DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 315

1. Preparer: Henry Peterson

2. Date prepared: 07/15/94

3. Generator: TAN
(area or contractor - use code from attached list)

4. Particular facility: 603
(building number - use code from attached list)

5. Number of waste stream from this facility:
2R

6. Waste stream:
Slightly contaminated non-combustibles, and wood used in the decontamination of the TAN-603 sump.

7. Type of radioactive waste (check box):
[ ] TRU or suspect TRU
[X] LLW
[ ] non-radioactive

8. Actual years disposed of at SDA:
Starting year 1984 Ending year 1986

9. Waste stream volume:
Amount 45.2600 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [ ] container volume or [X] waste volume

10. Comments (specify number of pertinent question):
Wastes generated at this facility occurred in 1984 and 1986. A TAN-603 waste stream, improperly designated as TSF-603 and that occurred in 1984, has been included in this waste stream. "Sludge" in the amount of 32.6 M3 was originally assigned to this waste stream. However, in discussions with G.L. Fife, Julie Lopez, Tom L. Trace and C.A. Pruett, it was decided that this waste should be assigned to TAN-623 as it is sludge from the sewage plant drying beds (see waste stream TAN-623-1R).

1. General physical form (see attached list)
Concrete, brick, and asphalt.
[X] other (specify)
21.

2. Details on physical form(particularly confinement related)
Particulate contamination of non-combustibles and wood.

3. Chemical form:
Oxide.

4. Inner packaging: [X] plastic bag [ ] plastic liner
[ ] metal liner [ ] none [X] other (specify)
Plastic liner.

5. Waste container type (see attached list)
Wooden box.

6. Other characteristics of interest:
The wood was simply wrapped in polyethylene sheet and taped to prevent contamination spread during transport to the RWMC.

7. Comments (specify number of pertinent question):
5. BXW (for the non-combustibles).

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Contaminant & CAS Registry Number	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
None.										

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Cs-137	Particulate.	Oxide.	A .02000000000000	CI	1984	1984	N			
Cs-137	Particulate.	Oxide.	A .00000200000000	CI	1986	1986	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

1. Type of source of information:
(check box)

[X] RWMIS [ ] other database
[ ] sample analysis data
[ ] operating records [X] interview
[ ] expert judgment [ ] reports
[ ] other

2. Details concerning source (names, report no., dates, etc.)
Interviews with G.L. Fife, TAN HP Supervisor (1980-1988) Julie Lopez, the HP Technician that worked on the job of radiologically surveying the TAN-603 waste; T.L. Trace, and C.A. Pruett.

3. Do the estimates of contaminant quantities in Part C and D represent:
[X] best estimate
[ ] worst case
[ ] other

4. If other than best estimate, explain why:

5. Do the data conflict with RWMIS?
(Historical or Present Data Only)
[ ] no
[X] yes

6. If yes, explain why:
RWMIS data shows that 18 64-cubic foot boxes of sludge were incorrectly assigned to this facility in 1987. The sludge waste has been assigned to TAN-623, the TAN Sewage Disposal Plant on a different datasheet (see waste stream TAN-623-1R).

7. Major unknowns in inventories of contaminants:

8. Key assumptions used to deal with the unknowns:

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 316

1. Preparer: Henry Peterson

2. Date prepared: 07/25/94

3. Generator: TAN
(area or contractor - use code from attached list)

4. Particular facility: 607
(building number - use code from attached list)

5. Number of waste stream from this facility:
6R

6. Waste stream:
TAN Hot Shop and Hot Cell waste.

7. Type of radioactive waste (check box):
[ ] TRU or suspect TRU
[X] LLW
[ ] non-radioactive

8. Actual years disposed of at SDA:
Starting year 1984 Ending year 1993

9. Waste stream volume:
Amount 904.9000 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [ ] container volume or [X] waste volume

10. Comments (specify number of pertinent question):
6. Hot Cell and Hot Shop waste was unsegregated for the time frame of this study. Prior to this period, at least some of the Hot Cell (TAN-633) waste was attributed to TAN-633. During this time period ('84 to '93) statements in the TAN Hot Shop logs indicate Hot Cell and Hot Shop waste was attributed to the TAN Hot Shop, TAN-607.

1. General physical form (see attached list)
Irradiated end boxes.
[X] other (specify)
5.

2. Details on physical form(particularly confinement related)
Majority of waste contains particulate radiological contamination of contamination control and personal protective items (polyethylene sheeting, blotting paper, etc.), Hot Shop/Hot Cell equipment and structures that are removed and/or replaced, and items removed from project hardware, such as fuel assembly end boxes or fuel assembly shrouds.

3. Chemical form:
Alloys (for some MAPs).

4. Inner packaging: [X] plastic bag [ ] plastic liner
[ ] metal liner [ ] none [X] other (specify)
Plastic liner.

5. Waste container type (see attached list)
Wooden box.

6. Other characteristics of interest:
Some Hot Cell wastes are placed in metal "buckets" with tight-fitting lids before being placed in wooden Hot Waste Boxes.

7. Comments (specify number of pertinent question):
4. HICs are High Integrity Containers.
5. Also BLM and O.
6. In 1990, the resin contents of 3 Submerged Demineralizer System (SDS) liners (#PF-8, PF-20, and PF-27) from Three Mile Island (TMI) were mixed with concrete, placed in 3 respective High Integrity Containers (HICs), and sent to the RWMC for disposal. A fourth HIC, sent to the RWMC the same year, contained equipment contaminated during the grouting operation of the 3 previous HICs and was also grouted into the fourth HIC. The majority of the radioactivity disposed of by TAN-607 in 1990 is contained within these HICs.

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Contaminant & CAS Registry Number	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
None.										

