DEFENSE NATIONAL STOCKPILE CENTER, NEW HAVEN DEPOT
DEFAULT AND RECOMMENDED VALUES FOR RESRAD INPUT PARAMETERS

RESRAD Version 6.3					Parameter Justification	
Parameter	**Code**	**Default Value**	**User Input Value**	**Units**	**Comments**	**Reference**
PATHWAY SELECTIONS						
External Gamma	N/A	Active	Active	N/A	N/A	N/A
Inhalation (without radon)	N/A	Active	Active	N/A	N/A	N/A
Plant Ingestion	N/A	Active	Active	N/A	N/A	N/A
Meat Ingestion	N/A	Active	Active	N/A	N/A	N/A
Milk Ingestion	N/A	Active	Active	N/A	N/A	N/A
Aquatic Foods	N/A	Active	Active	N/A	N/A	N/A
Drinking Water	N/A	Active	Active	N/A	N/A	N/A
Soil Ingestion	N/A	Active	Active	N/A	N/A	N/A
Radon	N/A	Inactive	Inactive	N/A	Not applicable per Federal Register, 1994, p. 43210	NRC 1994
CONTAMINATED ZONE PARAMETERS						
Area of contaminated zone	AREA	10,000	10,000	m^2	The RESRAD default is used as the base case for natural thorium.	Yu 1993 (Section 30)
Thickness of contaminated zone	THICK0	2	**0.5**	m	Contamination was assumed to be limited to the top 50 cm of soil for the majority of the site based on an evaluation of the site history and the resultant conceptual site model.	Yu 1993 (Section 39)
Length parallel to the aquifer	LCZPAQ	100	100	m	For all cases, the length parallel to the aquifer was calculated as the square root of the contaminated zone area.	Yu 1993 (Section 16)
Times for calculations	TI	1, 3, 10, 30, 100, 300, 1000	1, 3, 10, 30, 100, 300, 1000	yr	RESRAD defaults for calculation times.	Yu 2001
COVER AND CONTAMINATED ZONE HYDROLOGICAL DATA						
Cover depth	COVER)	0	0	m	As a conservative approach for dose modeling, no cover depth was assumed.	Yu 1993 (Section 31)
Density of cover material	DENSCV	1.5	**N/A**	g/cm^3	Lack of cover depth precludes an assigned value for this parameter.	Yu 1993 (Section 2)
Cover erosion rate	VCV	0.001	**N/A**	m/yr	Lack of cover depth precludes an assigned value for this parameter.	Yu 1993 (Section 14)

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RESRAD Version 6.3					Parameter Justification	
Parameter	**Code**	**Default Value**	**User Input Value**	**Units**	**Comments**	**Reference**
Density of contaminated zone	DENSCZ	1.5	1.2	g/cm^3	The soil density was selected from Table 2.1 of the reference for silty clay.	USDA 2006b Yu 1993 (Section 2)
Contaminated zone erosion rate	VCZ	0.001	0.001	m/yr	RESRAD default used.	Yu 1993 (Section 14)
Contaminated zone total porosity	TPCZ	0.4	0.4	unitless	RESRAD default used as an estimate of the total porosity	Yu 1993 (Section 3)
Contaminated zone field capacity	FCCZ	0.2	0.2	unitless	RESRAD default used as an estimate of field capacity	Yu 2001
Contaminated zone hydraulic conductivity	HCCZ	10	**3.21**	m/yr	Assumed to be a factor of 10 less than the saturated zone hydraulic conductivity for silty clay from Table 5.2 of the reference.	Yu 1993 (Section 5)
Contaminated zone b parameter	BCZ	5.3	**10.4**	unitless	The contaminated zone b parameter was selected from Table 13.1 of the reference for silty clay.	Yu 1993 (Section 13)
Humidity in air	HUMID	8	**N/A**	g/m^3	Humidity input is only required in RESRAD when tritium is a radionuclide of concern.	Yu 2001
Evapotranspiration coefficient	EVAPTR	0.5	0.5	unitless	No site-specific data available. RESRAD default used.	Yu 1993 (Section 12)
Wind speed	WIND	2	**4.4**	m/sec	Per city-data.com, the average annual wind speed is 9.9 mph (4.4 m/sec).	Yu 1993 (Section 21) DLA, 2000
Precipitation	PRECIP	1	**0.88**	m/yr	Site-specific value based on reported average annual rainfall, 34.75 in (88.27 cm) over the year.	Yu 1993 (Section 9) DLA, 2000
