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-236	Resin.	Unknown.	A .02949000000000	CI	1975	1975	N			See comment below.
Np-237	Resin.	Unknown.	A .04510000000000	CI	1975	1975	N			See comment below.
Pu-238	Resin.	Unknown.	A 3.1220000000000	CI	1975	1975	N			See comment below.
Pu-239	Resin.	Unknown.	A .79780000000000	CI	1975	1975	N			See comment below.
Pu-240	Resin.	Unknown.	A .48560000000000	CI	1975	1975	N			See comment below.
Pu-241	Resin.	Unknown.	A 260.20000000000	CI	1975	1975	N			See comment below.
Am-241	Resin.	Unknown.	A 69.380000000000	CI	1975	1975	N			See comment below.
Cm-242	Resin.	Unknown.	A 4.8560000000000	CI	1975	1975	N			See comment below.
Cm-244	Resin.	Unknown.	A 2.2550000000000	CI	1975	1975	N			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)
Basis for uncertainty - estimate of precision of measurement technique.

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	Resin.	Unknown.	A 8.6720000000000	CI	1976	1976	N			See comment below.
C-14	Resin.	Unknown.	A 74.580000000000	CI	1976	1976	N			See comment below.
Fe-55	Resin.	Unknown.	A 3469.0000000000	CI	1976	1976	N			See comment below.
Ni-59	Resin.	Unknown.	A 48.560000000000	CI	1976	1976	N			See comment below.
Ni-63	Resin.	Unknown.	A 4856.0000000000	CI	1976	1976	N			See comment below.
Co-60	Resin.	Unknown.	A 11790.000000000	CI	1976	1976	N			See comment below.
Sr-90	Resin.	Unknown.	A 4856.0000000000	CI	1976	1976	N			See comment below.
Tc-99	Resin.	Unknown.	A .26020000000000	CI	1976	1976	N			See comment below.
I-129	Resin.	Unknown.	A .00107540000000	CI	1976	1976	N			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)
Basis for uncertainty - estimate of precision of measurement technique.

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	Resin.	Unknown.	A 5377.0000000000	CI	1976	1976	N			See comment below.
Ce-144	Resin.	Unknown.	A 133.60000000000	CI	1976	1976	N			See comment below.
Eu-154	Resin.	Unknown.	A 126.60000000000	CI	1976	1976	N			See comment below.
Eu-155	Resin.	Unknown.	A 53.770000000000	CI	1976	1976	N			See comment below.
U-234	Resin.	Unknown.	A .07285000000000	CI	1976	1976	N			See comment below.
U-235	Resin.	Unknown.	A .00159600000000	CI	1976	1976	N			See comment below.
U-236	Resin.	Unknown.	A .02949000000000	CI	1976	1976	N			See comment below.
Np-237	Resin.	Unknown.	A .04510000000000	CI	1976	1976	N			See comment below.
Pu-238	Resin.	Unknown.	A 3.1220000000000	CI	1976	1976	N			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)
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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	Resin.	Unknown.	A .79780000000000	CI	1976	1976	N			See comment below.
Pu-240	Resin.	Unknown.	A .48560000000000	CI	1976	1976	N			See comment below.
Pu-241	Resin.	Unknown.	A 260.20000000000	CI	1976	1976	N			See comment below.
Am-241	Resin.	Unknown.	A 69.380000000000	CI	1976	1976	N			See comment below.
Cm-242	Resin.	Unknown.	A 4.8560000000000	CI	1976	1976	N			See comment below.
Cm-244	Resin.	Unknown.	A 2.2550000000000	CI	1976	1976	N			See comment below.
H-3	Resin.	Unknown.	A 8.6720000000000	CI	1977	1977	N			See comment below.
C-14	Resin.	Unknown.	A 74.580000000000	CI	1977	1977	N			See comment below.
Fe-55	Resin.	Unknown.	A 3469.0000000000	CI	1977	1977	N			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)
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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
Ni-59	Resin.	Unknown.	A 48.560000000000	CI	1977	1977	N			See comment below.
Ni-63	Resin.	Unknown.	A 4856.0000000000	CI	1977	1977	N			See comment below.
Co-60	Resin.	Unknown.	A 11790.000000000	CI	1977	1977	N			See comment below.
Sr-90	Resin.	Unknown.	A 4856.0000000000	CI	1977	1977	N			See comment below.
Tc-99	Resin.	Unknown.	A .26020000000000	CI	1977	1977	N			See comment below.
I-129	Resin.	Unknown.	A .00107540000000	CI	1977	1977	N			See comment below.
Cs-137	Resin.	Unknown.	A 5377.0000000000	CI	1977	1977	N			See comment below.
Ce-144	Resin.	Unknown.	A 133.60000000000	CI	1977	1977	N			See comment below.
Eu-154	Resin.	Unknown.	A 126.60000000000	CI	1977	1977	N			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.
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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	Resin.	Unknown.	A 53.770000000000	CI	1977	1977	N			See comment below.
U-234	Resin.	Unknown.	A .07285000000000	CI	1977	1977	N			See comment below.
U-235	Resin.	Unknown.	A .00159600000000	CI	1977	1977	N			See comment below.
U-236	Resin.	Unknown.	A .02949000000000	CI	1977	1977	N			See comment below.
Np-237	Resin.	Unknown.	A .04510000000000	CI	1977	1977	N			See comment below.
Pu-238	Resin.	Unknown.	A 3.1220000000000	CI	1977	1977	N			See comment below.
Pu-239	Resin.	Unknown.	A .79780000000000	CI	1977	1977	N			See comment below.
Pu-240	Resin.	Unknown.	A .48560000000000	CI	1977	1977	N			See comment below.
Pu-241	Resin.	Unknown.	A 260.20000000000	CI	1977	1977	N			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)
Basis for uncertainty - estimate of precision of measurement technique.

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
Am-241	Resin.	Unknown.	A 69.380000000000	CI	1977	1977	N			See comment below.
Cm-242	Resin.	Unknown.	A 4.8560000000000	CI	1977	1977	N			See comment below.
Cm-244	Resin.	Unknown.	A 2.2550000000000	CI	1977	1977	N			See comment below.
H-3	Resin.	Unknown.	A 8.6720000000000	CI	1978	1978	N			See comment below.
C-14	Resin.	Unknown.	A 74.580000000000	CI	1978	1978	N			See comment below.
Fe-55	Resin.	Unknown.	A 3469.0000000000	CI	1978	1978	N			See comment below.
Ni-59	Resin.	Unknown.	A 48.560000000000	CI	1978	1978	N			See comment below.
Ni-63	Resin.	Unknown.	A 4856.0000000000	CI	1978	1978	N			See comment below.
Co-60	Resin.	Unknown.	A 11790.000000000	CI	1978	1978	N			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.
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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	Resin.	Unknown.	A 4856.0000000000	CI	1978	1978	N			See comment below.
Tc-99	Resin.	Unknown.	A .26020000000000	CI	1978	1978	N			See comment below.
I-129	Resin.	Unknown.	A .00107540000000	CI	1978	1978	N			See comment below.
Cs-137	Resin.	Unknown.	A 5377.0000000000	CI	1978	1978	N			See comment below.
Ce-144	Resin.	Unknown.	A 133.60000000000	CI	1978	1978	N			See comment below.
Eu-154	Resin.	Unknown.	A 126.60000000000	CI	1978	1978	N			See comment below.
Eu-155	Resin.	Unknown.	A 53.770000000000	CI	1978	1978	N			See comment below.
U-234	Resin.	Unknown.	A .07285000000000	CI	1978	1978	N			See comment below.
U-235	Resin.	Unknown.	A .00159600000000	CI	1978	1978	N			See comment below.