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Cs-134	Particulate.	Oxide.	A .65900000000000	CI	1984	1984	N			
Cs-137	Particulate.	Oxide.	A 1.4200000000000	CI	1984	1984	N			
Sr-90	Particulate.	Oxide.	A .90200000000000	CI	1984	1984	N			
Cs-134	Particulate.	Oxide.	A 3.7400000000000	CI	1985	1985	N			
Cs-137	Particulate.	Oxide.	A 12.900000000000	CI	1985	1985	N			
Sr-90	Particulate.	Oxide.	A 8.1600000000000	CI	1985	1985	N			
Co-60	Particulate.	Oxide.	A .29000000000000	CI	1986	1986	N			
Cs-134	Particulate.	Oxide.	A 2.7900000000000	CI	1986	1986	N			
Cs-137	Particulate.	Oxide.	A 11.600000000000	CI	1986	1986	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Sr-90	Particulate.	Oxide.	A 7.3500000000000	CI	1986	1986	N			
Co-60	Particulate.	Oxide.	A 6.4100000000000	CI	1987	1987	N			
Cs-134	Particulate.	Oxide.	A 52.300000000000	CI	1987	1987	N			
Cs-137	Particulate.	Oxide.	A 299.00000000000	CI	1987	1987	N			
Sr-90	Particulate.	Oxide.	A 189.00000000000	CI	1987	1987	N			
U-234	Particulate.	Oxide.	A .00109000000000	CI	1987	1987	N			
U-235	Particulate.	Oxide.	A .00000650000000	CI	1987	1987	N			
U-238	Particulate.	Oxide.	A .00052200000000	CI	1987	1987	N			
Co-60	Particulate.	Oxide.	A .00612000000000	CI	1988	1988	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Cs-134	Particulate.	Oxide.	A .23100000000000	CI	1988	1988	N			
Cs-137	Particulate.	Oxide.	A 1.8000000000000	CI	1988	1988	N			
Sr-90	Particulate.	Oxide.	A 1.1300000000000	CI	1988	1988	N			
Co-60	Particulate.	Oxide.	A .28800000000000	CI	1989	1989	N			
Am-241	Particulate.	Oxide.	A .07100000000000	CI	1989	1989	N			
Ce-144	Particulate.	Oxide.	A .12000000000000	CI	1989	1989	N			
Cm-244	Particulate.	Oxide.	A .00225000000000	CI	1989	1989	N			
Cs-134	Particulate.	Oxide.	A 4.2500000000000	CI	1989	1989	N			
Cs-137	Particulate.	Oxide.	A 60.400000000000	CI	1989	1989	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Pu-239	Particulate.	Oxide.	A .01510000000000	CI	1989	1989	N			
Ru-106	Particulate.	Oxide.	A .08000000000000	CI	1989	1989	N			
Sb-125	Particulate.	Oxide.	A .17000000000000	CI	1989	1989	N			
Sr-90	Particulate.	Oxide.	A 38.000000000000	CI	1989	1989	N			
U-234	Particulate.	Oxide.	A .00012900000000	CI	1989	1989	N			
U-235	Particulate.	Oxide.	A .00000077800000	CI	1989	1989	N			
U-238	Particulate.	Oxide.	A .00003190000000	CI	1989	1989	N			
Ag-110m	Particulate.	Oxide.	A .00169000000000	CI	1990	1990	N			
Am-241	Particulate.	Oxide.	A .00037100000000	CI	1990	1990	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
C-14	Particulate.	Oxide.	A .02470000000000	CI	1990	1990	N			
Ce-144	Particulate.	Oxide.	A 1.6000000000000	CI	1990	1990	N			
Cm-242	Particulate.	Oxide.	A .00000009840000	CI	1990	1990	N			
Cm-244	Particulate.	Oxide.	A .00000785000000	CI	1990	1990	N			
Co-60	Particulate.	Oxide.	A .22800000000000	CI	1990	1990	N			
Cs-134	Particulate.	Oxide.	A 21.100000000000	CI	1990	1990	N			
Cs-137	Particulate.	Oxide.	A 2570.0000000000	CI	1990	1990	N			
Eu-152	Particulate.	Oxide.	A .00000476000000	CI	1990	1990	N			
Eu-154	Particulate.	Oxide.	A .00002110000000	CI	1990	1990	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Eu-155	Particulate.	Oxide.	A .00006000000000	CI	1990	1990	N			
Fe-55	Particulate.	Oxide.	A .00103000000000	CI	1990	1990	N			
H-3	Liquid.	Oxide.	A .89300000000000	CI	1990	1990	N			
I-129	Particulate.	Organic.	A .00053700000000	CI	1990	1990	N			
Mn-54	Particulate.	Oxide.	A .00211000000000	CI	1990	1990	N			
Nb-94	Particulate.	Oxide.	A .00000690000000	CI	1990	1990	N			
Ni-63	Particulate.	Oxide.	A .00246000000000	CI	1990	1990	N			
Np-237	Particulate.	Oxide.	A .00000012100000	CI	1990	1990	N			
Pu-238	Particulate.	Oxide.	A .00043900000000	CI	1990	1990	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Pu-239	Particulate.	Oxide.	A .00102000000000	CI	1990	1990	N			
Pu-240	Particulate.	Oxide.	A .00025700000000	CI	1990	1990	N			
Pu-241	Particulate.	Oxide.	A .01300000000000	CI	1990	1990	N			
Pu-242	Particulate.	Oxide.	A .00000002450000	CI	1990	1990	N			
Ru-106	Particulate.	Oxide.	A .29100000000000	CI	1990	1990	N			
Sb-125	Particulate.	Oxide.	A .70400000000000	CI	1990	1990	N			
Sr-90	Particulate.	Oxide.	A 62.300000000000	CI	1990	1990	N			
Tc-99	Particulate.	Oxide.	A .00541000000000	CI	1990	1990	N			
U-234	Particulate.	Oxide.	A .00002340000000	CI	1990	1990	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
U-235	Particulate.	Oxide.	A .00069400000000	CI	1990	1990	N			
U-236	Particulate.	Oxide.	A .00000110000000	CI	1990	1990	N			
U-238	Particulate.	Oxide.	A .00000829000000	CI	1990	1990	N			
Co-60	Particulate.	Oxide.	A .00105000000000	CI	1991	1991	N			
Cs-137	Particulate.	Oxide.	A .00645000000000	CI	1991	1991	N			
Ce-144	Particulate.	Oxide.	A 1.150000000000	CI	1992	1992	N			
Co-60	Particulate.	Oxide.	A 5.840000000000	CI	1992	1992	N			
Cs-134	Particulate.	Oxide.	A 6.150000000000	CI	1992	1992	N			
Cs-137	Particulate.	Oxide.	A 335.00000000000	CI	1992	1992	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Sb-125	Particulate.	Oxide.	A 1.8600000000000	CI	1992	1992	N			
Sr-90	Particulate.	Oxide.	A 210.00000000000	CI	1992	1992	N			
Co-60	Solid.	Alloy.	A .24700000000000	CI	1993	1993	N			
Cs-137	Particulate.	Oxide.	A .00106000000000	CI	1993	1993	N			
Fe-55	Solid.	Alloy.	A 48.600000000000	CI	1993	1993	N			
H-3	Liquid.	Oxide.	A 1.4300000000000	CI	1993	1993	N			
Ni-63	Solid.	Alloy.	A 162.00000000000	CI	1993	1993	N			
Pu-238	Particulate.	Oxide.	A .00000280000000	CI	1993	1993	N			
Pu-239	Particulate.	Oxide.	A .00000165000000	CI	1993	1993	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Sr-90	Particulate.	Oxide.	A .05410000000000	CI	1993	1993	N			
U-234	Particulate.	Oxide.	A .00000130000000	CI	1993	1993	N			
U-235	Particulate.	Oxide.	A .00000000778000	CI	1993	1993	N			
U-238	Particulate.	Oxide.	A .00233000000000	CI	1993	1993	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

1. Type of source of information:
(check box)

[X] RWMIS [ ] other database
[ ] sample analysis data
[ ] operating records [X] interview
[ ] expert judgment [X] reports
[X] other
TAN Hot Shop/Hot Cell logs.

2. Details concerning source (names, report no., dates, etc.)
Discussions with A.L. Ayers, Jr; A.L. Ayers, Jr. letter to H.K. Peterson, TEST AREA NORTH (TAN) HOT SHOP PROJECTS OF 1984 TO PRESENT, Aye-02-94, July 14, 1994; C.K. Mullen letter to H.K. Peterson.

3. Do the estimates of contaminant quantities in Part C and D represent:
[X] best estimate
[ ] worst case
[ ] other

4. If other than best estimate, explain why:

5. Do the data conflict with RWMIS?
(Historical or Present Data Only)
[ ] no
[X] yes

6. If yes, explain why:
Based on guidance from B.L. Rich, et al, Health Physics Manual of Good Practice for Uranium Facilities, EG&G Idaho Inc., EGG-2530, June 1988, U-234 was added to the 1987 radionuclides; U-234 was added to the 1989 radionuclides; U-235 was added to the 1993 radionuclides. (See continuation page.)

7. Major unknowns in inventories of contaminants:

8. Key assumptions used to deal with the unknowns:

Continuation of Part E Column or Question Number or Title 6.

The Sr-90 was increased for 1989 based on professional judgment because it was inconsistently too low compared to the Cs-137.

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 303

1. Preparer: Henry Peterson

2. Date prepared: 07/25/94

3. Generator: TAN
(area or contractor - use code from attached list)

4. Particular facility: 623
(building number - use code from attached list)

5. Number of waste stream from this facility:
1R

6. Waste stream:
Sewage sludge that has accumulated during previous years of plant operation.

7. Type of radioactive waste (check box):
[ ] TRU or suspect TRU
[X] LLW
[ ] non-radioactive

8. Actual years disposed of at SDA:
Starting year 1984 Ending year 1992

9. Waste stream volume:
Amount 74.2700 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [ ] container volume or [X] waste volume

10. Comments (specify number of pertinent question):
3. In the RWMIS printouts, this facility waste stream was designated as TAN-623 (for 1986) and TSF-623 (for 1984). Discussions with G.L. Fife, Julie Lopez, T.L. Trace and C.A. Pruett have indicated that 18 64-cubic foot boxes of "sludge", originally assigned by RWMIS to TAN-603 in 1987 should have been attributed to TAN-623. Therefore, this sludge waste is included in this waste stream.

1. General physical form (see attached list)
Sludge.
[ ] other (specify)

2. Details on physical form(particularly confinement related)
Moist, dewatered sludge.

3. Chemical form:
Oxide.

4. Inner packaging: [ ] plastic bag [X] plastic liner
[ ] metal liner [ ] none [ ] other (specify)

5. Waste container type (see attached list)
Wooden box.

6. Other characteristics of interest:

7. Comments (specify number of pertinent question):

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Contaminant & CAS Registry Number	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
None.										

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Co-60	Particulate.	Oxide.	A .00039000000000	CI	1984	1984	N	-20%	+20%	See comment below.
Cs-137	Particulate.	Oxide.	A .00057000000000	CI	1984	1984	N	-20%	+20%	See comment below.
Co-60	Particulate.	Oxide.	A .00000330000000	CI	1986	1986	N	-20%	+20%	See comment below.
Cs-137	Particulate.	Oxide.	A .00000470000000	CI	1986	1986	N	-20%	+20%	See comment below.
Co-60	Particulate.	Oxide.	A .00280000000000	CI	1987	1987	N	-20%	+20%	See comment below.
Cs-137	Particulate.	Oxide.	A .01720000000000	CI	1987	1987	N	-20%	+20%	See comment below.
Co-60	Particulate.	Oxide.	A .00105000000000	CI	1991	1991	N	-20%	+20%	See comment below.
Cs-137	Particulate.	Oxide.	A .00645000000000	CI	1991	1991	N	-20%	+20%	See comment below.

