 (Ci)	Pu-241 (Ci)	Pu-242 (Ci)	Am-241 (Ci)	Am-242m (Ci)	Cm-244 (Ci)	Cm-245 (Ci)	
1	1.66E+05	-	1.51E-04	-	-	2.33E-04	-	5.79E-03	8.45E-03	6.55E+00	1.75E+00	3.92E-01	2.15E+00	8.06E-05	1.05E+01	6.08E-03	4.22E+00	4.16E-04	
2	1.64E+05	-	1.25E-04	-	-	6.01E-05	-	1.50E-03	1.57E-02	1.02E+01	1.46E+00	3.27E-01	1.37E+00	6.73E-05	3.86E+00	2.22E-03	1.54E+00	1.52E-04	
3	1.64E+05	-	1.09E-04	-	-	1.54E-04	-	3.85E-03	2.88E-02	1.27E+01	1.81E+00	4.05E-01	2.04E+00	8.32E-05	3.91E+00	2.25E-03	1.57E+00	1.54E-04	
4	3.99E+05	-	1.81E-04	-	-	2.38E-04	-	1.02E-02	9.15E-03	1.86E+00	1.83E+00	4.09E-01	3.46E+00	8.42E-05	1.12E+01	6.48E-03	4.50E+00	4.43E-04	
5	1.71E+04	-	1.54E-05	-	-	2.99E-05	-	7.09E-04	1.20E-03	8.26E-01	1.38E-01	3.29E-02	2.21E-01	9.72E-06	9.91E-02	5.71E-05	3.97E-02	3.91E-06	
6	2.71E+05	-	2.87E-04	-	-	3.54E-04	-	1.33E-02	4.60E-03	-	1.36E+00	4.72E-01	5.29E+00	9.28E-04	3.21E-01	1.85E-04	1.29E-01	1.27E-05	
7	2.90E+05	-	6.88E-05	-	-	3.22E-04	-	1.11E-02	5.54E-03	2.72E+01	4.89E+00	1.20E+00	1.15E-01	1.11E-03	1.60E+00	9.23E-04	6.41E-01	6.32E-05	
8	1.02E+04	-	3.02E-06	-	-	7.97E-06	-	3.67E-04	1.67E-04	4.77E-01	1.05E-01	2.46E-02	2.35E-01	3.11E-05	2.26E-02	1.30E-05	9.06E-03	8.92E-07	
9	1.75E+05	-	1.80E-04	-	-	1.17E-04	-	2.91E-03	1.99E-02	4.31E+00	6.16E-01	1.38E-01	5.72E-01	2.83E-05	4.05E+00	2.33E-03	1.62E+00	1.60E-04	
10	6.53E+04	-	4.31E-05	-	-	5.25E-05	-	1.31E-03	1.00E-02	5.08E+00	7.26E-01	1.62E-01	7.22E-01	3.34E-05	2.63E-01	1.52E-04	1.05E-01	1.04E-05	
11	1.56E+05	2.81E-06	-	4.01E-04	3.29E-04	6.22E-06	5.09E-05	1.15E-05	2.18E-04	2.94E+01	2.93E-01	1.84E-01	1.05E-01	3.91E-04	1.50E-04	8.67E-08	6.02E-05	5.93E-09	
12	1.18E+05	2.09E-04	2.11E-06	5.89E-03	5.51E-04	1.04E-05	4.37E-05	1.04E-04	1.22E-03	2.12E+01	3.56E-01	1.97E-01	5.00E+00	2.84E-04	3.94E-01	2.27E-04	1.58E-01	1.55E-05	
13	7.54E+05	4.08E-04	1.09E-04	8.37E-02	1.18E-02	3.23E-04	1.22E-03	3.77E-03	3.04E-02	1.11E+02	3.00E+00	1.24E+00	2.19E+01	8.25E-04	3.77E+01	2.17E-02	1.51E+01	1.49E-03	
14	5.95E+04	1.38E-04	4.08E-05	4.86E-03	6.67E-04	5.39E-05	5.73E-05	1.03E-03	7.12E-03	3.19E+00	7.86E-01	2.54E-01	1.28E+00	4.65E-05	3.19E+00	1.84E-03	1.28E+00	1.26E-04	
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
21	1.18E+06	1.20E-06	-	3.79E-02	4.05E-02	6.43E-04	7.43E-03	3.80E-03	3.36E-02	2.02E+02	2.97E+00	1.01E+00	1.77E+01	1.13E-04	5.03E-03	2.90E-06	2.01E-03	1.98E-07	
22	1.18E+06	-	-	1.57E-01	5.65E-02	8.64E-04	9.30E-03	1.92E-02	3.43E-02	2.33E+02	-	-	-	-	5.47E-03	3.15E-06	2.19E-03	2.16E-07	
23	1.30E+06	1.78E-07	-	1.18E-02	1.88E-02	1.05E-04	4.21E-04	3.13E-03	8.69E-04	9.48E-01	3.25E-03	8.10E-04	9.48E-02	4.83E-03	1.24E-02	4.85E-07	3.64E-04	3.31E-08	
24	8.53E+05	-	1.55E-04	4.72E-10	1.51E-09	4.46E-04	5.76E-05	5.35E-02	1.38E-04	2.85E+02	4.47E+01	9.99E+00	2.35E-02	1.99E-03	1.52E+00	8.74E-04	6.07E-01	5.98E-05	
25	3.66E+05	-	6.66E-05	2.03E-10	6.47E-10	1.91E-04	2.47E-05	2.30E-02	5.93E-05	1.22E+02	1.92E+01	4.29E+00	1.01E+02	8.54E-04	4.42E+00	2.55E-03	1.77E+00	1.74E-04	
26	7.01E+05	-	1.27E-04	3.88E-10	1.24E-09	3.66E-04	4.73E-05	4.39E-02	1.13E-04	2.34E+02	4.67E+01	8.20E+00	1.93E+02	1.63E-03	1.60E+01	9.22E-03	6.40E+00	6.31E-04	
