DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 253

1. Preparer: Rhodes, Donald W.

2. Date prepared: 06/21/94

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

4. Particular facility: 626
(building number - use code from attached list)

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

6. Waste stream:
Hot cell waste, laboratory waste, cloth, paper, plastic and wood.

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 54.3000 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [X] container volume or [ ] waste volume

10. Comments (specify number of pertinent question):
6. A variety of waste types were produced as a result of clean-up operations. No waste was sent to the RWMC after 1987.

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

2. Details on physical form(particularly confinement related)
Generally loose waste packaged in the barrels or boxes. The low amounts of radionuclides suggest that no special packaging would be considered necessary.

3. Chemical form:
Plastic, cellulose, and silica.

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

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

6. Other characteristics of interest:

7. Comments (specify number of pertinent question):
1. Also 42 and 44.
5. Also BLX and BXW.

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
Ce-144	Dried solution.	Oxide.	T .39000000000000	CI	1984	1987	N			
Co-60	Dried solution.	Oxide.	T 1.1300000000000	CI	1984	1987	N			
Cs-137	Dried solution.	Oxide.	T 4.7500000000000	CI	1984	1987	N			
Cs-134	Dried solution.	Oxide.	T .59000000000000	CI	1984	1987	N			
Nb-95	Dried solution.	Oxide.	T .54000000000000	CI	1984	1987	N			
Zr-95	Dried solution.	Oxide.	T .28000000000000	CI	1984	1987	N			
U-235	Dried solution.	Oxide.	T .00003000000000	CI	1984	1987	N	-50%	+50%	Professional judgment.
U-238	Dried solution.	Oxide.	T .00200000000000	CI	1984	1987	N	-50%	+50%	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)

The MAP curies were added to the reported Co-60 curies and the MFP curies were added to the Cs-137. It is assumed that the uranium was determined by radiochemical analysis, but the other constituents were determined by a radiation measurement.

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.)
RWMIS printout 1984-93. Interview with W.D. Hanson who served as a health & safety engineer at the facility.

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:
It was not known how the amounts of radionuclide were determined.

8. Key assumptions used to deal with the unknowns:
Assumed that the uranium was determined by analysis, but that the other gamma emitting radionuclides were determined by a radiation measurement.

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION PDT - 282

1. Preparer: Rhodes, Donald W.

2. Date prepared: 07/21/94

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

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

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

6. Waste stream:
Consists primarily of rubble waste resulting from the disassembly and removal of facilities at ARA I, II, and III.

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 1996

9. Waste stream volume:
Amount 1600.0000 Units Cubic meters.
Check box: [ ] annual or [ ] total over all years
Check box: [ ] container volume or [ ] waste volume

10. Comments (specify number of pertinent question):
8. This project has been subject to significant delays due to extensive revision and review requirements.

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

2. Details on physical form(particularly confinement related)
Generally will be large pieces of concrete, etc. resulting from the physical destruction of existing facilities.

3. Chemical form:
Metal (stainless steel), carbon steel, calcium silicate (concrete), plastic, and asbestos.

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):
1. Also 10, 43, and 47.

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
1332-21-4 Asbestos	Solid insulation.	Magnesium silicate.	T 1000000.0000000	GM	1995	1995	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)
The amount of insulation was estimated to be 26 M3. This was converted to weight of asbestos by, 26 cu meters = 918 cuft. Then 918 cuft. x 16 lbs/cuft. x 0.15 asbestos x 464 g/lb = 1.0E+06g.

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
Cs-137	Sorbed on waste solids.	Probably oxides.	T 30.000000000000	CI	1994	1997	Y	N			
Sr-90	Sorbed on waste solids.	Probably oxides.	T 30.000000000000	CI	1994	1997	Y	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)
The waste forecast estimated a total of 30 curies from ARA-I was equally divided between Cs-137 and Sr-90. The estimate for ARA-II and ARA-III was listed as unknown.

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

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

2. Details concerning source (names, report no., dates, etc.)
Solid Radioactive Waste Forecast prepared by J.J. Ellison, Nov. 5, 1993. Discussion with J.J. Ellison. Report, INEL D+D Long-Range Plan, R.J. Buckland, D.J. Kenoyer, and D.H. Preussner, EGG-WM-10924, October 1993.

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:
Radiological contamination level not known for ARA II.

8. Key assumptions used to deal with the unknowns:
Assumed that the unknown radiological contamination levels for ARA II would be small like ARA III.

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 252

1. Preparer: Rhodes, Donald W.

2. Date prepared: 06/21/94

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

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

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

6. Waste stream:
Waste is from the "crushed heat extraction process" following the irradiation of a lithium target to produce tritium.

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

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

9. Waste stream volume:
Amount 22.2000 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [X] container volume or [ ] waste volume

10. Comments (specify number of pertinent question):
6. This was a "one-time" waste produced in the NPR project. It will not be produced again, because the NPR project has been discontinued.
3. CEG = Combustion Engineering-General Atomic.