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)
5* The sample data for the 1991 shipment was extrapolated to the 1984 and 1986 shipments, based on a conversation with G.L. Fife, who sampled all the sludge that was sent from TAN. The uncertainty for 1984 and 1986 is the same as that for 1991. In 1987 and 1991, 13 samples were taken and the analysis was +/- 20%.

1. Type of source of information:
(check box)

[ ] RWMIS [ ] other database
[X] sample analysis data
[ ] operating records [X] interview
[ ] expert judgment [ ] reports
[X] other
Shipping data for 1991.

2. Details concerning source (names, report no., dates, etc.)
Interviews and conversations with G.L. Fife, Julie Lopez, T.L. Trace, and C.A. Pruett.

3. Do the estimates of contaminant quantities in Part C and D represent:
[X] best estimate
[ ] worst case
[ ] other

4. If other than best estimate, explain why:

5. Do the data conflict with RWMIS?
(Historical or Present Data Only)
[ ] no
[X] yes

6. If yes, explain why:
The RWMIS data does not include the 1991 Shipment (which was sent to the RWMC on 4-22/23-1991).

7. Major unknowns in inventories of contaminants:

8. Key assumptions used to deal with the unknowns:
Unknowns for the 1984 and 1986 shipments are based on a discussion with G.L. Fife and extrapolated from the 1991 shipping data and sample analysis of sludge for that shipment.

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 302

1. Preparer: Henry Peterson

2. Date prepared: 07/22/94

3. Generator: TAN
(area or contractor - use code from attached list)

4. Particular facility: 629
(building number - use code from attached list)

5. Number of waste stream from this facility:
1R

6. Waste stream:
Cleanup of LOFT ERA waste in the preparation for Rockwell International Inc. to move into the building for the SMC Project.

7. Type of radioactive waste (check box):
[ ] TRU or suspect TRU
[X] LLW
[ ] non-radioactive

8. Actual years disposed of at SDA:
Starting year 1984 Ending year 1984

9. Waste stream volume:
Amount 7.2500 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [ ] container volume or [X] waste volume

10. Comments (specify number of pertinent question):

1. General physical form (see attached list)
Other scrap metals.
[ ] other (specify)

2. Details on physical form(particularly confinement related)
Scrap metal parts activated during LOFT tests that were no longer needed.

3. Chemical form:
Metal.

4. Inner packaging: [ ] plastic bag [X] plastic liner
[ ] metal liner [ ] none [ ] other (specify)

5. Waste container type (see attached list)
Wooden box.

6. Other characteristics of interest:

7. Comments (specify number of pertinent question):

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Contaminant & CAS Registry Number	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
None.										

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Co-58	Solid.	Metal.	A .00141000000000	CI	1984	1984	N			
Co-60	Solid.	Metal.	A .00142000000000	CI	1984	1984	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

1. Type of source of information:
(check box)

[X] RWMIS [ ] other database
[ ] sample analysis data
[ ] operating records [X] interview
[ ] expert judgment [ ] reports
[ ] other

2. Details concerning source (names, report no., dates, etc.)
Interviews and discussion with D.M. Sherick.

3. Do the estimates of contaminant quantities in Part C and D represent:
[X] best estimate
[ ] worst case
[ ] other

4. If other than best estimate, explain why:

5. Do the data conflict with RWMIS?
(Historical or Present Data Only)
[X] no
[ ] yes

6. If yes, explain why:

7. Major unknowns in inventories of contaminants:
None.

8. Key assumptions used to deal with the unknowns:

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 305

1. Preparer: Henry Peterson

2. Date prepared: 07/24/94

3. Generator: TAN
(area or contractor - use code from attached list)

4. Particular facility: 629
(building number - use code from attached list)

5. Number of waste stream from this facility:
2R

6. Waste stream:
Sand blasting grit contaminated with depleted uranium and scrap pieces of depleted uranium.

7. Type of radioactive waste (check box):
[ ] TRU or suspect TRU
[X] LLW
[ ] non-radioactive

8. Actual years disposed of at SDA:
Starting year 1986 Ending year 1992

9. Waste stream volume:
Amount 198.1000 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [ ] container volume or [X] waste volume

10. Comments (specify number of pertinent question):

1. General physical form (see attached list)
Other scrap metals.
[X] other (specify)
42.

2. Details on physical form(particularly confinement related)
Since there is no designation in the "Physical Form" list for sand (SiO2), the number for "glass" (#42) is used.

3. Chemical form:
Oxide.

4. Inner packaging: [ ] plastic bag [X] plastic liner [ ] metal liner [ ] none [X] other (specify)
BLM.

5. Waste container type (see attached list)
Metal barrel.

6. Other characteristics of interest:

7. Comments (specify number of pertinent question):
5. BLM is inside of an M-3 metal bin.

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Contaminant & CAS Registry Number	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
None.										

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
U-238	Particulate.	Oxide and metal.	A .00510000000000	CI	1986	1986	N	-10%	+10%	Professional judgment.
U-235	Particulate.	Oxide and metal.	A .00007000000000	CI	1986	1986	N	-10%	+10%	Professional judgment.
U-234	Particulate.	Oxide and metal.	A .00143000000000	CI	1986	1986	N	-10%	+10%	Professional judgment.
U-238	Particulate.	Oxide and metal.	A .07896000000000	CI	1987	1987	N	-10%	+10%	Professional judgment.
U-235	Particulate.	Oxide and metal.	A .00101000000000	CI	1987	1987	N	-10%	+10%	Professional judgment.
U-234	Particulate.	Oxide and metal.	A .02225000000000	CI	1987	1987	N	-10%	+10%	Professional judgment.
U-238	Particulate.	Oxide and metal.	A .42660000000000	CI	1988	1988	N	-10%	+10%	Professional judgment.
U-235	Particulate.	Oxide and metal.	A .00554000000000	CI	1988	1988	N	-10%	+10%	Professional judgment.
U-234	Particulate.	Oxide and metal.	A .12020000000000	CI	1988	1988	N	-10%	+10%	Professional judgment.

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)
Shipping personnel, R.K. Moss, confirmed there were no shipments in 1990 or in 1993. U-234 and U-235 were added as applicable for depleted uranium (0.2 weight percent U-235), as per Rich 1988, but scaled to match the total value of 0.0126 Ci of U-235 over all the years, per statement from R.K. Moss and D. Barg of SMC.

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
U-238	Particulate.	Oxide and metal.	A .20907000000000	CI	1989	1989	N	-10%	+10%	Professional judgment.
U-235	Particulate.	Oxide and metal.	A .00272000000000	CI	1989	1989	N	-10%	+10%	Professional judgment.
U-234	Particulate.	Oxide and metal.	A .05882000000000	CI	1989	1989	N	-10%	+10%	Professional judgment.
U-238	Particulate.	Oxide and metal.	A .24700000000000	CI	1991	1991	N	-10%	+10%	Professional judgment.
U-235	Particulate.	Oxide and metal.	A .00324000000000	CI	1991	1991	N	-10%	+10%	Professional judgment.
U-234	Particulate.	Oxide and metal.	A .06984000000000	CI	1991	1991	N	-10%	+10%	Professional judgment.
U-238	Particulate.	Oxide and metal.	A .00223900000000	CI	1992	1992	N	-10%	+10%	Professional judgment.
U-235	Particulate.	Oxide and metal.	A .00003000000000	CI	1992	1992	N	-10%	+10%	Professional judgment.
U-234	Particulate.	Oxide and metal.	A .00063000000000	CI	1992	1992	N	-10%	+10%	Professional judgment.

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)
Shipping personnel, R.K. Moss, confirmed there were no shipments in 1990 or in 1993. U-234 and U-235 were added as applicable for depleted uranium (0.2 weight percent U-235), as per Rich 1988, but scaled to match the total value of 0.0126 Ci of U-235 over all the years, per statement from R.K. Moss and D. Barg of SMC.

1. Type of source of information:
(check box)

[X] RWMIS [ ] other database
[ ] sample analysis data
[ ] operating records [X] interview
[ ] expert judgment [X] reports
[ ] other

2. Details concerning source (names, report no., dates, etc.)
Shipping personnel, R.K. Moss, confirmed there were no shipments in 1990 or 1993. Rich, B.L. et al, Health Physics Manual of Good Practices for Uranium Facilities, EGG-2530, June 1988.