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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-236	Resin.	Unknown.	A .02949000000000	CI	1978	1978	N			See comment below.
Np-237	Resin.	Unknown.	A .04510000000000	CI	1978	1978	N			See comment below.
Pu-238	Resin.	Unknown.	A 3.1220000000000	CI	1978	1978	N			See comment below.
Pu-239	Resin.	Unknown.	A .79780000000000	CI	1978	1978	N			See comment below.
Pu-240	Resin.	Unknown.	A .48560000000000	CI	1978	1978	N			See comment below.
Pu-241	Resin.	Unknown.	A 260.20000000000	CI	1978	1978	N			See comment below.
Am-241	Resin.	Unknown.	A 69.380000000000	CI	1978	1978	N			See comment below.
Cm-242	Resin.	Unknown.	A 4.8560000000000	CI	1978	1978	N			See comment below.
Cm-244	Resin.	Unknown.	A 2.2550000000000	CI	1978	1978	N			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.
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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	Resin.	Unknown.	A 8.6720000000000	CI	1979	1979	N			See comment below.
C-14	Resin.	Unknown.	A 74.580000000000	CI	1979	1979	N			See comment below.
Fe-55	Resin.	Unknown.	A 3469.0000000000	CI	1979	1979	N			See comment below.
Ni-59	Resin.	Unknown.	A 48.560000000000	CI	1979	1979	N			See comment below.
Ni-63	Resin.	Unknown.	A 4856.0000000000	CI	1979	1979	N			See comment below.
Co-60	Resin.	Unknown.	A 11790.000000000	CI	1979	1979	N			See comment below.
Sr-90	Resin.	Unknown.	A 4856.0000000000	CI	1979	1979	N			See comment below.
Tc-99	Resin.	Unknown.	A .26020000000000	CI	1979	1979	N			See comment below.
I-129	Resin.	Unknown.	A .00107540000000	CI	1979	1979	N			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.
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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	Resin.	Unknown.	A 5377.0000000000	CI	1979	1979	N			See comment below.
Ce-144	Resin.	Unknown.	A 133.60000000000	CI	1979	1979	N			See comment below.
Eu-154	Resin.	Unknown.	A 126.60000000000	CI	1979	1979	N			See comment below.
Eu-155	Resin.	Unknown.	A 53.770000000000	CI	1979	1979	N			See comment below.
U-234	Resin.	Unknown.	A .07285000000000	CI	1979	1979	N			See comment below.
U-235	Resin.	Unknown.	A .00159600000000	CI	1979	1979	N			See comment below.
U-236	Resin.	Unknown.	A .02949000000000	CI	1979	1979	N			See comment below.
Np-237	Resin.	Unknown.	A .04510000000000	CI	1979	1979	N			See comment below.
Pu-238	Resin.	Unknown.	A 3.1220000000000	CI	1979	1979	N			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.
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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	Resin.	Unknown.	A .79780000000000	CI	1979	1979	N			See comment below.
Pu-240	Resin.	Unknown.	A .48560000000000	CI	1979	1979	N			See comment below.
Pu-241	Resin.	Unknown.	A 260.20000000000	CI	1979	1979	N			See comment below.
Am-241	Resin.	Unknown.	A 69.380000000000	CI	1979	1979	N			See comment below.
Cm-242	Resin.	Unknown.	A 4.8560000000000	CI	1979	1979	N			See comment below.
Cm-244	Resin.	Unknown.	A 2.2550000000000	CI	1979	1979	N			See comment below.
H-3	Resin.	Unknown.	A 8.6720000000000	CI	1980	1980	N			See comment below.
C-14	Resin.	Unknown.	A 74.580000000000	CI	1980	1980	N			See comment below.
Fe-55	Resin.	Unknown.	A 3469.0000000000	CI	1980	1980	N			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.
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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
Ni-59	Resin.	Unknown.	A 48.560000000000	CI	1980	1980	N			See comment below.
Ni-63	Resin.	Unknown.	A 4856.0000000000	CI	1980	1980	N			See comment below.
Co-60	Resin.	Unknown.	A 11790.000000000	CI	1980	1980	N			See comment below.
Sr-90	Resin.	Unknown.	A 4856.0000000000	CI	1980	1980	N			See comment below.
Tc-99	Resin.	Unknown.	A .26020000000000	CI	1980	1980	N			See comment below.
I-129	Resin.	Unknown.	A .00107540000000	CI	1980	1980	N			See comment below.
Cs-137	Resin.	Unknown.	A 5377.0000000000	CI	1980	1980	N			See comment below.
Ce-144	Resin.	Unknown.	A 133.60000000000	CI	1980	1980	N			See comment below.
Eu-154	Resin.	Unknown.	A 126.60000000000	CI	1980	1980	N			See comment below.

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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	Resin.	Unknown.	A 53.770000000000	CI	1980	1980	N			See comment below.
U-234	Resin.	Unknown.	A .07285000000000	CI	1980	1980	N			See comment below.
U-235	Resin.	Unknown.	A .00159600000000	CI	1980	1980	N			See comment below.
U-236	Resin.	Unknown.	A .02949000000000	CI	1980	1980	N			See comment below.
Np-237	Resin.	Unknown.	A .04510000000000	CI	1980	1980	N			See comment below.
Pu-238	Resin.	Unknown.	A 3.1220000000000	CI	1980	1980	N			See comment below.
Pu-239	Resin.	Unknown.	A .79780000000000	CI	1980	1980	N			See comment below.
Pu-240	Resin.	Unknown.	A .48560000000000	CI	1980	1980	N			See comment below.
Pu-241	Resin.	Unknown.	A 260.20000000000	CI	1980	1980	N			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.
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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
Am-241	Resin.	Unknown.	A 69.380000000000	CI	1980	1980	N			See comment below.
Cm-242	Resin.	Unknown.	A 4.8560000000000	CI	1980	1980	N			See comment below.
Cm-244	Resin.	Unknown.	A 2.2550000000000	CI	1980	1980	N			See comment below.
H-3	Resin.	Unknown.	A 3.5470000000000	CI	1981	1981	N			See comment below.
C-14	Resin.	Unknown.	A 30.510000000000	CI	1981	1981	N			See comment below.
Fe-55	Resin.	Unknown.	A 1419.0000000000	CI	1981	1981	N			See comment below.
Ni-59	Resin.	Unknown.	A 19.870000000000	CI	1981	1981	N			See comment below.
Ni-63	Resin.	Unknown.	A 1987.0000000000	CI	1981	1981	N			See comment below.
Co-60	Resin.	Unknown.	A 4824.0000000000	CI	1981	1981	N			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.
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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	Resin.	Unknown.	A 1987.0000000000	CI	1981	1981	N			See comment below.
Tc-99	Resin.	Unknown.	A .10640000000000	CI	1981	1981	N			See comment below.
I-129	Resin.	Unknown.	A .00043980000000	CI	1981	1981	N			See comment below.
Cs-137	Resin.	Unknown.	A 2199.0000000000	CI	1981	1981	N			See comment below.
Ce-144	Resin.	Unknown.	A 54.630000000000	CI	1981	1981	N			See comment below.
Eu-154	Resin.	Unknown.	A 51.790000000000	CI	1981	1981	N			See comment below.
Eu-155	Resin.	Unknown.	A 21.990000000000	CI	1981	1981	N			See comment below.
U-234	Resin.	Unknown.	A .02980000000000	CI	1981	1981	N			See comment below.
U-235	Resin.	Unknown.	A .00065720000000	CI	1981	1981	N			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.
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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-236	Resin.	Unknown.	A .01206000000000	CI	1981	1981	N			See comment below.
Np-237	Resin.	Unknown.	A .01845000000000	CI	1981	1981	N			See comment below.
Pu-238	Resin.	Unknown.	A 1.2770000000000	CI	1981	1981	N			See comment below.
Pu-239	Resin.	Unknown.	A .32640000000000	CI	1981	1981	N			See comment below.
Pu-240	Resin.	Unknown.	A .19870000000000	CI	1981	1981	N			See comment below.
Pu-241	Resin.	Unknown.	A 106.40000000000	CI	1981	1981	N			See comment below.
Am-241	Resin.	Unknown.	A 28.380000000000	CI	1981	1981	N			See comment below.
Cm-242	Resin.	Unknown.	A 1.9870000000000	CI	1981	1981	N			See comment below.
Cm-244	Resin.	Unknown.	A .92230000000000	CI	1981	1981	N			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)
Basis for uncertainty - estimate of precision of measurement technique.