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

2. Details on physical form(particularly confinement related)
A powder formed by crushing small silicon carbide particles containing the Li target material and Tritium. The powder was placed in plastic or glass bottles and solidified in aquasets or Hi-Lite.

3. Chemical form:
Silicon carbide and Li.

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

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

6. Other characteristics of interest:
The bottles were contained in a plastic bag. This was placed in a carbon steel box that was lined with Roto-mold, a thick plastic.

7. Comments (specify number of pertinent question):
1. Also 44. Physical form #53 is a powder that was mixed as immobilizing agent and allowed to set up.
5. The TX4 box is a standard size box approximately (4'x4'x8'), made of carbon steel and totally lined with Roto-mold, a rigid plastic coating formed in-place.

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
H-3	Contained in solidifying agent.	Tritiated water.	T 1965.0000000000	CI	1993	1993	N	-25%	+25%	Professional judgment.
Th-228	Contained in solidifying agent.	Oxide.	T 2.0000000000000	CI	1993	1993	N	-25%	+25%	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)
The amount of tritium reported as being in the waste was considered to be reasonably accurate, because of close control of the total inventory and radiochemical analysis of the waste.

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

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

2. Details concerning source (names, report no., dates, etc.)
Curie values were obtained from RWMIS. The description and method of handling the waste was obtained from interviews with R.E. Korenke who was the manager in charge of the project and J.A. Cook who was directly involved with the processing and disposal of the waste.

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:
No actual analytical records were found.

8. Key assumptions used to deal with the unknowns:
Interviews with personnel who were directly involved in the project suggested that the uncertainty of the analytical results was low. Therefore a +/-25% uncertainty was assumed.

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 251

1. Preparer: Rhodes, Donald W.

2. Date prepared: 06/22/94

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

4. Particular facility: 617
(building number - use code from attached list)

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

6. Waste stream:
Liquids in vermiculite, sludge, plastic, paper, cloth, carbon steel, and wood.

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 149.8000 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [X] container volume or [ ] waste volume

10. Comments (specify number of pertinent question):
4. Includes 91 M3 of waste disposed of from buildings designated as 665, 669, 674, 690, 691, EBR and EFS but this waste contained <1 Ci of total radionuclides and no apparent hazardous materials. The waste consisted of general laboratory waste, biological waste, a metal tank, soil, gravel, brick, concrete, and rubble. This waste is not reported separately.

1. General physical form (see attached list)
Vermiculite and other sorbents.
[ ] other (specify)

2. Details on physical form(particularly confinement related)
Material was generally packed in a wooden box, but it is possible that the box may have been lined with plastic.

3. Chemical form:
Liquid absorbed in vermiculite, cellulose, and carbon steel constituents (principally Fe and C).

4. Inner packaging: [ ] plastic bag [X] plastic liner
[ ] metal liner [ ] none [X] other (specify)
See 7 below.

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

6. Other characteristics of interest:

7. Comments (specify number of pertinent question):
4. This is not known for sure, but it was common practice to line a box with plastic, especially if one of the waste constituents was sludge.
1. Also 11, 44, 10, and 21.
5. Also BLX and PB3.

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	Absorbed in or on dry materials.	Oxide.	T 1.8000000000000	CI	1984	1993	N			
Cs-137	Absorbed in or on dry materials.	Oxide.	T 1.8000000000000	CI	1984	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)
The radiochemical contamination was reported as MAP and MFP. The curies were assigned to Co-60 for the MAP and to Cs-137 for the MFP. The amount was very likely determined by a radiation reading.

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

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

2. Details concerning source (names, report no., dates, etc.)
RWMIS printout 1984-1993. Waste descriptions were obtained from content codes given in 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:
Radioactivity was reported as MAP and MFP.

8. Key assumptions used to deal with the unknowns:
The values for radioactivity were assigned to Co-60 and Cs-137. The amount for each was small (1.8 Ci) and thus did not justify trying to assign values to other radionuclides. The values were probably obtained by a radiation reading.

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION PDT - 284

1. Preparer: Rhodes, Donald W.

2. Date prepared: 07/21/94

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

4. Particular facility: 625
(building number - use code from attached list)

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

6. Waste stream:
Principally protective clothing and personnel protective equipment.

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 1000.0000 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [X] container volume or [ ] waste volume

10. Comments (specify number of pertinent question):
4. Also includes other CFA facilities.

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

2. Details on physical form(particularly confinement related)
Waste would be in the form of coveralls, respirators and other protective items.

3. Chemical form:
Cloth, plastic, and possibly some rubber.

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):
1. Also 23.
5. Also BXC, PB3, and O.

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
Ni-63			T .01500000000000	CI	1994	2003	Y	N			
Cs-137			T .02400000000000	CI	1994	2003	Y	N			
Co-60			T .02400000000000	CI	1994	2003	Y	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
[X] generator forecasts
[ ] other

2. Details concerning source (names, report no., dates, etc.)
Solid Radioactive Waste Forecast prepared by D. Miller and G. Lewis-Kido, September 1993. Conversation with G. Lewis-Kido.