3. Do the estimates of contaminant quantities in Part C and D represent:
[X] best estimate
[ ] worst case
[ ] other

4. If other than best estimate, explain why:

5. Do the data conflict with RWMIS?
(Historical or Present Data Only)
[X] no
[ ] yes

6. If yes, explain why:

7. Major unknowns in inventories of contaminants:
None.

8. Key assumptions used to deal with the unknowns:

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 310

1. Preparer: Henry Peterson

2. Date prepared: 07/22/94

3. Generator: TAN
(area or contractor - use code from attached list)

4. Particular facility: 630
(building number - use code from attached list)

5. Number of waste stream from this facility:
1R

6. Waste stream:
Compactible waste generated during LOFT reactor building entries.

7. Type of radioactive waste (check box):
[ ] TRU or suspect TRU
[X] LLW
[ ] non-radioactive

8. Actual years disposed of at SDA:
Starting year 1984 Ending year 1985

9. Waste stream volume:
Amount 4.2800 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [ ] container volume or [X] waste volume

10. Comments (specify number of pertinent question):
6. The compactible waste consists of blotting paper, plastic, anti-contamination clothing, smears, and other cloth, paper, and plastic used to support reactor building entries primarily following the LOFT LP-FP-1 test.

1. General physical form (see attached list)
Combustibles (paper, cloth, wood, etc.)
[X] other (specify)
44.

2. Details on physical form(particularly confinement related)
Paper, plastic, and cloth.

3. Chemical form:
Cellulose, polyethylene, cotton, rubber, and unnatural fibers.

4. Inner packaging: [ ] plastic bag [X] plastic liner
[ ] metal liner [ ] none [X] other (specify)
Plastic bag.

5. Waste container type (see attached list)
Metal barrel.

6. Other characteristics of interest:

7. Comments (specify number of pertinent question):
4. Bagged in polyethylene, which was then contained in a metal barrel.

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Contaminant & CAS Registry Number	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
None.										

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Co-58	Particulate.	Oxide.	T .00043800000000	CI	1984	1985	N			
Co-60	Particulate.	Oxide.	T .00121000000000	CI	1984	1985	N			
Mn-54	Particulate.	Oxide.	T .00070000000000	CI	1984	1985	N			
Cr-51	Particulate.	Oxide.	T .00333000000000	CI	1984	1985	N			
Fe-55	Particulate.	Oxide.	T .00483000000000	CI	1984	1985	N			
Cs-137	Particulate.	Elemental.	A .00004950000000	CI	1985	1985	N			
I-131	Particulate.	Elemental.	A .00017600000000	CI	1985	1985	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)
In 1984, only two MAPs were assumed to makeup the list of radionuclides, i.e., Co-60 and Co-58, and they were assumed to be in equal quantities as listed in RWMIS. The above list preserves the curie quantity of the gamma-emitting radionuclides with an additional MAP radionuclide, Fe-55, which does not emit gamma rays. The distribution of the MAP radionuclides is assumed to be generated in stainless steel type 304, the principal type in the LOFT primary coolant system and was calculated based on a standard PWR in-core section with a burnup of 33,000 MWd/MTU and a 60-day decay as described in "Characteristics of Potential Repository Wastes", U.S. DOE Office of Civilian Radioactive Waste Management, July 1992, DOE/RW-0184-R1. The MFP activity of the 1985 waste is based on Table 21, p.41, Report OECD LOFT-T-3808.

1. Type of source of information:
(check box)

[X] RWMIS [ ] other database
[ ] sample analysis data
[ ] operating records [X] interview
[ ] expert judgment [X] reports
[ ] other

2. Details concerning source (names, report no., dates, etc.)
Interview with M.L. Carboneau. "Containment Analysis Report for LOFT Experiment LP-FP-2", January 1989, OECD LOFT-T-3808, (Table 21, page 41.) and H.K. Peterson letter to Lofthouse Pletscher, "LOFT CV Entry and Cleanup Activities Following the LP-FP-2 Test", HKP-6-85, March 21, 1985.

3. Do the estimates of contaminant quantities in Part C and D represent:
[X] best estimate
[ ] worst case
[ ] other

4. If other than best estimate, explain why:

5. Do the data conflict with RWMIS?
(Historical or Present Data Only)
[ ] no
[X] yes

6. If yes, explain why:
The gamma-emitting quantities of the MAP and MFP are equal to quantities reported in RWMIS, but quantities of non-gamma emitting radionuclides have been included in the amount expected.

7. Major unknowns in inventories of contaminants:

8. Key assumptions used to deal with the unknowns:

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 309

1. Preparer: Henry Peterson

2. Date prepared: 07/25/94

3. Generator: TAN
(area or contractor - use code from attached list)

4. Particular facility: 647
(building number - use code from attached list)

5. Number of waste stream from this facility:
1R

6. Waste stream:
Contaminated or activated steel parts and equipment that have been stored at TAN-647.

7. Type of radioactive waste (check box):
[ ] TRU or suspect TRU
[X] LLW
[ ] non-radioactive

8. Actual years disposed of at SDA:
Starting year 1984 Ending year 1986

9. Waste stream volume:
Amount 98.3400 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [ ] container volume or [X] waste volume

10. Comments (specify number of pertinent question):
3. In the RWMIS data base, the waste stream from this facility in 1984 has been designated as LOF-647, which is an improper designation, and is included under the proper designation TAN-647. Wastes from this facility, known as the RPSSA (Radioactive Parts Storage and Service Area) occurred only in 1984 and 1986 for this report period.

1. General physical form (see attached list)
Other scrap metals.
[ ] other (specify)

2. Details on physical form(particularly confinement related)
Principally surface-contaminated components.

3. Chemical form:
Oxide.

4. Inner packaging: [X] plastic bag [ ] plastic liner
[ ] metal liner [ ] none [X] other (specify)
Plastic liner.

5. Waste container type (see attached list)
Wooden box.

6. Other characteristics of interest:

7. Comments (specify number of pertinent question):
4. Wrapped in polyethylene and placed in a poly-lined wooden box for transport to the RWMC.

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Contaminant & CAS Registry Number	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
None.										

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Co-58	Metal.	Alloy.	A .90000000000000	CI	1984	1984	N			
Co-60	Metal.	Alloy.	A .90000000000000	CI	1984	1984	N			
Ag-110m	Metal.	Alloy.	A .03000000000000	CI	1984	1984	N			
Cr-51	Metal.	Alloy.	A .03000000000000	CI	1984	1984	N			
Mn-54	Metal.	Alloy.	A .03000000000000	CI	1984	1984	N			
Co-60	Particulate.	Alloy.	A .00002000000000	CI	1986	1986	N			
Cs-137	Particulate.	Oxide.	A 2.3200000000000	CI	1986	1986	N			
Sr-90	Particulate.	Oxide.	A 2.3000000000000	CI	1986	1986	N			
Ce-144	Particulate.	Oxide.	A .00800000000000	CI	1986	1986	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

1. Type of source of information:
(check box)

[X] RWMIS [ ] other database
[ ] sample analysis data
[ ] operating records [X] interview
[ ] expert judgment [ ] reports
[X] other
TAN-607 Hot Shop logs.

2. Details concerning source (names, report no., dates, etc.)
Interview and discussion with Kevin Streeper, TAN Hot Shop Operations Manager; Interview with Ilene Harrell, TAN Hot Shop Shift Manager.

3. Do the estimates of contaminant quantities in Part C and D represent:
[X] best estimate
[ ] worst case
[ ] other

4. If other than best estimate, explain why:

5. Do the data conflict with RWMIS?
(Historical or Present Data Only)
[X] no
[ ] yes

6. If yes, explain why:

7. Major unknowns in inventories of contaminants:

8. Key assumptions used to deal with the unknowns:

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 312

1. Preparer: Henry Peterson

2. Date prepared: 07/25/94

3. Generator: TAN
(area or contractor - use code from attached list)

4. Particular facility: 650
(building number - use code from attached list)

5. Number of waste stream from this facility:
1R

6. Waste stream:
Compactible waste generated following LOFT tests.

7. Type of radioactive waste (check box):
[ ] TRU or suspect TRU
[X] LLW
[ ] non-radioactive

8. Actual years disposed of at SDA:
Starting year 1985 Ending year 1986

9. Waste stream volume:
Amount 9.9200 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [ ] container volume or [X] waste volume

10. Comments (specify number of pertinent question):
6. All of this waste stream occurred in 1985 and 1986, and was generated following the LP-FP-1 and LP-FP-2 test and consisted of contaminated articles such as protective clothing, contamination control material (polyethylene sheet, poly bags, blotting paper, etc.) that was used for reactor building entries.