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	Resin.	Unknown.	A 3.5470000000000	CI	1982	1982	N			See comment below.
C-14	Resin.	Unknown.	A 30.510000000000	CI	1982	1982	N			See comment below.
Fe-55	Resin.	Unknown.	A 1419.0000000000	CI	1982	1982	N			See comment below.
Ni-59	Resin.	Unknown.	A 19.870000000000	CI	1982	1982	N			See comment below.
Ni-63	Resin.	Unknown.	A 1987.0000000000	CI	1982	1982	N			See comment below.
Co-60	Resin.	Unknown.	A 4824.0000000000	CI	1982	1982	N			See comment below.
Sr-90	Resin.	Unknown.	A 1987.0000000000	CI	1982	1982	N			See comment below.
Tc-99	Resin.	Unknown.	A .10640000000000	CI	1982	1982	N			See comment below.
I-129	Resin.	Unknown.	A .00043980000000	CI	1982	1982	N			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)
Basis for uncertainty - estimate of precision of measurement technique.

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	Resin.	Unknown.	A 2199.0000000000	CI	1982	1982	N			See comment below.
Ce-144	Resin.	Unknown.	A 54.630000000000	CI	1982	1982	N			See comment below.
Eu-154	Resin.	Unknown.	A 51.790000000000	CI	1982	1982	N			See comment below.
Eu-155	Resin.	Unknown.	A 21.990000000000	CI	1982	1982	N			See comment below.
U-234	Resin.	Unknown.	A .02980000000000	CI	1982	1982	N			See comment below.
U-235	Resin.	Unknown.	A .00065270000000	CI	1982	1982	N			See comment below.
U-236	Resin.	Unknown.	A .01206000000000	CI	1982	1982	N			See comment below.
Np-237	Resin.	Unknown.	A .01845000000000	CI	1982	1982	N			See comment below.
Pu-238	Resin.	Unknown.	A 1.2770000000000	CI	1982	1982	N			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)
Basis for uncertainty - estimate of precision of measurement technique.

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	Resin.	Unknown.	A .32640000000000	CI	1982	1982	N			See comment below.
Pu-240	Resin.	Unknown.	A .19870000000000	CI	1982	1982	N			See comment below.
Pu-241	Resin.	Unknown.	A 106.40000000000	CI	1982	1982	N			See comment below.
Am-241	Resin.	Unknown.	A 28.380000000000	CI	1982	1982	N			See comment below.
Cm-242	Resin.	Unknown.	A 1.9870000000000	CI	1982	1982	N			See comment below.
Cm-244	Resin.	Unknown.	A .92230000000000	CI	1982	1982	N			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)
Basis for uncertainty - estimate of precision of measurement technique.

PART E - SOURCES OF INFORMATION AND UNCERTAINTIES - TRA-603-1H

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

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

2. Details concerning source (names, report no., dates, etc.)
Extrapolation from RWMIS for 1952-1961.

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:
A portion of, or all of the measurements, were assumed to be taken using a G-M detector which only measures gamma emitters; beta emitters have been added to the RWMIS activity based on scaling factors. Therefore, the total activity will be greater than that in RWMIS.

7. Major unknowns in inventories of contaminants:
Method of measurement.

8. Key assumptions used to deal with the unknowns:
On part D, no G-M counter correction is needed to entries for which upper and lower bounds are given. The presence of such bounds indicates that the estimate was based on weight, laboratory analysis, spectrometry, and/or mathematical calculations. The G-M counter correction is needed for entries for which no bounds are given, because such estimates were originally made using the G-M counter method.

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION HDT - 160

1. Preparer: Amaro, C.

2. Date prepared: 08/23/93

3. Generator: TRA
(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:
3H

6. Waste stream:
Irradiated end boxes.

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

8. Actual years disposed of at SDA:
Starting year 1961 Ending year 1965

9. Waste stream volume:
Amount 20.9627 Units Cubic feet.
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. Also 642.

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

2. Details on physical form(particularly confinement related)

3. Chemical form:
Aluminum alloy end boxes.

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):

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	Solid.	Al alloy.	T 158.40000000000	CI	1961	1961	N			See continuation page.
C-14	Solid.	Al alloy.	T 21.250000000000	CI	1961	1961	N			See continuation page.
Fe-55	Solid.	Al alloy.	T 3671.0000000000	CI	1961	1961	N			See continuation page.
Ni-59	Solid.	Al alloy.	T 1.1010000000000	CI	1961	1961	N			See continuation page.
Ni-63	Solid.	Al alloy.	T 618.20000000000	CI	1961	1961	N			See continuation page.
Co-60	Solid.	Al alloy.	T 1294.0000000000	CI	1961	1961	N			See continuation page.
Sr-90	Solid.	Al alloy.	T 1.7770000000000	CI	1961	1961	N			See continuation page.
Tc-99	Solid.	Al alloy.	T .34780000000000	CI	1961	1961	N			See continuation page.
I-129	Solid.	Al alloy.	T .00009045000000	CI	1961	1961	N			See continuation page.

* 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	Solid.	Al alloy.	T 386.40000000000	CI	1961	1961	N			See continuation page.
Ce-144	Solid.	Al alloy.	T 9.0800000000000	CI	1961	1961	N			See continuation page.
Eu-154	Solid.	Al alloy.	T .00560300000000	CI	1961	1961	N			See continuation page.
Eu-155	Solid.	Al alloy.	T 18.160000000000	CI	1961	1961	N			See continuation page.
U-234	Solid.	Al alloy.	T .00405700000000	CI	1961	1961	N			See continuation page.
U-235	Solid.	Al alloy.	T .00008694000000	CI	1961	1961	N			See continuation page.
U-236	Solid.	Al alloy.	T .00154600000000	CI	1961	1961	N			See continuation page.
Np-237	Solid.	Al alloy.	T .00251200000000	CI	1961	1961	N			See continuation page.
Pu-238	Solid.	Al alloy.	T .10430000000000	CI	1961	1961	N			See continuation page.