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:
Normal uncertainties with respect to long-range projects.

8. Key assumptions used to deal with the unknowns:
Assumed that changes in long-range programs would have little effect, because the total radiological contamination is expected to be low (<1Ci).

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 260

1. Preparer: Rhodes, Donald W.

2. Date prepared: 07/11/94

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

4. Particular facility: 601
(building number - use code from attached list)

5. Number of waste stream from this facility:
8R

6. Waste stream:
Waste resulting from the replacement and/or removal for disposal of equipment and decontamination of the 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 1992

9. Waste stream volume:
Amount 630.8000 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [X] container volume or [ ] waste volume

10. Comments (specify number of pertinent question):
6. The primary purpose of this facility was to reprocess Navy and test reactor fuels to recover the unburned uranium. The processing of fuel at the ICPP was discontinued in 1992.

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

2. Details on physical form(particularly confinement related)
Waste materials were generally loose material placed in boxes.

3. Chemical form:
Metal, ferrous and non-ferrous, silica (glass), silicates (concrete and brick), aluminosilicates (soil and gravel), and asbestos.

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):
1. Also 21, 23, 41, 42, 44, and 47.
6. Also PB3.

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
1332-21-4 Asbestos	Solid insulation.	Magnesium silicate.	T 285000.00000000	GM	1991	1991	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)

The asbestos was reported on the waste disposal forms as a percentage of the total volume. The total insulation for 7 shipments was 256ft3. 256ft3 x 16lb/ft3 x 0.15 asbestos x 464g/lb = 2.85E+05g asbestos. The other 85% of the lagging was magnesia and magnesium carbonate.

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	Sorbed on waste solid surfaces.	Probably oxide.	T 34.200000000000	CI	1984	1992	N			
Cs-137	Sorbed on waste solid surfaces.	Probably oxide.	T 11.900000000000	CI	1984	1992	N			
Nb-95	Sorbed on waste solid surfaces.	Probably oxide.	T 5.3000000000000	CI	1984	1992	N			
Pr-144	Sorbed on waste solid surfaces.	Probably oxide.	T 33.600000000000	CI	1984	1992	N			
Rh-106	Sorbed on waste solid surfaces.	Probably oxide.	T 17.200000000000	CI	1984	1992	N			
Ru-106	Sorbed on waste solid surfaces.	Probably oxide.	T 17.200000000000	CI	1984	1992	N			
Sb-125	Sorbed on waste solid surfaces.	Probably oxide.	T 7.6000000000000	CI	1984	1992	N			
Sr-90	Sorbed on waste solid surfaces.	Probably oxide.	T 17.200000000000	CI	1984	1992	N			
Y-90	Sorbed on waste solid surfaces.	Probably oxide.	T 17.200000000000	CI	1984	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)

Although no radiochemical analysis was made, the values for the radionuclides were determined by taking a radiation reading, then entering this value into a computer program that determines the total amount for each radionuclide, including Sr-90 and Y-90.

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
Zr-95	Sorbed on waste solid surfaces.	Probably oxide.	T 5.3000000000000	CI	1984	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)
Although no radiochemical analysis was made, the values for the radionuclides were determined by taking a radiation reading, then entering this value into a computer program that determines the total amount for each radionuclide, including Sr-90 and Y-90.

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

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

2. Details concerning source (names, report no., dates, etc.)
RWMIS printout for 1984-93. Tech Note data compiled from RWMIS by C.J. Barnard and M.J. Schlafman. Conversation with K.L. Miller and R.L. Smith, WINCO employees.

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:
The exact volume of the asbestos is not known, because the volume was estimated by the shipper and varied from 5% to 100% of the total for a given shipment.

8. Key assumptions used to deal with the unknowns:
Assumed that the shipper's estimate was reasonably correct. It may be a high estimate, because the box would have a considerable amount of void space that would be difficult to estimate.

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 261

1. Preparer: Rhodes, Donald W.

2. Date prepared: 07/11/94

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

4. Particular facility: 604
(building number - use code from attached list)

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

6. Waste stream:
The waste consisted of pieces of equipment that were replaced; insulated piping, contaminated soil, and general cleaning materials, such as cloth, paper, plastic and filters.

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

8. Actual years disposed of at SDA:
Starting year 1988 Ending year 1992

9. Waste stream volume:
Amount 233.4000 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [X] container volume or [ ] waste volume

10. Comments (specify number of pertinent question):
6. This building houses the PEW evaporator and the Rare Gas plant, which are waste treatment units.

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

2. Details on physical form(particularly confinement related)
The waste materials were placed in boxes lined with plastic.
No special effort was made to produce a non-leachable waste.

3. Chemical form:
Metal (stainless steel), fiberglass (filters), silica (glass), aluminosilicates (soil), and plastic.

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):
1. Also 21, 22, 41, 42, 43, 44, and 47.
5. Also PB3.