1. General physical form (see attached list)
Combustibles (paper, cloth, wood, etc.)
[X] other (specify)
44.

2. Details on physical form(particularly confinement related)
Particulate contamination on protective clothing, blotting paper, polyethylene sheet, etc.

3. Chemical form:
Oxides, elemental.

4. Inner packaging: [X] plastic bag [ ] plastic liner
[ ] metal liner [ ] none [X] other (specify)
Plastic liner.

5. Waste container type (see attached list)
Bale.

6. Other characteristics of interest:

7. Comments (specify number of pertinent question):

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Contaminant & CAS Registry Number	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
None.										

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Co-58	Particulate.	Oxide.	T .00399000000000	CI	1985	1986	N			
Co-60	Particulate.	Oxide.	T .00310000000000	CI	1985	1986	N			
I-131	Particulate.	Elemental.	T .01400000000000	CI	1985	1986	N			
Cs-137	Particulate.	Oxide.	T .00160000000000	CI	1985	1986	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

1. Type of source of information:
(check box)

[X] RWMIS [ ] other database
[ ] sample analysis data
[X] operating records [ ] interview
[ ] expert judgment [X] reports
[ ] other

2. Details concerning source (names, report no., dates, etc.)
"Containment Analysis Report for LOFT Experiment LP-FP-2", January 1989, by M.L. Carboneau, OECD LOFT-T-3808; "OECD LOFT FISSION PRODUCT EXPERIMENT LP-FP-2 FISSION PRODUCT DATA REPORT", May 1987, by M.L. Carboneau, R.L. Nitchke, D.C. Mecham, E.W. Coryell and J.A. Bagues, OECD LOFT-T-3805.

3. Do the estimates of contaminant quantities in Part C and D represent:
[X] best estimate
[ ] worst case
[ ] other

4. If other than best estimate, explain why:

5. Do the data conflict with RWMIS?
(Historical or Present Data Only)
[X] no
[ ] yes

6. If yes, explain why:

7. Major unknowns in inventories of contaminants:

8. Key assumptions used to deal with the unknowns:
Only the major long half-lived fission products were accounted for in the RWMIS MFP designation.

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 313

1. Preparer: Henry Peterson

2. Date prepared: 07/25/94

3. Generator: TAN
(area or contractor - use code from attached list)

4. Particular facility: 650
(building number - use code from attached list)

5. Number of waste stream from this facility:
2R

6. Waste stream:
LOFT LP-FP-2 resins.

7. Type of radioactive waste (check box):
[ ] TRU or suspect TRU
[X] LLW
[ ] non-radioactive

8. Actual years disposed of at SDA:
Starting year 1985 Ending year 1986

9. Waste stream volume:
Amount 7.0880 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [ ] container volume or [X] waste volume

10. Comments (specify number of pertinent question):
6. The types of resin used in the LOFT project were all organic, polystyrene bead type, produced by DUOLITE and EAGLE-PITCHER.

1. General physical form (see attached list)
Resin.
[X] other (specify)
7.

2. Details on physical form(particularly confinement related)
Complexed with cation/anion exchange resins. Not solidified.

3. Chemical form:
Elemental, oxide.

4. Inner packaging: [ ] plastic bag [ ] plastic liner
[X] metal liner [ ] none [ ] other (specify)

5. Waste container type (see attached list)
Other.

6. Other characteristics of interest:
Contained in a carbon steel or stainless steel tank or drum.

7. Comments (specify number of pertinent question):
2. The majority of the resin was disposed in 1986, one year after the LP-FP-2 test. From activity levels measured in the primary coolant system after the test, essentially all of the fission products contained in the resins consisted of Cs-134 and Cs-137. (See page 139 of Ref. 1.)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Contaminant & CAS Registry Number	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
7439-92-1 Lead	Lead shielded resin cask.	Metal.	T 5400000.0000000	GM	1985	1985	N	-10%	+10%	Professional judgment.

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Mn-54	Particulate.	Oxide.	T .00022400000000	CI	1985	1986	N			
Co-58	Particulate.	Oxide.	T .00154000000000	CI	1985	1986	N			
Co-60	Particulate.	Oxide.	T .00023700000000	CI	1985	1986	N			
Cs-134	Particulate.	Oxide.	T .18500000000000	CI	1985	1986	N			
Cs-137	Particulate.	Oxide.	T .30600000000000	CI	1985	1986	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column. If not, mark N and give the minimum value and maximum value.

Additional information or explanations (indicate pertinent contaminant)

All curie values are based on the Primary Coolant System (PCS) activity levels. (Page 139 of Ref. 1.) Decayed to one year after the LP-FP-2 test.

1. Type of source of information:
(check box)

[X] RWMIS [ ] other database
[ ] sample analysis data
[ ] operating records [X] interview
[ ] expert judgment [X] reports
[ ] other

2. Details concerning source (names, report no., dates, etc.)
Interview and discussion with R.A. Montgomery.
Ref. 1: "OECD LOFT FISSION PRODUCT EXPERIMENT LP-FP-2 FISSION PRODUCT DATA REPORT", by M.L. Carboneau, et al., May 1987, OECD-LOFT-T-3805.

J.D. Wells letter to K.L. Falconer, "Hazardous Materials in the SDA", JDW-02-86, January 15, 1986.

3. Do the estimates of contaminant quantities in Part C and D represent:
[X] best estimate
[ ] worst case
[ ] other

4. If other than best estimate, explain why:

5. Do the data conflict with RWMIS?
(Historical or Present Data Only)
[X] no
[ ] yes

6. If yes, explain why:

7. Major unknowns in inventories of contaminants:

8. Key assumptions used to deal with the unknowns:

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 314

1. Preparer: Henry Peterson

2. Date prepared: 07/22/94

3. Generator: TAN
(area or contractor - use code from attached list)

4. Particular facility: 650
(building number - use code from attached list)

5. Number of waste stream from this facility:
3R

6. Waste stream:
Discarded LOFT facility parts and systems after the final test.

7. Type of radioactive waste (check box):
[ ] TRU or suspect TRU
[X] LLW
[ ] non-radioactive

8. Actual years disposed of at SDA:
Starting year 1985 Ending year 1993

9. Waste stream volume:
Amount 1169.0000 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [ ] container volume or [X] waste volume

10. Comments (specify number of pertinent question):
6. This waste stream consists of all of the system components, and primarily non-compactibles that were discarded from the LOFT facility following the LP-FP-2 test so that the Mobile Test Assembly (MTA) and the Blowdown Suppression Tank (BST) could be removed from the containment building to put the facility in an inactive and defunct status.

1. General physical form (see attached list)
Other core,reactor vessel,loop component
[X] other (specify)
6, 10, 22, 23, 31, 41.

2. Details on physical form(particularly confinement related)
Activation products produced during reactor operation are incorporated into the structural parts within the reactor vessel. Otherwise, MFP and MAP contamination is in particulate form that coats structural components.

3. Chemical form:
Oxides and elemental.

4. Inner packaging: [ ] plastic bag [X] plastic liner
[ ] metal liner [ ] none [X] other (specify)
Sealed pipes, internally contaminated.

5. Waste container type (see attached list)
Wooden box.

6. Other characteristics of interest:

7. Comments (specify number of pertinent question):
5. Also O and BLX.

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Contaminant & CAS Registry Number	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
None.										