* 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	Solid.	Al alloy.	T .10430000000000	CI	1961	1961	N			See continuation page.
Pu-240	Solid.	Al alloy.	T .01101000000000	CI	1961	1961	N			See continuation page.
Pu-241	Solid.	Al alloy.	T 11.400000000000	CI	1961	1961	N			See continuation page.
Am-241	Solid.	Al alloy.	T .05216000000000	CI	1961	1961	N			See continuation page.
Cm-242	Solid.	Al alloy.	T .05216000000000	CI	1961	1961	N			See continuation page.
Cm-244	Solid.	Al alloy.	T .04830000000000	CI	1961	1961	N			See continuation page.
H-3	Solid.	Al alloy.	T 627.30000000000	CI	1962	1962	N			See continuation page.
C-14	Solid.	Al alloy.	T 84.150000000000	CI	1962	1962	N			See continuation page.
Fe-55	Solid.	Al alloy.	T 14530.000000000	CI	1962	1962	N			See continuation page.

* 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
Ni-59	Solid.	Al alloy.	T 4.3600000000000	CI	1962	1962	N			See continuation page.
Ni-63	Solid.	Al alloy.	T 2448.0000000000	CI	1962	1962	N			See continuation page.
Co-60	Solid.	Al alloy.	T 5125.0000000000	CI	1962	1962	N			See continuation page.
Sr-90	Solid.	Al alloy.	T 7.0380000000000	CI	1962	1962	N			See continuation page.
Tc-99	Solid.	Al alloy.	T 1.3770000000000	CI	1962	1962	N			See continuation page.
I-129	Solid.	Al alloy.	T .00035802000000	CI	1962	1962	N			See continuation page.
Cs-137	Solid.	Al alloy.	T 1530.0000000000	CI	1962	1962	N			See continuation page.
Ce-144	Solid.	Al alloy.	T 35.950000000000	CI	1962	1962	N			See continuation page.
Eu-154	Solid.	Al alloy.	T .02218000000000	CI	1962	1962	N			See continuation page.

* 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	Solid.	Al alloy.	T 71.910000000000	CI	1962	1962	N			See continuation page.
U-234	Solid.	Al alloy.	T .01606000000000	CI	1962	1962	N			See continuation page.
U-235	Solid.	Al alloy.	T .00034420000000	CI	1962	1962	N			See continuation page.
U-236	Solid.	Al alloy.	T .00612000000000	CI	1962	1962	N			See continuation page.
Np-237	Solid.	Al alloy.	T .00994500000000	CI	1962	1962	N			See continuation page.
Pu-238	Solid.	Al alloy.	T .41310000000000	CI	1962	1962	N			See continuation page.
Pu-239	Solid.	Al alloy.	T .41310000000000	CI	1962	1962	N			See continuation page.
Pu-240	Solid.	Al alloy.	T .04360000000000	CI	1962	1962	N			See continuation page.
Pu-241	Solid.	Al alloy.	T 45.130000000000	CI	1962	1962	N			See continuation page.

* 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
Am-241	Solid.	Al alloy.	T .20650000000000	CI	1962	1962	N			See continuation page.
Cm-242	Solid.	Al alloy.	T .20650000000000	CI	1962	1962	N			See continuation page.
Cm-244	Solid.	Al alloy.	T .19120000000000	CI	1962	1962	N			See continuation page.
H-3	Solid.	Al alloy.	T 9.8400000000000	CI	1965	1965	N			See continuation page.
C-14	Solid.	Al alloy.	T 1.3200000000000	CI	1965	1965	N			See continuation page.
Fe-55	Solid.	Al alloy.	T 228.00000000000	CI	1965	1965	N			See continuation page.
Ni-59	Solid.	Al alloy.	T .06840000000000	CI	1965	1965	N			See continuation page.
Ni-63	Solid.	Al alloy.	T 38.400000000000	CI	1965	1965	N			See continuation page.
Co-60	Solid.	Al alloy.	T 80.400000000000	CI	1965	1965	N			See continuation page.

* 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	Solid.	Al alloy.	T .11040000000000	CI	1965	1965	N			See continuation page.
Tc-99	Solid.	Al alloy.	T .02160000000000	CI	1965	1965	N			See continuation page.
I-129	Solid.	Al alloy.	T .00000561600000	CI	1965	1965	N			See continuation page.
Cs-137	Solid.	Al alloy.	T 24.000000000000	CI	1965	1965	N			See continuation page.
Ce-144	Solid.	Al alloy.	T .56400000000000	CI	1965	1965	N			See continuation page.
Eu-154	Solid.	Al alloy.	T .00034800000000	CI	1965	1965	N			See continuation page.
Eu-155	Solid.	Al alloy.	T 1.1280000000000	CI	1965	1965	N			See continuation page.
U-234	Solid.	Al alloy.	T .00025200000000	CI	1965	1965	N			See continuation page.
U-235	Solid.	Al alloy.	T .00000540000000	CI	1965	1965	N			See continuation page.

* 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-236	Solid.	Al alloy.	T .00009600000000	CI	1965	1965	N			See continuation page.
Np-237	Solid.	Al alloy.	T .00015600000000	CI	1965	1965	N			See continuation page.
Pu-238	Solid.	Al alloy.	T .00648000000000	CI	1965	1965	N			See continuation page.
Pu-239	Solid.	Al alloy.	T .00648000000000	CI	1965	1965	N			See continuation page.
Pu-240	Solid.	Al alloy.	T .00068400000000	CI	1965	1965	N			See continuation page.
Pu-241	Solid.	Al alloy.	T .70800000000000	CI	1965	1965	N			See continuation page.
Am-241	Solid.	Al alloy.	T .00324000000000	CI	1965	1965	N			See continuation page.
Cm-242	Solid.	Al alloy.	T .00324000000000	CI	1965	1965	N			See continuation page.
Cm-244	Solid.	Al alloy.	T .00300000000000	CI	1965	1965	N			See continuation page.

* 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)

PART E - SOURCES OF INFORMATION AND UNCERTAINTIES - TRA-603-3H

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.)
Interviewee wishes to remain anonymous.

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:
A portion of, or all of the measurements, were assumed to be taken using a G-M detector which only measures gamma emitters; beta emitters have been added to the RWMIS activity based on scaling factors. Therefore, the total activity will be greater than that in RWMIS.

7. Major unknowns in inventories of contaminants:
MAP and MFP were major unknowns.

8. Key assumptions used to deal with the unknowns:
MAP and MFP were broken down into radionuclides; MFP is according to the fission products and their half lives while MAP is the cross sections and their half lives. On part D, no G-M counter correction is needed to entries for which upper and lower bounds are given. The presence of such bounds indicates that the estimate was based on weight, laboratory analysis, spectrometry, and/or mathematical calculations. The G-M counter correction is needed for entries for which no bounds are given, because such estimates were originally made using the G-M counter method.

Continuation of Part D Column or Question Number or Title Uncertainty basis.

A Geiger-Mueller counter was probably used to measure this item. Therefore, the true uncertainty is not known.

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION HDT - 151

1. Preparer: Amaro, C.

2. Date prepared: 08/23/93

3. Generator: TRA
(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:
4H

6. Waste stream:
Core and loop components.

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

8. Actual years disposed of at SDA:
Starting year 1961 Ending year 1970

9. Waste stream volume:
Amount 609.4706 Units Cubic feet.
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. 642 also.