Irrigation	RI	0.2	0.2	m/yr	No site-specific data available. RESRAD default used.	Yu 1993 (Section 11)
Irrigation mode	IDITCH	Overhead	Overhead	unitless	The “Overhead” and “Ditch” designations are independent of the depth of contaminated zone and have no significant impact on the RESRAD evaluation. The RESRAD default designation was selected.	Yu 2001
Runoff coefficient	RUNOFF	0.2	0.2	unitless	The RESRAD default value was selected based on reference value for intermediate combinations of clay and loam.	Yu 1993 (Section 10)

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RESRAD Version 6.3					Parameter Justification	
Parameter	**Code**	**Default Value**	**User Input Value**	**Units**	**Comments**	**Reference**
Watershed area for nearby stream or pond	WAREA	1.00E6	1.00E6	m^2	RESRAD default used.	Yu 1993 (Section 17)
Accuracy for water/soil computations	EPS	0.001	0.001	unitless	RESRAD default used.	Yu 2001
SATURATED ZONE HYDROLOGICAL DATA						
Density of saturated zone	DENSAQ	1.5	1.2	g/cm^3	Soil density range from samples obtained by USDA at the site was 1.2 to 1.7. The RESRAD default was chosen as a reasonable average.	USDA 2006b Yu 1993 (Section 2)
Saturated zone total porosity	TPSZ	0.4	0.4	unitless	RESRAD default used. Equivalent to contaminated zone total porosity.	Yu 1993 (Section 3)
Saturated zone effective porosity	EPSZ	0.2	0.2	unitless	RESRAD default used.	Yu 1993 (Section 4)
Saturated zone field capacity	FCSZ	0.2	0.2	unitless	RESRAD default used.	Yu 2001
Saturated zone hydraulic conductivity	HCSZ	100	**32.1**	m/yr	Saturated zone hydraulic conductivity for silty clay taken from Table 5.2 of the reference.	Yu 1993 (Section 5)
Saturated zone hydraulic gradient	HGWT	0.02	0.02	unitless	RESRAD default used. Potable water at the Site is obtained via public water supply. Groundwater contamination is not considered a significant exposure pathway, though this parameter is "active" for conservatism.	Yu 1993 (Section 15)
Saturated zone b parameter	BSZ	5.3	**10.4**	unitless	The contaminated zone b parameter was selected from Table 13.1 of the reference for silty clay.	Yu 1993 (Section 13)
Water table drop rate	VWT	0.001	0.001	m/yr	RESRAD default used. Groundwater contamination is not considered a significant exposure pathway, though this parameter is "active" for conservatism.	Yu 1993 (Section 18)
Well pump intake depth (meters below water table)	DWIBWT	10	10	m	RESRAD default used. Groundwater contamination is not considered a significant exposure pathway, though this parameter is "active" for conservatism.	Yu 1993 (Section 19)
Model for Water Transport Parameters [Non-dispersion (ND) or Mass-Balance (MB)]	MODEL	ND	**MB**	unitless	Per NRC guidance, the MB model is an acceptable approach and provides a potentially more conservative dose estimate relative to the ND model. The MB model assumes a well is located at the center of the site rather than on the down gradient side of the Site boundary.	NUREG-1757, Vo. 2, App. I, page I-40

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RESRAD Version 6.3					Parameter Justification	
Parameter	**Code**	**Default Value**	**User Input Value**	**Units**	**Comments**	**Reference**
					In addition, all radionuclides released from the contaminated zone are withdrawn through the well. Groundwater contamination is not considered a significant exposure pathway, though this parameter is "active" for conservatism.	NRC 1999b