27	7.83E+05	-	1.42E-04	4.33E-10	1.38E-09	4.09E-04	5.28E-05	4.91E-02	1.27E-04	2.62E+02	4.10E+01	9.16E+00	2.16E+02	1.83E-03	2.03E+01	1.17E-02	8.13E+00	8.01E-04	
28	4.94E+05	-	8.99E-05	2.73E-10	8.73E-10	2.58E-04	3.34E-05	3.10E-02	8.00E-05	1.65E+02	2.59E+01	5.78E+00	1.36E-02	1.15E-03	7.08E+00	4.08E-03	2.84E+00	2.79E-04	
29	4.74E+05	2.57E-04	6.83E-05	5.26E-02	7.42E-03	2.03E-04	7.66E-04	2.37E-03	1.91E-02	6.98E+01	1.89E+00	7.82E-01	1.38E+01	5.19E-04	1.51E+00	8.73E-04	6.06E-01	5.97E-05	
30	9.90E+05	-	-	-	-	1.99E-03	3.54E-05	3.68E-04	1.31E-06	8.99E-04	3.84E+00	2.34E+00	2.40E+00	2.47E-02	5.74E-03	3.40E+01	1.96E-02	1.36E+01	1.34E-03
31	4.59E+05	2.49E-04	6.62E-05	5.10E-02	7.19E-03	1.97E-04	7.41E-04	2.30E-03	1.85E-02	6.76E+01	1.83E+00	7.57E-01	1.33E-01	5.02E-04	1.67E+01	9.63E-03	6.69E+00	6.59E-04	
32	9.13E+05	-	-	-	-	2.38E-03	3.41E-05	5.35E-04	1.60E-05	9.86E-04	3.46E+02	3.04E+00	2.25E+00	1.55E+02	4.75E-03	2.28E+01	1.32E-02	9.15E+00	9.01E-04
33	9.42E+05	-	1.05E-03	5.05E-09	1.04E-04	1.95E-03	1.08E-03	2.83E-01	8.88E-02	1.45E+02	7.91E+01	1.39E+01	4.12E+02	8.03E-04	1.22E+01	7.05E-03	4.90E+00	4.82E-04	
34	6.40E+05	-	1.95E-04	-	-	1.97E-04	-	1.39E-02	1.08E-02	-	2.25E+00	5.03E-01	1.04E+01	1.04E-04	1.01E+01	5.83E-03	4.05E+00	3.99E-04	
35	4.94E+05	-	-	-	-	1.26E-03	2.19E-05	3.72E-04	1.29E-05	4.55E-04	1.89E+02	1.53E+00	1.17E+00	9.07E-01	2.62E-03	6.41E+00	3.70E-03	2.57E+00	2.53E-04
36	5.30E+05	-	-	-	-	2.35E-03	4.55E-05	8.30E-04	1.49E-05	6.57E-04	2.04E+02	1.59E+00	1.26E+00	8.26E+01	2.73E-03	3.55E+01	2.05E-02	1.42E+01	1.40E-03
37	4.60E+05	2.49E-04	6.63E-05	5.10E-02	7.20E-03	1.97E-04	7.43E-04	2.30E-03	1.85E-02	6.77E+01	1.83E+00	7.58E-01	1.34E+01	5.03E-04	1.40E+01	8.09E-03	5.62E+00	5.53E-04	
38	4.20E+05	-	-	-	-	6.84E-03	9.43E-05	1.30E-03	7.66E-06	7.28E-03	1.66E+02	6.54E-01	5.52E-01	1.42E+02	8.15E-03	4.38E-01	2.53E-04	1.75E-01	1.73E-05
39	7.95E+05	-	-	-	-	5.45E-03	7.88E-05	9.35E-04	1.66E-05	3.42E-03	3.04E+02	3.78E+00	2.35E+00	2.70E-02	5.00E-03	2.85E+00	1.64E-03	1.14E+00	1.12E-04
40	6.12E+05	8.45E-05	9.39E-05	2.40E-03	2.31E-03	4.36E-04	5.77E-04	1.37E-02	4.77E-02	4.36E+01	1.41E+01	5.33E+00	7.50E+01	2.69E-03	1.33E-01	7.65E-05	5.31E-02	5.23E-06	
41	3.46E+05	-	-	-	-	8.30E-03	9.60E-05	2.38E-03	6.57E-06	2.48E-02	1.36E+02	-	-	-	1.17E+00	6.76E-04	4.70E-01	4.63E-05	
42	1.27E+06	5.84E-03	2.07E-05	8.23E-02	3.03E-02	7.14E-04	4.05E-03	1.25E-02	2.49E-02	3.93E+02	1.40E+01	5.03E+00	8.62E+01	4.61E-03	3.93E+01	2.27E-02	1.57E+01	1.55E-03	
43	9.45E+05	-	-	-	-	1.54E-02	2.12E-04	2.93E-03	1.72E-05	1.64E-02	3.73E+02	1.47E+00	1.24E+00	3.19E+02	1.84E-02	6.18E-01	3.56E-04	2.48E-01	2.44E-05
44	5.64E+05	-	1.03E-04	3.12E-10	9.96E-10	2.95E-04	3.81E-05	3.54E-02	9.13E-05	1.89E+02	2.95E+01	6.60E+00	1.55E+02	1.32E-03	9.58E+00	5.53E-03	3.84E+00	3.78E-04	
45	5.11E+05	-	9.29E-05	2.83E-10	9.02E-10	2.67E-04	3.45E-05	3.20E-02	8.27E-05	1.71E+02	2.67E+01	5.98E+00	1.41E+02	1.19E-03	8.21E+00	4.73E-03	3.29E+00	3.24E-04	
46	6.72E+05	-	1.22E-04	3.72E-10	1.19E-09	3.51E-04	4.54E-05	4.22E-02	1.09E-04	2.25E+02	3.52E+01	7.87E+00	1.85E-02	1.57E-03	1.62E+01	9.34E-03	6.49E+00	6.39E-04	