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
1332-21-4 Asbestos	Solid insulation.	Magnesium silicate.	T 228000.00000000	GM	1988	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)

The shipments containing the insulation were reported to contain from 70% to 90% insulation. The asbestos was determined by taking the total volume of insulation and calculating the amount of asbestos as follows: 205ft3 insulation x 16lb/ft3 x 0.15 asbestos x 464 glb = 2.28E+05g asbestos. The other 85% of the pipe insulation was magnesia and magnesium carbonate.

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	Sorbed on waste solid surface.	Probably oxide.	T 9.1000000000000	CI	1988	1992	N			
Cs-137	Sorbed on waste solid surface.	Probably oxide.	T 5.9000000000000	CI	1988	1992	N			
Nb-95	Sorbed on waste solid surface.	Probably oxide.	T 1.4000000000000	CI	1988	1992	N			
Pr-144	Sorbed on waste solid surface.	Probably oxide.	T 9.1000000000000	CI	1988	1992	N			
Rh-106	Sorbed on waste solid surface.	Probably oxide.	T 4.6000000000000	CI	1988	1992	N			
Ru-106	Sorbed on waste solid surface.	Probably oxide.	T 4.6000000000000	CI	1988	1992	N			
Sb-125	Sorbed on waste solid surface.	Probably oxide.	T 2.0000000000000	CI	1988	1992	N			
Sr-90	Sorbed on waste solid surface.	Probably oxide.	T 4.6000000000000	CI	1988	1992	N			
Y-90	Sorbed on waste solid surface.	Probably oxide.	T 4.6000000000000	CI	1988	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)
Although no radiochemical analysis was done, the radiation reading was entered into a computer program that determines the amount of each radionuclide present, including Sr-90 and Y-90.

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
Zr-95	Sorbed on waste solid surface.	Probably oxide.	T 1.4000000000000	CI	1988	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)
Although no radiochemical analysis was done, the radiation reading was entered into a computer program that determines the amount of each radionuclide present, including Sr-90 and Y-90.

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

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

2. Details concerning source (names, report no., dates, etc.)
RWMIS printout 1984-93. Tech Note data compiled from RWMIS by C. J. Barnard and M.J. Schlafman. Conversation with K.L. Miller and R.L. Smith, WINCO employees.

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:
The amount of insulation containing asbestos was estimated by the shipper.

8. Key assumptions used to deal with the unknowns:
Assumed that estimate of the amount of pipe insulation was reasonably accurate.

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 262

1. Preparer: Rhodes, Donald W.

2. Date prepared: 07/11/94

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

4. Particular facility: 605
(building number - use code from attached list)

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

6. Waste stream:
HEPA filters, metal, soil and concrete, and cleanup materials, such as paper, cloth, and plastic.

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

8. Actual years disposed of at SDA:
Starting year 1988 Ending year 1992

9. Waste stream volume:
Amount 88.8000 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [X] container volume or [ ] waste volume

10. Comments (specify number of pertinent question):
4. This facility contains the blowers for cleanup of the off-gas before it is released through the stack.
6. In addition to normal off-gas cleanup, replacement and modification of equipment contributed to the waste.

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

2. Details on physical form(particularly confinement related)
Individual waste items were placed in plastic lined boxes for transport to the RWMC.

3. Chemical form:
Fiberglass (filters), plastic, aluminosilicates (soil), and metal (stainless steel).

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):
1. Also 21, 41, 44, and 10.
5. Also PB3.

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
Ce-144	Sorbed on surfaces of waste solids.	Probably oxides.	T 20.100000000000	CI	1988	1992	N			
Cs-137	Sorbed on surfaces of waste solids.	Probably oxides.	T 10.200000000000	CI	1988	1992	N			
Nb-95	Sorbed on surfaces of waste solids.	Probably oxides.	T 3.2000000000000	CI	1988	1992	N			
Pr-144	Sorbed on surfaces of waste solids.	Probably oxides.	T 2.0000000000000	CI	1988	1992	N			
Rh-106	Sorbed on surfaces of waste solids.	Probably oxides.	T 10.200000000000	CI	1988	1992	N			
Ru-106	Sorbed on surfaces of waste solids.	Probably oxides.	T 10.200000000000	CI	1988	1992	N			
Sb-125	Sorbed on surfaces of waste solids.	Probably oxides.	T 4.5000000000000	CI	1988	1992	N			
Sr-90	Sorbed on surfaces of waste solids.	Probably oxides.	T 10.200000000000	CI	1988	1992	N			
Y-90	Sorbed on surfaces of waste solids.	Probably oxides.	T 10.200000000000	CI	1988	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)
The values for the radionuclides were obtained by entering a radiation reading into a computer program that determined the value for each radionuclide, including Sr-90 and Y-90.

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
Zr-95	Sorbed on surfaces of waste solids.	Probably oxides.	T 3.2000000000000	CI	1988	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)

The values for the radionuclides were obtained by entering a radiation reading into a computer program that determined the value for each radionuclide, including Sr-90 and Y-90.

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

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

2. Details concerning source (names, report no., dates, etc.)
RWMIS printout 1984-1993. Tech Note data compiled from RWMIS by C.J. Barnard and M.J. Schlafman. Conversation with K.L. Miller and R.L. Smith, WINCO employees.