Well pumping rate	UW	250	250	m^3/yr	RESRAD default used. Groundwater contamination is not considered a significant exposure pathway, though this parameter is "active" for conservatism.	Yu 2001
UNCONTAMINATED UNSATURATED ZONE PARAMETERS						
Number of unsaturated zone strata	NS	1	1	unitless	RESRAD default used.	Yu 1993 (Section 25)
Unsaturated zone thickness	H(1)	4	**14.50**	m	Determined by subtracting the contaminated zone thickness (0.15 m) from the assumed saturated zone depth below ground surface (15 m).	Yu 1993 (Section 25)
Unsaturated zone soil density	DENSUZ(1)	1.5	1.2	g/cm^3	Soil density range from samples obtained by USDA at the site was 1.2 to 1.7. The RESRAD default was chosen as a reasonable average.	USDA 2006b Yu 1993 (Section 2)
Unsaturated zone total porosity	TPUZ(1)	0.4	0.4	unitless	RESRAD default used (equivalent to saturated and contaminated zone total porosity inputs).	Yu 1993 (Section 3)
Unsaturated zone effective porosity	EPSZ(1)	0.2	0.2	unitless	RESRAD default used.	Yu 1993 (Section 4)
Unsaturated zone field capacity	FCSZ(1)	0.2	0.2	unitless	RESRAD default used.	Yu 2001
Unsaturated zone hydraulic conductivity	HCSZ(1)	100	**3.21**	m/yr	Assumed to be a factor of 10 less than the saturated zone hydraulic conductivity for silty clay from Table 5.2 of the reference.	Yu 1993 (Section 5)
Unsaturated zone b parameter	BSZ	5.3	**10.4**	unitless	The unsaturated zone b parameter was selected from Table 13.1 of the reference for silty clay.	Yu 1993 (Section 13)
ELEMENTAL DISTRIBUTION (PARTITION) COEFFICIENTS AND LEACH RATES: THORIUM						
Contaminated zone	DCNUCC(2 & 3)	60,000	**5,800**	cm^3/g	Site is predominantly silty clay. Value from Table 32.1 of the reference for clay selected as the input. However, for thorium, the value selected has no impact on the DCGL determination.	Yu 1993 (Section 32)
Unsaturated zone	DCNUCU(2 & 3,1)	60,000	**5,800**	cm^3/g	Site is predominantly silty clay. Value from Table 32.1 of the reference for clay selected as the input. However, for thorium, the value selected has no impact on the DCGL determination.	Yu 1993 (Section 32)

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DEFAULT AND RECOMMENDED VALUES FOR RESRAD INPUT PARAMETERS

RESRAD Version 6.3					Parameter Justification	
Parameter	**Code**	**Default Value**	**User Input Value**	**Units**	**Comments**	**Reference**
Saturated zone	DCNUCS(2 & 3)	60,000	**5,800**	cm^3/g	Site is predominantly silty clay. Value from Table 32.1 of the reference for clay selected as the input.	Yu 1993 (Section 32)
Leach rate	ALEACH(2 & 3)	0	0	y^{-1}	RESRAD default used.	Yu 2001
Solubility constant	SOLUBK(2 & 3)	0	0	unitless	RESRAD default used.	Yu 2001
ELEMENTAL DISTRIBUTION (PARTITION) COEFFICIENTS AND LEACH RATES: RADIUM						
Contaminated zone	DCNUCC(1)	70	**9,100**	cm^3/g	Site is predominantly silty clay. Value from Table 32.1 of the reference for clay selected as the input.	Yu 1993 (Section 32)
Unsaturated zone	DCNUCU(1,1)	70	**9,100**	cm^3/g	Site is predominantly silty clay. Value from Table 32.1 of the reference for clay selected as the input.	Yu 1993 (Section 32)
Saturated zone	DCNUCS(1)	70	**9,100**	cm^3/g	Site is predominantly silty clay. Value from Table 32.1 of the reference for clay selected as the input.	Yu 1993 (Section 32)
Leach rate	ALEACH(1)	0	0	y^{-1}	RESRAD default used.	Yu 2001
Solubility constant	SOLUBK(1)	0	0	unitless	RESRAD default used.	Yu 2001
ELEMENTAL DISTRIBUTION (PARTITION) COEFFICIENTS AND LEACH RATES: URANIUM						
Contaminated zone	DCNUCC(1)	70	**1,600**	cm^3/g	Site is predominantly silty clay. Value from Table 32.1 of the reference for clay selected as the input.	Yu 1993 (Section 32)
Unsaturated zone	DCNUCU(1,1)	70	**1,600**	cm^3/g	Site is predominantly silty clay. Value from Table 32.1 of the reference for clay selected as the input.	Yu 1993 (Section 32)
Saturated zone	DCNUCS(1)	70	**1,600**	cm^3/g	Site is predominantly silty clay. Value from Table 32.1 of the reference for clay selected as the input.	Yu 1993 (Section 32)
Leach rate	ALEACH(1)	0	0	y^{-1}	RESRAD default used.	Yu 2001
Solubility constant	SOLUBK(1)	0	0	unitless	RESRAD default used.	Yu 2001
ELEMENTAL DISTRIBUTION (PARTITION) COEFFICIENTS AND LEACH RATES: ACTINIUM						
Contaminated zone	DCNUCC(1)	70	**2,400**	cm^3/g	Site is predominantly silty clay. Value from Table 32.1 of the reference for clay selected as the input.	Yu 1993 (Section 32)

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RESRAD Version 6.3					Parameter Justification	
Parameter	**Code**	**Default Value**	**User Input Value**	**Units**	**Comments**	**Reference**
Unsaturated zone	DCNUCU(1,1)	70	**2,400**	cm^3/g	Site is predominantly silty clay. Value from Table 32.1 of the reference for clay selected as the input.	Yu 1993 (Section 32)
Saturated zone	DCNUCS(1)	70	**2,400**	cm^3/g	Site is predominantly silty clay. Value from Table 32.1 of the reference for clay selected as the input.	Yu 1993 (Section 32)
Leach rate	ALEACH(1)	0	0	y^{-1}	RESRAD default used.	Yu 2001
Solubility constant	SOLUBK(1)	0	0	unitless	RESRAD default used.	Yu 2001
ELEMENTAL DISTRIBUTION (PARTITION) COEFFICIENTS AND LEACH RATES: PROTACTINIUM						
Contaminated zone	DCNUCC(1)	70	**2,700**	cm^3/g	Site is predominantly silty clay. Value from Table 32.1 of the reference for clay selected as the input.	Yu 1993 (Section 32)
Unsaturated zone	DCNUCU(1,1)	70	**2,700**	cm^3/g	Site is predominantly silty clay. Value from Table 32.1 of the reference for clay selected as the input.	Yu 1993 (Section 32)
Saturated zone	DCNUCS(1)	70	**2,700**	cm^3/g	Site is predominantly silty clay. Value from Table 32.1 of the reference for clay selected as the input.	Yu 1993 (Section 32)
Leach rate	ALEACH(1)	0	0	y^{-1}	RESRAD default used.	Yu 2001
Solubility constant	SOLUBK(1)	0	0	unitless	RESRAD default used.	Yu 2001
ELEMENTAL DISTRIBUTION (PARTITION) COEFFICIENTS AND LEACH RATES: LEAD						
Contaminated zone	DCNUCC(1)	70	**550**	cm^3/g	Site is predominantly silty clay. Value from Table 32.1 of the reference for clay selected as the input.	Yu 1993 (Section 32)
Unsaturated zone	DCNUCU(1,1)	70	**550**	cm^3/g	Site is predominantly silty clay. Value from Table 32.1 of the reference for clay selected as the input.	Yu 1993 (Section 32)
Saturated zone	DCNUCS(1)	70	**550**	cm^3/g	Site is predominantly silty clay. Value from Table 32.1 of the reference for clay selected as the input.	Yu 1993 (Section 32)
Leach rate	ALEACH(1)	0	0	y^{-1}	RESRAD default used.	Yu 2001
Solubility constant	SOLUBK(1)	0	0	unitless	RESRAD default used.	Yu 2001

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RESRAD Version 6.3					Parameter Justification	
Parameter	**Code**	**Default Value**	**User Input Value**	**Units**	**Comments**	**Reference**
OCCUPANCY, INHALATION AND EXTERNAL GAMMA DATA						
Inhalation rate	INHALR	8,400	8,400	m^3/y	RESRAD default used.	Yu 1993 (Section 43)
Mass loading for inhalation	MLINH	0.0001	0.0001	g/m^3	RESRAD default used.	Yu 1993 (Section 35)
Exposure duration	ED	30	30	yr	RESRAD default used. DCGL calculations not influenced by exposure duration.	Yu 2001
Inhalation shielding factor	SHF3	0.4	0.4	unitless	RESRAD default used.	Yu 1993 (Section 36)
External gamma shielding factor	SHF1	0.7	**0.5512**	unitless	EPA value from Equation 4 in reference used.	EPA 2000
Indoor time fraction	FIND	0.5	**0.6571**	unitless	EPA value from Equation 4 in reference used.	EPA 2000
Outdoor time fraction	FOTD	0.25	**0.1181**	unitless	EPA value from Equation 4 in reference used.	EPA 2000
Shape of the contaminated zone (circular or non-circular)	FS	Circular	Circular	unitless	RESRAD default used.	Yu 1993 (Section 50)
INGESTION PATHWAY (DIETARY DATA)						
Fruits, vegetables and grain consumption	DIET(1)	160	**112**	kg/yr	No site-specific value is available. Hence, NRC value was assigned.	ANL 1993 (Section 42) NUREG/CR 5512 (Vol. 4, p. 3-6)
Leafy vegetable consumption	DIET(2)	14	**21.4**	kg/yr	No site-specific value is available. Hence, NRC value was assigned.	ANL 1993 (Section 44) NUREG/CR 5512 (Vol. 4, p. 3-6)
Milk consumption	DIET(3)	92	**233**	L/yr	No site-specific value is available. Hence, NRC value was assigned.	ANL 1993 (Section 47) NUREG/CR 5512 (Vol. 4, p. 3-6)
Meat and poultry consumption	DIET(4)	63	**65.1**	kg/yr	No site-specific value is available. Hence, NRC value was assigned.	ANL 1993 (Section 46)

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Parameter	**Code**	**Default Value**	**User Input Value**	**Units**	**Comments**	**Reference**
						NUREG/CR 5512 (Vol. 4, p. 3-6)
Fish consumption	DIET(5)	5.4	**20.6**	kg/yr	No site-specific value is available. Hence, NRC value was assigned.	ANL 1993 (Section 46) NUREG/CR 5512 (Vol. 4, p. 3-6)
Other seafood consumption	DIET(6)	0.9	0.9	kg/yr	No site-specific or NRC value is available. Hence, RESRAD default value was assigned.	ANL 1993 (Section 46) NUREG/CR 5512 (Vol. 4, p. 3-6)
Soil ingestion rate	SOIL	36.5	18.3	g/yr	No site-specific value is available. Hence, NRC value was assigned.	ANL 1993 (Section 46) NUREG/CR 5512 (Vol. 4, p. 3-6)
Drinking water intake	DWI	510	**478.5**	L/yr	No site-specific value is available. Hence, NRC value was assigned.	ANL 1993 (Section 46) NUREG/CR 5512 (Vol. 4, p. 3-6)
Contamination fraction of drinking water	FDW	1	1	unitless	Maximum NRC value used.	NRC 1999b Yu 2001
Contamination fraction of household water	FHHW	1	**NA**	unitless	Radon pathway is not selected; hence this parameter is not applicable	N/A
Contamination fraction of livestock water	FLW	1	1	unitless	Maximum NRC value used.	N/A
Contamination fraction of irrigation water	FIRW	1	1	unitless	Maximum NRC value used.	NRC 1999b
Contamination fraction of aquatic food	FR9	0.5	0.5	unitless	No site-specific or NRC value is available. Hence, RESRAD default value was assigned.	N/A
Contaminated fraction of plant food	FPLANT	-1	-1	unitless	Setting the parameter to -1 allows RESRAD to determine appropriate value based on area factor.	Yu 1993
Contaminated fraction of meat	FMEAT	-1	-1	unitless	Setting the parameter to -1 allows RESRAD to determine appropriate value based on area factor.	N/A
Contaminated fraction of milk	FMILK	-1	-1	unitless	Setting the parameter to -1 allows RESRAD to determine appropriate value based on area factor.	N/A

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RESRAD Version 6.3					Parameter Justification	
Parameter	**Code**	**Default Value**	**User Input Value**	**Units**	**Comments**	**Reference**
INGESTION PATHWAY (NON-DIETARY DATA)						
Livestock fodder intake for meat	LP15	68	68	kg/day	No site-specific value was available. NUREG/CR-6697 provides a range of values (13.4 to 53.6 kg/day); however, a specific justification for selecting a particular value within the range provided could not be identified. Therefore, the default value was selected.	NUREG/CR-6697, Table 3-1, p. 157)
Livestock fodder intake for milk	LP16	55	55	kg/day	No site-specific value was available. NUREG/CR-6697 provides a range of values (31.6 to 126 kg/day); however, a specific justification for selecting a particular value within the range provided could not be identified. Therefore, the default value was selected.	NUREG/CR-6697, Table 3-1, p. 158)
Livestock water intake for meat	LW15	50	50	L/day	No site-specific value was available. NUREG/CR-6697 provides a range of values (25 to 100 L/day). The "base" or middle value (50 L/day) is in agreement with the RESRAD default value was selected.	NUREG/CR-6697, Table 3-1, p. 158) ANL 1993 (Section 45)
Livestock water intake for milk	LW15	160	160	L/day	No site-specific value was available. NUREG/CR-6697 provides a range of values (30 to 120 L/day); however, a specific justification for selecting a particular value within the range provided could not be identified. Therefore, the default value was selected.	NUREG/CR-6697, Table 3-1, p. 158) ANL 1993 (Section 45)
Livestock intake of soil	LS1	0.5	0.5	kg/day	No site-specific value was available. NUREG/CR-6697 provides a range of values (0.25 to 1.0 kg/day). The "base" or middle value (0.5 kg/day) is in agreement with the RESRAD default value was selected.	NUREG/CR-6697, Table 3-1, p. 158)
Mass loading for foliar deposition	MLFD	0.0001	0.0001	g/m^3	No site-specific value was available. NUREG/CR-6697 provides a range of values (1E-7 to 7E-4 g/m^3); however, a specific justification for selecting a particular value within the range provided could not be identified. Therefore, the default value was selected.	NUREG/CR-6697, Table 3-1, p. 158)
Depth of soil mixing layer	DM	0.15	0.15	m	No site-specific value was available. NUREG/CR-6697 provides a range of values (0.075 to 0.3 m). The "base" or middle value (0.15 m) is in agreement with the RESRAD default value was selected.	NUREG/CR-6697, Table 3-1, p. 158) Yu 1993 (Section 35)
Depth of roots	DROOT	0.9	0.9	m	No site-specific value was available. NUREG/CR-6697 provides a range of values (0.3 to 3 m). The "base" or middle value (0.9 m) is in agreement with the RESRAD default value was selected.	NUREG/CR-6697, Table 3-1, p. 159) Yu 1993 (Section 37)
Groundwater fractional usage: Drinking water	FGWDW	1	1	unitless	No site-specific value was identified; the RESRAD and NRC parameter values are identical and were selected.	NUREG/CR-6697, Table 3-1, p. 3-7)

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Parameter	**Code**	**Default Value**	**User Input Value**	**Units**	**Comments**	**Reference**
Groundwater fractional usage: Household water	FGWHH	1	**N/A**	unitless	Radon pathway not active	N/A
Groundwater fractional usage: Livestock water	FGWLW	1	1	unitless	No site-specific value was identified; the RESRAD and NRC parameter values are identical and were selected.	NUREG/CR-6697, Table 3-1, p. 3-7)
Groundwater fractional usage: Irrigation water	FGWIR	1	1	unitless	No site-specific value was identified; the RESRAD and NRC parameter values are identical and were selected.	NUREG/CR-6697, Table 3-1, p. 3-7)
PLANT TRANSPORT FACTORS						
Wet weight crop yield: non-leafy vegetables	YV(1)	0.7	0.7	kg/m^2	No site-specific value was available. NUREG/CR-6697 provides a range of values (0.31 to 3 kg/m^2); however, a specific justification for selecting a particular value within the range provided could not be identified. Therefore, the default value was selected.	NUREG/CR-6697, Table 3-1, p. 159)
Wet weight crop yield: leafy vegetables	YV(2)	1.5	1.5	kg/m^2	No site-specific value was available. NUREG/CR-6697 provides a range of values (2.7 to 3 kg/m^2); however, a specific justification for selecting a particular value within the range provided could not be identified. Therefore, the default value was selected.	NUREG/CR-6697, Table 3-1, p. 159)
Wet weight crop yield: fodder	YV(3)	1.1	1.1	kg/m^2	No site-specific value was available. NUREG/CR-6697 provides a range of values (1.259 to 2.36 kg/m^2); however, a specific justification for selecting a particular value within the range provided could not be identified. Therefore, the default value was selected.	NUREG/CR-6697, Table 3-1, p. 159)
Length of growing season: non-leafy vegetables	TE(1)	0.17	0.17	years	No site-specific value was available. NUREG/CR-6697 provides a range of values (0.085 to 0.4932 years); however, a specific justification for selecting a particular value within the range provided could not be identified. Therefore, the default value was selected.	NUREG/CR-6697, Table 3-1, p. 159)
Length of growing season: leafy vegetables	TE(2)	0.25	0.25	years	No site-specific value was available. NUREG/CR-6697 provides a range of values (0.062 to 0.246 years); however, a specific justification for selecting a particular value within the range provided could not be identified. Therefore, the default value was selected.	NUREG/CR-6697, Table 3-1, p. 159)
Length of growing season: fodder	TE(3)	0.08	0.08	years	No site-specific value was available. NUREG/CR-6697 provides a range of values (0.04 to 0.16 years). The "base" or middle value (0.08) is in agreement with the RESRAD default value was selected.	NUREG/CR-6697, Table 3-1, p. 160)
Translocation factor: non-leafy vegetables	TIV(1)	0.1	0.1	unitless	No site-specific value was available. NUREG/CR-6697 provides a range of values (0.06 to 0.2). The "base" or middle value (0.1) is in agreement with the RESRAD default value was selected.	NUREG/CR-6697, Table 3-1, p. 160)

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Parameter	**Code**	**Default Value**	**User Input Value**	**Units**	**Comments**	**Reference**
Translocation factor: leafy vegetables	TIV(2)	1	1	unitless	No site-specific value was available. NUREG/CR-6697 provides a range of values (0.5 to 1). The maximum value (1) is in agreement with the RESRAD default value was selected.	NUREG/CR-6697, Table 3-1, p. 160)
Translocation factor: fodder	TIV(3)	1	1	unitless	No site-specific value was available. NUREG/CR-6697 provides a range of values (0.5 to 1). The maximum value (1) is in agreement with the RESRAD default value was selected.	NUREG/CR-6697, Table 3-1, p. 160)
Weathering removal constant	WLAM	20	20	y^{-1}	No site-specific value was available. NUREG/CR-6697 provides a range of values (10 to 40). The "base" or middle value (20) is in agreement with the RESRAD default value was selected.	NUREG/CR-6697, Table 3-1, p. 160)
Wet foliar interception fraction: non-leafy vegetables	RWET(1)	0.25	0.25	unitless	No site-specific value was available. NUREG/CR-6697 provides a range of values; however, a specific justification for selecting a particular value within the range provided could not be identified. Therefore, the default value was selected.	NUREG/CR-6697, Table 3-1, p. 160)
Wet foliar interception fraction: leafy vegetables	RWET(2)	0.25	0.25	unitless	No site-specific value was available. NUREG/CR-6697 provides a range of values; however, a specific justification for selecting a particular value within the range provided could not be identified. Therefore, the default value was selected.	NUREG/CR-6697, Table 3-1, p. 161)
Wet foliar interception fraction: fodder	RWET(3)	0.25	0.25	unitless	No site-specific value was available. NUREG/CR-6697 provides a range of values; however, a specific justification for selecting a particular value within the range provided could not be identified. Therefore, the default value was selected.	NUREG/CR-6697, Table 3-1, p. 161)
Dry foliar interception fraction: non-leafy vegetables	RDRY(1)	0.25	0.25	unitless	No site-specific value was available. NUREG/CR-6697 provides a range of values; however, a specific justification for selecting a particular value within the range provided could not be identified. Therefore, the default value was selected.	NUREG/CR-6697, Table 3-1, p. 160)
Dry foliar interception fraction: leafy vegetables	RDRY(2)	0.25	0.25	unitless	No site-specific value was available. NUREG/CR-6697 provides a range of values; however, a specific justification for selecting a particular value within the range provided could not be identified. Therefore, the default value was selected.	NUREG/CR-6697, Table 3-1, p. 160)
Dry foliar interception fraction: fodder	RDRY(3)	0.25	0.25	unitless	No site-specific value was available. NUREG/CR-6697 provides a range of values; however, a specific justification for selecting a particular value within the range provided could not be identified. Therefore, the default value was selected.	NUREG/CR-6697, Table 3-1, p. 160)

DEFENSE NATIONAL STOCKPILE CENTER, NEW HAVEN DEPOT
DEFAULT AND RECOMMENDED VALUES FOR RESRAD INPUT PARAMETERS

RESRAD Version 6.3					Parameter Justification	
Parameter	**Code**	**Default Value**	**User Input Value**	**Units**	**Comments**	**Reference**
STORAGE TIMES BEFORE USE						
Fruits, non-leafy vegetables and grain	STOR_T(1)	14	14	days	No site-specific value was identified; the RESRAD and NRC parameter values are identical and were selected.	NUREG/CR-6697, Table 3-1, p. 3-7)
Leafy vegetables	STOR_T(2)	1	1	days	No site-specific value was identified; the RESRAD and NRC parameter values are identical and were selected.	NUREG/CR-6697, Table 3-1, p. 3-7)
Milk	STOR_T(3)	1	1	days	No site-specific value was identified; the RESRAD and NRC parameter values are identical and were selected.	NUREG/CR-6697, Table 3-1, p. 3-7)
Meat	STOR_T(4)	20	20	days	No site-specific value was identified; the RESRAD and NRC parameter values are identical and were selected.	NUREG/CR-6697, Table 3-1, p. 3-7)
Fish	STOR_T(5)	7	7	days	No site-specific value was identified; the RESRAD and NRC parameter values are identical and were selected.	NUREG/CR-6697, Table 3-1, p. 3-7)
Crustacea and mollusks	STOR_T(6)	7	7	days	No site-specific value was identified; the RESRAD and NRC parameter values are identical and were selected.	NUREG/CR-6697, Table 3-1, p. 3-7)
Well water	STOR_T(7)	1	1	days	No site-specific value was identified; the RESRAD and NRC parameter values are identical and were selected.	NUREG/CR-6697, Table 3-1, p. 3-7)
Surface water	STOR_T(8)	1	1	days	No site-specific value was identified; the RESRAD and NRC parameter values are identical and were selected.	NUREG/CR-6697, Table 3-1, p. 3-7)
Livestock fodder	STOR_T(9)	45	45	days	No site-specific value was identified; the RESRAD and NRC parameter values are identical and were selected.	NUREG/CR-6697, Table 3-1, p. 3-7)