47	5.97E+05	-	8.80E-05	-	-	2.39E-04	-	1.89E-02	-	2.02E+02	2.90E+01	6.49E+00	1.26E+02	1.33E-03	2.66E+00	1.53E-03	1.06E+00	1.05E-04	
48	2.40E+05	-	-	8.21E-01	2.81E+00	1.89E-03	8.62E-02	1.86E-03	1.80E-01	1.36E+03	2.46E+00	-	-	-	1.31E+00	7.57E-04	5.26E-01	5.18E-05	
49	1.92E+05	1.04E-04	2.76E-05	2.13E-02	3.00E-03	8.21E-05	3.10E-04	9.60E-04	7.72E-03	2.82E+01	7.64E-01	3.16E-01	5.57E+00	2.10E-04	4.77E-02	2.75E-05	1.91E-02	1.88E-06	
50	4.24E+05	7.00E-07	6.11E-05	1.09E-03	7.02E-04	1.16E-04	1.45E-04	6.15E-03	7.92E-05	1.62E-02	1.03E-01	1.12E-03	2.95E-02	4.29E-04	6.53E-03	1.99E-08	7.56E-04	1.36E-09	
51	6.93E+05	2.77E-05	4.07E-06	3.37E-03	2.80E-03	7.30E-05	4.54E-04	6.66E-04	2.26E-03	2.44E+02	3.27E+00	1.85E+00	9.28E+01	3.35E-03	8.26E-01	4.76E-04	3.31E-01	3.26E-05	
Phase Totals	2.39E+07	7.57E-03	3.96E																

Table 7: Less Conservative Soluble Actinide Inventory by Tank, Continued

Tank	Free Supernate Volume, gal	Th-232 (Ci)	U-232 (Ci)	U-233 (Ci)	U-234 (Ci)	U-235 (Ci)	U-236 (Ci)	U-238 (Ci)	Np-237 (Ci)	Pu-238 (Ci)	Pu-239 (Ci)	Pu-240 (Ci)	Pu-241 (Ci)	Pu-242 (Ci)	Am-241 (Ci)	Am-242m (Ci)	Cm-244 (Ci)	Cm-245 (Ci)	
1	1.71E+04	-	1.55E-05	-	-	2.39E-05	-	5.96E-04	8.69E-04	6.74E-01	1.80E-01	4.03E-02	2.21E-01	8.29E-06	1.08E+00	6.25E-04	4.34E-01	4.28E-05	
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4	2.99E+05	-	1.36E-04	-	-	1.79E-04	-	7.70E-03	6.87E-03	1.39E+00	1.38E+00	3.08E-01	2.60E+00	6.33E-05	8.44E+00	4.87E-03	3.38E+00	3.33E-04	
5	3.64E-12	-	3.27E-21	-	-	6.35E-21	-	1.50E-19	2.54E-19	1.75E-16	2.92E-17	6.99E-18	4.68E-17	2.06E-21	2.10E-17	1.21E-20	8.42E-18	8.29E-22	
6	2.54E+05	-	2.68E-04	-	-	3.32E-04	-	1.24E-02	4.30E-03	-	1.27E+00	4.41E-01	4.95E+00	8.68E-04	3.01E-01	1.73E-04	1.20E-01	1.19E-05	
7	2.76E+05	-	6.56E-05	-	-	3.07E-04	-	1.06E-02	5.28E-03	2.59E+01	4.66E+00	1.15E+00	1.10E+01	1.06E-03	1.53E+00	8.79E-04	6.11E-01	6.02E-05	
8	7.28E+03	-	2.16E-06	-	-	5.72E-06	-	2.63E-04	1.19E-04	3.42E-01	7.51E-02	1.77E-02	1.68E-01	2.23E-05	1.62E-02	9.35E-06	6.50E-03	6.40E-07	
9	1.30E+04	-	1.34E-05	-	-	8.66E-06	-	2.16E-04	1.48E-03	3.21E-01	4.58E-02	1.02E-02	4.25E-02	2.11E-06	3.01E-01	1.73E-04	1.20E-01	1.19E-05	
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11	1.42E+05	2.56E-06	-	3.66E-04	3.00E-04	5.66E-06	4.64E-05	1.05E-05	1.98E-04	2.68E+01	2.66E-01	1.67E-01	9.58E+00	3.56E-04	1.37E-04	7.89E-08	5.48E-05	5.40E-09	
12	2.46E+04	4.35E-05	4.38E-07	1.22E-03	1.15E-04	2.16E-06	9.09E-06	2.17E-05	2.54E-04	4.42E+00	7.41E-02	4.09E-02	1.04E+00	5.92E-05	8.20E-02	4.73E-05	3.28E-02	3.23E-06	
13	5.78E+05	3.13E-04	8.32E-05	6.41E-02	9.05E-03	2.47E-04	9.33E-04	2.89E-03	2.33E-02	8.51E+01	2.30E+00	9.52E-01	1.68E+01	6.32E-04	2.89E+01	1.67E-02	1.16E+01	1.14E-03	
14	1.05E+03	2.43E-06	7.20E-07	8.57E-05	1.18E-05	9.52E-07	1.01E-06	1.82E-05	1.26E-04	5.63E-02	1.39E-02	4.48E-03	2.27E-02	8.20E-07	5.62E-02	3.24E-05	2.25E-02	2.22E-06	
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