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:
No analytical analysis was made for the radiological contaminants.

8. Key assumptions used to deal with the unknowns:
Assumed that the computer program for converting the radiation readings to individual radionuclides was reasonably accurate.

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 263

1. Preparer: Rhodes, Donald W.

2. Date prepared: 07/11/94

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

4. Particular facility: 610
(building number - use code from attached list)

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

6. Waste stream:
This waste stream originated from CPP-610 building which was used as a collection point for waste from several areas at CPP. The RWMIS printout contained 38 content codes that included building materials, various types of equipment, general cleanup materials, metals, filters and many other items.

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 4474.0000 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [X] container volume or [ ] waste volume

10. Comments (specify number of pertinent question):
6. The 610 building was used to collect waste materials that were removed periodically and transported to the RWMC during the period 1984 to 1992. In 1992, the building itself was demolished and the building materials buried at the RWMC. The waste from CPP-610 made up 62% of the total volume and 46% of the total curies received at the RWMC from the ICPP during the period of 1984-1993.

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

2. Details on physical form(particularly confinement related)
Waste included metallic equipment used at CPP-603, such as fuel racks and yokes. Also construction materials, cleanup materials, filters, fuel charging casks, and liquids solidified in Portland cement. Also lead in bricks and sheets.

3. Chemical form:
Metals (stainless steel, carbon steel, and aluminum), fiberglass (filters), aluminosilicates (soil), asphalt (roofing material), lead, and plastic.

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):
1. Also 7, 21, 22, 23, 41, 42, 43, and 44.
5. Also BXM, I, O, and PB3.

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	Sheets and bricks.	Metal.	T 15000000.000000	GM	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)

The lead was undoubtedly used for shielding and was in the form of both sheets and bricks. It was contained in wooden boxes and was buried in the time period 02/03/84 to 05/23/84. It was only slightly contaminated (total of 0.4 Ci).

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	Sorbed on waste solids.	Probably oxides.	T 96.100000000000	CI	1984	1992	N			
Co-60	Sorbed on waste solids.	Probably oxides.	T .20000000000000	CI	1984	1992	N			
Cs-134	Sorbed on waste solids.	Probably oxides.	T .10000000000000	CI	1984	1992	N			
Cs-137	Sorbed on waste solids.	Probably oxides.	T 126.90000000000	CI	1984	1992	N			
Eu-152	Sorbed on waste solids.	Probably oxides.	T 6.2000000000000	CI	1984	1992	N			
Eu-154	Sorbed on waste solids.	Probably oxides.	T 4.3000000000000	CI	1984	1992	N			
Eu-155	Sorbed on waste solids.	Probably oxides.	T .90000000000000	CI	1984	1992	N			
Nb-95	Sorbed on waste solids.	Probably oxides.	T 15.100000000000	CI	1984	1992	N			
Pr-144	Sorbed on waste solids.	Probably oxides.	T 96.100000000000	CI	1984	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)
99.4 Ci was reported as MFP. This was divided equally between Cs-137 and Sr-90 in the above table.

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
Rh-106	Sorbed on waste solids.	Probably oxides.	T 48.800000000000	CI	1984	1992	N			
Ru-106	Sorbed on waste solids.	Probably oxides.	T 48.800000000000	CI	1984	1992	N			
Sb-125	Sorbed on waste solids.	Probably oxides.	T 23.800000000000	CI	1984	1992	N			
Sr-90	Sorbed on waste solids.	Probably oxides.	T 100.20000000000	CI	1984	1992	N			
Y-90	Sorbed on waste solids.	Probably oxides.	T 51.200000000000	CI	1984	1992	N			
Zr-95	Sorbed on waste solids.	Probably oxides.	T 15.100000000000	CI	1984	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)
99.4 Ci was reported as MFP. This was divided equally between Cs-137 and Sr-90 in the above table.

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

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

2. Details concerning source (names, report no., dates, etc.)
RWMIS printout 1984-1993. Tech Note data compiled from RWMIS by C.J. Barnard and M.J. Schlafman. Conversation with R.D. Denny, WINCO employee.

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:
The radionuclide inventory included nearly 100 Ci of MFP.

8. Key assumptions used to deal with the unknowns:
The MFP was assumed to be 50% Cs-137 and 50% Sr-90, both of which are common constituents of CPP waste.

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 264

1. Preparer: Rhodes, Donald W.

2. Date prepared: 07/12/94

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

4. Particular facility: 649
(building number - use code from attached list)

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

6. Waste stream:
This waste is produced in the facility that contains the atmospheric protection system for treating the off-gas from the plant.

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 89.9000 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [X] container volume or [ ] waste volume

10. Comments (specify number of pertinent question):
A major upgrade of this facility was completed in 1984. Approximately 98.7% of the total curies sent from this facility to the RWMC was shipped in 1984.

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

2. Details on physical form(particularly confinement related)
Contaminated construction materials were disposed of during the installation of a new atmospheric protection system. Filters were disposed of routinely.