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Co-58	Particulate.	Oxide.	A .25400000000000	CI	1985	1985	N			
Co-60	Particulate.	Oxide.	A .03900000000000	CI	1985	1985	N			
Mn-54	Particulate.	Oxide.	A .03740000000000	CI	1985	1985	N			
Cs-137	Particulate.	Oxide.	A .05000000000000	CI	1985	1985	N			
Ba-140	Particulate.	Oxide.	A .15200000000000	CI	1985	1985	N			
Co-58	Solid.	Alloy.	A 19.900000000000	CI	1986	1986	N			
Co-60	Solid.	Alloy.	A 95.900000000000	CI	1986	1986	N			
Mn-54	Solid.	Alloy.	A 46.100000000000	CI	1986	1986	N			
Fe-59	Solid.	Alloy.	A .00038000000000	CI	1986	1986	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Ce-144	Solid.	Elemental.	A 10.100000000000	CI	1986	1986	N			
U-235	Fines.	Oxide.	A .00004150000000	CI	1986	1986	N	-30%	+30%	Professional judgment.
U-234	Fines.	Oxide.	A .00073000000000	CI	1986	1986	N	-30%	+30%	Professional judgment.
U-238	Fines.	Oxide.	A .00005810000000	CI	1986	1986	N	-30%	+30%	Professional judgment.
Cs-137	Particulate.	Oxide.	A 73.800000000000	CI	1986	1986	N			
Cs-134	Particulate.	Oxide.	A .46000000000000	CI	1986	1986	N			
Sr-89	Particulate.	Oxide.	A .00591000000000	CI	1986	1986	N			
Sr-90	Particulate.	Oxide.	A .01390000000000	CI	1986	1986	N			
Co-58	Solid.	Alloy.	A .10900000000000	CI	1987	1987	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Co-60	Solid.	Alloy.	A 17.400000000000	CI	1987	1987	N			
Mn-54	Solid.	Alloy.	A 4.2400000000000	CI	1987	1987	N			
Cs-137	Particulate.	Oxide.	A 3.5100000000000	CI	1987	1987	N			
Cs-134	Particulate.	Oxide.	A .01590000000000	CI	1987	1987	N			
Sr-90	Particulate.	Oxide.	A .00065900000000	CI	1987	1987	N			
Cs-137	Particulate.	Oxide.	A .00404000000000	CI	1988	1988	N			
Cs-134	Particulate.	Oxide.	A .00001340000000	CI	1988	1988	N			
Sr-90	Particulate.	Oxide.	A .00000075700000	CI	1988	1988	N			
Ce-144	Particulate.	Oxide.	A .02600000000000	CI	1993	1993	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Co-60	Particulate.	Oxide.	A .02600000000000	CI	1993	1993	N			
Cs-137	Particulate.	Oxide.	A .17200000000000	CI	1993	1993	N			
Eu-155	Particulate.	Oxide.	A .00195000000000	CI	1993	1993	N			
Ru-106	Particulate.	Oxide.	A .00598000000000	CI	1993	1993	N			
Sb-125	Particulate.	Oxide.	A .00598000000000	CI	1993	1993	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

1. Type of source of information:
(check box)

[X] RWMIS [ ] other database
[ ] sample analysis data
[ ] operating records [X] interview
[X] expert judgment [X] reports
[ ] other

2. Details concerning source (names, report no., dates, etc.)
Interview with R.D. Sayer; OECD LOFT FISSION PRODUCT EXPERIMENT LP-FP-2 FISSION PRODUCT DATA REPORT, by M.L. Carboneau, et al., May 1987, OECD-LOFT-T-3805; QUICK-LOOK REPORT ON OECD LOFT EXPERIMENT. LP-FP-2, by J.P. Adams, et al., September 1985, OECD-LOFT-T-3804; HEALTH PHYSICS MANUAL OF GOOD PRACTICES FOR URANIUM FACILITIES by B.L. Rich, et al., June 1988, EGG-2530/UC-41.

3. Do the estimates of contaminant quantities in Part C and D represent:
[X] best estimate
[ ] worst case
[ ] other

4. If other than best estimate, explain why:

5. Do the data conflict with RWMIS?
(Historical or Present Data Only)
[ ] no
[X] yes

6. If yes, explain why:
The total curies per year are the same, but the distribution for a given year is different from RWMIS values. The RWMIS curie values are not consistent with expected values. For example, for 1986, the value of Ce-144 is 7.5 times that for Cs-137 and should be the same as the value of Pr-144, which is only 35.6% of the Ce-144 value. Also, in RWMIS the value of Zr-95 is 265 times the value of Nb-95, a ratio way out of line for the LOFT operation.

7. Major unknowns in inventories of contaminants:

8. Key assumptions used to deal with the unknowns:

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 301

1. Preparer: Henry Peterson

2. Date prepared: 07/25/94

3. Generator: TAN
(area or contractor - use code from attached list)

4. Particular facility: 668
(building number - use code from attached list)

5. Number of waste stream from this facility:
1R

6. Waste stream:
Soil that was dug from in front of the TAN Hot Shop during the construction of TAN-668.

7. Type of radioactive waste (check box):
[ ] TRU or suspect TRU
[X] LLW
[ ] non-radioactive

8. Actual years disposed of at SDA:
Starting year 1985 Ending year 1985

9. Waste stream volume:
Amount 72.5000 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [ ] container volume or [X] waste volume

10. Comments (specify number of pertinent question):
6. TAN 668 is the Heavy Equipment Cleaning Facility or the entrance enclosure to the large shielding doors of the TAN Hot Shop where items coming out of the Hot Shop are resurveyed and decontaminated if necessary (the majority of the decontamination was performed in the Hot Shop). The soil became contaminated chiefly during the GE/ANP project with the testing of the nuclear aircraft engines, therefore it is principally Cs-137 and Sr-90.

1. General physical form (see attached list)
Soil.
[ ] other (specify)

2. Details on physical form(particularly confinement related)
The soil contamination is confined in an ion-/cation complex with the clay minerals contained in the soil.

3. Chemical form:
Unknown.

4. Inner packaging: [ ] plastic bag [X] plastic liner
[ ] metal liner [ ] none [ ] other (specify)

5. Waste container type (see attached list)
Wooden box.

6. Other characteristics of interest:

7. Comments (specify number of pertinent question):

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Contaminant & CAS Registry Number	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
None.										

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Cs-137	Particulate.	Oxide.	T .39000000000000	CI	1985	1985	N			
Sr-90	Particulate.	Oxide.	T .39000000000000	CI	1985	1985	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)
(Cs-137) - There are several references that show that Cs-137 and Sr-90 are the major contaminants left from the GE/ANP testing era. Decontamination and decommissioning of the HTRE engines and work at TAN-620, the IET Control and Equipment Building, show these two components to be 99% of the activity, the same components that would be present in the soil dug from in front of TAN-668.

1. Type of source of information:
(check box)

[X] RWMIS [ ] other database
[ ] sample analysis data
[ ] operating records [X] interview
[ ] expert judgment [ ] reports
[X] other
TAN Hot Shop logs.

2. Details concerning source (names, report no., dates, etc.)
TAN Hot Shop Logs #32, #33, #34, and #35. Interview with I. Harrell and K. Streeper. RWMIS.

3. Do the estimates of contaminant quantities in Part C and D represent:
[X] best estimate
[ ] worst case
[ ] other

4. If other than best estimate, explain why:

5. Do the data conflict with RWMIS?
(Historical or Present Data Only)
[X] no
[ ] yes

6. If yes, explain why:

7. Major unknowns in inventories of contaminants:

8. Key assumptions used to deal with the unknowns:

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 311

1. Preparer: Henry Peterson

2. Date prepared: 07/25/94

3. Generator: TAN
(area or contractor - use code from attached list)

4. Particular facility: DFN
(building number - use code from attached list)

5. Number of waste stream from this facility:
1R

6. Waste stream:
Pieces of ferrous and non-ferrous articles and contamination control items (blotting paper, plastic sheeting, rubber, and cloth) generated in a decontamination facility.

7. Type of radioactive waste (check box):
[ ] TRU or suspect TRU
[X] LLW
[ ] non-radioactive

8. Actual years disposed of at SDA:
Starting year 1984 Ending year 1987

9. Waste stream volume:
Amount 108.7400 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [ ] container volume or [X] waste volume

10. Comments (specify number of pertinent question):
4. The TAN Decontamination Facility North (DFN) was located in the west end of TAN-607. To distinguish waste from this facility (DFN) as opposed to TAN-607, the TANDFN designation was established.
8. Wastes were sent from the facility only in 1984 and 1987. The wastes generated in 1984 are listed in RWMIS as consisting of Mixed Fission Products (MFP) and those generated in 1987 are listed as Mixed Activation Products (MAP). Wastes for 1984 consist of removal of old ventilation and filter ductwork and structures necessary to update and refit the area for the new decontamination facility. Wastes of 1987 are combustible and compactible wastes and "ferrous and non-ferrous metal articles" discarded with the decontamination of pieces of equipment, casks, and tools.

1. General physical form (see attached list)
Combustibles (paper, cloth, wood, etc.)
[X] other (specify)
10.

2. Details on physical form(particularly confinement related)
Contamination principally on the surface of items.

3. Chemical form:

4. Inner packaging: [X] plastic bag [ ] plastic liner
[ ] metal liner [ ] none [X] other (specify)
Plastic liner.

5. Waste container type (see attached list)
Wooden box.

6. Other characteristics of interest:

7. Comments (specify number of pertinent question):
4. Bagged in polyethylene and contained in poly-lined wooden boxes.

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Contaminant & CAS Registry Number	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
None.										