21	1.18E+06	1.20E-06	-	3.78E-02	4.04E-02	6.40E-04	7.40E-03	3.79E-03	3.35E-02	2.01E+02	2.96E+00	1.01E+00	1.77E+01	1.13E-04	5.01E-03	2.89E-06	2.01E-03	1.98E-07	
22	1.17E+06	-	-	1.56E-01	5.62E-02	8.59E-04	9.25E-03	1.91E-02	3.41E-02	2.31E+02	-	-	-	-	5.43E-03	3.13E-06	2.18E-03	2.14E-07	
23	1.26E+06	1.72E-07	-	1.15E-02	1.82E-02	1.01E-04	4.09E-04	3.04E-03	8.43E-04	9.19E-01	3.15E-03	7.86E-04	9.19E-02	4.68E-03	1.20E-02	4.70E-07	3.53E-04	3.21E-08	
24	8.51E+05	-	1.55E-04	4.71E-10	1.50E-09	4.45E-04	5.74E-05	5.34E-02	1.38E-04	2.84E+02	4.45E+01	9.96E+00	2.34E+02	1.98E-03	1.51E+00	8.71E-04	6.05E-01	5.96E-05	
25	3.69E+04	-	6.70E-06	2.04E-11	6.51E-11	1.93E-05	2.49E-06	2.31E-03	5.96E-06	1.23E+01	1.93E+00	4.31E-01	1.01E+01	8.59E-05	4.45E-01	2.57E-04	1.78E-01	1.76E-05	
26	5.19E+05	-	9.44E-05	2.87E-10	9.16E-10	2.71E-04	3.50E-05	3.26E-02	8.40E-05	1.73E+02	2.72E+01	6.07E+00	1.43E+02	2.11E-03	1.18E+01	6.83E-03	4.74E+00	4.67E-04	
27	6.00E+05	-	1.09E-04	3.32E-10	1.06E-09	3.14E-04	4.05E-05	3.77E-02	9.71E-05	2.01E+02	3.14E+01	7.03E+00	1.65E-02	1.40E-03	1.56E+01	8.97E-03	6.23E+00	6.14E-04	
28	1.85E+05	-	3.37E-05	1.03E-10	3.27E-10	9.68E-05	1.25E-05	1.16E-02	3.00E-05	6.19E+01	9.70E+00	2.17E+00	5.10E+01	4.32E-04	2.65E+00	1.53E-03	1.06E+00	1.05E-04	
29	1.67E+05	9.05E-05	2.41E-05	1.85E-02	2.62E-03	7.16E-05	2.70E-04	8.37E-04	6.73E-03	2.46E+01	6.66E-01	2.75E-01	4.85E+00	1.83E-04	5.34E-01	3.08E-04	2.14E-01	2.11E-05	
30	9.15E-05	-	-	-	-	1.84E-03	3.27E-05	3.40E-04	1.21E-06	8.31E-04	3.55E+02	3.09E+00	2.22E+00	2.28E-02	5.30E-03	3.14E+01	1.81E-02	1.26E+01	1.24E-03
31	1.15E+05	6.24E-05	1.66E-05	1.28E-02	1.80E-03	4.93E-05	1.86E-04	5.76E-04	4.64E-03	1.70E+01	4.59E-01	1.90E-01	3.34E+00	1.26E-04	4.19E+00	2.42E-03	1.68E+00	1.65E-04	
32	8.44E+05	-	-	-	2.20E-03	3.15E-05	4.95E-04	1.48E-05	9.12E-04	3.20E+02	2.81E+00	2.08E+00	1.43E+02	4.39E-03	2.11E+01	1.22E-02	8.46E+00	8.33E-04	
33	7.95E+05	-	8.89E-04	4.26E-09	8.78E-05	1.65E-03	9.14E-04	2.39E-01	7.50E-02	1.22E+02	6.67E+01	1.17E+01	3.48E+02	6.78E-04	1.03E+01	5.95E-03	4.13E+00	4.07E-04	
34	5.69E+05	-	1.74E-04	-	-	1.75E-04	-	1.24E-02	9.57E-03	-	2.00E+00	4.47E-01	9.25E+00	9.28E-05	8.98E+00	5.18E-03	3.60E+00	3.54E-04	
35	4.50E+05	-	-	-	1.15E-03	1.99E-05	3.39E-04	1.18E-05	4.15E-04	1.72E+02	1.39E+00	1.06E+00	8.25E+01	2.39E-03	5.84E+00	3.36E-03	2.34E+00	2.30E-04	
36	2.20E+05	-	-	-	9.74E-04	1.89E-05	3.44E-04	6.17E-06	2.72E-04	8.44E+01	6.57E-01	5.23E-01	3.42E+01	1.13E-03	1.47E+01	8.49E-03	5.90E+00	5.81E-04	
37	1.16E+05	6.30E-05	1.68E-05	1.29E-02	1.82E-03	4.98E-05	1.88E-04	5.82E-04	4.69E-03	1.71E+01	4.64E-01	1.92E-01	3.38E+00	1.27E-04	3.55E+00	2.05E-03	1.42E+00	1.40E-04	
38	1.71E+05	-	-	-	2.79E-03	3.85E-05	5.32E-04	3.13E-06	2.97E-03	6.76E+01	2.67E-01	2.26E-01	5.79E-01	3.33E-03	1.79E-01	1.03E-04	7.16E-02	7.05E-06	
39	7.22E+05	-	-	-	4.96E-03	7.16E-05	8.50E-04	1.51E-05	3.11E-03	2.76E+02	3.43E+00	2.13E+00	2.45E+02	4.55E-03	2.59E+00	1.49E-03	1.04E+00	1.02E-04	
40	3.05E+05	4.21E-05	4.67E-05	1.20E-03	1.15E-03	2.17E-04	2.87E-04	6.80E-03	2.37E-02	2.17E+01	7.01E+00	2.65E+00	3.73E+01	1.34E-03	6.60E-02	3.81E-05	2.64E-02	2.61E-06	