1. General physical form (see attached list)
Other core,reactor vessel,loop component
[ ] other (specify)

2. Details on physical form(particularly confinement related)
Solids, such as loop piping, stainless steel and Al pieces, equipment leads, end pile tubes, or end boxes from fuel elements.

3. Chemical form:
Metallic (stainless steel and Al).

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

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

6. Other characteristics of interest:

7. Comments (specify number of pertinent question):
5. "Other", which cannot be defined by the preparer.

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	Solid.	Metallic.	T .17240000000000	CI	1961	1961	N			See continuation page.
C-14	Solid.	Metallic.	T .02312000000000	CI	1961	1961	N			See continuation page.
Fe-55	Solid.	Metallic.	T 3.9940000000000	CI	1961	1961	N			See continuation page.
Ni-59	Solid.	Metallic.	T .00119800000000	CI	1961	1961	N			See continuation page.
Ni-63	Solid.	Metallic.	T .67260000000000	CI	1961	1961	N			See continuation page.
Co-60	Solid.	Metallic.	T 1.4080000000000	CI	1961	1961	N			See continuation page.
Sr-90	Solid.	Metallic.	T .00193400000000	CI	1961	1961	N			See continuation page.
Tc-99	Solid.	Metallic.	T .00037830000000	CI	1961	1961	N			See continuation page.
I-129	Solid.	Metallic.	T .00000009837000	CI	1961	1961	N			See continuation page.

* 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.

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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	Solid.	Metallic.	T .42040000000000	CI	1961	1961	N			See continuation page.
Ce-144	Solid.	Metallic.	T .00987900000000	CI	1961	1961	N			See continuation page.
Eu-154	Solid.	Metallic.	T .00000609500000	CI	1961	1961	N			See continuation page.
Eu-155	Solid.	Metallic.	T .01976000000000	CI	1961	1961	N			See continuation page.
U-234	Solid.	Metallic.	T .00000441400000	CI	1961	1961	N			See continuation page.
U-235	Solid.	Metallic.	T .00000009460000	CI	1961	1961	N			See continuation page.
U-236	Solid.	Metallic.	T .00000168100000	CI	1961	1961	N			See continuation page.
Np-237	Solid.	Metallic.	T .00000273200000	CI	1961	1961	N			See continuation page.
Pu-238	Solid.	Metallic.	T .00011350000000	CI	1961	1961	N			See continuation page.

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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	Solid.	Metallic.	T .00011350000000	CI	1961	1961	N			See continuation page.
Pu-240	Solid.	Metallic.	T .00001198000000	CI	1961	1961	N			See continuation page.
Pu-241	Solid.	Metallic.	T .01240000000000	CI	1961	1961	N			See continuation page.
Am-241	Solid.	Metallic.	T .00005675000000	CI	1961	1961	N			See continuation page.
Cm-242	Solid.	Metallic.	T .00005675000000	CI	1961	1961	N			See continuation page.
Cm-244	Solid.	Metallic.	T .00005255000000	CI	1961	1961	N			See continuation page.
H-3	Solid.	Metallic.	T 492.00000000000	CI	1963	1963	N			See continuation page.
C-14	Solid.	Metallic.	T 66.000000000000	CI	1963	1963	N			See continuation page.
Fe-55	Solid.	Metallic.	T 11400.000000000	CI	1963	1963	N			See continuation page.

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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
Ni-59	Solid.	Metallic.	T 3.4200000000000	CI	1963	1963	N			See continuation page.
Ni-63	Solid.	Metallic.	T 1920.0000000000	CI	1963	1963	N			See continuation page.
Co-60	Solid.	Metallic.	T 4020.0000000000	CI	1963	1963	N			See continuation page.
Sr-90	Solid.	Metallic.	T 5.5200000000000	CI	1963	1963	N			See continuation page.
Tc-99	Solid.	Metallic.	T 1.0800000000000	CI	1963	1963	N			See continuation page.
I-129	Solid.	Metallic.	T .00028080000000	CI	1963	1963	N			See continuation page.
Cs-137	Solid.	Metallic.	T 1200.0000000000	CI	1963	1963	N			See continuation page.
Ce-144	Solid.	Metallic.	T 28.200000000000	CI	1963	1963	N			See continuation page.
Eu-154	Solid.	Metallic.	T .01740000000000	CI	1963	1963	N			See continuation page.

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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	Solid.	Metallic.	T 56.400000000000	CI	1963	1963	N			See continuation page.
U-234	Solid.	Metallic.	T .01260000000000	CI	1963	1963	N			See continuation page.
U-235	Solid.	Metallic.	T .00027000000000	CI	1963	1963	N			See continuation page.
U-236	Solid.	Metallic.	T .00480000000000	CI	1963	1963	N			See continuation page.
Np-237	Solid.	Metallic.	T .00780000000000	CI	1963	1963	N			See continuation page.
Pu-238	Solid.	Metallic.	T .32400000000000	CI	1963	1963	N			See continuation page.
Pu-239	Solid.	Metallic.	T .32400000000000	CI	1963	1963	N			See continuation page.
Pu-240	Solid.	Metallic.	T .03420000000000	CI	1963	1963	N			See continuation page.
Pu-241	Solid.	Metallic.	T 35.400000000000	CI	1963	1963	N			See continuation page.

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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
Am-241	Solid.	Metallic.	T .16200000000000	CI	1963	1963	N			See continuation page.
Cm-242	Solid.	Metallic.	T .16200000000000	CI	1963	1963	N			See continuation page.
Cm-244	Solid.	Metallic.	T .15000000000000	CI	1963	1963	N			See continuation page.
H-3	Solid.	Metallic.	T 574.20000000000	CI	1964	1964	N			See continuation page.
C-14	Solid.	Metallic.	T 77.030000000000	CI	1964	1964	N			See continuation page.
Fe-55	Solid.	Metallic.	T 13310.000000000	CI	1964	1964	N			See continuation page.
Ni-59	Solid.	Metallic.	T 3.9920000000000	CI	1964	1964	N			See continuation page.
Ni-63	Solid.	Metallic.	T 2241.0000000000	CI	1964	1964	N			See continuation page.
Co-60	Solid.	Metallic.	T 4692.0000000000	CI	1964	1964	N			See continuation page.

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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	Solid.	Metallic.	T 6.4430000000000	CI	1964	1964	N			See continuation page.
Tc-99	Solid.	Metallic.	T 1.2610000000000	CI	1964	1964	N			See continuation page.
I-129	Solid.	Metallic.	T .00032769000000	CI	1964	1964	N			See continuation page.
Cs-137	Solid.	Metallic.	T 1401.0000000000	CI	1964	1964	N			See continuation page.
Ce-144	Solid.	Metallic.	T 32.910000000000	CI	1964	1964	N			See continuation page.
Eu-154	Solid.	Metallic.	T .02031000000000	CI	1964	1964	N			See continuation page.
Eu-155	Solid.	Metallic.	T 65.830000000000	CI	1964	1964	N			See continuation page.
U-234	Solid.	Metallic.	T .01471000000000	CI	1964	1964	N			See continuation page.
U-235	Solid.	Metallic.	T .00031510000000	CI	1964	1964	N			See continuation page.

