RADIOACTIVE MATERIALS IN THE NATIONAL DEFENSE STOCKPILE
(as of March 20, 1981)

Reference Item No. 4
(from NRC Application Form NRC-2)

Location & Material	Type of Packaging	Storage	Total Net Wt. Short Tons	Estimated Radioactive Content in %
Zone 2				
GSA/FPRS Warren Depot, P.O. Box 590 Warren, OH 44482				
Columbite/Tantalite	Painted & Galv. Steel Drums	I	1,276	? /3
Defense Construction Supply Center, Attn: TK Bldg. 41-8 Columbus, OH 43215				
Baddeleyite Ore	4 Piles	0	7,125	0.40 U_3O_8 /2
GSA/FPRS Hammond Depot, P.O. Box 686, 3200 Sheffield Avenue, Hammond, IN 46325				
Thorium Nitrate	Painted Steel Drums	I	955	46.0 - 47.15 Tho /1
Columbite/Tantalite	Wood Kegs, Black & Galv. Drums	I	200	? /3
GSA/FPRS Jeffersonville Depot 1601 Duch Lane, P.O. Box 638 Jeffersonville, IN 47130				
Baddeleyite Ore	1 Pile	0	1,052	.32 U_3O_8 /2
GSA/FPRS Casad Depot, New Haven IN 46774				
Baddeleyite Ore	1 Pile	0	7,814	.38 U_3O_8 /2
	Black & Galv. Drums	I	567	? /3
U.S. Naval Weapons Support Center Code 113 Attn: Mr. Slaves, Crane IN 47522				
Columbite/Tantalite	Black Steel Drums & Wooden Kegs	I	113	? /3

Location/Commodity	Total Net Wt. in pounds	Estimated Radioactive Content (%)	Total amount of Source material in pounds
GSA/FPRS Casad Depot, New Haven IN 46774 Baddeleyite Ore	15,628,000	0.38 U_3O_8 x .84 -gram molecular product correction factor .31% U	48,446.80 (U)
U.S. Naval Weapons Support Center Code 113 Attn: Mr. Slaves, Crane IN 47522 Columbite/Tantalite	226,000	*0.12 (U & Th)	271.20 (U & Th

*See explanation of 0.12 (U & Th) value in Supplement Sheet No. 1, attachment no. 1

Totals in pounds	(KG) Equivalency
(U & Th) = 9,078.14	4,117.07
(U) = 101,797.20	46,166.53
(Th) = 3,058,176.60	1,386,928.16
TOTAL IN (KG)	1,437,212.76

Location & Material	Type of Packaging	Storage	Total Net Wt. Short Tons	Estimated or Analyzed Radioactive Content in % (E=Estimated;A=Analyze
DLA/DNSC Casad Depot New Haven, IN 46774 Baddeleyite Ore	1 Pile	0	15,990.69	Average .10 ThO_2(A) .30 UO_2(A)
Columbium, Natural Minerals	Steel & Galv Drums	I	184.73	?/3(E)
Tantalum, Natural Minerals	Drums, Boxes & Bags	I	333.67	?/3(E)
Tantalum, Chemically Processed	Painted Steel Drums	I	6.68	?/3(E)
Tantalum, Oxide	Wood Kegs	I	41.17	?/3(E)
*Rare Earth, Sodium Sulfate	Galv. Drums	I	796.56	0.04 - 0.20 ThO_2(A)
U.S. Naval Weapons Support Center Code 113 Attn: Mr. Slaves Crane, IN 47522				
Columbium, Natural Minerals	Painted Steel Drums	I	42.30	?/3(E)
Tantalum, Natural Minerals	Steel Drums & Wood Kegs	I	70.89	?/3(E)

* This material does not fall into the category of licensable material, see 10 CFR Part 40.13 (c)(i)(vi). Refer to our letter to Mr. John Hickey, NRC, Fuel Cycle & Material Licensing dated February 19, 1981 - NCR Control No. 18523.

Location/Commodity	Total Net Wt. in Pounds	Estimated or Analyzed Radioactive Content Expressed in % by Weight (E=Estimated; A=Analyzed)	Total Amount Source Material in Pounds
DLA/DNSC Casad Depot New Haven, IN 46774 Baddeleyite Ore	31,981,380	.09-.11 (A) (ThO_2) .28-.32 (A) (UO_2) Using highest amount .32 expressed as (U) the gram molecular product correction factor for (U) content .32 X.93 .29 Using highest amount .11 expressed as (Th) the gram molecular product correction factor for (Th) content .11 X.88 .09 Using highest amounts expressed as (U+Th) .09 (U) .29 (Th) .38 (U+Th)	
Tantalum, Natural Minreals	667,338	*0.12 (E)(U & Th)	121,529.24 (U & Th)
Tantalum, Chemically Processed	13,352	*0.12 (E)(U & Th)	800.81 (U & Th)
Tantalum Oxide	82,331	*0.12 (E)(U & Th)	16.02 (U & Th) 98.79 (U & Th)

Columbium, Natural Minerals	369,462	*0.12 (E)(U & Th)	443.35 (U & Th)
Rare Earth, Sodium Sulfate	1,593,114	0.176 (Th)	2,803.88 (Th)
(See explanation - Rare Earth)		.04 - .20 ThO_2	
Sodium Sulfate - Hammond Depot)		using high value .20	
		X.88	
		0.176	

U.S. Naval Weapons Support
Center
Code 113 Attn: Mr. Slaves
Crane, IN 47522

Columbium, Natural Minerals	84,598	*0.12 (E)(U & Th)	101.52 (U & Th)
Tantalum, Natural Minerals	141,774	*0.12 (E)(U & Th)	170.13 (U & Th)

* See explanation of 0.12 (U & Th) value on Attachment No. 1
** See explanation of 0.12 (U) value on Attachment No. 1

O'Dell Tantalum

New Haven Depot

Lot 1 42,000 Pounds

ThO2 % =	0.015	x	0.88	=	0.01 % Th
U3O8 % =	0.13	x	0.84	=	0.11 % U

Th = 5.54 Pounds
U = 45.86 Pounds
Th + U = 51.41 Pounds

Lot 2 42,000 Pounds

ThO2 % =	0.013	x	0.88	=	0.01 % Th
U3O8 % =	0.13	x	0.84	=	0.11 % U

Th = 4.80 Pounds
U = 45.86 Pounds
Th + U = 50.67 Pounds

Lot 3 42,000 Pounds

ThO2 % =	0.008	x	0.88	=	0.01 % Th
U3O8 % =	0.14	x	0.84	=	0.12 % U

Th = 2.96 Pounds
U = 49.39 Pounds
Th + U = 52.35 Pounds

Lot 4 42,000 Pounds

ThO2 % =	0.019	x	0.88	=	0.02 % Th
U3O8 % =	0.26	x	0.84	=	0.22 % U

Th = 7.02 Pounds
U = 91.73 Pounds
Th + U = 98.75 Pounds

Lot 5 42,000 Pounds

ThO2 % =	0.019	x	0.88	=	0.02 % Th
U3O8 % =	0.25	x	0.84	=	0.21 % U

Th = 7.02 Pounds
U = 88.20 Pounds
Th + U = 95.22 Pounds