41	1.24E-05	-	-	-	2.98E-03	3.45E-05	8.55E-04	2.36E-06	8.90E-03	4.87E+01	-	-	-	-	4.21E-01	2.43E-04	1.69E-01	1.66E-05	
42	1.25E+06	5.78E-03	2.05E-05	8.14E-02	3.00E-02	7.06E-04	4.00E-03	1.24E-02	2.46E-02	3.89E+02	1.39E+01	4.98E+00	8.53E+01	4.56E-03	3.89E+01	2.24E-02	1.56E+01	1.53E-03	
43	7.76E+05	-	-	-	1.26E-02	1.74E-04	2.41E-03	1.42E-05	1.35E-02	3.06E+02	1.21E+00	1.02E+00	2.62E+02	1.51E-02	5.08E-01	2.93E-04	2.03E-01	2.00E-05	
44	2.63E+05	-	4.79E-05	1.46E-10	4.65E-10	1.38E-04	1.78E-05	1.65E-02	4.26E-05	8.80E+01	1.38E+01	3.08E+00	7.25E+01	6.14E-04	4.47E+00	2.58E-03	1.79E+00	1.76E-04	
45	1.80E+05	-	3.26E-05	9.93E-11	3.17E-10	9.38E-05	1.21E-05	1.13E-02	2.90E-05	6.00E+01	9.40E+00	2.10E+00	4.94E+01	4.19E-04	2.88E+00	1.66E-03	1.15E+00	1.14E-04	
46	4.13E+05	-	7.51E-05	2.28E-10	7.29E-10	2.16E-04	2.79E-05	2.59E-02	6.68E-05	1.38E+02	2.16E+01	4.83E+00	1.14E+02	9.63E-04	9.94E+00	5.73E-03	3.98E+00	3.92E-04	
47	1.73E+05	-	2.55E-05	-	-	6.93E-05	-	5.48E-03	-	5.85E+01	8.41E+00	1.88E+00	3.65E+01	3.87E-04	7.69E-01	4.44E-04	3.08E-01	3.03E-05	
48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
49	1.92E+05	1.04E-04	2.76E-05	2.13E-02	3.00E-03	8.21E-05	3.10E-04	9.60E-04	7.72E-03	2.82E+01	7.64E-01	3.16E-01	5.57E+00	2.10E-04	4.77E-02	2.75E-05	1.91E-02	1.88E-06	
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
51	5.82E+05	2.33E-05	3.42E-06	2.83E-03	2.35E-03	6.13E-05	3.81E-04	5.59E-04	1.90E-03	2.05E+02	2.74E+00	1.56E+00	7.79E+01	2.81E-03	6.94E-01	4.00E-04	2.78E-01	2.74E-05	
Phase Totals	1.66E+07	6.53E-03	2.38E-03	4.24E-01	1.98E-01	7.88E-03	3.10E-02	5.32E-01	3.01E-01	4.11E+03	2.89E+02	7.33E+01	2.57E+03	6.24E-02	2.35E+02	1.35E-01	9.40E+01	9.26E-03	

Table 7: Less Conservative Soluble Actinide Inventory by Tank, Continued

Tank	Sludge IL Volume, gal	Th-232 (Ci)	U-232 (Ci)	U-233 (Ci)	U-234 (Ci)	U-235 (Ci)	U-236 (Ci)	U-238 (Ci)	Np-237 (Ci)	Pu-238 (Ci)	Pu-239 (Ci)	Pu-240 (Ci)	Pu-241 (Ci)	Pu-242 (Ci)	Am-241 (Ci)	Am-242m (Ci)	Cm-244 (Ci)	Cm-245 (Ci)	
1	4.93E+03	-	4.47E-06	-	-	6.91E-06	-	1.72E-04	2.51E-04	1.95E-01	5.21E-02	1.16E-02	6.39E-02	2.40E-06	3.13E-01	1.81E-04	1.26E-01	1.24E-05	
2	2.85E+03	-	2.17E-06	-	-	1.05E-06	-	2.61E-05	2.73E-04	1.78E-01	2.54E-02	5.68E-03	2.39E-02	1.17E-06	6.71E-02	3.87E-05	2.69E-02	2.65E-06	
3	2.85E+03	-	1.90E-06	-	-	2.68E-06	-	6.70E-05	5.00E-04	2.20E-01	3.15E-02	7.03E-03	3.55E-02	1.45E-06	6.80E-02	3.92E-05	2.72E-02	2.68E-06	
4	8.90E+04	-	4.05E-05	-	-	5.31E-05	-	2.29E-03	2.04E-03	4.14E-01	4.09E-01	9.14E-02	7.73E-01	1.88E-05	2.51E+00	1.45E-03	1.00E+00	9.89E-05	
5	1.71E+04	-	1.54E-05	-	-	2.99E-05	-	7.09E-04	1.20E-03	8.26E-01	1.38E-01	3.29E-02	2.21E-01	9.72E-06	9.91E-02	5.71E-05	3.97E-02	3.91E-06	
6	1.75E+04	-	1.84E-05	-	-	2.28E-05	-	8.52E-04	2.96E-04	-	8.73E-02	3.03E-02	3.40E-01	5.97E-05	2.07E-02	1.19E-05	8.28E-03	8.15E-07	
7	1.38E+04	-	3.27E-06	-	-	1.53E-05	-	5.30E-04	2.63E-04	1.29E+00	2.33E-01	5.72E-02	5.46E-01	5.29E-05	7.61E-02	4.39E-05	3.05E-02	3.00E-06	
8	2.87E+03	-	8.53E-07	-	-	2.25E-06	-	1.04E-04	4.71E-05	1.35E-01	2.96E-02	6.97E-03	6.63E-02	8.79E-06	6.39E-03	3.69E-06	2.56E-03	2.52E-07	