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U-236	Solid.	Metallic.	T .00560200000000	CI	1964	1964	N			See continuation page.
Np-237	Solid.	Metallic.	T .00910400000000	CI	1964	1964	N			See continuation page.
Pu-238	Solid.	Metallic.	T .37820000000000	CI	1964	1964	N			See continuation page.
Pu-239	Solid.	Metallic.	T .37820000000000	CI	1964	1964	N			See continuation page.
Pu-240	Solid.	Metallic.	T .03992000000000	CI	1964	1964	N			See continuation page.
Pu-241	Solid.	Metallic.	T 41.320000000000	CI	1964	1964	N			See continuation page.
Am-241	Solid.	Metallic.	T .18910000000000	CI	1964	1964	N			See continuation page.
Cm-242	Solid.	Metallic.	T .18910000000000	CI	1964	1964	N			See continuation page.
Cm-244	Solid.	Metallic.	T .17510000000000	CI	1964	1964	N			See continuation page.

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Co-60	Solid.	Metallic.	T 19000.000000000	CI	1964	1964	N	-20%	+20%	See comment below.
H-3	Solid.	Metallic.	T 16300.000000000	CI	1965	1965	N			See continuation page.
C-14	Solid.	Metallic.	T 2186.0000000000	CI	1965	1965	N			See continuation page.
Fe-55	Solid.	Metallic.	T 377600.00000000	CI	1965	1965	N			See continuation page.
Ni-59	Solid.	Metallic.	T 113.30000000000	CI	1965	1965	N			See continuation page.
Ni-63	Solid.	Metallic.	T 63600.000000000	CI	1965	1965	N			See continuation page.
Co-60	Solid.	Metallic.	T 133200.00000000	CI	1965	1965	N			See continuation page.
Sr-90	Solid.	Metallic.	T 182.80000000000	CI	1965	1965	N			See continuation page.
Tc-99	Solid.	Metallic.	T 35.770000000000	CI	1965	1965	N			See continuation page.

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I-129	Solid.	Metallic.	T .00929700000000	CI	1965	1965	N			See continuation page.
Cs-137	Solid.	Metallic.	T 39750.000000000	CI	1965	1965	N			See continuation page.
Ce-144	Solid.	Metallic.	T 934.10000000000	CI	1965	1965	N			See continuation page.
Eu-154	Solid.	Metallic.	T .57640000000000	CI	1965	1965	N			See continuation page.
Eu-155	Solid.	Metallic.	T 1868.0000000000	CI	1965	1965	N			See continuation page.
U-234	Solid.	Metallic.	T .41740000000000	CI	1965	1965	N			See continuation page.
U-235	Solid.	Metallic.	T .00894400000000	CI	1965	1965	N			See continuation page.
U-236	Solid.	Metallic.	T .15900000000000	CI	1965	1965	N			See continuation page.
Np-237	Solid.	Metallic.	T .25840000000000	CI	1965	1965	N			See continuation page.

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Pu-238	Solid.	Metallic.	T 10.730000000000	CI	1965	1965	N			See continuation page.
Pu-239	Solid.	Metallic.	T 10.730000000000	CI	1965	1965	N			See continuation page.
Pu-240	Solid.	Metallic.	T 1.1330000000000	CI	1965	1965	N			See continuation page.
Pu-241	Solid.	Metallic.	T 1173.0000000000	CI	1965	1965	N			See continuation page.
Am-241	Solid.	Metallic.	T 5.3660000000000	CI	1965	1965	N			See continuation page.
Cm-242	Solid.	Metallic.	T 5.3660000000000	CI	1965	1965	N			See continuation page.
Cm-244	Solid.	Metallic.	T 4.9690000000000	CI	1965	1965	N			See continuation page.
H-3	Solid.	Metallic.	T 377.80000000000	CI	1966	1966	N			See continuation page.
C-14	Solid.	Metallic.	T 50.680000000000	CI	1966	1966	N			See continuation page.

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Fe-55	Solid.	Metallic.	T 8753.0000000000	CI	1966	1966	N			See continuation page.
Ni-59	Solid.	Metallic.	T 2.6260000000000	CI	1966	1966	N			See continuation page.
Ni-63	Solid.	Metallic.	T 1474.0000000000	CI	1966	1966	N			See continuation page.
Co-60	Solid.	Metallic.	T 3087.0000000000	CI	1966	1966	N			See continuation page.
Sr-90	Solid.	Metallic.	T 4.2380000000000	CI	1966	1966	N			See continuation page.
Tc-99	Solid.	Metallic.	T .82930000000000	CI	1966	1966	N			See continuation page.
I-129	Solid.	Metallic.	T .00021564000000	CI	1966	1966	N			See continuation page.
Cs-137	Solid.	Metallic.	T 921.40000000000	CI	1966	1966	N			See continuation page.
Ce-144	Solid.	Metallic.	T 21.650000000000	CI	1966	1966	N			See continuation page.

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Eu-154	Solid.	Metallic.	T .01336000000000	CI	1966	1966	N			See continuation page.
Eu-155	Solid.	Metallic.	T 43.310000000000	CI	1966	1966	N			See continuation page.
U-234	Solid.	Metallic.	T .00967500000000	CI	1966	1966	N			See continuation page.
U-235	Solid.	Metallic.	T .00020730000000	CI	1966	1966	N			See continuation page.
U-236	Solid.	Metallic.	T .00368600000000	CI	1966	1966	N			See continuation page.
Np-237	Solid.	Metallic.	T .00598900000000	CI	1966	1966	N			See continuation page.
Pu-238	Solid.	Metallic.	T .24880000000000	CI	1966	1966	N			See continuation page.
Pu-239	Solid.	Metallic.	T .24880000000000	CI	1966	1966	N			See continuation page.
Pu-240	Solid.	Metallic.	T .02626000000000	CI	1966	1966	N			See continuation page.

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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-241	Solid.	Metallic.	T 27.180000000000	CI	1966	1966	N			See continuation page.
Am-241	Solid.	Metallic.	T .12440000000000	CI	1966	1966	N			See continuation page.
Cm-242	Solid.	Metallic.	T .12440000000000	CI	1966	1966	N			See continuation page.
Cm-244	Solid.	Metallic.	T .11520000000000	CI	1966	1966	N			See continuation page.
H-3	Solid.	Metallic.	T .00159200000000	CI	1968	1968	N			See continuation page.
C-14	Solid.	Metallic.	T .00021360000000	CI	1968	1968	N			See continuation page.
Fe-55	Solid.	Metallic.	T .03690000000000	CI	1968	1968	N			See continuation page.
Ni-59	Solid.	Metallic.	T .00001107000000	CI	1968	1968	N			See continuation page.
Ni-63	Solid.	Metallic.	T .00621400000000	CI	1968	1968	N			See continuation page.

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Co-60	Solid.	Metallic.	T .01301000000000	CI	1968	1968	N			See continuation page.
Sr-90	Solid.	Metallic.	T .00001787000000	CI	1968	1968	N			See continuation page.
Tc-99	Solid.	Metallic.	T .00000349600000	CI	1968	1968	N			See continuation page.
I-129	Solid.	Metallic.	T .00000000091000	CI	1968	1968	N			See continuation page.
Cs-137	Solid.	Metallic.	T .00388400000000	CI	1968	1968	N			See continuation page.
Ce-144	Solid.	Metallic.	T .00009127000000	CI	1968	1968	N			See continuation page.
Eu-154	Solid.	Metallic.	T .00000005630000	CI	1968	1968	N			See continuation page.
Eu-155	Solid.	Metallic.	T .00018250000000	CI	1968	1968	N			See continuation page.
U-234	Solid.	Metallic.	T .00000004080000	CI	1968	1968	N			See continuation page.