3. Chemical form:
Metal (stainless steel), fiberglass (filters), cellulose (paper), aluminosilicates (soil), and calcium silicate (concrete).

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):
1. Also 12, 21, 22, 23, 41, 42, 43, and 44.
5. Also PB3.

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
Ce-144	Sorbed on waste solids.	Probably oxides.	T 39.100000000000	CI	1984	1992	N			
Cs-137	Sorbed on waste solids.	Probably oxides.	T 19.900000000000	CI	1984	1992	N			
Nb-95	Sorbed on waste solids.	Probably oxides.	T 6.2000000000000	CI	1984	1992	N			
Pr-144	Sorbed on waste solids.	Probably oxides.	T 39.100000000000	CI	1984	1992	N			
Rh-106	Sorbed on waste solids.	Probably oxides.	T 19.900000000000	CI	1984	1992	N			
Ru-106	Sorbed on waste solids.	Probably oxides.	T 19.900000000000	CI	1984	1992	N			
Sb-125	Sorbed on waste solids.	Probably oxides.	T 8.7000000000000	CI	1984	1992	N			
Sr-90	Sorbed on waste solids.	Probably oxides.	T 19.900000000000	CI	1984	1992	N			
Y-90	Sorbed on waste solids.	Probably oxides.	T 19.900000000000	CI	1984	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)
Most of this contamination was probably contained in a prefilter system that was replaced with a removable system in 1984.

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
Zr-95	Sorbed on waste solids.	Probably oxides.	T 6.2000000000000	CI	1984	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)
Most of this contamination was probably contained in a prefilter system that was replaced with a removable system in 1984.

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

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

2. Details concerning source (names, report no., dates, etc.)
RWMIS printout 1984-93. Tech Note data compiled from RWMIS by C.J. Barnard and M.J. Schlafman. Conversation with F.S. Ward, a WINCO employee.

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:
Not clear from the published data why the radioactive contamination was produced predominately in 1984.

8. Key assumptions used to deal with the unknowns:
Resolved this in a conversation with F.S. Ward, who was responsible for the operation of this system.

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 265

1. Preparer: Rhodes, Donald W.

2. Date prepared: 07/15/94

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

4. Particular facility: 659
(building number - use code from attached list)

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

6. Waste stream:
This waste was produced at the New Waste Calcining Facility. It consists of metals, construction materials and cleanup materials resulting from modifications, operation, and decontamination of the 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 1992

9. Waste stream volume:
Amount 397.8000 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [X] container volume or [ ] 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)
Waste consisted of materials from upgrading of the facility, such as metals, concrete, filters and cleanup materials.

3. Chemical form:
Metal (stainless steel and aluminum), cellulose (paper), plastic, and calcium silicate (concrete).

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):
1. Also 21, 22, 41, 42, 43, and 44.
5. Also BXM, O, and PB3.

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
Ce-144	Sorbed on waste solids.	Probably oxides.	T 11.000000000000	CI	1984	1992	N			
Co-60	Sorbed on waste solids.	Probably oxides.	T .00000580000000	CI	1984	1992	N			
Cs-134	Sorbed on waste solids.	Probably oxides.	T .00000027000000	CI	1984	1992	N			
Cs-137	Sorbed on waste solids.	Probably oxides.	T 5.3000000000000	CI	1984	1992	N			
Eu-154	Sorbed on waste solids.	Probably oxides.	T .00000050000000	CI	1984	1992	N			
Nb-95	Sorbed on waste solids.	Probably oxides.	T 1.7000000000000	CI	1984	1992	N			
Pr-144	Sorbed on waste solids.	Probably oxides.	T 10.000000000000	CI	1984	1992	N			
Rh-106	Sorbed on waste solids.	Probably oxides.	T 5.3000000000000	CI	1984	1992	N			
Ru-106	Sorbed on waste solids.	Probably oxides.	T 5.3000000000000	CI	1984	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)
No radiochemical analysis was available. The amounts of radiochemical contaminants were determined by entering radiation readings into a computer program that produced the amounts of radionuclides present, including Sr-90 and Y-90.

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	Sorbed on waste solids.	Probably oxides.	T 2.4000000000000	CI	1984	1992	N			
Sr-90	Sorbed on waste solids.	Probably oxides.	T 5.3000000000000	CI	1984	1992	N			
Y-90	Sorbed on waste solids.	Probably oxides.	T 5.3000000000000	CI	1984	1992	N			
Zr-95	Sorbed on waste solids.	Probably oxides.	T 1.7000000000000	CI	1984	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)
No radiochemical analysis was available. The amounts of radiochemical contaminants were determined by entering radiation readings into a computer program that produced the amounts of radionuclides present, including Sr-90 and Y-90.

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

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

2. Details concerning source (names, report no., dates, etc.)
RWMIS printout 1984-93. Tech Note data compiled from RWMIS by C.J. Barnard and M.J. Schlafman. Interview with K.L. Miller, a WINCO employee.