9	1.90E+03	-	1.95E-06	-	-	1.26E-06	-	3.15E-05	2.15E-04	4.68E-02	6.68E-03	1.49E-03	6.20E-03	3.07E-07	4.38E-02	2.53E-05	1.76E-02	1.73E-06	
10	1.90E+03	-	1.25E-06	-	-	1.52E-06	-	3.80E-05	2.91E-04	1.48E-01	2.11E-02	4.71E-03	2.10E-02	9.70E-07	7.65E-03	4.41E-06	3.06E-03	3.02E-07	
11	1.39E+04	2.51E-07	-	3.58E-05	2.94E-05	5.54E-07	4.54E-06	1.03E-06	1.94E-05	2.62E+00	2.61E-02	1.64E-02	9.38E-01	3.49E-05	1.34E-05	7.72E-09	5.36E-06	5.28E-10	
12	7.58E+04	1.34E-04	1.35E-06	3.77E-03	3.53E-04	6.64E-06	2.79E-05	6.68E-05	7.81E-04	1.36E+01	2.28E-01	1.26E-01	3.20E+00	1.82E-04	2.52E-01	1.45E-04	1.01E-01	9.95E-06	
13	1.76E+05	9.56E-05	2.54E-05	1.96E-02	2.76E-03	7.55E-05	2.85E-04	8.83E-04	7.10E-03	2.60E+01	7.03E-01	2.91E-01	5.12E+00	1.93E-04	8.82E+00	5.09E-03	3.53E+00	3.48E-04	
14	1.96E+04	4.53E-05	1.34E-05	1.60E-03	2.20E-04	1.78E-05	1.89E-05	3.39E-04	2.35E-03	1.05E+00	2.59E-01	8.36E-02	4.23E-01	1.53E-05	1.05E+00	6.05E-04	4.20E-01	4.14E-05	
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
21	4.26E+03	4.34E-09	-	1.37E-04	1.46E-04	2.32E-06	2.68E-05	1.37E-05	1.21E-04	7.29E-01	1.07E-02	3.65E-03	6.40E-02	4.08E-07	1.82E-05	1.05E-08	7.27E-06	7.16E-10	
22	6.99E+03	-	-	9.34E-04	3.36E-04	5.13E-06	5.53E-05	1.14E-04	2.04E-04	1.38E+00	-	-	-	-	3.25E-05	1.87E-08	1.30E-05	1.28E-09	
23	3.93E+04	5.38E-09	-	3.58E-04	5.68E-04	3.17E-06	1.28E-05	9.49E-05	2.63E-05	2.87E-02	9.84E-05	2.45E-05	2.87E-03	1.46E-04	3.76E-04	1.47E-08	1.10E-05	1.00E-09	
24	2.48E+03	-	4.51E-07	1.37E-12	4.37E-12	1.29E-06	1.67E-07	1.55E-04	4.01E-07	8.28E-01	1.30E-01	2.90E-02	6.82E-01	5.78E-06	4.40E-03	2.54E-06	1.76E-03	1.74E-07	
25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
26	1.82E+05	-	3.30E-05	1.00E-10	3.20E-10	9.48E-05	1.22E-05	1.14E-02	2.94E-05	6.06E+01	9.50E+00	2.12E+00	5.00E+01	4.23E-04	4.14E+00	2.39E-03	1.66E+00	1.63E-04	
27	2.70E+03	-	4.91E-07	1.50E-12	4.77E-12	1.41E-06	1.82E-07	1.70E-04	4.37E-07	9.03E-01	1.41E-01	3.16E-02	7.44E-01	6.30E-06	7.01E-02	4.04E-05	2.81E-02	2.76E-06	
28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
30	4.42E+02	-	-	-	-	8.90E-07	1.58E-08	1.64E-07	5.86E-10	4.02E-07	1.72E-01	1.49E-03	1.07E-03	1.10E-01	2.56E-06	1.52E-02	8.75E-06	6.08E-03	5.99E-07
31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
32	6.89E+04	-	-	-	-	1.80E-04	2.57E-06	4.04E-05	1.21E-06	7.44E-05	2.61E+01	2.29E-01	1.70E-01	1.17E-01	3.59E-04	1.72E+00	9.94E-04	6.90E-01	6.80E-05
33	5.90E+04	-	6.59E-05	3.16E-10	6.51E-06	1.22E-04	6.78E-05	1.77E-02	5.56E-03	9.08E+00	4.95E+00	8.69E-01	2.58E+01	5.03E-05	7.66E-01	4.41E-04	3.07E-01	3.02E-05	
34	1.41E+04	-	4.31E-06	-	-	4.36E-06	-	3.08E-04	2.38E-04	-	4.97E-02	1.11E-02	2.30E-01	2.30E-06	2.23E-01	1.29E-04	8.94E-02	8.80E-06	
35	4.42E+04	-	-	-	-	1.13E-04	1.96E-06	3.33E-05	1.16E-06	4.08E-05	1.69E+01	1.37E-01	1.04E-01	8.11E+00	2.35E-04	5.74E-01	3.31E-04	2.30E-01	2.26E-05
36	1.30E+02	-	-	-	-	5.77E-07	1.12E-08	2.04E-07	3.66E-09	1.61E-07	5.00E-02	3.90E-04	3.10E-04	2.03E-02	6.70E-07	8.73E-03	5.03E-06	3.49E-03	3.44E-07
37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