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Cs-137	Particulate.	Oxide.	A .04610000000000	CI	1984	1984	N			
Co-60	Particulate.	Oxide.	A .97700000000000	CI	1987	1987	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column. If not, mark N and give the minimum value and maximum value.

Additional information or explanations (indicate pertinent contaminant)

Cs-137 - chosen because it is easily released from damaged fuel and easily spread after release. Also, it is the longest half-lived radionuclide of the volatile metals released. Co-60 is the dominant, long-lived radionuclide that persists after the other MAPs have decayed away.

1. Type of source of information:
(check box)

[X] RWMIS [ ] other database
[ ] sample analysis data
[ ] operating records [X] interview
[ ] expert judgment [ ] reports
[ ] other

2. Details concerning source (names, report no., dates, etc.)
Interview with G.L. Fife, TAN HP Supervisor (1980-1988).

3. Do the estimates of contaminant quantities in Part C and D represent:
[X] best estimate
[ ] worst case
[ ] other

4. If other than best estimate, explain why:

5. Do the data conflict with RWMIS?
(Historical or Present Data Only)
[X] no
[ ] yes

6. If yes, explain why:

7. Major unknowns in inventories of contaminants:

8. Key assumptions used to deal with the unknowns:

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION PDT - 317

1. Preparer: Henry Peterson

2. Date prepared: 08/25/94

3. Generator: TAN
(area or contractor - use code from attached list)

4. Particular facility: 607
(building number - use code from attached list)

5. Number of waste stream from this facility:
6P

6. Waste stream:
TAN Hot Shop and Hot Cell Waste.

7. Type of radioactive waste (check box):
[ ] TRU or suspect TRU
[X] LLW
[ ] non-radioactive

8. Actual years disposed of at SDA:
Starting year 1994 Ending year 2003

9. Waste stream volume:
Amount 800.0000 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [ ] container volume or [X] waste volume

10. Comments (specify number of pertinent question):
6. Hot Cell and Hot Shop Waste was unsegregated for the time frame of this study. Prior to this time period, at least some of the Hot Cell (TAN-633) waste was attributed to TAN-633. During this time period ('84-'93) statements in the TAN Hot Shop logs indicate Hot Cell and Hot Shop waste was attributed to the TAN Hot Shop, TAN-607.
6. In a discussion with K.E. Streeper, TAN Operations Manager, he stated, considering the operations that are planned over the next 2 or 3 years, that waste from the TAN Hot Shop would be about the same as for the last couple of years.

1. General physical form (see attached list)
Irradiated end boxes.
[X] other (specify)
5.

2. Details on physical form(particularly confinement related)
Majority of waste contains particulate radiological contamination of contamination control and personal protective items (polyethylene sheeting, blotting paper, etc.), Hot Shop/Hot Cell equipment and structures that are removed and/or replaced, and items removed from project hardware.

3. Chemical form:
Oxides (for particulate) and alloys (for some MAPs).

4. Inner packaging: [X] plastic bag [ ] plastic liner
[ ] metal liner [ ] none [X] other (specify)
Plastic liner.

5. Waste container type (see attached list)
Wooden box.

6. Other characteristics of interest:
Some Hot Cell wastes are placed in metal "buckets" with tight-fitting lids before being placed in wooden Hot Waste boxes.

7. Comments (specify number of pertinent question):
4. HICs are High Integrity Containers.
5. Also BLM and O.
The only major operation planned for the next couple of years is to dry the Three Mile Island (TMI) fuel and send it to the Idaho Chemical Processing Plant (ICPP) where it will be stored in a ground-vault facility that is protected from the weather. Some other operations that were discussed with K.E. Streeper, the TAN Operations Manager, are to remove the storage racks that the TMI fuel was stored in from the pool, discard them as waste to the RWMC, and drain the 607-TAN pool. After draining, the pool would be decontaminated, and that operation would generate more waste. Any projections beyond the TMI fuel drying operation are uncertain.

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Contaminant & CAS Registry Number	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
None.										

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Forecast	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Cs-134	Particulate.	Oxide.	T .65900000000000	CI	1994	2003	N	N			
Cs-137	Particulate.	Oxide.	T 1.4200000000000	CI	1994	2003	N	N			
Sr-90	Particulate.	Oxide.	T .90200000000000	CI	1994	2003	N	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

1. Type of source of information:
(check box)

[ ] RWMIS [ ] other database
[ ] sample analysis data
[ ] operating records [X] interview
[ ] expert judgment [ ] reports
[ ] generator forecasts
[ ] other

2. Details concerning source (names, report no., dates, etc.)
Discussions with K.E. Streeper, TAN Operations Manager, and Ilene G. Harrell.

3. Do the estimates of contaminant quantities in Part C and D represent:
[X] best estimate
[ ] worst case
[ ] other

4. If other than best estimate, explain why:

5. Do the data conflict with RWMIS?
(Historical or Present Data Only)
[X] no
[ ] yes

6. If yes, explain why:

7. Major unknowns in inventories of contaminants:

8. Key assumptions used to deal with the unknowns:

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION PDT - 318

1. Preparer: Henry Peterson

2. Date prepared: 08/25/94

3. Generator: TAN
(area or contractor - use code from attached list)

4. Particular facility: 623
(building number - use code from attached list)

5. Number of waste stream from this facility:
1P

6. Waste stream:
Sewage sludge.

7. Type of radioactive waste (check box):
[ ] TRU or suspect TRU
[X] LLW
[ ] non-radioactive

8. Actual years disposed of at SDA:
Starting year 1994 Ending year 2003

9. Waste stream volume:
Amount 49.0000 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [ ] container volume or [X] waste volume

10. Comments (specify number of pertinent question):
6. In discussions with K.E. Streeper, TAN Operations Manager, and other personnel that are involved in projected operations for TAN, and discussions with personnel (T.L. Trace and C.A. Pruett) who have been involved in disposal of the TAN sewage "sludge", an estimate of about 66% of the past generation rate should be a good estimate of what will be generated in the future, based on the number of people at TAN and the reduced workload.

1. General physical form (see attached list)
Sludge.
[ ] other (specify)

2. Details on physical form(particularly confinement related)
Moist, dewatered sludge.

3. Chemical form:
Oxide.

4. Inner packaging: [ ] plastic bag [X] plastic liner
[ ] metal liner [ ] none [ ] other (specify)

5. Waste container type (see attached list)
Wooden box.

6. Other characteristics of interest:

7. Comments (specify number of pertinent question):

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Contaminant & CAS Registry Number	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
None.										

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Fore cast	Samp les?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
Co-60	Particulate.	Oxide.	T .00280000000000	CI	1994	2003	N	N			
Cs-137	Particulate.	Oxide.	T .01600000000000	CI	1994	2003	N	N			

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)
This estimated activity is based on an estimate of 66% of the waste generated over the past 10 previous years as discussed in Part A-10. (THIS ESTIMATE IS NOT BASED ON A WASTE GENERATOR FORECAST.)

1. Type of source of information:
(check box)

[ ] RWMIS [ ] other database
[ ] sample analysis data
[ ] operating records [X] interview
[ ] expert judgment [ ] reports
[ ] generator forecasts
[ ] other

2. Details concerning source (names, report no., dates, etc.)
Interview and conversation with K.E. Streeper, T.L. Trace, and C.A. Pruett. (See A.10.)

3. Do the estimates of contaminant quantities in Part C and D represent:
[X] best estimate
[ ] worst case
[ ] other

4. If other than best estimate, explain why:

5. Do the data conflict with RWMIS?
(Historical or Present Data Only)
[X] no
[ ] yes

6. If yes, explain why:

7. Major unknowns in inventories of contaminants:

8. Key assumptions used to deal with the unknowns:

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION PDT - 319

1. Preparer: Henry Peterson

2. Date prepared: 08/24/94

3. Generator: TAN
(area or contractor - use code from attached list)

4. Particular facility: 629
(building number - use code from attached list)

5. Number of waste stream from this facility:
2P

6. Waste stream:
Sand-blasting grit contaminated with U-238 and scrap pieces of U-238 (assumed).

7. Type of radioactive waste (check box):
[ ] TRU or suspect TRU
[X] LLW
[ ] non-radioactive

8. Actual years disposed of at SDA:
Starting year 1994 Ending year 2003

9. Waste stream volume:
Amount 36.2200 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [ ] container volume or [X] waste volume

10. Comments (specify number of pertinent question):
Volume and curie activities are based on a "not yet assigned" waste stream as projected by K.A. Klossner, November 11, 1993. The estimate is based on assumptions of "1994 levels of funding and production through CY-2003. However, if funding and/or production levels are cut, the amount of direct disposed waste will increase one hundred fold".