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:
Seemed to be relatively low radiochemical contamination for a facility that handles very high curie material.

8. Key assumptions used to deal with the unknowns:
Verified that most of the contamination produced at this facility is picked up by acid decontamination washes and returned to the waste storage tanks for calcination.

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 266

1. Preparer: Rhodes, Donald W.

2. Date prepared: 07/13/94

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

4. Particular facility: 666
(building number - use code from attached list)

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

6. Waste stream:
This waste stream was assumed to be one stream made up of waste from 16 different buildings, none of which contained significant amounts of radioactivity compared to the streams from other buildings at the ICPP. (See 10.)

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 1110.5000 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [X] container volume or [ ] waste volume

10. Comments (specify number of pertinent question):
4. Includes the following facilities: CPP-602, 603, 608, 617, 627, 633, 637, 640, 663, 672, 749, DCF, S21, S71, and TFA.
6. The total waste contained only about 3% of the total radioactivity produced at the ICPP during the time period 1984-1993.

1. General physical form (see attached list)
Combustibles (paper, cloth, wood, etc.)
[X] other (specify)
7.

2. Details on physical form(particularly confinement related)
Generally construction materials, cleanup materials, fuel charging casks, and liquids solidified in Portland cement.

3. Chemical form:
Metal (stainless steel, carbon steel, and aluminum), cellulose, (paper), plastic, aluminosilicates (soil), and calcium silicate (concrete).

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):
1. Also 10, 41, 42, 43, and 47.
5. Also PB3, O, BXM, and I.

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
1332-21-4 Asbestos	Insulation.	Magnesium silicate.	T 710000.00000000	GM	1991	1991	N			
7439-92-1 Lead	Fuel charging casks.	Metal.	T 63000000.000000	GM	1984	1984	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)
The asbestos disposed of at the RWMC was produced by a laboratory renovation and asbestos removal project that was ongoing at the ICPP (primarily the 602 building) during the year 1991. The amount of asbestos was calculated assuming the insulation was 15% asbestos and the rest was magnesia and hydrated magnesium carbonate.

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	Sorbed on waste solids.	Probably oxides.	T 9.2000000000000	CI	1984	1992	N			
Cs-137	Sorbed on waste solids.	Probably oxides.	T 3.2000000000000	CI	1984	1992	N			
Nb-95	Sorbed on waste solids.	Probably oxides.	T 1.4000000000000	CI	1984	1992	N			
Pr-144	Sorbed on waste solids.	Probably oxides.	T 9.1000000000000	CI	1984	1992	N			
Rh-106	Sorbed on waste solids.	Probably oxides.	T 4.6000000000000	CI	1984	1992	N			
Ru-106	Sorbed on waste solids.	Probably oxides.	T 4.6000000000000	CI	1984	1992	N			
Sb-125	Sorbed on waste solids.	Probably oxides.	T 2.1000000000000	CI	1984	1992	N			
Y-90	Sorbed on waste solids.	Probably oxides.	T 4.6000000000000	CI	1984	1992	N			
Zr-95	Sorbed on waste solids.	Probably oxides.	T 1.4000000000000	CI	1984	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)
The curies for the individual radionuclides were determined by assuming that the distribution was the same as that for CPP-601, the fuel processing facility. The total curies for all of the 16 buildings was then divided up according to that distribution.

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	Sorbed on waste solids.	Probably oxides.	T 4.6000000000000	CI	1984	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)
The curies for the individual radionuclides were determined by assuming that the distribution was the same as that for CPP-601, the fuel processing facility. The total curies for all of the 16 buildings was then divided up according to that distribution.

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

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

2. Details concerning source (names, report no., dates, etc.)
RWMIS printout 1984-93. Tech Note data compiled from RWMIS by C.J. Barnard and M.J. Schlafman.

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:
The total amount for each radionuclide was not known, but the total curies were known.

8. Key assumptions used to deal with the unknowns:
Assumed that the distribution for the radionuclides in this stream was the same as the distribution reported for CPP-601 building, the fuel processing facility. This is probably a reasonable assumption, because the total radioactivity for this stream was only 3% of the total for all of the CPP during the time period 1984-92.

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION RDT - 267

1. Preparer: Rhodes, Donald W.

2. Date prepared: 07/12/94

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

4. Particular facility: 684
(building number - use code from attached list)

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

6. Waste stream:
This waste stream originated from the Remote Analytical Facility and consisted of metal, construction materials, and cleanup materials.

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

8. Actual years disposed of at SDA:
Starting year 1987 Ending year 1992

9. Waste stream volume:
Amount 145.0000 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [X] container volume or [ ] waste volume

10. Comments (specify number of pertinent question):
6. Most of the radioactive waste (96%) was produced in 1988 during startup of the facility.

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

2. Details on physical form(particularly confinement related)
Final construction and testing of the facility produced metals and construction materials as waste. Routine operation produced very little.

3. Chemical form:
Metal (stainless steel), cellulose (paper), silica (glass), and plastic.

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):
1. Also 21, 41, and 42.