39	7.25E+04	-	-	-	-	4.97E-04	7.18E-06	8.53E-05	1.52E-06	3.12E-04	2.77E+01	3.45E-01	2.14E-01	2.46E-01	4.56E-04	2.60E-01	1.50E-04	1.04E-01	1.03E-05
40	3.07E+05	4.24E-05	4.71E-05	1.21E-03	1.16E-03	2.19E-04	2.90E-04	6.86E-03	2.39E-02	2.19E+01	7.07E+00	2.67E+00	3.76E+01	1.35E-03	6.66E-02	3.84E-05	2.67E-02	2.63E-06	
41	1.87E+03	-	-	-	-	4.48E-05	5.18E-07	1.29E-05	3.55E-08	1.34E-04	7.32E-01	-	-	-	6.33E-03	3.65E-06	2.54E-03	2.50E-07	
42	1.40E+04	6.47E-05	2.29E-07	9.11E-04	3.35E-04	7.91E-06	4.48E-05	1.39E-04	2.76E-04	4.36E+00	1.55E-01	5.57E-02	9.55E-01	5.10E-05	4.35E-01	2.51E-04	1.74E-01	1.72E-05	
43	1.69E+05	-	-	-	-	2.76E-03	3.80E-05	5.25E-04	3.09E-06	2.94E-03	6.68E+01	2.64E-01	2.23E-01	5.72E-01	3.29E-03	1.11E-01	6.39E-05	4.44E-02	4.37E-06
44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
47	1.74E+05	-	2.56E-05	-	-	6.95E-05	-	5.50E-03	-	5.87E+01	8.44E+00	1.89E+00	3.67E+01	3.88E-04	7.72E-01	4.45E-04	3.09E-01	3.05E-05	
48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
51	1.11E+05	4.45E-06	6.53E-07	5.41E-04	4.50E-04	1.17E-05	7.28E-05	1.07E-04	3.63E-04	3.92E+01	5.25E-01	2.98E-01	1.49E-01	5.38E-04	1.33E-01	7.64E-05	5.31E-02	5.23E-06	
Phase Totals	1.73E+06	3.87E-04	3.09E-04	3.05E-02	1.09E-02	8.47E-04	1.63E-03	4.93E-02	5.00E-02	3.84E+02	3.46E+01	9.56E+00	2.87E+02	8.52E-03	2.26E+01	1.31E-02	9.07E+00	8.93E-04	-

Table 7: Less Conservative Soluble Actinide Inventory by Tank, Continued

Tank	Salt IL Volume, gal	Th-232 (Ci)	U-232 (Ci)	U-233 (Ci)	U-234 (Ci)	U-235 (Ci)	U-236 (Ci)	U-238 (Ci)	Np-237 (Ci)	Pu-238 (Ci)	Pu-239 (Ci)	Pu-240 (Ci)	Pu-241 (Ci)	Pu-242 (Ci)	Am-241 (Ci)	Am-242m (Ci)	Cm-244 (Ci)	Cm-245 (Ci)
1	1.44E+05	-	1.31E-04	-	-	2.02E-04	-	5.02E-03	7.33E-03	5.68E+00	1.52E+00	3.40E-01	1.87E+00	6.99E-05	9.15E+00	5.27E-03	3.66E+00	3.61E-04
2	1.61E+05	-	1.23E-04	-	-	5.91E-05	-	1.47E-03	1.54E-02	1.01E+01	1.44E+00	3.21E-01	1.35E+00	6.61E-05	3.79E+00	2.19E-03	1.52E+00	1.49E-04
3	1.61E+05	-	1.08E-04	-	-	1.52E-04	-	3.78E-03	2.83E-02	1.25E+01	1.78E+00	3.98E-01	2.01E+00	8.18E-05	3.84E+00	2.22E-03	1.54E+00	1.52E-04
4	1.02E+04	-	4.63E-06	-	-	6.07E-06	-	2.61E-04	2.33E-04	4.73E-02	4.67E-02	1.04E-02	8.83E-02	2.15E-06	2.86E-01	1.65E-04	1.15E-01	1.13E-05
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
9	1.60E+05	-	1.64E-04	-	-	1.07E-04	-	2.66E-03	1.82E-02	3.95E+00	5.64E-01	1.26E-01	5.23E-01	2.59E-05	3.70E+00	2.13E-03	1.48E+00	1.46E-04
10	6.34E+04	-	4.18E-05	-	-	5.10E-05	-	1.27E-03	9.72E-03	4.94E+00	7.05E-01	1.58E-01	7.01E-01	3.24E-05	2.56E-01	1.47E-04	1.02E-01	1.01E-05
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12	1.80E+04	3.18E-05	3.20E-07	8.95E-04	8.38E-05	1.58E-06	6.64E-06	1.59E-05	1.85E-04	3.23E+00	5.41E-02	2.99E-02	7.59E-01	4.32E-05	5.99E-02	3.45E-05	2.40E-02	2.36E-06
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
14	3.89E+04	8.99E-05	2.67E-05	3.17E-03	4.35E-04	3.52E-05	3.74E-05	6.72E-04	4.65E-03	2.08E+00	5.13E-01	1.66E-01	8.38E-01	3.03E-05	2.08E+00	1.20E-03	8.33E-01	8.21E-05
15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
25	3.30E+05	-	5.99E-05	1.82E-10	5.82E-10	1.72E-04	2.22E-05	2.07E-02	5.33E-05	1.10E+02	1.73E+01	3.86E+00	9.08E+01	7.69E-04	3.98E+00	2.29E-03	1.59E+00	1.57E-04