* 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 sample column is marked "N" because the preparer cannot prove a sample was counted by the Radiation Measurements Laboratory (RML) at TRA, but based on the RWMIS radionuclide identification, the preparer believes a sample was counted. A 5-10% error is normal for a sample analyzed by the RML, however, being conservative, the preparer assigned a 20% error (doubling the 10% error).

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	Solid.	Metallic.	T .00000000090000	CI	1968	1968	N			See continuation page.
U-236	Solid.	Metallic.	T .00000001550000	CI	1968	1968	N			See continuation page.
Np-237	Solid.	Metallic.	T .00000002520000	CI	1968	1968	N			See continuation page.
Pu-238	Solid.	Metallic.	T .00000104900000	CI	1968	1968	N			See continuation page.
Pu-239	Solid.	Metallic.	T .00000104900000	CI	1968	1968	N			See continuation page.
Pu-240	Solid.	Metallic.	T .00000011070000	CI	1968	1968	N			See continuation page.
Pu-241	Solid.	Metallic.	T .00011460000000	CI	1968	1968	N			See continuation page.
Am-241	Solid.	Metallic.	T .00000052430000	CI	1968	1968	N			See continuation page.
Cm-242	Solid.	Metallic.	T .00000052430000	CI	1968	1968	N			See continuation page.

* 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 sample column is marked "N" because the preparer cannot prove a sample was counted by the Radiation Measurements Laboratory (RML) at TRA, but based on the RWMIS radionuclide identification, the preparer believes a sample was counted. A 5-10% error is normal for a sample analyzed by the RML, however, being conservative, the preparer assigned a 20% error (doubling the 10% error).

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
Cm-244	Solid.	Metallic.	T .00000048550000	CI	1968	1968	N			See continuation page.
H-3	Solid.	Metallic.	T 4166.0000000000	CI	1969	1969	N			See continuation page.
C-14	Solid.	Metallic.	T 558.90000000000	CI	1969	1969	N			See continuation page.
Fe-55	Solid.	Metallic.	T 96530.000000000	CI	1969	1969	N			See continuation page.
Ni-59	Solid.	Metallic.	T 28.960000000000	CI	1969	1969	N			See continuation page.
Ni-63	Solid.	Metallic.	T 16260.000000000	CI	1969	1969	N			See continuation page.
Co-60	Solid.	Metallic.	T 34040.000000000	CI	1969	1969	N			See continuation page.
Sr-90	Solid.	Metallic.	T 46.740000000000	CI	1969	1969	N			See continuation page.
Tc-99	Solid.	Metallic.	T 9.1450000000000	CI	1969	1969	N			See continuation page.

* 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 sample column is marked "N" because the preparer cannot prove a sample was counted by the Radiation Measurements Laboratory (RML) at TRA, but based on the RWMIS radionuclide identification, the preparer believes a sample was counted. A 5-10% error is normal for a sample analyzed by the RML, however, being conservative, the preparer assigned a 20% error (doubling the 10% error).

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
I-129	Solid.	Metallic.	T .00237780000000	CI	1969	1969	N			See continuation page.
Cs-137	Solid.	Metallic.	T 10160.000000000	CI	1969	1969	N			See continuation page.
Ce-144	Solid.	Metallic.	T 238.80000000000	CI	1969	1969	N			See continuation page.
Eu-154	Solid.	Metallic.	T .14730000000000	CI	1969	1969	N			See continuation page.
Eu-155	Solid.	Metallic.	T 477.60000000000	CI	1969	1969	N			See continuation page.
U-234	Solid.	Metallic.	T .10670000000000	CI	1969	1969	N			See continuation page.
U-235	Solid.	Metallic.	T .00228600000000	CI	1969	1969	N			See continuation page.
U-236	Solid.	Metallic.	T .04064000000000	CI	1969	1969	N			See continuation page.
Np-237	Solid.	Metallic.	T .06605000000000	CI	1969	1969	N			See continuation page.

* 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 sample column is marked "N" because the preparer cannot prove a sample was counted by the Radiation Measurements Laboratory (RML) at TRA, but based on the RWMIS radionuclide identification, the preparer believes a sample was counted. A 5-10% error is normal for a sample analyzed by the RML, however, being conservative, the preparer assigned a 20% error (doubling the 10% error).

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-238	Solid.	Metallic.	T 2.7430000000000	CI	1969	1969	N			See continuation page.
Pu-239	Solid.	Metallic.	T 2.7430000000000	CI	1969	1969	N			See continuation page.
Pu-240	Solid.	Metallic.	T .28960000000000	CI	1969	1969	N			See continuation page.
Pu-241	Solid.	Metallic.	T 299.70000000000	CI	1969	1969	N			See continuation page.
Am-241	Solid.	Metallic.	T 1.3720000000000	CI	1969	1969	N			See continuation page.
Cm-242	Solid.	Metallic.	T 1.3720000000000	CI	1969	1969	N			See continuation page.
Cm-244	Solid.	Metallic.	T 1.2700000000000	CI	1969	1969	N			See continuation page.
H-3	Solid.	Metallic.	T 5.2740000000000	CI	1970	1970	N			See continuation page.
C-14	Solid.	Metallic.	T .70750000000000	CI	1970	1970	N			See continuation page.

* 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 sample column is marked "N" because the preparer cannot prove a sample was counted by the Radiation Measurements Laboratory (RML) at TRA, but based on the RWMIS radionuclide identification, the preparer believes a sample was counted. A 5-10% error is normal for a sample analyzed by the RML, however, being conservative, the preparer assigned a 20% error (doubling the 10% error).

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
Fe-55	Solid.	Metallic.	T 122.20000000000	CI	1970	1970	N			See continuation page.
Ni-59	Solid.	Metallic.	T .03666000000000	CI	1970	1970	N			See continuation page.
Ni-63	Solid.	Metallic.	T 20.580000000000	CI	1970	1970	N			See continuation page.
Co-60	Solid.	Metallic.	T 43.090000000000	CI	1970	1970	N			See continuation page.
Sr-90	Solid.	Metallic.	T .05917000000000	CI	1970	1970	N			See continuation page.
Tc-99	Solid.	Metallic.	T .01158000000000	CI	1970	1970	N			See continuation page.
I-129	Solid.	Metallic.	T .00000300960000	CI	1970	1970	N			See continuation page.
Cs-137	Solid.	Metallic.	T 12.860000000000	CI	1970	1970	N			See continuation page.
Ce-144	Solid.	Metallic.	T .30230000000000	CI	1970	1970	N			See continuation page.

* 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 sample column is marked "N" because the preparer cannot prove a sample was counted by the Radiation Measurements Laboratory (RML) at TRA, but based on the RWMIS radionuclide identification, the preparer believes a sample was counted. A 5-10% error is normal for a sample analyzed by the RML, however, being conservative, the preparer assigned a 20% error (doubling the 10% error).

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-154	Solid.	Metallic.	T .00018650000000	CI	1970	1970	N			See continuation page.
Eu-155	Solid.	Metallic.	T .60460000000000	CI	1970	1970	N			See continuation page.
U-234	Solid.	Metallic.	T .00013510000000	CI	1970	1970	N			See continuation page.
U-235	Solid.	Metallic.	T .00000289400000	CI	1970	1970	N			See continuation page.
U-236	Solid.	Metallic.	T .00005145000000	CI	1970	1970	N			See continuation page.
Np-237	Solid.	Metallic.	T .00008361000000	CI	1970	1970	N			See continuation page.
Pu-238	Solid.	Metallic.	T .00347300000000	CI	1970	1970	N			See continuation page.
Pu-239	Solid.	Metallic.	T .00347300000000	CI	1970	1970	N			See continuation page.
Pu-240	Solid.	Metallic.	T .00036660000000	CI	1970	1970	N			See continuation page.

* 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 sample column is marked "N" because the preparer cannot prove a sample was counted by the Radiation Measurements Laboratory (RML) at TRA, but based on the RWMIS radionuclide identification, the preparer believes a sample was counted. A 5-10% error is normal for a sample analyzed by the RML, however, being conservative, the preparer assigned a 20% error (doubling the 10% error).

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-241	Solid.	Metallic.	T .37950000000000	CI	1970	1970	N			See continuation page.
Am-241	Solid.	Metallic.	T .00173700000000	CI	1970	1970	N			See continuation page.
Cm-242	Solid.	Metallic.	T .00173700000000	CI	1970	1970	N			See continuation page.
Cm-244	Solid.	Metallic.	T .00160800000000	CI	1970	1970	N			See continuation page.

* 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 sample column is marked "N" because the preparer cannot prove a sample was counted by the Radiation Measurements Laboratory (RML) at TRA, but based on the RWMIS radionuclide identification, the preparer believes a sample was counted. A 5-10% error is normal for a sample analyzed by the RML, however, being conservative, the preparer assigned a 20% error (doubling the 10% error).

PART E - SOURCES OF INFORMATION AND UNCERTAINTIES - TRA-603-4H

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.)
Interviewees wish to remain anonymous.

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:
A portion of, or all of the measurements, were assumed to be taken using a G-M detector which only measures gamma emitters; beta emitters have been added to the RWMIS activity based on scaling factors. Therefore, the total activity will be greater than that in RWMIS.

7. Major unknowns in inventories of contaminants:
MAP and MFP were assigned equal values major unknowns.

8. Key assumptions used to deal with the unknowns:
MAP was broken down into radionuclides according to their cross sections and their half lives. MFP was broken down into radionuclides according to the fission products and their half lives. On part D, no G-M counter correction is needed to entries for which upper and lower bounds are given. The presence of such bounds indicates that the estimate was based on weight, laboratory analysis, spectrometry, and/or mathematical calculations. The G-M counter correction is needed for entries for which no bounds are given, because such estimates were originally made using the G-M counter method.

Continuation of Part D Column or Question Number or Title Uncertainty basis.

A Geiger-Mueller counter was probably used to measure this item. Therefore, the true uncertainty is not known.

DATA INPUT FOR HISTORICAL DATA TASK FOR RWMC SUBSURFACE DISPOSAL AREA

PART A - GENERAL INFORMATION HDT - 152

1. Preparer: Amaro, C.

2. Date prepared: 08/24/93

3. Generator: TRA
(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:
5H

6. Waste stream:
Uranium in metal.

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

8. Actual years disposed of at SDA:
Starting year 1971 Ending year 1980

9. Waste stream volume:
Amount 7.4390 Units Cubic feet.
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 614, 661, 666, 604, 626, and 654.

1. General physical form (see attached list)
[X] other (specify)
Uranium in metal.

2. Details on physical form(particularly confinement related)
Some of the uranium is depleted while some is normal uranium. Some is even a UAl alloy.

3. Chemical form:

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

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

6. Other characteristics of interest:

7. Comments (specify number of pertinent question):
5. BXW and "Other", which cannot be defined by the preparer.

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-235	Solid.	Depleted U.	A .00002140000000	CI	1971	1971	N	-20%	+20%	See continuation page.
U-238	Solid.	Depleted U.	A .00032970000000	CI	1971	1971	N	-20%	+20%	See continuation page.
U-235	Solid.	U in Al.	A .00000303000000	CI	1971	1971	N	-20%	+20%	See continuation page.
U-238	Solid.	U in Al.	A .00006613000000	CI	1971	1971	N	-20%	+20%	See continuation page.
U-235	Solid.	Depleted U.	A .00003343000000	CI	1973	1973	N	-20%	+20%	See continuation page.
U-238	Solid.	Depleted U.	A .00565400000000	CI	1973	1973	N	-20%	+20%	See continuation page.
U-235	Solid.	Depleted U.	A .00028780000000	CI	1975	1975	N	-20%	+20%	See continuation page.
U-238	Solid.	Depleted U.	A .00228700000000	CI	1975	1975	N	-20%	+20%	See continuation page.
U-232	Solid.	Metal.	A 8.3600000000000	CI	1975	1975	N	-20%	+20%	See continuation page.

* 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 sample column is marked "N" because the preparer cannot prove a sample was counted by the Radiation Measurements Laboratory (RML) at TRA, but based on the RWMIS radionuclide identification, the preparer believes a sample was counted. A 5-10% error is normal for a sample analyzed by the RML, however, being conservative, the preparer assigned a 20% error (doubling the 10% error).

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-233	Solid.	Metal.	A .00947000000000	CI	1976	1976	N	-20%	+20%	See continuation page.
U-235	Solid.	Depleted and normal U metal.	A .00007871000000	CI	1977	1977	N	-20%	+20%	See continuation page.
U-238	Solid.	Depleted and normal U metal.	A .00326300000000	CI	1977	1977	N	-20%	+20%	See continuation page.
Am-241	Solid.	Depleted and normal U metal.	A .00000032400000	CI	1977	1977	N	-20%	+20%	See continuation page.
U-238	Solid.	Depleted U metal with Np.	A .00000003360000	CI	1980	1980	N	-20%	+20%	See continuation page.
Np-237	Solid.	Depleted U metal with Np.	A .00000705000000	CI	1980	1980	N	-20%	+20%	See continuation page.
U-235	Solid.	UO2.	A .00005156000000	CI	1980	1980	N	-20%	+20%	See continuation page.
U-238	Solid.	UO2.	A .00018730000000	CI	1980	1980	N	-20%	+20%	See continuation page.

* 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 sample column is marked "N" because the preparer cannot prove a sample was counted by the Radiation Measurements Laboratory (RML) at TRA, but based on the RWMIS radionuclide identification, the preparer believes a sample was counted. A 5-10% error is normal for a sample analyzed by the RML, however, being conservative, the preparer assigned a 20% error (doubling the 10% error).

PART E - SOURCES OF INFORMATION AND UNCERTAINTIES - TRA-603-5H

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.)
Interviewee wishes to remain anonymous.

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:
On part D, no G-M counter correction is needed to entries for which upper and lower bounds are given. The presence of such bounds indicates that the estimate was based on weight, laboratory analysis, spectrometry, and/or mathematical calculations. The G-M counter correction is needed for entries for which no bounds are given, because such estimates were originally made using the G-M counter method.

Continuation of Part D Column or Question Number or Title Uncertainty basis.

In 1970, a germanium detector was being used by the Radiation Measurements Lab (RML) at TRA. Although the preparer cannot prove a sample was brought to the RML to count, based on the radionuclides identified by RWMIS, the preparer believes that samples were brought to the RML to be analyzed. A 20% error was assigned because of counting uncertainties. Errors are typically 5-10%. A 20% error was chosen because it should be 2 times the standard error.