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
Ce-144	Sorbed on waste solids.	Probably oxides.	T 23.300000000000	CI	1987	1992	N			
Cs-137	Sorbed on waste solids.	Probably oxides.	T 13.900000000000	CI	1987	1992	N			
Nb-95	Sorbed on waste solids.	Probably oxides.	T 3.5000000000000	CI	1987	1992	N			
Pr-144	Sorbed on waste solids.	Probably oxides.	T 21.400000000000	CI	1987	1992	N			
Rh-106	Sorbed on waste solids.	Probably oxides.	T 11.400000000000	CI	1987	1992	N			
Ru-106	Sorbed on waste solids.	Probably oxides.	T 11.400000000000	CI	1987	1992	N			
Sb-125	Sorbed on waste solids.	Probably oxides.	T 5.0000000000000	CI	1987	1992	N			
Sr-90	Sorbed on waste solids.	Probably oxides.	T 11.400000000000	CI	1987	1992	N			
Y-90	Sorbed on waste solids.	Probably oxides.	T 11.400000000000	CI	1987	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
Zr-95	Sorbed on waste solids.	Probably oxides.	T 3.5000000000000	CI	1987	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)

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

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

2. Details concerning source (names, report no., dates, etc.)
RWMIS printout 1984-93. Tech Note data compiled from RWMIS by C.J. Barnard and M.J. Schlafman.

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 - 281

1. Preparer: Rhodes, Donald W.

2. Date prepared: 07/19/94

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

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

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

6. Waste stream:
This waste stream includes waste, such as construction materials and cleanup materials, from all areas at the CPP that will be shipped directly to the RWMC for burial.

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 57000.0000 Units Cubic meters.
Check box: [ ] annual or [X] total over all years
Check box: [X] container volume or [ ] waste volume

10. Comments (specify number of pertinent question):
9. Over the period of 1994-2003, the smallest annual volume was estimated to be 435 M3 per year and the largest volume 944 M3 per year.

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

2. Details on physical form(particularly confinement related)
Construction materials and cleanup materials.

3. Chemical form:
Probably metal, silicates, aluminates, fiberglass, and plastic.

4. Inner packaging: [ ] plastic bag [X] plastic liner
[ ] metal liner [ ] none [X] other (specify)
See 7 below.

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

6. Other characteristics of interest:

7. Comments (specify number of pertinent question):
1. Probably also 10, 22, 23, 42, 43, and 44.
4. Assumed that the wooden boxes will be lined with plastic, which is a common practice now.

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
Cs-137	Sorbed on waste solids.	Probably oxides.	T 414.20000000000	CI	1994	2003	Y	N			
Ce-144	Sorbed on waste solids.	Probably oxides.	T 15.100000000000	CI	1994	2003	Y	N			
Pr-144	Sorbed on waste solids.	Probably oxides.	T 15.100000000000	CI	1994	2003	Y	N			
Eu-154	Sorbed on waste solids.	Probably oxides.	T 3.8000000000000	CI	1994	2003	Y	N			
Eu-155	Sorbed on waste solids.	Probably oxides.	T 2.5000000000000	CI	1994	2003	Y	N			
H-3	Sorbed on waste solids.	Probably oxides.	T .25000000000000	CI	1994	2003	Y	N	-50%	+50%	Professional judgment.
Co-60	Sorbed on waste solids.	Probably oxides.	T .25000000000000	CI	1994	2003	Y	N			
Sr-90	Sorbed on waste solids.	Probably oxides.	T 389.10000000000	CI	1994	2003	Y	N			
Y-90	Sorbed on waste solids.	Probably oxides.	T 389.10000000000	CI	1994	2003	Y	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)
These estimates are based on existing or planned future programs of the ICPP which could be changed significantly at some future date. Waste was listed as being produced each year during the time period 1994-2003.

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
Ru-106	Sorbed on waste solids.	Probably oxides.	T 2.5000000000000	CI	1994	2003	Y	N			
Rh-106	Sorbed on waste solids.	Probably oxides.	T 2.5000000000000	CI	1994	2003	Y	N			
Sb-125	Sorbed on waste solids.	Probably oxides.	T 3.2300000000000	CI	1994	2003	Y	N			
I-129	Sorbed on waste solids.	Probably oxides.	T .04000000000000	CI	1994	2003	Y	N	-50%	+50%	Professional judgment.
Cs-134	Sorbed on waste solids.	Probably oxides.	T 17.600000000000	CI	1994	2003	Y	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)
These estimates are based on existing or planned future programs of the ICPP which could be changed significantly at some future date. Waste was listed as being produced each year during the time period 1994-2003.

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

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

2. Details concerning source (names, report no., dates, etc.)
Values obtained from Radioactive Waste Forecast (RLS-018-93) prepared by J.R. Hitz and approved by R.L. Skinner, 11/15/93. Conversation with J.P. Hitz, a WINCO employee.

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:
The projects that will produce the waste are tentative and could change in the future.

8. Key assumptions used to deal with the unknowns:
Assumed that the projects existing, or planned for the future, are valid.