26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
27	1.80E+05	-	3.27E-05	9.96E-11	3.18E-10	9.41E-05	1.22E-05	1.13E-02	2.91E-05	6.02E+01	9.43E+00	2.11E+00	4.96E+01	4.20E-04	4.67E+00	2.69E-03	1.87E+00	1.84E-04
28	3.09E+05	-	5.62E-05	1.71E-10	5.45E-10	1.61E-04	2.08E-05	1.94E-02	5.00E-05	1.03E+02	1.62E+01	3.62E+00	8.51E+01	7.20E-04	4.43E+00	2.55E-03	1.77E+00	1.75E-04
29	3.07E+05	1.66E-04	4.42E-05	3.41E-02	4.81E-03	1.31E-04	4.96E-04	1.54E-03	1.24E-02	4.52E+01	1.22E+00	5.06E-01	8.92E+00	3.36E-04	9.81E-01	5.65E-04	3.93E-01	3.87E-05
30	7.49E+04	-	-	-	1.51E-04	2.68E-06	2.78E-05	9.93E-08	6.80E-05	2.90E+01	2.53E-01	1.81E-01	1.87E+01	4.34E-04	2.57E+00	1.48E-03	1.03E+00	1.01E-04
31	3.44E+05	1.86E-04	4.96E-05	3.82E-02	5.39E-03	1.47E-04	5.56E-04	1.72E-03	1.39E-02	5.07E+01	1.37E+00	5.67E-01	9.99E+00	3.76E-04	1.25E+01	7.22E-03	5.01E+00	4.94E-04
32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
33	8.81E+04	-	9.86E-05	4.72E-10	9.73E-06	1.83E-04	1.01E-04	2.65E-02	8.31E-03	1.36E+01	7.40E+00	1.30E+00	3.85E+01	7.51E-05	1.14E+00	6.60E-04	4.58E-01	4.51E-05
34	5.74E+04	-	1.75E-05	-	-	1.77E-05	-	1.25E-03	9.65E-04	-	2.02E-01	4.51E-02	9.34E-01	9.36E-06	9.07E-01	5.23E-04	3.63E-01	3.58E-05
35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
36	3.11E+05	-	-	-	1.38E-03	2.67E-05	4.86E-04	8.72E-06	3.85E-04	1.19E+02	9.29E-01	7.39E-01	4.84E+01	1.60E-03	2.08E+01	1.20E-02	8.33E+00	8.21E-04
37	3.43E+05	1.86E-04	4.95E-05	3.81E-02	5.38E-03	1.47E-04	5.55E-04	1.72E-03	1.38E-02	5.06E+01	1.37E+00	5.66E-01	9.98E+00	3.76E-04	1.05E+01	6.04E-03	4.20E+00	4.13E-04
38	2.48E+05	-	-	-	4.05E-03	5.58E-05	7.70E-04	4.53E-06	4.31E-03	9.80E+01	3.87E-01	3.27E-01	8.39E+01	4.82E-03	2.59E-01	1.49E-04	1.04E-01	1.02E-05
39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
41	2.20E+05	-	-	-	5.27E-03	6.10E-05	1.51E-03	4.17E-06	1.57E-02	8.61E+01	-	-	-	-	7.45E-01	4.30E-04	2.98E-01	2.94E-05
42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
44	3.01E+05	-	5.47E-05	1.66E-10	5.31E-10	1.57E-04	2.03E-05	1.89E-02	4.87E-05	1.01E+02	1.58E+01	3.52E+00	8.29E+01	7.02E-04	5.11E+00	2.95E-03	2.05E+00	2.02E-04
45	3.31E+05	-	6.03E-05	1.83E-10	5.85E-10	1.73E-04	2.24E-05	2.08E-02	5.36E-05	1.11E+02	1.73E+01	3.88E+00	9.13E+01	7.73E-04	5.32E+00	3.07E-03	2.13E+00	2.10E-04
46	2.60E+05	-	4.72E-05	1.44E-10	4.58E-10	1.36E-04	1.75E-05	1.63E-02	4.20E-05	8.67E+01	1.36E+01	3.04E+00	7.15E-01	6.05E-04	6.25E+00	3.60E-03	2.50E+00	2.47E-04
47	2.50E+05	-	3.69E-05	-	-	1.00E-04	-	7.94E-03	-	8.47E+01	1.22E+01	2.72E+00	5.29E+01	5.60E-04	1.11E+00	6.42E-04	4.46E-01	4.39E-05
48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
49	8.97E+01	4.86E-08	1.29E-08	9.96E-06	1.40E-06	3.84E-08	1.45E-07	4.49E-07	3.61E-06	1.32E-02	3.58E-04	1.48E-04	2.61E-03	9.81E-08	2.23E-05	1.29E-08	8.93E-06	8.80E-10
50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Phase Totals	4.71E+06	6.60E-04	1.21E-03	1.14E-01	2.70E-02	2.38E-03	4.66E-03	1.63E-01	1.54E-01	1.19E+03	1.21E+02	2.85E+01	7.51E+02	1.29E-02	1.04E+02	6.02E-02	4.18E+01	4.12E-03