1. General physical form (see attached list)
Other scrap metals.
[X] other (specify)
42.

2. Details on physical form(particularly confinement related)
Since there is no designation in the "Physical Form" list for sand (SiO2), the number for "glass" (#42) was used.

3. Chemical form:
Oxide.

4. Inner packaging: [ ] plastic bag [X] plastic liner
[ ] metal liner [ ] none [X] other (specify)
BLM.

5. Waste container type (see attached list)
Metal barrel.

6. Other characteristics of interest:

7. Comments (specify number of pertinent question):
5. BLM (inside of an M-3 metal bin).

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Contaminant & CAS Registry Number	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
None.										

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Fore cast	Samp les?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
U-238	Particulate.	Oxide and metal.	T .00000560000000	CI	1994	2003	Y	N	-10%	+10%	Professional judgment.
U-235	Particulate.	Oxide and metal.	T .00080000000000	CI	1994	2003	Y	N	-10%	+10%	Professional judgment.
U-234	Particulate.	Oxide and metal.	T .00000232000000	CI	1994	2003	Y	N	-10%	+10%	Professional judgment.

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)
This estimate was based on the waste generator forecast proposed by K.A. Klossner, November, 1993, for contact handled disposal at RWMC. The U-234 and U-235 components were added in accordance with the guidance provided by Ref. Rich, 1988.

1. Type of source of information:
(check box)

[ ] RWMIS [ ] other database
[ ] sample analysis data
[ ] operating records [X] interview
[ ] expert judgment [ ] reports
[X] generator forecasts
[ ] other

2. Details concerning source (names, report no., dates, etc.)
Interview and discussion with R.K. Moss, Waste Manager at SMC.

3. Do the estimates of contaminant quantities in Part C and D represent:
[X] best estimate
[ ] worst case
[ ] other

4. If other than best estimate, explain why:

5. Do the data conflict with RWMIS?
(Historical or Present Data Only)
[X] no
[ ] yes

6. If yes, explain why:

7. Major unknowns in inventories of contaminants:

8. Key assumptions used to deal with the unknowns:

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION PDT - 320

1. Preparer: Henry Peterson

2. Date prepared: 08/27/94

3. Generator: TAN
(area or contractor - use code from attached list)

4. Particular facility: 629
(building number - use code from attached list)

5. Number of waste stream from this facility:
3P

6. Waste stream:
Contact-handled waste for incineration.

7. Type of radioactive waste (check box):
[ ] TRU or suspect TRU
[X] LLW
[ ] non-radioactive

8. Actual years disposed of at SDA:
Starting year 1994 Ending year 2003

9. Waste stream volume:
Amount 661.0000 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [ ] container volume or [X] waste volume

10. Comments (specify number of pertinent question):
Volume and curie activities are based on a waste stream labeled as SMC-WCR-001-91 as defined by K.A. Klossner, November 11, 1993. The estimate is based on assumptions of current levels of funding and production through CY-2003.

1. General physical form (see attached list)
Unknown.
[ ] other (specify)

2. Details on physical form(particularly confinement related)
Particulate contamination on incinerable items.

3. Chemical form:
Oxide.

4. Inner packaging: [ ] plastic bag [X] plastic liner
[ ] metal liner [ ] none [X] other (specify)
BXC.

5. Waste container type (see attached list)
Cardboard box.

6. Other characteristics of interest:

7. Comments (specify number of pertinent question):
B-1. Based on professional judgment and container type, waste is probably cloth, anti-c's, plastic and paper (21 and 44).

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Contaminant & CAS Registry Number	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
None.										

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Forecast	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
U-238	Particulate.	Oxide and metal.	T .01800000000000	CI	1994	2003	Y	N	-10%	+10%	Professional judgment.
U-235	Particulate.	Oxide and metal.	T .00026000000000	CI	1994	2003	Y	N	-10%	+10%	Professional judgment.
U-234	Particulate.	Oxide and metal.	T .00750000000000	CI	1994	2003	Y	N	-10%	+10%	Professional judgment.

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)
This estimate was based on the waste generator forecast proposed by K.A. Klossner, November 1993, for incinerable waste. U-238 curie estimates are provided on the forecast and U-234 and U-235 were added in accordance with Figure 2-2 of the reference, Rich, 1988. The amount of waste would increase by orders of magnitude if the project is terminated.

1. Type of source of information:
(check box)

[ ] RWMIS [ ] other database
[ ] sample analysis data
[ ] operating records [X] interview
[ ] expert judgment [ ] reports
[X] generator forecasts
[ ] other

2. Details concerning source (names, report no., dates, etc.)
Interview and discussion with R.K. Moss, Waste Manager at SMC.

3. Do the estimates of contaminant quantities in Part C and D represent:
[X] best estimate
[ ] worst case
[ ] other

4. If other than best estimate, explain why:

5. Do the data conflict with RWMIS?
(Historical or Present Data Only)
[X] no
[ ] yes

6. If yes, explain why:

7. Major unknowns in inventories of contaminants:
None.

8. Key assumptions used to deal with the unknowns:

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION PDT - 321

1. Preparer: Henry Peterson

2. Date prepared: 08/27/94

3. Generator: TAN
(area or contractor - use code from attached list)

4. Particular facility: 629
(building number - use code from attached list)

5. Number of waste stream from this facility:
4P

6. Waste stream:
Compactible waste from SMC.

7. Type of radioactive waste (check box):
[ ] TRU or suspect TRU
[X] LLW
[ ] non-radioactive

8. Actual years disposed of at SDA:
Starting year 1994 Ending year 2003

9. Waste stream volume:
Amount 680.0000 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [ ] container volume or [X] waste volume

10. Comments (specify number of pertinent question):
Volume and curie activities are based on a waste stream labeled as SMC-WCR-002-91 as defined by K.A. Klossner, November 11, 1993. The estimate is based on assumptions of current levels of funding and production through CY-2003.

1. General physical form (see attached list)
Unknown.
[ ] other (specify)

2. Details on physical form(particularly confinement related)
Particulate contamination on compactible waste.

3. Chemical form:
Oxide.

4. Inner packaging: [ ] plastic bag [X] plastic liner
[ ] metal liner [ ] none [X] other (specify)
BXC.

5. Waste container type (see attached list)
Metal box.

6. Other characteristics of interest:

7. Comments (specify number of pertinent question):
B-1. Based on professional judgment and container type, waste is probably metals, Hepa filters, and other filters. (10, 22, and 23.)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Contaminant & CAS Registry Number	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Samples?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
None.										

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)

For each contaminant, complete at least one line on the following table. If any entries for that contaminant vary by year, fill out additional lines as needed to cover the varying entries for different years. For example, if the annual quantity disposed was x kg for 1952-56 and y kg for 1956-84, use two lines to handle this situation.

Radionuclide	Physical Form	Chemical Form	(A)nnual/(T)otal Quantity	Unit	Begin Year	End Year	Fore cast	Samp les?	Minimum Value/#Samp	Maximum Value/STD	Basis for Uncertainty
U-238	Particulate.	Oxide and metal.	T .11000000000000	CI	1994	2003	Y	N	-10%	+10%	Professional judgment.
U-235	Particulate.	Oxide and metal.	T .00160000000000	CI	1994	2003	Y	N	-10%	+10%	Professional judgment.
U-234	Particulate.	Oxide and metal.	T .04500000000000	CI	1994	2003	Y	N	-10%	+10%	Professional judgment.

* If sample data are available, mark Y in the column titled "Samples?" and provide number of samples in the next column and standard deviation in the next column.
If not, mark N and give the minimum value and maximum value.
Additional information or explanations (indicate pertinent contaminant)
This estimate was based on the waste generator forecast proposed by K.A. Klossner, November, 1993, for compactible waste. U-238 curie estimates are provided on the forecast and U-234 and U-235 were added in accordance with Figure 2-2 of the reference, Rich, 1988. The amount of waste would increase by orders of magnitude if the project is terminated.

1. Type of source of information:
(check box)

[ ] RWMIS [ ] other database
[ ] sample analysis data
[ ] operating records [X] interview
[ ] expert judgment [ ] reports
[X] generator forecasts
[ ] other

2. Details concerning source (names, report no., dates, etc.)
Interview and discussion with R.K. Moss, Waste Manager at SMC.

3. Do the estimates of contaminant quantities in Part C and D represent:
[X] best estimate
[ ] worst case
[ ] other

4. If other than best estimate, explain why:

5. Do the data conflict with RWMIS?
(Historical or Present Data Only)
[X] no
[ ] yes

6. If yes, explain why:

7. Major unknowns in inventories of contaminants:
None.

8. Key assumptions used to deal with the unknowns: