Changes in Default Target Levels and Risk-Based Target Levels

The attached tables provide a comparison for some chemicals of the February 2005 version and the January 2006 Default Target Levels (DTLs) and Risk-Based Target Levels (RBTLs) in the draft Departmental Missouri Risk-Based Corrective action (MRBCA) Technical Guidance The Cleanup Levels for Missouri (CALM) values are also included in the tables as a point of reference. However, please note that the CALM values are not consistent with the pathways presented for the MRBCA numbers. The list of chemicals is meant to be representative of those found on site of examples of those whose values changed; however, petroleum-related chemicals are not used in these tables.

Each table includes (i) equivalent CALM values if available, (ii) February 2005 values, (iii) January 2006 values, (iv) comparison of January 2006 values with February 2005 values, and (v) the reason for the change. Note that each table is one page.

Following is the list of changes incorporated in January 2006 values:

1. Changes in toxicity values for several chemicals
2. Adoption of USEPA's Risk Assessment Guidance for Superfund (RAGS) Part E
    - Changes in equations
    - Inclusion of dermal contact scenario for domestic water use
    - Changes in skin surface area
    - Changes in soil adherence factor
3. Changes in inhalation rate of construction worker

For further explanation and details, refer to the memo "Changes in Calculation of Tier 1 Risk-Based Target Levels for Departmental Missouri Risk-Based Corrective Action Technical Guidance, September 12, 2005, Information for Risk-Based Remediation Rule Workgroup" available at ***http://www.dnr.mo.gov/alpd/hwp/mrbca/mrbca.htm***

<u>List of Tables</u>

The following tables are included and each table is one page:

Table 1 Changes in DTLs for soil
Table 2 Changes in DTLs for groundwater

<u>Soil Type 1 (Sandy)</u>

Tables 3 – 7 Changes in RBTLs for Residential Land Use, Soil Type 1 (Sandy) for the each of following pathways:
- Surficial soil (ingestion, inhalation, and dermal contact)
- Surburface soil (indoor inhalation)
- Groundwater (indoor inhalation)

- Groundwater (dermal contact)
- Groundwater (domestic water use)

Tables 8 – 11 Changes in RBTLs for Non-residential Land Use, Soil Type 1 (Sandy) for the each of following pathways:

- Surficial soil (ingestion, inhalation, and dermal contact)
- Subsurface soil (indoor inhalation)
- Groundwater (indoor inhalation)
- Groundwater (dermal contact)

Tables 12 – 14 Changes in RBTLs for Construction Worker, Soil Type 1 (Sandy) for the each of following pathways:

- Soil (ingestion, inhalation, and dermal contact)
- Groundwater (outdoor inhalation)
- Groundwater (dermal contact)

<u>Soil Type 2 (Silty)</u>

Tables 15 – 19 Changes in RBTLs for Residential Land Use, Soil Type 2 (Silty) for the same pathways as listed in Tables 3 – 7

Tables 20 – 23 Changes in RBTLs for Non-residential Land Use, Soil Type 2 (Silty) for the same pathways as listed in Tables 8 – 11

Tables 24 – 26 Changes in RBTLs for Construction Worker, Soil Type 2 (Silty) for the same pathways as listed in Tables 12 – 14

<u>Soil Type 3 (Clayey)</u>

Tables 27 – 31 Changes in RBTLs for Residential Land Use, Soil Type 3 (Clayey) for the same pathways as listed in Tables 3 – 7

Tables 32 – 35 Changes in RBTLs for Non-residential Land Use, Soil Type 3 (Clayey) for the same pathways as listed in Tables 8 – 11

Tables 36 – 38 Changes in RBTLs for Construction Worker, Soil Type 3 (Clayey) for the same pathways as listed in Tables 12 – 14

Table 1
Changes in Default Target Levels for Soil
Departmental MRBCA Technical Guidance
Lowest Value of All Pathways

Chemical	CAS #	Lowest CALM STARC*** (mg/kg)	Soil				Ratio of Jan. 2006/Feb. 2005		Why Changed
			DTL Feb. 2005 (mg/kg)	Pathway Feb. 2005	DTL Jan. 2006 (mg/kg)	Pathway Jan. 2006			
Carbon tetrachloride	56-23-5	1.30E-01	7.96E-02	INH	7.96E-02	INH	1.0	=	
1,1-Dichloroethane	75-34-3	NIC	1.82E-01	GWP	1.80E-01	GWP	0.99	-	Change in RBTL for domestic water use
cis-1,2-Dichloroethylene	156-59-2	5.00E-01	5.21E-01	GWP	5.21E-01	GWP	1.0	=	
1,2-Dichloropropane	78-87-5	4.00E-02	4.20E-02	GWP	4.20E-02	GWP	1.0	=	
1,3-Dichloropropene	542-75-6	4.00E-03	5.17E-02	GWP	5.06E-02	GWP	0.98	-	Change in RBTL for domestic water use
1,4-Dioxane**	123-91-1	1.00E-02	2.36E-01	GWP	2.35E-01	GWP	0.998	-	Change in RBTL for domestic water use
Methyl ethyl ketone	78-93-3	7.40E+03	7.31E+00	GWP	7.30E+00	GWP	0.998	-	Change in RBTL for domestic water use
Methylene chloride	75-09-2	2.00E-02	1.76E-02	GWP	1.76E-02	GWP	1.0	=	
Tetrachloroethylene	127-18-4	1.00E-01	1.41E-01	GWP	1.41E-01	GWP	1.0	=	
1,1,1-Trichloroethane	71-55-6	3.50E+00	4.24E+00	GWP	4.24E+00	GWP	1.0	=	
Trichloroethylene	79-01-6	1.00E-01	1.41E-01	GWP	1.41E-01	GWP	1.0	+	
Vinyl chloride	75-01-4	2.00E-02	1.92E-02	GWP	1.92E-02	GWP	1.0	=	
Bis(2-ethylhexyl)phthalate	117-81-7	4.10E+02	1.17E+02	DC	3.47E+02	SDC	3.0	+	Change in RBTL for soil direct contact
1,2-Dibromo-3-chloropropane	96-12-8	1.00E-03	1.10E-03	GWP	1.10E-03	GWP	1.0	=	
Ethylene glycol**	107-21-1	3.40E+01	6.00E+01	GWP	6.00E+01	GWP	0.999	-	Change in RBTL for domestic water use
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	4.15E-02	GWP	2.00E-03	GWP	0.05	-	Change in RBTL for domestic water use
3-Nitroaniline**	99-09-2	NIC	3.37E-02	GWP	3.29E-02	GWP	0.97	-	Change in RBTL for domestic water use
Pentachlorophenol	87-86-5	7.00E-02	8.94E-02	GWP	8.94E-02	GWP	1.0	=	
Polychlorinated biphenyls (PCBs)	1336-36-3	6.00E-01	6.31E-01	DC	2.20E+00	SDC	3.5	+	Change in RBTL for soil direct contact
alpha-Hexachlorocyclohexane	319-84-6	3.20E-04	1.97E-02	GWP	1.27E-02	GWP	0.6	-	Change in RBTL for domestic water use
Atrazine	1912-24-9	1.80E-01	2.22E-01	GWP	2.22E-01	GWP	1.0	=	
Chlordane (technical)	12789-03-6	7.00E+00	4.67E+00	DC	5.40E+00	GWP	1.2	+	Change in RBTL for domestic water use
DDT	50-29-3	8.00E+00	4.82E+00	DC	1.43E+01	SDC	3.0	+	Change in RBTL for domestic water use
Diazinon	333-41-5	2.00E-02	4.99E-01	GWP	4.00E-01	GWP	0.8	-	Change in RBTL for domestic water use
Silvex (2,4,5-TP)	93-72-1	4.00E-01	4.83E-01	GWP	4.83E-01	GWP	1.0	=	
Arsenic*	7440-38-2	1.10E+01	4.35E+00	DC	4.47E+00	SDC	1.03	+	Change in RBTL for soil direct contact
Cadmium*	7440-43-9	1.10E+01	1.88E+00	GWP	1.88E+00	GWP	1.0	=	
Mercury	7439-97-6	6.00E-01	7.84E-03	INH	7.84E-03	INH	1.0	=	
Cyanide	57-12-5	3.90E+01	7.73E+01	GWP	7.71E+01	GWP	0.998	-	Change in RBTL for domestic water use

Notes:

CALM: Cleanup levels for Missouri
GWP: Protection of domestic groundwater use pathway
NIC: Chemical not in CALM
DC or SDC: Soil direct contact pathway
INH: Indoor inhalation pathway
STARC: Soil Target Concentration
DTL: Default target level
MRBCA: Missouri risk-based corrective action

*: Chemicals in Tanks program. DTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
**: February 2005 value was in error. Therefore, revised February 2005 value is shown.
***: Lowest value of STARCs (direct exposure for scenarios A, B, and C, and leaching to groundwater)
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 2
Changes in Default Target Levels for Groundwater
Departmental MRBCA Technical Guidance
Lowest Value of All Pathways

Chemical	CAS #	CALM GTARC (mg/L)	Groundwater				Ratio of Jan. 2006/Feb. 2005		Why Changed
			DTL Feb. 2005 (mg/L)	Pathway Feb. 2005	DTL Jan. 2006 (mg/L)	Pathway Jan. 2006			
Carbon tetrachloride	56-23-5	5.00E-03	5.00E-03	DWG	5.00E-03	DWG	1.0	=	
1,1-Dichloroethane	75-34-3	NIC	2.52E-02	DWG	2.49E-02	DWG	0.99	-	Change in RBTL for domestic water use
cis-1,2-Dichloroethylene	156-59-2	7.00E-02	7.00E-02	DWG	7.00E-02	DWG	1.0	=	
1,2-Dichloropropane	78-87-5	5.00E-03	5.00E-03	DWG	5.00E-03	DWG	1.0	=	
1,3-Dichloropropene	542-75-6	4.00E-04	4.41E-03	DWG	4.31E-03	DWG	0.98	-	Change in RBTL for domestic water use
1,4-Dioxane**	123-91-1	3.00E-03	6.11E-02	DWG	6.10E-02	DWG	0.998	-	Change in RBTL for domestic water use
Methyl ethyl ketone	78-93-3	No GTARC	3.65E+00	DWG	3.64E+00	DWG	0.998	-	Change in RBTL for domestic water use
Methylene chloride	75-09-2	5.00E-03	5.00E-03	DWG	5.00E-03	DWG	1.0	=	
Tetrachloroethylene	127-18-4	5.00E-03	5.00E-03	DWG	5.00E-03	DWG	1.0	=	
1,1,1-Trichloroethane	71-55-6	2.00E-01	2.00E-01	DWG	2.00E-01	DWG	1.0	=	
Trichloroethylene	79-01-6	5.00E-03	5.00E-03	DWG	5.00E-03	DWG	1.0	=	
Vinyl chloride	75-01-4	2.00E-03	2.00E-03	DWG	2.00E-03	DWG	1.0	=	
Bis(2-ethylhexyl)phthalate	117-81-7	6.00E-03	6.00E-03	DWG	6.00E-03	DWG	1.0	=	
1,2-Dibromo-3-chloropropane	96-12-8	2.00E-04	2.00E-04	DWG	2.00E-04	DWG	1.0	=	
Ethylene glycol**	107-21-1	1.40E+01	3.13E+01	DWG	3.13E+01	DWG	0.999	-	Change in RBTL for domestic water use
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	3.13E-02	DWG	1.51E-03	DWG	0.05	-	Change in RBTL for domestic water use
3-Nitroaniline**	99-09-2	NIC	4.69E-03	DWG	4.57E-03	DWG	0.97	-	Change in RBTL for domestic water use
Pentachlorophenol	87-86-5	1.00E-03	1.00E-03	DWG	1.00E-03	DWG	1.0	=	
Polychlorinated biphenyls (PCBs)	1336-36-3	5.00E-04	5.00E-04	DWG	6.34E-05	GDC	0.1	-	Change in RBTL for groundwater dermal contact
alpha-Hexachlorocyclohexane	319-84-6	2.20E-06	1.07E-04	DWG	6.88E-05	DWG	0.6	-	Change in RBTL for domestic water use
Atrazine	1912-24-9	3.00E-03	3.00E-03	DWG	3.00E-03	DWG	1.0	=	
Chlordane (technical)	12789-03-6	2.00E-03	1.92E-03	DWG	3.02E-04	DWG	0.2	-	Change in RBTL for domestic water use
DDT	50-29-3	2.00E-03	1.98E-03	DWG	2.42E-04	DWG	0.1	-	Change in RBTL for domestic water use
Diazinon	333-41-5	6.00E-04	1.41E-02	DWG	1.13E-02	DWG	0.8	-	Change in RBTL for domestic water use
Silvex (2,4,5-TP)	93-72-1	5.00E-02	5.00E-02	DWG	5.00E-02	DWG	1.0	=	
Arsenic*	7440-38-2	5.00E-02	1.00E-02	DWG	1.00E-02	DWG	1.0	=	
Cadmium*	7440-43-9	5.00E-03	5.00E-03	DWG	5.00E-03	DWG	1.0	=	
Mercury	7439-97-6	2.00E-03	5.07E-02	INH	5.07E-02	INH	1.0	=	
Cyanide	57-12-5	2.00E-01	3.13E-01	DWG	3.12E-01	DWG	0.998	-	Change in RBTL for domestic water use

Notes:

CALM: Cleanup levels for Missouri
DTL: Default target level
DWG: Domestic water use
GDC: Groundwater dermal contact pathway
GTARC: Groundwater target concentration
INH: Indoor inhalation pathway
MRBCA: Missouri risk-based corrective action
NIC: Chemical not in CALM

*: Chemicals in Tanks program. DTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
**: February 2005 value was in error. Therefore, revised February 2005 value is shown.
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 3
Changes in Risk-Based Target Levels for Residential Land Use, Soil Type 1 (Sandy)
Departmental MRBCA Technical Guidance
Surficial Soil (Ingestion, Inhalation, and Dermal Contact)

Chemical	CAS #	Equivalent CALM (STARC Scenario A) (mg/kg)	Surficial Soil (Ingestion, Inhalation, and Dermal Contact) Soil Type 1 (Sandy)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/kg)	RBTL Jan. 2006 (mg/kg)			
Carbon tetrachloride	56-23-5	2.00E+00	7.83E+00	9.86E+00	1.3	+	Changes in skin surface area (SA) and soil adherence factor (AF)
1,1-Dichloroethane	75-34-3	NIC	9.99E+01	8.22E+01	0.8	-	Changes in SA, AF, and inhalation reference dose
cis-1,2-Dichloroethylene	156-59-2	1.20E+03	5.53E+01	6.36E+01	1.2	+	Changes in SA and AF
1,2-Dichloropropane	78-87-5	1.00E+01	7.39E+00	8.78E+00	1.2	+	Changes in SA and AF
1,3-Dichloropropene	542-75-6	9.00E-01	1.37E+01	2.76E+01	2.0	+	Changes in SA and AF
1,4-Dioxane	123-91-1	1.50E+02	9.96E+01	1.79E+02	1.8	+	Changes in SA and AF
Methyl ethyl ketone	78-93-3	7.40E+03	1.10E+04	1.92E+04	1.8	+	Changes in SA and AF
Methylene chloride	75-09-2	5.10E+01	1.67E+02	2.83E+02	1.7	+	Changes in SA and AF
Tetrachloroethylene	127-18-4	4.00E+01	2.48E+01	7.73E+00	0.3	-	Changes in SA, AF, and oral/inhalation slope factors
1,1,1-Trichloroethane	71-55-6	1.20E+03	2.36E+03	2.95E+03	1.2	+	Changes in SA and AF
Trichloroethylene	79-01-6	4.00E+01	7.16E+01	1.11E+02	1.6	+	Changes in SA and AF
Vinyl chloride	75-01-4	3.00E-01	1.14E+00	3.18E+00	2.8	+	Changes in SA and AF
Bis(2-ethylhexyl)phthalate	117-81-7	4.10E+02	1.17E+02	3.47E+02	3.0	+	Changes in SA and AF
1,2-Dibromo-3-chloropropane	96-12-8	1.00E+00	1.16E+00	3.37E+00	2.9	+	Changes in SA and AF
Ethylene glycol	107-21-1	1.24E+05	2.94E+04	4.48E+04	1.5	+	Changes in SA and AF
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	3.26E+01	5.73E+00	0.2	-	Changes in SA, AF, and oral reference dose
3-Nitroaniline	99-09-2	NIC	7.44E+00	1.78E+01	2.4	+	Changes in SA and AF
Pentachlorophenol	87-86-5	6.00E+00	6.46E+00	2.97E+01	4.6	+	Changes in SA and AF
Polychlorinated biphenyls (PCBs)	1336-36-3	6.00E-01	6.31E-01	2.20E+00	3.5	+	Changes in SA and AF
alpha-Hexachlorocyclohexane	319-84-6	3.00E-01	2.57E-01	7.47E-01	2.9	+	Changes in SA and AF
Atrazine	1912-24-9	7.00E+00	7.13E+00	2.11E+01	3.0	+	Changes in SA and AF
Chlordane (technical)	12789-03-6	7.00E+00	4.67E+00	1.38E+01	2.9	+	Changes in SA and AF
DDT	50-29-3	8.00E+00	4.82E+00	1.43E+01	3.0	+	Changes in SA and AF
Diazinon	333-41-5	5.90E+01	2.25E+01	5.50E+01	2.4	+	Changes in SA and AF
Silvex (2,4,5-TP)	93-72-1	5.60E+02	1.99E+02	4.89E+02	2.5	+	Changes in SA and AF
Arsenic*	7440-38-2	1.10E+01	4.35E+00	4.47E+00	1.0	+	Changes in SA and AF
Cadmium*	7440-43-9	1.10E+02	3.23E+01	3.80E+01	1.2	+	Changes in SA and AF
Mercury	7439-97-6	6.00E-01	4.63E-01	4.63E-01	1.0	+	Changes in SA and AF
Cyanide	57-12-5	5.48E+03	5.02E+02	1.22E+03	2.4	+	Changes in SA and AF

Notes:

CALM: Cleanup levels for Missouri
MRBCA: Missouri risk-based corrective action
NA: Sufficient information is not available to calculate the RBTL.
NIC: Chemical not in CALM
RBTL: Risk-based target level
STARC: Soil target concentration
*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 4
Changes in Risk-Based Target Levels for Residential Land Use, Soil Type 1 (Sandy)
Departmental MRBCA Technical Guidance
Subsurface Soil (Indoor Inhalation)

Chemical	CAS #	Equivalent CALM (mg/kg)	Subsurface Soil (Indoor Inhalation of Vapors) Soil Type 1 (Sandy)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/kg)	RBTL Jan. 2006 (mg/kg)			
Carbon tetrachloride	56-23-5	NA	7.96E-02	7.96E-02	1.0	=	
1,1-Dichloroethane	75-34-3	NA	9.22E-01	9.22E-01	1.0	=	
cis-1,2-Dichloroethylene	156-59-2	NIC	1.71E+00	1.71E+00	1.0	=	
1,2-Dichloropropane	78-87-5	NA	3.03E-01	3.03E-01	1.0	=	
1,3-Dichloropropene	542-75-6	NA	2.24E-01	2.24E-01	1.0	=	
1,4-Dioxane	123-91-1	NA	3.83E+01	3.83E+01	1.0	=	
Methyl ethyl ketone	78-93-3	NA	3.88E+03	3.88E+03	1.0	=	
Methylene chloride	75-09-2	NA	2.86E+00	2.86E+00	1.0	=	
Tetrachloroethylene	127-18-4	NA	6.30E-01	3.00E-01	0.5	-	Change in inhalation slope factor
1,1,1-Trichloroethane	71-55-6	NA	6.86E+01	6.86E+01	1.0	=	
Trichloroethylene	79-01-6	NA	1.46E+00	1.46E+00	1.0	=	
Vinyl chloride	75-01-4	NA	3.22E-02	3.22E-02	1.0	=	
Bis(2-ethylhexyl)phthalate	117-81-7	NA	6.64E+10	1.02E+10	0.2	-	Change in inhalation slope factor
1,2-Dibromo-3-chloropropane	96-12-8	NA	3.75E+02	3.75E+02	1.0	=	
Ethylene glycol	107-21-1	NA	1.49E+05	1.49E+05	1.0	=	
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	3.40E+02	3.40E+02	1.0	=	
3-Nitroaniline	99-09-2	NIC	4.82E+03	5.05E+03	1.05	+	Change in inhalation reference dose
Pentachlorophenol	87-86-5	NA	4.62E+05	4.62E+05	1.0	=	
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	1.32E+03	1.32E+03	1.0	=	
alpha-Hexachlorocyclohexane	319-84-6	NA	5.69E+01	5.69E+01	1.0	=	
Atrazine	1912-24-9	NA	5.20E+04	5.20E+04	1.0	=	
Chlordane (technical)	12789-03-6	NA	2.63E+04	2.63E+04	1.0	=	
DDT	50-29-3	NA	3.04E+06	3.04E+06	1.0	=	
Diazinon	333-41-5	NA	6.29E+04	6.29E+04	1.0	=	
Silvex (2,4,5-TP)	93-72-1	NA	2.79E+05	2.79E+05	1.0	=	
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	7.84E-03	7.84E-03	1.0	=	
Cyanide	57-12-5	NA	NA	NA	NA	NA	

Notes:

CALM: Cleanup levels for Missouri

NA: Not available

RBTL: Risk-based target level

MRBCA: Missouri risk-based corrective action

NIC: Chemical not in CALM

*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf

+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.

-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative

=: January 2006 value is same as February 2005 value.

Table 5
Changes in Risk-Based Target Levels for Residential Land Use, Soil Type 1 (Sandy)
Departmental MRBCA Technical Guidance
Groundwater (Indoor Inhalation)

Chemical	CAS #	Equivalent CALM (mg/L)	Groundwater (Indoor Inhalation of Vapors) Soil Type 1 (Sandy)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/L)	RBTL Jan. 2006 (mg/L)			
Carbon tetrachloride	56-23-5	NA	7.67E-02	7.67E-02	1.0	=	
1,1-Dichloroethane	75-34-3	NA	3.73E+00	3.73E+00	1.0	=	
cis-1,2-Dichloroethylene	156-59-2	NIC	6.55E+00	6.55E+00	1.0	=	
1,2-Dichloropropane	78-87-5	NA	1.02E+00	1.02E+00	1.0	=	
1,3-Dichloropropene	542-75-6	NA	5.96E-01	5.96E-01	1.0	=	
1,4-Dioxane	123-91-1	NA	2.50E+02	2.50E+02	1.0	=	
Methyl ethyl ketone	78-93-3	NA	4.89E+04	4.89E+04	1.0	=	
Methylene chloride	75-09-2	NA	2.27E+01	2.27E+01	1.0	=	
Tetrachloroethylene	127-18-4	NA	7.09E-01	3.38E-01	0.5	-	Change in inhalation slope factor
1,1,1-Trichloroethane	71-55-6	NA	1.02E+02	1.02E+02	1.0	=	
Trichloroethylene	79-01-6	NA	1.60E+00	1.60E+00	1.0	=	
Vinyl chloride	75-01-4	NA	1.11E-01	1.11E-01	1.0	=	
Bis(2-ethylhexyl)phthalate	117-81-7	NA	7.43E+05	1.14E+05	0.2	-	Change in inhalation slope factor
1,2-Dibromo-3-chloropropane	96-12-8	NA	1.71E+03	1.71E+03	1.0	=	
Ethylene glycol	107-21-1	NA	1.95E+06	1.95E+06	1.0	=	
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	6.44E+03	6.44E+03	1.0	=	
3-Nitroaniline	99-09-2	NIC	1.68E+04	1.77E+04	1.05	+	Change in inhalation reference dose
Pentachlorophenol	87-86-5	NA	1.30E+05	1.30E+05	1.0	=	
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	7.41E-01	7.41E-01	1.0	=	
alpha-Hexachlorocyclohexane	319-84-6	NA	7.76E+00	7.76E+00	1.0	=	
Atrazine	1912-24-9	NA	1.77E+04	1.77E+04	1.0	=	
Chlordane (technical)	12789-03-6	NA	3.71E+01	3.71E+01	1.0	=	
DDT	50-29-3	NA	1.95E+02	1.95E+02	1.0	=	
Diazinon	333-41-5	NA	4.47E+04	4.47E+04	1.0	=	
Silvex (2,4,5-TP)	93-72-1	NA	7.27E+05	7.27E+05	1.0	=	
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	5.07E-02	5.07E-02	1.0	=	
Cyanide	57-12-5	NA	NA	NA	NA	NA	

Notes:

CALM: Cleanup levels for Missouri

NA: Not available

RBTL: Risk-based target level

MRBCA: Missouri risk-based corrective action

NIC: Chemical not in CALM

*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf

+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.

-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative

=: January 2006 value is same as February 2005 value.

Table 6
Changes in Risk-Based Target Levels for Residential Land Use, Soil Type 1 (Sandy)
Departmental MRBCA Technical Guidance
Groundwater (Dermal Contact)

Chemical	CAS #	Equivalent CALM (mg/L)	Groundwater (Dermal Contact) Soil Type 1 (Sandy)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/L)	RBTL Jan. 2006 (mg/L)			
Carbon tetrachloride	56-23-5	NA	1.06E-01	4.69E-02	0.4	-	Adoption of RAGS Part E
1,1-Dichloroethane	75-34-3	NA	5.77E+00	3.53E+00	0.6	-	Adoption of RAGS Part E
cis-1,2-Dichloroethylene	156-59-2	NIC	4.82E+00	4.22E+00	0.9	-	Adoption of RAGS Part E
1,2-Dichloropropane	78-87-5	NA	5.21E-01	4.21E-01	0.8	-	Adoption of RAGS Part E
1,3-Dichloropropene	542-75-6	NA	5.13E-01	2.99E-01	0.6	-	Adoption of RAGS Part E
1,4-Dioxane	123-91-1	NA	6.07E+01	3.93E+01	0.6	-	Adoption of RAGS Part E
Methyl ethyl ketone	78-93-3	NA	2.31E+03	2.27E+03	0.98	-	Adoption of RAGS Part E
Methylene chloride	75-09-2	NA	8.40E+00	5.54E+00	0.7	-	Adoption of RAGS Part E
Tetrachloroethylene	127-18-4	NA	1.28E-01	5.06E-03	0.04	-	Adoption of RAGS Part E and change in deraml slope factor
1,1,1-Trichloroethane	71-55-6	NA	7.95E+01	5.64E+01	0.7	-	Adoption of RAGS Part E
Trichloroethylene	79-01-6	NA	1.41E+00	7.22E-01	0.5	-	Adoption of RAGS Part E
Vinyl chloride	75-01-4	NA	2.81E-02	2.06E-02	0.7	-	Adoption of RAGS Part E
Bis(2-ethylhexyl)phthalate	117-81-7	NA	6.30E-01	7.52E-02	0.1	-	Adoption of RAGS Part E
1,2-Dibromo-3-chloropropane	96-12-8	NA	3.56E-02	9.82E-03	0.3	-	Adoption of RAGS Part E
Ethylene glycol	107-21-1	NA	6.43E+04	6.62E+04	1.03	+	Adoption of RAGS Part E
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	2.38E+00	5.56E-02	0.02	-	Adoption of RAGS Part E and change in dermal reference dose
3-Nitroaniline**	99-09-2	NIC	3.53E-01	2.45E-01	0.7	-	Adoption of RAGS Part E
Pentachlorophenol	87-86-5	NA	4.71E-03	1.12E-03	0.2	-	Adoption of RAGS Part E
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	3.24E-04	6.34E-05	0.2	-	Adoption of RAGS Part E
alpha-Hexachlorocyclohexane	319-84-6	NA	1.45E-03	2.90E-04	0.2	-	Adoption of RAGS Part E
Atrazine	1912-24-9	NA	1.34E-01	4.23E-02	0.3	-	Adoption of RAGS Part E
Chlordane (technical)	12789-03-6	NA	3.45E-03	5.37E-04	0.2	-	Adoption of RAGS Part E
DDT	50-29-3	NA	2.40E-03	4.14E-04	0.2	-	Adoption of RAGS Part E
Diazinon	333-41-5	NA	2.99E-01	7.71E-02	0.3	-	Adoption of RAGS Part E
Silvex (2,4,5-TP)	93-72-1	NA	2.25E+00	7.02E-01	0.3	-	Adoption of RAGS Part E
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	NA	NA	NA	NA	
Cyanide	57-12-5	NA	7.39E+01	1.12E+02	1.5	+	Adoption of RAGS Part E and change in skin surface area

Notes:

CALM: Cleanup levels for Missouri
NA: Not available
RAGS: Risk assessment guidance for superfund
MRBCA: Missouri risk-based corrective action
NIC: Chemical not in CALM
RBTL: Risk-based target level

*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
**: February 2005 value was in error. Therefore, revised February 2005 value is shown.
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 7
Changes in Risk-Based Target Levels for Residential Land Use, Soil Type 1 (Sandy)
Departmental MRBCA Technical Guidance
Groundwater (Domestic Water Use)

Chemical	CAS #	Equivalent CALM (mg/L)	Groundwater (Domestic Water Use) Soil Type 1 (Sandy)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/L)	RBTL Jan. 2006 (mg/L)			
Carbon tetrachloride	56-23-5	NA	5.00E-03	5.00E-03	1.0	=	
1,1-Dichloroethane	75-34-3	NA	2.52E-02	2.49E-02	0.99	-	Inclusion of dermal contact (DC) per RAGS Part E
cis-1,2-Dichloroethylene	156-59-2	NIC	7.00E-02	7.00E-02	1.0	=	
1,2-Dichloropropane	78-87-5	NA	5.00E-03	5.00E-03	1.0	=	
1,3-Dichloropropene	542-75-6	NA	4.41E-03	4.31E-03	0.98	-	Inclusion of DC per RAGS Part E
1,4-Dioxane**	123-91-1	NA	6.11E-02	6.10E-02	0.998	-	Inclusion of DC per RAGS Part E
Methyl ethyl ketone	78-93-3	NA	3.65E+00	3.64E+00	0.998	-	Inclusion of DC per RAGS Part E
Methylene chloride	75-09-2	NA	5.00E-03	5.00E-03	1.0	=	
Tetrachloroethylene	127-18-4	NA	5.00E-03	5.00E-03	1.0	=	
1,1,1-Trichloroethane	71-55-6	NA	2.00E-01	2.00E-01	1.0	=	
Trichloroethylene	79-01-6	NA	5.00E-03	5.00E-03	1.0	=	
Vinyl chloride	75-01-4	NA	2.00E-03	2.00E-03	1.0	=	
Bis(2-ethylhexyl)phthalate	117-81-7	NA	6.00E-03	6.00E-03	1.0	=	
1,2-Dibromo-3-chloropropane	96-12-8	NA	2.00E-04	2.00E-04	1.0	=	
Ethylene glycol**	107-21-1	NA	3.13E+01	3.13E+01	0.999	-	Inclusion of DC per RAGS Part E
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	3.13E-02	1.51E-03	0.05	-	Inclusion of DC per RAGS Part E and changes in oral/dermal reference doses
3-Nitroaniline**	99-09-2	NIC	4.69E-03	4.57E-03	0.97	-	Inclusion of DC per RAGS Part E
Pentachlorophenol	87-86-5	NA	1.00E-03	1.00E-03	1.0	=	
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	5.00E-04	5.00E-04	1.0	=	
alpha-Hexachlorocyclohexane	319-84-6	NA	1.07E-04	6.88E-05	0.6	-	Inclusion of DC per RAGS Part E
Atrazine	1912-24-9	NA	3.00E-03	3.00E-03	1.0	=	
Chlordane (technical)	12789-03-6	NA	1.92E-03	3.02E-04	0.2	-	Inclusion of DC per RAGS Part E
DDT	50-29-3	NA	1.98E-03	2.42E-04	0.1	-	Inclusion of DC per RAGS Part E
Diazinon	333-41-5	NA	1.41E-02	1.13E-02	0.8	-	Inclusion of DC per RAGS Part E
Silvex (2,4,5-TP)	93-72-1	NA	5.00E-02	5.00E-02	1.0	=	
Arsenic*	7440-38-2	NA	1.00E-02	1.00E-02	1.0	=	
Cadmium*	7440-43-9	NA	5.00E-03	5.00E-03	1.0	=	
Mercury	7439-97-6	NA	NA	NA	NA	NA	
Cyanide	57-12-5	NA	3.13E-01	3.12E-01	0.998	-	Inclusion of DC per RAGS Part E

Notes:

CALM: Cleanup levels for Missouri
NA: Not available
RAGS: Risk assessment guidance for superfund
MRBCA: Missouri risk-based corrective action
NIC: Chemical not in CALM
RBTL: Risk-based target level

*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
**: February 2005 value was in error. Therefore, revised February 2005 value is shown.
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 8
Changes in Risk-Based Target Levels for Non-residential Land Use, Soil Type 1 (Sandy)
Departmental MRBCA Technical Guidance
Surficial Soil (Ingestion, Inhalation, and Dermal Contact)

Chemical	CAS #	Equivalent CALM (STARC Scenario B) (mg/kg)	Surficial Soil (Ingestion, Inhalation, and Dermal Contact) Soil Type 1 (Sandy)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/kg)	RBTL Jan. 2006 (mg/kg)			
Carbon tetrachloride	56-23-5	3.00E+00	1.94E+01	3.03E+01	1.6	+	Changes in skin surface area (SA) and soil adherence factor (AF)
1,1-Dichloroethane	75-34-3	NIC	2.59E+02	3.28E+02	1.3	+	Changes in SA, AF, and inhalation reference dose
cis-1,2-Dichloroethylene	156-59-2	1.20E+03	5.21E+02	6.57E+02	1.3	+	Changes in SA and AF
1,2-Dichloropropane	78-87-5	1.40E+01	4.13E+01	5.11E+01	1.2	+	Changes in SA and AF
1,3-Dichloropropene	542-75-6	1.00E+00	3.73E+01	7.93E+01	2.1	+	Changes in SA and AF
1,4-Dioxane	123-91-1	2.10E+02	2.56E+02	4.25E+02	1.7	+	Changes in SA and AF
Methyl ethyl ketone	78-93-3	1.00E+04	7.67E+04	1.56E+05	2.0	+	Changes in SA and AF
Methylene chloride	75-09-2	7.10E+01	4.35E+02	8.10E+02	1.9	+	Changes in SA and AF
Tetrachloroethylene	127-18-4	5.50E+01	6.56E+01	2.41E+01	0.4	-	Changes in SA, AF, and oral/inhalation slope factors
1,1,1-Trichloroethane	71-55-6	1.20E+03	2.40E+04	3.64E+04	1.5	+	Changes in SA and AF
Trichloroethylene	79-01-6	5.60E+01	1.67E+02	2.41E+02	1.4	+	Changes in SA and AF
Vinyl chloride	75-01-4	4.00E-01	3.40E+00	1.04E+01	3.1	+	Changes in SA and AF
Bis(2-ethylhexyl)phthalate	117-81-7	5.70E+02	3.58E+02	1.23E+03	3.4	+	Changes in SA and AF
1,2-Dibromo-3-chloropropane	96-12-8	2.00E+00	3.53E+00	1.17E+01	3.3	+	Changes in SA and AF
Ethylene glycol	107-21-1	1.24E+05	2.03E+05	3.41E+05	1.7	+	Changes in SA and AF
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	2.27E+02	5.60E+01	0.2	-	Changes in SA, AF, and oral reference dose
3-Nitroaniline	99-09-2	NIC	5.30E+01	1.77E+02	3.3	+	Changes in SA and AF
Pentachlorophenol	87-86-5	9.00E+00	1.86E+01	9.00E+01	4.8	+	Changes in SA and AF
Polychlorinated biphenyls (PCBs)	1336-36-3	9.00E-01	1.88E+00	7.38E+00	3.9	+	Changes in SA and AF
alpha-Hexachlorocyclohexane	319-84-6	4.00E-01	7.82E-01	2.58E+00	3.3	+	Changes in SA and AF
Atrazine	1912-24-9	1.00E+01	2.18E+01	7.49E+01	3.4	+	Changes in SA and AF
Chlordane (technical)	12789-03-6	1.00E+01	1.43E+01	4.87E+01	3.4	+	Changes in SA and AF
DDT	50-29-3	1.20E+01	1.47E+01	5.07E+01	3.4	+	Changes in SA and AF
Diazinon	333-41-5	5.90E+01	1.60E+02	5.54E+02	3.5	+	Changes in SA and AF
Silvex (2,4,5-TP)	93-72-1	7.90E+02	1.42E+03	4.93E+03	3.5	+	Changes in SA and AF
Arsenic*	7440-38-2	1.10E+01	1.91E+01	1.99E+01	1.0	+	Changes in SA and AF
Cadmium*	7440-43-9	1.50E+02	3.47E+02	4.79E+02	1.4	+	Changes in SA and AF
Mercury	7439-97-6	8.00E-01	6.30E+00	6.30E+00	1.0	+	Changes in SA and AF
Cyanide	57-12-5	7.67E+03	3.58E+03	1.23E+04	3.4	+	Changes in SA and AF

Notes:

CALM: Cleanup levels for Missouri
MRBCA: Missouri risk-based corrective action
NA: Not available
NIC: Chemical not in CALM
RBTL: Risk-based target level
STARC: Soil target concentration
*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 9
Changes in Risk-Based Target Levels for Non-residential Land Use, Soil Type 1 (Sandy)
Departmental MRBCA Technical Guidance
Subsurface Soil (Indoor Inhalation)

Chemical	CAS #	Equivalent CALM (mg/kg)	Subsurface Soil (Indoor Inhalation of Vapors) Soil Type 1 (Sandy)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/kg)	RBTL Jan. 2006 (mg/kg)			
Carbon tetrachloride	56-23-5	NA	4.17E-01	4.17E-01	1.0	=	
1,1-Dichloroethane	75-34-3	NA	4.83E+00	4.83E+00	1.0	=	
cis-1,2-Dichloroethylene	156-59-2	NIC	1.38E+01	1.38E+01	1.0	=	
1,2-Dichloropropane	78-87-5	NA	1.70E+00	1.66E+00	0.97	-	Change in inhalation slope factor
1,3-Dichloropropene	542-75-6	NA	1.18E+00	1.18E+00	1.0	=	
1,4-Dioxane	123-91-1	NA	2.01E+02	2.01E+02	1.0	=	
Methyl ethyl ketone	78-93-3	NA	3.12E+04	3.12E+04	1.0	=	
Methylene chloride	75-09-2	NA	1.50E+01	1.50E+01	1.0	=	
Tetrachloroethylene	127-18-4	NA	3.30E+00	1.57E+00	0.5	-	Change in inhalation slope factor
1,1,1-Trichloroethane	71-55-6	NA	5.51E+02	5.51E+02	1.0	=	
Trichloroethylene	79-01-6	NA	7.68E+00	7.68E+00	1.0	=	
Vinyl chloride	75-01-4	NA	1.69E-01	1.69E-01	1.0	=	
Bis(2-ethylhexyl)phthalate	117-81-7	NA	5.34E+11	5.34E+10	0.1	-	Change in inhalation slope factor
1,2-Dibromo-3-chloropropane	96-12-8	NA	1.96E+03	1.96E+03	1.0	=	
Ethylene glycol	107-21-1	NA	1.20E+06	1.20E+06	1.0	=	
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	2.73E+03	2.73E+03	1.0	=	
3-Nitroaniline	99-09-2	NIC	3.87E+04	4.06E+04	1.05	+	Change in inhalation reference dose
Pentachlorophenol	87-86-5	NA	2.42E+06	2.42E+06	1.0	=	
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	6.94E+03	6.94E+03	1.0	=	
alpha-Hexachlorocyclohexane	319-84-6	NA	2.98E+02	2.98E+02	1.0	=	
Atrazine	1912-24-9	NA	2.73E+05	2.73E+05	1.0	=	
Chlordane (technical)	12789-03-6	NA	1.38E+05	1.38E+05	1.0	=	
DDT	50-29-3	NA	1.59E+07	1.59E+07	1.0	=	
Diazinon	333-41-5	NA	5.06E+05	5.06E+05	1.0	=	
Silvex (2,4,5-TP)	93-72-1	NA	2.25E+06	2.25E+06	1.0	=	
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	6.30E-02	6.30E-02	1.0	=	
Cyanide	57-12-5	NA	NA	NA	NA	NA	

Notes:
CALM: Cleanup levels for Missouri
MRBCA: Missouri risk-based corrective action
NA: Not available
NIC: Chemical not in CALM
RBTL: Risk-based target level
*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 10
Changes in Risk-Based Target Levels for Non-residential Land Use, Soil Type 1 (Sandy)
Departmental MRBCA Technical Guidance
Groundwater (Indoor Inhalation)

Chemical	CAS #	Equivalent CALM (mg/L)	Groundwater (Indoor Inhalation of Vapors) Soil Type 1 (Sandy)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/L)	RBTL Jan. 2006 (mg/L)			
Carbon tetrachloride	56-23-5	NA	4.02E-01	4.02E-01	1.0	=	
1,1-Dichloroethane	75-34-3	NA	1.95E+01	1.95E+01	1.0	=	
cis-1,2-Dichloroethylene	156-59-2	NIC	5.27E+01	5.27E+01	1.0	=	
1,2-Dichloropropane	78-87-5	NA	5.76E+00	5.60E+00	0.97	-	Change in inhalation slope factor
1,3-Dichloropropene	542-75-6	NA	3.12E+00	3.12E+00	1.0	=	
1,4-Dioxane	123-91-1	NA	1.31E+03	1.31E+03	1.0	=	
Methyl ethyl ketone	78-93-3	NA	3.93E+05	3.93E+05	1.0	=	
Methylene chloride	75-09-2	NA	1.19E+02	1.19E+02	1.0	=	
Tetrachloroethylene	127-18-4	NA	3.72E+00	1.77E+00	0.5	-	Change in inhalation slope factor
1,1,1-Trichloroethane	71-55-6	NA	8.22E+02	8.22E+02	1.0	=	
Trichloroethylene	79-01-6	NA	8.41E+00	8.41E+00	1.0	=	
Vinyl chloride	75-01-4	NA	5.82E-01	5.82E-01	1.0	=	
Bis(2-ethylhexyl)phthalate	117-81-7	NA	5.97E+06	5.97E+05	0.1	-	Change in inhalation slope factor
1,2-Dibromo-3-chloropropane	96-12-8	NA	8.94E+03	8.94E+03	1.0	=	
Ethylene glycol	107-21-1	NA	1.57E+07	1.57E+07	1.0	=	
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	5.18E+04	5.18E+04	1.0	=	
3-Nitroaniline	99-09-2	NIC	1.35E+05	1.42E+05	1.05	+	Change in inhalaion reference dose
Pentachlorophenol	87-86-5	NA	6.81E+05	6.81E+05	1.0	=	
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	3.88E+00	3.88E+00	1.0	=	
alpha-Hexachlorocyclohexane	319-84-6	NA	4.07E+01	4.07E+01	1.0	=	
Atrazine	1912-24-9	NA	9.25E+04	9.25E+04	1.0	=	
Chlordane (technical)	12789-03-6	NA	1.94E+02	1.94E+02	1.0	=	
DDT	50-29-3	NA	1.02E+03	1.02E+03	1.0	=	
Diazinon	333-41-5	NA	3.59E+05	3.59E+05	1.0	=	
Silvex (2,4,5-TP)	93-72-1	NA	5.85E+06	5.85E+06	1.0	=	
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	4.07E-01	4.07E-01	1.0	=	
Cyanide	57-12-5	NA	NA	NA	NA	NA	

Notes:
CALM: Cleanup levels for Missouri
NA: Not available
RBTL: Risk-based target level
MRBCA: Missouri risk-based corrective action
NIC: Chemical not in CALM
*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 11
Changes in Risk-Based Target Levels for Non-residential Land Use, Soil Type 1 (Sandy)
Departmental MRBCA Technical Guidance
Groundwater (Dermal Contact)

Chemical	CAS #	Equivalent CALM (mg/L)	Groundwater (Dermal Contact) Soil Type 1 (Sandy)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/L)	RBTL Jan. 2006 (mg/L)			
Carbon tetrachloride	56-23-5	NA	2.92E-01	1.71E-01	0.6	-	Adoption of RAGS Part E
1,1-Dichloroethane	75-34-3	NA	1.59E+01	1.29E+01	0.8	-	Adoption of RAGS Part E
cis-1,2-Dichloroethylene	156-59-2	NIC	2.83E+01	2.34E+01	0.8	-	Adoption of RAGS Part E
1,2-Dichloropropane	78-87-5	NA	2.16E+00	1.65E+00	0.8	-	Adoption of RAGS Part E
1,3-Dichloropropene	542-75-6	NA	1.41E+00	1.09E+00	0.8	-	Adoption of RAGS Part E
1,4-Dioxane	123-91-1	NA	1.67E+02	1.44E+02	0.9	-	Adoption of RAGS Part E
Methyl ethyl ketone	78-93-3	NA	1.36E+04	1.26E+04	0.9	-	Adoption of RAGS Part E
Methylene chloride	75-09-2	NA	2.31E+01	2.02E+01	0.9	-	Adoption of RAGS Part E
Tetrachloroethylene	127-18-4	NA	3.54E-01	1.85E-02	0.1	-	Adoption of RAGS Part E and change in dermal slope factor
1,1,1-Trichloroethane	71-55-6	NA	4.67E+02	3.13E+02	0.7	-	Adoption of RAGS Part E
Trichloroethylene	79-01-6	NA	3.89E+00	2.64E+00	0.7	-	Adoption of RAGS Part E
Vinyl chloride	75-01-4	NA	7.74E-02	7.53E-02	1.0	-	Adoption of RAGS Part E
Bis(2-ethylhexyl)phthalate	117-81-7	NA	1.73E+00	2.75E-01	0.2	-	Adoption of RAGS Part E
1,2-Dibromo-3-chloropropane	96-12-8	NA	9.81E-02	3.59E-02	0.4	-	Adoption of RAGS Part E
Ethylene glycol	107-21-1	NA	3.77E+05	3.67E+05	1.0	-	Adoption of RAGS Part E
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	1.40E+01	3.08E-01	0.02	-	Adoption of RAGS Part E and change in dermal reference dose
3-Nitroaniline**	99-09-2	NIC	2.07E+00	1.36E+00	0.7	-	Adoption of RAGS Part E
Pentachlorophenol	87-86-5	NA	1.30E-02	4.08E-03	0.3	-	Adoption of RAGS Part E
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	8.91E-04	2.31E-04	0.3	-	Adoption of RAGS Part E
alpha-Hexachlorocyclohexane	319-84-6	NA	3.99E-03	1.06E-03	0.3	-	Adoption of RAGS Part E
Atrazine	1912-24-9	NA	3.70E-01	1.55E-01	0.4	-	Adoption of RAGS Part E
Chlordane (technical)	12789-03-6	NA	9.50E-03	1.96E-03	0.2	-	Adoption of RAGS Part E
DDT	50-29-3	NA	6.61E-03	1.51E-03	0.2	-	Adoption of RAGS Part E
Diazinon	333-41-5	NA	1.76E+00	4.27E-01	0.2	-	Adoption of RAGS Part E
Silvex (2,4,5-TP)	93-72-1	NA	1.32E+01	3.89E+00	0.3	-	Adoption of RAGS Part E
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	NA	NA	NA	NA	
Cyanide	57-12-5	NA	4.34E+02	6.19E+02	1.4	+	Adoption of RAGS Part E and change in skin surface area

Notes:

CALM: Cleanup levels for Missouri
NA: Not available
RAGS: Risk assessment guidance for superfund
MRBCA: Missouri risk-based corrective action
NIC: Chemical not in CALM
RBTL: Risk-based target level

*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
**: February 2005 value was in error. Therefore, revised February 2005 value is shown.
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 12
Changes in Risk-Based Target Levels for Construction Worker, Soil Type 1 (Sandy)
Departmental MRBCA Technical Guidance
Soil (Ingestion, Inhalation, and Dermal Contact)

Chemical	CAS #	Equivalent CALM (mg/kg)	Soil (Ingestion, Inhalation, and Dermal Contact) Soil Type 1 (Sandy)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/kg)	RBTL Jan. 2006 (mg/kg)			
Carbon tetrachloride	56-23-5	NA	8.54E+01	6.53E+01	0.8	-	Changes in skin SA, soil AF, and IR
1,1-Dichloroethane	75-34-3	NA	1.35E+03	9.51E+01	0.1	-	Changes in SA, AF, and inhalation reference dose (RfDi)
cis-1,2-Dichloroethylene	156-59-2	NIC	1.28E+02	8.06E+01	0.6	-	Changes in SA and AF
1,2-Dichloropropane	78-87-5	NA	1.81E+01	1.14E+01	0.6	-	Changes in skin SA, soil AF, IR, and RfDi
1,3-Dichloropropene	542-75-6	NA	4.89E+01	3.02E+01	0.6	-	Changes in skin SA, soil AF, IR, and RfDi
1,4-Dioxane	123-91-1	NA	3.59E+03	2.43E+03	0.7	-	Changes in SA and AF
Methyl ethyl ketone	78-93-3	NA	5.98E+04	4.38E+04	0.7	-	Changes in SA and AF
Methylene chloride	75-09-2	NA	1.16E+03	7.35E+02	0.6	-	Changes in SA and AF
Tetrachloroethylene	127-18-4	NA	7.55E+02	2.20E+02	0.3	-	Changes in SA, AF, IR, and oral/inhalation/dermal slope factors
1,1,1-Trichloroethane	71-55-6	NA	6.30E+03	4.03E+03	0.6	-	Changes in SA and AF
Trichloroethylene	79-01-6	NA	1.47E+03	9.46E+02	0.6	-	Changes in SA and AF
Vinyl chloride	75-01-4	NA	7.61E+01	6.19E+01	0.8	-	Changes in SA and AF
Bis(2-ethylhexyl)phthalate	117-81-7	NA	9.93E+03	2.85E+04	2.9	+	Changes in SA and AF
1,2-Dibromo-3-chloropropane	96-12-8	NA	2.53E+01	4.91E+01	1.9	+	Change in SA, AF, IR, and RfDi
Ethylene glycol	107-21-1	NA	1.16E+05	7.87E+04	0.7	-	Changes in SA and AF
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	1.47E+02	6.08E+01	0.4	-	Changes in SA, AF, and oral/dermal reference doses
3-Nitroaniline	99-09-2	NIC	1.32E+02	2.74E+02	2.1	+	Changes in SA, AF, and RfDi
Pentachlorophenol	87-86-5	NA	1.29E+03	4.77E+03	3.7	+	Changes in SA and AF
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	1.28E+02	3.78E+02	2.9	+	Changes in SA and AF
alpha-Hexachlorocyclohexane	319-84-6	NA	4.71E+01	8.82E+01	1.9	+	Changes in SA and AF
Atrazine	1912-24-9	NA	1.51E+03	4.34E+03	2.9	+	Changes in SA and AF
Chlordane (technical)	12789-03-6	NA	2.29E+02	5.12E+02	2.2	+	Changes in SA and AF
DDT	50-29-3	NA	2.48E+02	7.13E+02	2.9	+	Changes in SA and AF
Diazinon	333-41-5	NA	4.22E+02	1.28E+03	3.0	+	Changes in SA and AF
Silvex (2,4,5-TP)	93-72-1	NA	3.67E+03	1.14E+04	3.1	+	Changes in SA and AF
Arsenic*	7440-38-2	NA	8.54E+02	8.87E+02	1.0	+	Changes in SA and AF
Cadmium*	7440-43-9	NA	9.65E+02	1.29E+03	1.3	+	Changes in SA and AF
Mercury	7439-97-6	NA	8.23E-01	5.08E-01	0.6	-	Changes in SA and AF
Cyanide	57-12-5	NA	9.93E+03	2.85E+04	2.9	+	Changes in SA and AF

Notes:

AF: Adherence factor
IR: Inhalation rate
NA: Not available
RBTL: Risk-based target level
CALM: Cleanup levels for Missouri
MRBCA: Missouri risk-based corrective action
NIC: Chemical not in CALM
SA: Skin surface area

*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 13
Changes in Risk-Based Target Levels for Construction Worker, Soil Type 1 (Sandy)
Departmental MRBCA Technical Guidance
Groundwater (Outdoor Inhalation)

Chemical	CAS #	Equivalent CALM (mg/L)	Groundwater (Outdoor Inhalation of Vapors) Soil Type 1 (Sandy)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/L)	RBTL Jan. 2006 (mg/L)			
Carbon tetrachloride	56-23-5	NA	7.60E+03	4.69E+03	0.6	-	Change in inhalation rate (IR)
1,1-Dichloroethane	75-34-3	NA	2.87E+05	1.98E+04	0.1	-	Changes in IR and inhalation reference dose (RfDi)
cis-1,2-Dichloroethylene	156-59-2	NIC	2.68E+04	1.66E+04	0.6	-	Change in IR
1,2-Dichloropropane	78-87-5	NA	4.08E+03	2.52E+03	0.6	-	Change in IR
1,3-Dichloropropene	542-75-6	NA	7.02E+03	4.32E+03	0.6	-	Changes in IR and RfDi
1,4-Dioxane	123-91-1	NA	2.50E+06	1.55E+06	0.6	-	Change in IR
Methyl ethyl ketone	78-93-3	NA	3.51E+07	2.16E+07	0.6	-	Change in IR
Methylene chloride	75-09-2	NA	3.47E+05	2.14E+05	0.6	-	Change in IR
Tetrachloroethylene	127-18-4	NA	7.76E+04	2.28E+04	0.3	-	Changes in IR and inhalation slope factor
1,1,1-Trichloroethane	71-55-6	NA	6.81E+05	4.20E+05	0.6	-	Change in IR
Trichloroethylene	79-01-6	NA	1.59E+05	9.79E+04	0.6	-	Change in IR
Vinyl chloride	75-01-4	NA	1.39E+04	8.59E+03	0.6	-	Change in IR
Bis(2-ethylhexyl)phthalate	117-81-7	NA	4.35E+08	2.69E+08	0.6	-	Change in IR
1,2-Dibromo-3-chloropropane	96-12-8	NA	2.23E+06	1.15E+06	0.5	-	Changes in IR and RfDi
Ethylene glycol	107-21-1	NA	1.14E+09	7.06E+08	0.6	-	Change in IR
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	3.77E+06	2.33E+06	0.6	-	Change in IR
3-Nitroaniline	99-09-2	NIC	9.87E+06	6.39E+06	0.6	-	Changes in IR and RfDi
Pentachlorophenol	87-86-5	NA	9.56E+08	5.90E+08	0.6	-	Change in IR
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	1.54E+04	9.48E+03	0.6	-	Change in IR
alpha-Hexachlorocyclohexane	319-84-6	NA	3.36E+04	4.61E+04	1.4	+	Changes in IR and RfDi
Atrazine	1912-24-9	NA	1.68E+08	1.04E+08	0.6	-	Change in IR
Chlordane (technical)	12789-03-6	NA	3.75E+04	2.31E+04	0.6	-	Change in IR
DDT	50-29-3	NA	4.57E+05	2.82E+05	0.6	-	Change in IR
Diazinon	333-41-5	NA	2.62E+07	1.61E+07	0.6	-	Change in IR
Silvex (2,4,5-TP)	93-72-1	NA	4.26E+08	2.63E+08	0.6	-	Change in IR
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	2.72E+02	1.68E+02	0.6	-	Change in IR
Cyanide	57-12-5	NA	NA	NA	NA	NA	

Notes:
CALM: Cleanup levels for Missouri
NA: Not available
RBTL: Risk-based target level
MRBCA: Missouri risk-based corrective action
NIC: Chemical not in CALM
*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 14
Changes in Risk-Based Target Levels for Construction Worker, Soil Type 1 (Sandy)
Departmental MRBCA Technical Guidance
Groundwater (Dermal Contact)

Chemical	CAS #	Equivalent CALM (mg/L)	Groundwater (Dermal Contact) Soil Type 1 (Sandy)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/L)	RBTL Jan. 2006 (mg/L)			
Carbon tetrachloride	56-23-5	NA	2.63E+00	1.55E+00	0.6	-	Adoption of RAGS Part E
1,1-Dichloroethane	75-34-3	NA	8.99E+02	7.30E+02	0.8	-	Adoption of RAGS Part E
cis-1,2-Dichloroethylene	156-59-2	NIC	7.85E+01	6.50E+01	0.8	-	Adoption of RAGS Part E
1,2-Dichloropropane	78-87-5	NA	8.49E+00	6.48E+00	0.8	-	Adoption of RAGS Part E
1,3-Dichloropropene	542-75-6	NA	9.80E+01	7.58E+01	0.8	-	Adoption of RAGS Part E
1,4-Dioxane	123-91-1	NA	1.16E+04	9.97E+03	0.9	-	Adoption of RAGS Part E
Methyl ethyl ketone	78-93-3	NA	3.76E+04	3.50E+04	0.9	-	Adoption of RAGS Part E
Methylene chloride	75-09-2	NA	1.03E+03	9.03E+02	0.9	-	Adoption of RAGS Part E
Tetrachloroethylene	127-18-4	NA	1.82E+01	1.28E+00	0.1	-	Adoption of RAGS Part E and change in dermal slope factor
1,1,1-Trichloroethane	71-55-6	NA	1.30E+03	8.68E+02	0.7	-	Adoption of RAGS Part E
Trichloroethylene	79-01-6	NA	2.70E+02	1.83E+02	0.7	-	Adoption of RAGS Part E
Vinyl chloride	75-01-4	NA	5.38E+00	5.23E+00	1.0	-	Adoption of RAGS Part E
Bis(2-ethylhexyl)phthalate	117-81-7	NA	4.82E+01	7.63E+00	0.2	-	Adoption of RAGS Part E
1,2-Dibromo-3-chloropropane	96-12-8	NA	7.77E-01	2.84E-01	0.4	-	Adoption of RAGS Part E
Ethylene glycol	107-21-1	NA	1.05E+06	1.02E+06	1.0	-	Adoption of RAGS Part E
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	3.89E+01	8.56E-01	0.02	-	Adoption of RAGS Part E and change in deraml reference dose
3-Nitroaniline**	99-09-2	NIC	5.75E+00	3.77E+00	0.7	-	Adoption of RAGS Part E
Pentachlorophenol	87-86-5	NA	9.01E-01	2.84E-01	0.3	-	Adoption of RAGS Part E
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	6.19E-02	1.61E-02	0.3	-	Adoption of RAGS Part E
alpha-Hexachlorocyclohexane	319-84-6	NA	2.77E-01	7.36E-02	0.3	-	Adoption of RAGS Part E
Atrazine	1912-24-9	NA	2.57E+01	1.07E+01	0.4	-	Adoption of RAGS Part E
Chlordane (technical)	12789-03-6	NA	1.65E-01	3.40E-02	0.2	-	Adoption of RAGS Part E
DDT	50-29-3	NA	1.12E-01	2.55E-02	0.2	-	Adoption of RAGS Part E
Diazinon	333-41-5	NA	4.88E+00	1.19E+00	0.2	-	Adoption of RAGS Part E
Silvex (2,4,5-TP)	93-72-1	NA	3.66E+01	1.08E+01	0.3	-	Adoption of RAGS Part E
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	NA	NA	NA	NA	
Cyanide	57-12-5	NA	1.20E+03	1.72E+03	1.4	+	Adoption of RAGS Part E and change in skin surface area

Notes:

CALM: Cleanup levels for Missouri
NA: Not available
RAGS: Risk assessment guidance for superfund
MRBCA: Missouri risk-based corrective action
NIC: Chemical not in CALM
RBTL: Risk-based target level

*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
**: February 2005 value was in error. Therefore, revised February 2005 value is shown.
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 15
Changes in Risk-Based Target Levels for Residential Land Use, Soil Type 2 (Silty)
Departmental MRBCA Technical Guidance
Surficial Soil (Ingestion, Inhalation, and Dermal Contact)

Chemical	CAS #	Equivalent CALM (STARC Scenario A) (mg/kg)	Surficial Soil (Ingestion, Inhalation, and Dermal Contact) Soil Type 2 (Silty)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/kg)	RBTL Jan. 2006 (mg/kg)			
Carbon tetrachloride	56-23-5	2.00E+00	8.03E+00	1.28E+01	1.6	+	Changes in skin surface area (SA) and soil adherence factor (AF)
1,1-Dichloroethane	75-34-3	NIC	1.20E+02	1.23E+02	1.0	+	Changes in SA, AF, and inhalation reference dose
cis-1,2-Dichloroethylene	156-59-2	1.20E+03	7.49E+01	9.10E+01	1.2	+	Changes in SA and AF
1,2-Dichloropropane	78-87-5	1.00E+01	9.75E+00	1.23E+01	1.3	+	Changes in SA and AF
1,3-Dichloropropene	542-75-6	9.00E-01	1.37E+01	3.06E+01	2.2	+	Changes in SA and AF
1,4-Dioxane	123-91-1	1.50E+02	1.14E+02	2.29E+02	2.0	+	Changes in SA and AF
Methyl ethyl ketone	78-93-3	7.40E+03	1.25E+04	2.44E+04	2.0	+	Changes in SA and AF
Methylene chloride	75-09-2	5.10E+01	1.67E+02	3.38E+02	2.0	+	Changes in SA and AF
Tetrachloroethylene	127-18-4	4.00E+01	2.48E+01	7.73E+00	0.3	-	Changes in SA, AF, and oral/inhalation slope factors
1,1,1-Trichloroethane	71-55-6	1.20E+03	2.94E+03	3.90E+03	1.3	+	Changes in SA and AF
Trichloroethylene	79-01-6	4.00E+01	7.16E+01	1.15E+02	1.6	+	Changes in SA and AF
Vinyl chloride	75-01-4	3.00E-01	1.14E+00	3.18E+00	2.8	+	Changes in SA and AF
Bis(2-ethylhexyl)phthalate	117-81-7	4.10E+02	1.17E+02	3.47E+02	3.0	+	Changes in SA and AF
1,2-Dibromo-3-chloropropane	96-12-8	1.00E+00	1.15E+00	3.25E+00	2.8	+	Changes in SA and AF
Ethylene glycol	107-21-1	1.24E+05	2.49E+04	3.52E+04	1.4	+	Changes in SA and AF
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	2.40E+01	5.39E+00	0.2	-	Changes in SA, AF, and oral reference dose
3-Nitroaniline	99-09-2	NIC	7.30E+00	1.71E+01	2.3	+	Changes in SA and AF
Pentachlorophenol	87-86-5	6.00E+00	6.46E+00	2.97E+01	4.6	+	Changes in SA and AF
Polychlorinated biphenyls (PCBs)	1336-36-3	6.00E-01	6.31E-01	2.21E+00	3.5	+	Changes in SA and AF
alpha-Hexachlorocyclohexane	319-84-6	3.00E-01	2.58E-01	7.51E-01	2.9	+	Changes in SA and AF
Atrazine	1912-24-9	7.00E+00	7.13E+00	2.11E+01	3.0	+	Changes in SA and AF
Chlordane (technical)	12789-03-6	7.00E+00	4.68E+00	1.38E+01	3.0	+	Changes in SA and AF
DDT	50-29-3	8.00E+00	4.82E+00	1.43E+01	3.0	+	Changes in SA and AF
Diazinon	333-41-5	5.90E+01	2.23E+01	5.50E+01	2.5	+	Changes in SA and AF
Silvex (2,4,5-TP)	93-72-1	5.60E+02	1.97E+02	4.89E+02	2.5	+	Changes in SA and AF
Arsenic*	7440-38-2	1.10E+01	4.35E+00	4.47E+00	1.0	+	Changes in SA and AF
Cadmium*	7440-43-9	1.10E+02	3.23E+01	3.80E+01	1.2	+	Changes in SA and AF
Mercury	7439-97-6	6.00E-01	6.92E-01	6.92E-01	1.0	+	Changes in SA and AF
Cyanide	57-12-5	5.48E+03	5.02E+02	1.22E+03	2.4	+	Changes in SA and AF

Notes:

CALM: Cleanup levels for Missouri
MRBCA: Missouri risk-based corrective action
NA: Not available
NIC: Chemical not in CALM
RBTL: Risk-based target level
STARC: Soil target concentration
*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 16
Changes in Risk-Based Target Levels for Residential Land Use, Soil Type 2 (Silty)
Departmental MRBCA Technical Guidance
Subsurface Soil (Indoor Inhalation)

Chemical	CAS #	Equivalent CALM (mg/kg)	Subsurface Soil (Indoor Inhalation of Vapors) Soil Type 2 (Silty)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/kg)	RBTL Jan. 2006 (mg/kg)			
Carbon tetrachloride	56-23-5	NA	1.56E-01	1.56E-01	1.0	=	
1,1-Dichloroethane	75-34-3	NA	2.09E+00	2.09E+00	1.0	=	
cis-1,2-Dichloroethylene	156-59-2	NIC	3.87E+00	3.87E+00	1.0	=	
1,2-Dichloropropane	78-87-5	NA	6.74E-01	6.74E-01	1.0	=	
1,3-Dichloropropene	542-75-6	NA	4.68E-01	4.68E-01	1.0	=	
1,4-Dioxane	123-91-1	NA	9.68E+01	9.68E+01	1.0	=	
Methyl ethyl ketone	78-93-3	NA	1.28E+04	1.28E+04	1.0	=	
Methylene chloride	75-09-2	NA	7.69E+00	7.69E+00	1.0	=	
Tetrachloroethylene	127-18-4	NA	1.25E+00	5.94E-01	0.5	-	Change in inhalation slope factor
1,1,1-Trichloroethane	71-55-6	NA	1.38E+02	1.38E+02	1.0	=	
Trichloroethylene	79-01-6	NA	2.92E+00	2.92E+00	1.0	=	
Vinyl chloride	75-01-4	NA	6.74E-02	6.74E-02	1.0	=	
Bis(2-ethylhexyl)phthalate	117-81-7	NA	2.60E+10	3.99E+09	0.2	-	Change in inhalation slope factor
1,2-Dibromo-3-chloropropane	96-12-8	NA	7.52E+01	7.52E+01	1.0	=	
Ethylene glycol	107-21-1	NA	7.27E+04	7.27E+04	1.0	=	
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	8.35E+01	8.35E+01	1.0	=	
3-Nitroaniline	99-09-2	NIC	7.22E+02	7.57E+02	1.05	+	Change in inhalation reference dose
Pentachlorophenol	87-86-5	NA	8.58E+04	8.58E+04	1.0	=	
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	2.52E+03	2.52E+03	1.0	=	
alpha-Hexachlorocyclohexane	319-84-6	NA	8.83E+01	8.83E+01	1.0	=	
Atrazine	1912-24-9	NA	6.61E+03	6.61E+03	1.0	=	
Chlordane (technical)	12789-03-6	NA	4.83E+04	4.83E+04	1.0	=	
DDT	50-29-3	NA	4.76E+06	4.76E+06	1.0	=	
Diazinon	333-41-5	NA	1.58E+04	1.58E+04	1.0	=	
Silvex (2,4,5-TP)	93-72-1	NA	3.85E+04	3.85E+04	1.0	=	
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	1.90E-02	1.90E-02	1.0	=	
Cyanide	57-12-5	NA	NA	NA	NA	NA	

Notes:

CALM: Cleanup levels for Missouri

NA: Not available

RBTL: Risk-based target level

MRBCA: Missouri risk-based corrective action

NIC: Chemical not in CALM

*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf

+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.

-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative

=: January 2006 value is same as February 2005 value.

Table 17
Changes in Risk-Based Target Levels for Residential Land Use, Soil Type 2 (Silty)
Departmental MRBCA Technical Guidance
Groundwater (Indoor Inhalation)

Chemical	CAS #	Equivalent CALM (mg/L)	Groundwater (Indoor Inhalation of Vapors) Soil Type 2 (Silty)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/L)	RBTL Jan. 2006 (mg/L)			
Carbon tetrachloride	56-23-5	NA	1.28E-01	1.28E-01	1.0	=	
1,1-Dichloroethane	75-34-3	NA	6.53E+00	6.53E+00	1.0	=	
cis-1,2-Dichloroethylene	156-59-2	NIC	1.16E+01	1.16E+01	1.0	=	
1,2-Dichloropropane	78-87-5	NA	1.82E+00	1.82E+00	1.0	=	
1,3-Dichloropropene	542-75-6	NA	1.01E+00	1.01E+00	1.0	=	
1,4-Dioxane	123-91-1	NA	4.56E+02	4.56E+02	1.0	=	
Methyl ethyl ketone	78-93-3	NA	9.20E+04	9.20E+04	1.0	=	
Methylene chloride	75-09-2	NA	4.08E+01	4.08E+01	1.0	=	
Tetrachloroethylene	127-18-4	NA	1.19E+00	5.68E-01	0.5	-	Change in inhalation slope factor
1,1,1-Trichloroethane	71-55-6	NA	1.72E+02	1.72E+02	1.0	=	
Trichloroethylene	79-01-6	NA	2.74E+00	2.74E+00	1.0	=	
Vinyl chloride	75-01-4	NA	1.83E-01	1.83E-01	1.0	=	
Bis(2-ethylhexyl)phthalate	117-81-7	NA	2.91E+05	4.47E+04	0.2	-	Change in inhalation slope factor
1,2-Dibromo-3-chloropropane	96-12-8	NA	2.70E+02	2.70E+02	1.0	=	
Ethylene glycol	107-21-1	NA	5.37E+05	5.37E+05	1.0	=	
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	7.45E+02	7.45E+02	1.0	=	
3-Nitroaniline	99-09-2	NIC	2.09E+03	2.19E+03	1.05	+	Change in inhalation reference dose
Pentachlorophenol	87-86-5	NA	2.37E+04	2.37E+04	1.0	=	
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	1.39E+00	1.39E+00	1.0	=	
alpha-Hexachlorocyclohexane	319-84-6	NA	1.19E+01	1.19E+01	1.0	=	
Atrazine	1912-24-9	NA	2.20E+03	2.20E+03	1.0	=	
Chlordane (technical)	12789-03-6	NA	6.80E+01	6.80E+01	1.0	=	
DDT	50-29-3	NA	3.06E+02	3.06E+02	1.0	=	
Diazinon	333-41-5	NA	1.08E+04	1.08E+04	1.0	=	
Silvex (2,4,5-TP)	93-72-1	NA	8.68E+04	8.68E+04	1.0	=	
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	8.77E-02	8.77E-02	1.0	=	
Cyanide	57-12-5	NA	NA	NA	NA	NA	

Notes:

CALM: Cleanup levels for Missouri

NA: Not available

RBTL: Risk-based target level

MRBCA: Missouri risk-based corrective action

NIC: Chemical not in CALM

*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf

+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.

-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative

=: January 2006 value is same as February 2005 value.

Table 18
Changes in Risk-Based Target Levels for Residential Land Use, Soil Type 2 (Silty)
Departmental MRBCA Technical Guidance
Groundwater (Dermal Contact)

Chemical	CAS #	Equivalent CALM (mg/L)	Groundwater (Dermal Contact) Soil Type 2 (Silty)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/L)	RBTL Jan. 2006 (mg/L)			
Carbon tetrachloride	56-23-5	NA	1.06E-01	4.69E-02	0.4	-	Adoption of RAGS Part E
1,1-Dichloroethane	75-34-3	NA	5.77E+00	3.53E+00	0.6	-	Adoption of RAGS Part E
cis-1,2-Dichloroethylene	156-59-2	NIC	4.82E+00	4.22E+00	0.9	-	Adoption of RAGS Part E
1,2-Dichloropropane	78-87-5	NA	5.21E-01	4.21E-01	0.8	-	Adoption of RAGS Part E
1,3-Dichloropropene	542-75-6	NA	5.13E-01	2.99E-01	0.6	-	Adoption of RAGS Part E
1,4-Dioxane	123-91-1	NA	6.07E+01	3.93E+01	0.6	-	Adoption of RAGS Part E
Methyl ethyl ketone	78-93-3	NA	2.31E+03	2.27E+03	0.98	-	Adoption of RAGS Part E
Methylene chloride	75-09-2	NA	8.40E+00	5.54E+00	0.7	-	Adoption of RAGS Part E
Tetrachloroethylene	127-18-4	NA	1.28E-01	5.06E-03	0.04	-	Adoption of RAGS Part E and change in deraml slope factor
1,1,1-Trichloroethane	71-55-6	NA	7.95E+01	5.64E+01	0.7	-	Adoption of RAGS Part E
Trichloroethylene	79-01-6	NA	1.41E+00	7.22E-01	0.5	-	Adoption of RAGS Part E
Vinyl chloride	75-01-4	NA	2.81E-02	2.06E-02	0.7	-	Adoption of RAGS Part E
Bis(2-ethylhexyl)phthalate	117-81-7	NA	6.30E-01	7.52E-02	0.1	-	Adoption of RAGS Part E
1,2-Dibromo-3-chloropropane	96-12-8	NA	3.56E-02	9.82E-03	0.3	-	Adoption of RAGS Part E
Ethylene glycol	107-21-1	NA	6.43E+04	6.62E+04	1.03	+	Adoption of RAGS Part E
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	2.38E+00	5.56E-02	0.02	-	Adoption of RAGS Part E and change in dermal reference dose
3-Nitroaniline**	99-09-2	NIC	3.53E-01	2.45E-01	0.7	-	Adoption of RAGS Part E
Pentachlorophenol	87-86-5	NA	4.71E-03	1.12E-03	0.2	-	Adoption of RAGS Part E
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	3.24E-04	6.34E-05	0.2	-	Adoption of RAGS Part E
alpha-Hexachlorocyclohexane	319-84-6	NA	1.45E-03	2.90E-04	0.2	-	Adoption of RAGS Part E
Atrazine	1912-24-9	NA	1.34E-01	4.23E-02	0.3	-	Adoption of RAGS Part E
Chlordane (technical)	12789-03-6	NA	3.45E-03	5.37E-04	0.2	-	Adoption of RAGS Part E
DDT	50-29-3	NA	2.40E-03	4.14E-04	0.2	-	Adoption of RAGS Part E
Diazinon	333-41-5	NA	2.99E-01	7.71E-02	0.3	-	Adoption of RAGS Part E
Silvex (2,4,5-TP)	93-72-1	NA	2.25E+00	7.02E-01	0.3	-	Adoption of RAGS Part E
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	NA	NA	NA	NA	
Cyanide	57-12-5	NA	7.39E+01	1.12E+02	1.5	+	Adoption of RAGS Part E and change in skin surface area

Notes:

CALM: Cleanup levels for Missouri
NA: Not available
RAGS: Risk assessment guidance for superfund
MRBCA: Missouri risk-based corrective action
NIC: Chemical not in CALM
RBTL: Risk-based target level

*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
**: February 2005 value was in error. Therefore, revised February 2005 value is shown.
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 19
Changes in Risk-Based Target Levels for Residential Land Use, Soil Type 2 (Silty)
Departmental MRBCA Technical Guidance
Groundwater (Domestic Water Use)

Chemical	CAS #	Equivalent CALM (mg/L)	Groundwater (Domestic Water Use) Soil Type 2 (Silty)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/L)	RBTL Jan. 2006 (mg/L)			
Carbon tetrachloride	56-23-5	NA	5.00E-03	5.00E-03	1.0	=	
1,1-Dichloroethane	75-34-3	NA	2.52E-02	2.49E-02	0.99	-	Inclusion of dermal contact (DC) per RAGS Part E
cis-1,2-Dichloroethylene	156-59-2	NIC	7.00E-02	7.00E-02	1.0	=	
1,2-Dichloropropane	78-87-5	NA	5.00E-03	5.00E-03	1.0	=	
1,3-Dichloropropene	542-75-6	NA	4.41E-03	4.31E-03	0.98	-	Inclusion of DC per RAGS Part E
1,4-Dioxane**	123-91-1	NA	6.11E-02	6.10E-02	0.998	-	Inclusion of DC per RAGS Part E
Methyl ethyl ketone	78-93-3	NA	3.65E+00	3.64E+00	0.998	-	Inclusion of DC per RAGS Part E
Methylene chloride	75-09-2	NA	5.00E-03	5.00E-03	1.0	=	
Tetrachloroethylene	127-18-4	NA	5.00E-03	5.00E-03	1.0	=	
1,1,1-Trichloroethane	71-55-6	NA	2.00E-01	2.00E-01	1.0	=	
Trichloroethylene	79-01-6	NA	5.00E-03	5.00E-03	1.0	=	
Vinyl chloride	75-01-4	NA	2.00E-03	2.00E-03	1.0	=	
Bis(2-ethylhexyl)phthalate	117-81-7	NA	6.00E-03	6.00E-03	1.0	=	
1,2-Dibromo-3-chloropropane	96-12-8	NA	2.00E-04	2.00E-04	1.0	=	
Ethylene glycol**	107-21-1	NA	3.13E+01	3.13E+01	0.999	-	Inclusion of DC per RAGS Part E
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	3.13E-02	1.51E-03	0.05	-	Inclusion of DC per RAGS Part E and changes in oral/dermal reference doses
3-Nitroaniline**	99-09-2	NIC	4.69E-03	4.57E-03	0.97	-	Inclusion of DC per RAGS Part E
Pentachlorophenol	87-86-5	NA	1.00E-03	1.00E-03	1.0	=	
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	5.00E-04	5.00E-04	1.0	=	
alpha-Hexachlorocyclohexane	319-84-6	NA	1.07E-04	6.88E-05	0.6	-	Inclusion of DC per RAGS Part E
Atrazine	1912-24-9	NA	3.00E-03	3.00E-03	1.0	=	
Chlordane (technical)	12789-03-6	NA	1.92E-03	3.02E-04	0.2	-	Inclusion of DC per RAGS Part E
DDT	50-29-3	NA	1.98E-03	2.42E-04	0.1	-	Inclusion of DC per RAGS Part E
Diazinon	333-41-5	NA	1.41E-02	1.13E-02	0.8	-	Inclusion of DC per RAGS Part E
Silvex (2,4,5-TP)	93-72-1	NA	5.00E-02	5.00E-02	1.0	=	
Arsenic*	7440-38-2	NA	1.00E-02	1.00E-02	1.0	=	
Cadmium*	7440-43-9	NA	5.00E-03	5.00E-03	1.0	=	
Mercury	7439-97-6	NA	NA	NA	NA	NA	
Cyanide	57-12-5	NA	3.13E-01	3.12E-01	0.998	-	Inclusion of DC per RAGS Part E

Notes:

CALM: Cleanup levels for Missouri
MRBCA: Missouri risk-based corrective action
NA: Not available
NIC: Chemical not in CALM
RAGS: Risk assessment guidance for superfund
RBTL: Risk-based target level
*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
**: February 2005 value was in error. Therefore, revised February 2005 value is shown.
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 20
Changes in Risk-Based Target Levels for Non-residential Land Use, Soil Type 2 (Silty)
Departmental MRBCA Technical Guidance
Surficial Soil (Ingestion, Inhalation, and Dermal Contact)

Chemical	CAS #	Equivalent CALM (STARC Scenario B) (mg/kg)	Surficial Soil (Ingestion, Inhalation, and Dermal Contact) Soil Type 2 (Silty)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/kg)	RBTL Jan. 2006 (mg/kg)			
Carbon tetrachloride	56-23-5	3.00E+00	1.94E+01	3.03E+01	1.6	+	Changes in skin surface area (SA) and soil adherence factor (AF)
1,1-Dichloroethane	75-34-3	NIC	2.59E+02	3.28E+02	1.3	+	Changes in SA, AF, and inhalation reference dose
cis-1,2-Dichloroethylene	156-59-2	1.20E+03	5.21E+02	6.57E+02	1.3	+	Changes in SA and AF
1,2-Dichloropropane	78-87-5	1.40E+01	4.67E+01	5.98E+01	1.3	+	Changes in SA and AF
1,3-Dichloropropene	542-75-6	1.00E+00	3.73E+01	7.93E+01	2.1	+	Changes in SA and AF
1,4-Dioxane	123-91-1	2.10E+02	3.05E+02	5.82E+02	1.9	+	Changes in SA and AF
Methyl ethyl ketone	78-93-3	1.00E+04	8.80E+04	2.10E+05	2.4	+	Changes in SA and AF
Methylene chloride	75-09-2	7.10E+01	4.35E+02	8.10E+02	1.9	+	Changes in SA and AF
Tetrachloroethylene	127-18-4	5.50E+01	6.56E+01	2.41E+01	0.4	-	Changes in SA, AF, and oral/inhalation slope factors
1,1,1-Trichloroethane	71-55-6	1.20E+03	2.40E+04	3.64E+04	1.5	+	Changes in SA and AF
Trichloroethylene	79-01-6	5.60E+01	1.73E+02	2.55E+02	1.5	+	Changes in SA and AF
Vinyl chloride	75-01-4	4.00E-01	3.40E+00	1.04E+01	3.1	+	Changes in SA and AF
Bis(2-ethylhexyl)phthalate	117-81-7	5.70E+02	3.58E+02	1.23E+03	3.4	+	Changes in SA and AF
1,2-Dibromo-3-chloropropane	96-12-8	2.00E+00	3.47E+00	1.11E+01	3.2	+	Changes in SA and AF
Ethylene glycol	107-21-1	1.24E+05	1.71E+05	2.60E+05	1.5	+	Changes in SA and AF
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	1.65E+02	5.12E+01	0.3	-	Changes in SA, AF, and oral reference dose
3-Nitroaniline	99-09-2	NIC	5.20E+01	1.67E+02	3.2	+	Changes in SA and AF
Pentachlorophenol	87-86-5	9.00E+00	1.86E+01	9.00E+01	4.8	+	Changes in SA and AF
Polychlorinated biphenyls (PCBs)	1336-36-3	9.00E-01	1.88E+00	7.39E+00	3.9	+	Changes in SA and AF
alpha-Hexachlorocyclohexane	319-84-6	4.00E-01	7.84E-01	2.61E+00	3.3	+	Changes in SA and AF
Atrazine	1912-24-9	1.00E+01	2.18E+01	7.49E+01	3.4	+	Changes in SA and AF
Chlordane (technical)	12789-03-6	1.00E+01	1.43E+01	4.88E+01	3.4	+	Changes in SA and AF
DDT	50-29-3	1.20E+01	1.47E+01	5.07E+01	3.4	+	Changes in SA and AF
Diazinon	333-41-5	5.90E+01	1.59E+02	5.54E+02	3.5	+	Changes in SA and AF
Silvex (2,4,5-TP)	93-72-1	7.90E+02	1.40E+03	4.93E+03	3.5	+	Changes in SA and AF
Arsenic*	7440-38-2	1.10E+01	1.91E+01	1.99E+01	1.0	+	Changes in SA and AF
Cadmium*	7440-43-9	1.50E+02	3.47E+02	4.79E+02	1.4	+	Changes in SA and AF
Mercury	7439-97-6	8.00E-01	6.30E+00	6.30E+00	1.0	+	Changes in SA and AF
Cyanide	57-12-5	7.67E+03	3.58E+03	1.23E+04	3.4	+	Changes in SA and AF

Notes:

CALM: Cleanup levels for Missouri
MRBCA: Missouri risk-based corrective action
NA: Not available
NIC: Chemical not in CALM
RBTL: Risk-based target level
STARC: Soil target concentration
*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 21
Changes in Risk-Based Target Levels for Non-residential Land Use, Soil Type 2 (Silty)
Departmental MRBCA Technical Guidance
Subsurface Soil (Indoor Inhalation)

Chemical	CAS #	Equivalent CALM (mg/kg)	Subsurface Soil (Indoor Inhalation of Vapors) Soil Type 2 (Silty)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/kg)	RBTL Jan. 2006 (mg/kg)			
Carbon tetrachloride	56-23-5	NA	8.15E-01	8.15E-01	1.0	=	
1,1-Dichloroethane	75-34-3	NA	1.10E+01	1.10E+01	1.0	=	
cis-1,2-Dichloroethylene	156-59-2	NIC	3.11E+01	3.11E+01	1.0	=	
1,2-Dichloropropane	78-87-5	NA	3.80E+00	3.69E+00	0.97	-	Change in inhalation slope factor
1,3-Dichloropropene	542-75-6	NA	2.45E+00	2.45E+00	1.0	=	
1,4-Dioxane	123-91-1	NA	5.08E+02	5.08E+02	1.0	=	
Methyl ethyl ketone	78-93-3	NA	1.03E+05	1.03E+05	1.0	=	
Methylene chloride	75-09-2	NA	4.03E+01	4.03E+01	1.0	=	
Tetrachloroethylene	127-18-4	NA	6.54E+00	3.11E+00	0.5	-	Change in inhalation slope factor
1,1,1-Trichloroethane	71-55-6	NA	1.11E+03	1.11E+03	1.0	=	
Trichloroethylene	79-01-6	NA	1.53E+01	1.53E+01	1.0	=	
Vinyl chloride	75-01-4	NA	3.53E-01	3.53E-01	1.0	=	
Bis(2-ethylhexyl)phthalate	117-81-7	NA	2.09E+11	2.09E+10	0.1	-	Change in inhalation slope factor
1,2-Dibromo-3-chloropropane	96-12-8	NA	3.94E+02	3.94E+02	1.0	=	
Ethylene glycol	107-21-1	NA	5.85E+05	5.85E+05	1.0	=	
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	6.70E+02	6.70E+02	1.0	=	
3-Nitroaniline	99-09-2	NIC	5.80E+03	6.08E+03	1.05	+	Change in inhalation reference dose
Pentachlorophenol	87-86-5	NA	4.50E+05	4.50E+05	1.0	=	
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	1.32E+04	1.32E+04	1.0	=	
alpha-Hexachlorocyclohexane	319-84-6	NA	4.63E+02	4.63E+02	1.0	=	
Atrazine	1912-24-9	NA	3.46E+04	3.46E+04	1.0	=	
Chlordane (technical)	12789-03-6	NA	2.53E+05	2.53E+05	1.0	=	
DDT	50-29-3	NA	2.50E+07	2.50E+07	1.0	=	
Diazinon	333-41-5	NA	1.27E+05	1.27E+05	1.0	=	
Silvex (2,4,5-TP)	93-72-1	NA	3.09E+05	3.09E+05	1.0	=	
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	1.53E-01	1.53E-01	1.0	=	
Cyanide	57-12-5	NA	NA	NA	NA	NA	

Notes:

CALM: Cleanup levels for Missouri

NA: Not available

RBTL: Risk-based target level

MRBCA: Missouri risk-based corrective action

NIC: Chemical not in CALM

*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf

+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.

-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative

=: January 2006 value is same as February 2005 value.

Table 22
Changes in Risk-Based Target Levels for Non-residential Land Use, Soil Type 2 (Silty)
Departmental MRBCA Technical Guidance
Groundwater (Indoor Inhalation)

Chemical	CAS #	Equivalent CALM (mg/L)	Groundwater (Indoor Inhalation of Vapors) Soil Type 2 (Silty)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/L)	RBTL Jan. 2006 (mg/L)			
Carbon tetrachloride	56-23-5	NA	6.70E-01	6.70E-01	1.0	=	
1,1-Dichloroethane	75-34-3	NA	3.42E+01	3.42E+01	1.0	=	
cis-1,2-Dichloroethylene	156-59-2	NIC	9.36E+01	9.36E+01	1.0	=	
1,2-Dichloropropane	78-87-5	NA	1.03E+01	9.97E+00	0.97	-	Change in inhalation slope factor
1,3-Dichloropropene	542-75-6	NA	5.29E+00	5.29E+00	1.0	=	
1,4-Dioxane	123-91-1	NA	2.39E+03	2.39E+03	1.0	=	
Methyl ethyl ketone	78-93-3	NA	7.40E+05	7.40E+05	1.0	=	
Methylene chloride	75-09-2	NA	2.14E+02	2.14E+02	1.0	=	
Tetrachloroethylene	127-18-4	NA	6.25E+00	2.98E+00	0.5	-	Change in inhalation slope factor
1,1,1-Trichloroethane	71-55-6	NA	1.38E+03	1.38E+03	1.0	=	
Trichloroethylene	79-01-6	NA	1.43E+01	1.43E+01	1.0	=	
Vinyl chloride	75-01-4	NA	9.59E-01	9.59E-01	1.0	=	
Bis(2-ethylhexyl)phthalate	117-81-7	NA	2.34E+06	2.34E+05	0.1	-	Change in inhalation slope factor
1,2-Dibromo-3-chloropropane	96-12-8	NA	1.41E+03	1.41E+03	1.0	=	
Ethylene glycol	107-21-1	NA	4.32E+06	4.32E+06	1.0	=	
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	5.98E+03	5.98E+03	1.0	=	
3-Nitroaniline	99-09-2	NIC	1.68E+04	1.76E+04	1.05	+	Change in inhalaion reference dose
Pentachlorophenol	87-86-5	NA	1.24E+05	1.24E+05	1.0	=	
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	7.29E+00	7.29E+00	1.0	=	
alpha-Hexachlorocyclohexane	319-84-6	NA	6.26E+01	6.26E+01	1.0	=	
Atrazine	1912-24-9	NA	1.15E+04	1.15E+04	1.0	=	
Chlordane (technical)	12789-03-6	NA	3.56E+02	3.56E+02	1.0	=	
DDT	50-29-3	NA	1.60E+03	1.60E+03	1.0	=	
Diazinon	333-41-5	NA	8.66E+04	8.66E+04	1.0	=	
Silvex (2,4,5-TP)	93-72-1	NA	6.98E+05	6.98E+05	1.0	=	
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	7.05E-01	7.05E-01	1.0	=	
Cyanide	57-12-5	NA	NA	NA	NA	NA	

Notes:

CALM: Cleanup levels for Missouri

NA: Not available

RBTL: Risk-based target level

MRBCA: Missouri risk-based corrective action

NIC: Chemical not in CALM

*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf

+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.

-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative

=: January 2006 value is same as February 2005 value.

Table 23
Changes in Risk-Based Target Levels for Non-residential Land Use, Soil Type 2 (Silty)
Departmental MRBCA Technical Guidance
Groundwater (Dermal Contact)

Chemical	CAS #	Equivalent CALM (mg/L)	Groundwater (Dermal Contact) Soil Type 2 (Silty)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/L)	RBTL Jan. 2006 (mg/L)			
Carbon tetrachloride	56-23-5	NA	2.92E-01	1.71E-01	0.6	-	Adoption of RAGS Part E
1,1-Dichloroethane	75-34-3	NA	1.59E+01	1.29E+01	0.8	-	Adoption of RAGS Part E
cis-1,2-Dichloroethylene	156-59-2	NIC	2.83E+01	2.34E+01	0.8	-	Adoption of RAGS Part E
1,2-Dichloropropane	78-87-5	NA	2.16E+00	1.65E+00	0.8	-	Adoption of RAGS Part E
1,3-Dichloropropene	542-75-6	NA	1.41E+00	1.09E+00	0.8	-	Adoption of RAGS Part E
1,4-Dioxane	123-91-1	NA	1.67E+02	1.44E+02	0.9	-	Adoption of RAGS Part E
Methyl ethyl ketone	78-93-3	NA	1.36E+04	1.26E+04	0.9	-	Adoption of RAGS Part E
Methylene chloride	75-09-2	NA	2.31E+01	2.02E+01	0.9	-	Adoption of RAGS Part E
Tetrachloroethylene	127-18-4	NA	3.54E-01	1.85E-02	0.1	-	Adoption of RAGS Part E and change in dermal slope factor
1,1,1-Trichloroethane	71-55-6	NA	4.67E+02	3.13E+02	0.7	-	Adoption of RAGS Part E
Trichloroethylene	79-01-6	NA	3.89E+00	2.64E+00	0.7	-	Adoption of RAGS Part E
Vinyl chloride	75-01-4	NA	7.74E-02	7.53E-02	1.0	-	Adoption of RAGS Part E
Bis(2-ethylhexyl)phthalate	117-81-7	NA	1.73E+00	2.75E-01	0.2	-	Adoption of RAGS Part E
1,2-Dibromo-3-chloropropane	96-12-8	NA	9.81E-02	3.59E-02	0.4	-	Adoption of RAGS Part E
Ethylene glycol	107-21-1	NA	3.77E+05	3.67E+05	1.0	-	Adoption of RAGS Part E
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	1.40E+01	3.08E-01	0.02	-	Adoption of RAGS Part E and change in dermal reference dose
3-Nitroaniline**	99-09-2	NIC	2.07E+00	1.36E+00	0.7	-	Adoption of RAGS Part E
Pentachlorophenol	87-86-5	NA	1.30E-02	4.08E-03	0.3	-	Adoption of RAGS Part E
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	8.91E-04	2.31E-04	0.3	-	Adoption of RAGS Part E
alpha-Hexachlorocyclohexane	319-84-6	NA	3.99E-03	1.06E-03	0.3	-	Adoption of RAGS Part E
Atrazine	1912-24-9	NA	3.70E-01	1.55E-01	0.4	-	Adoption of RAGS Part E
Chlordane (technical)	12789-03-6	NA	9.50E-03	1.96E-03	0.2	-	Adoption of RAGS Part E
DDT	50-29-3	NA	6.61E-03	1.51E-03	0.2	-	Adoption of RAGS Part E
Diazinon	333-41-5	NA	1.76E+00	4.27E-01	0.2	-	Adoption of RAGS Part E
Silvex (2,4,5-TP)	93-72-1	NA	1.32E+01	3.89E+00	0.3	-	Adoption of RAGS Part E
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	NA	NA	NA	NA	
Cyanide	57-12-5	NA	4.34E+02	6.19E+02	1.4	+	Adoption of RAGS Part E and change in skin surface area

Notes:

CALM: Cleanup levels for Missouri
NA: Not available
RAGS: Risk assessment guidance for superfund
MRBCA: Missouri risk-based corrective action
NIC: Chemical not in CALM
RBTL: Risk-based target level

*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
**: February 2005 value was in error. Therefore, revised February 2005 value is shown.
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 24
Changes in Risk-Based Target Levels for Construction Worker, Soil Type 2 (Silty)
Departmental MRBCA Technical Guidance
Soil (Ingestion, Inhalation, and Dermal Contact)

Chemical	CAS #	Equivalent CALM (mg/kg)	Soil (Ingestion, Inhalation, and Dermal Contact) Soil Type 2 (Silty)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/kg)	RBTL Jan. 2006 (mg/kg)			
Carbon tetrachloride	56-23-5	NA	1.09E+02	8.90E+01	0.8	-	Changes in skin SA, soil AF, and IR
1,1-Dichloroethane	75-34-3	NA	2.00E+03	1.43E+02	0.1	-	Changes in SA, AF, and inhalation reference dose (RfDi)
cis-1,2-Dichloroethylene	156-59-2	NIC	1.90E+02	1.21E+02	0.6	-	Changes in SA and AF
1,2-Dichloropropane	78-87-5	NA	2.65E+01	1.70E+01	0.6	-	Changes in skin SA, soil AF, IR, and RfDi
1,3-Dichloropropene	542-75-6	NA	7.06E+01	4.36E+01	0.6	-	Changes in skin SA, soil AF, IR, and RfDi
1,4-Dioxane	123-91-1	NA	5.35E+03	3.80E+03	0.7	-	Changes in SA and AF
Methyl ethyl ketone	78-93-3	NA	9.32E+04	7.62E+04	0.8	-	Changes in SA and AF
Methylene chloride	75-09-2	NA	1.85E+03	1.20E+03	0.6	-	Changes in SA and AF
Tetrachloroethylene	127-18-4	NA	1.02E+03	2.96E+02	0.3	-	Changes in SA, AF, IR, and oral/inhalation/dermal slope factors
1,1,1-Trichloroethane	71-55-6	NA	8.76E+03	5.68E+03	0.6	-	Changes in SA and AF
Trichloroethylene	79-01-6	NA	2.02E+03	1.33E+03	0.7	-	Changes in SA and AF
Vinyl chloride	75-01-4	NA	9.69E+01	8.61E+01	0.9	-	Changes in SA and AF
Bis(2-ethylhexyl)phthalate	117-81-7	NA	9.93E+03	2.85E+04	2.9	+	Changes in SA and AF
1,2-Dibromo-3-chloropropane	96-12-8	NA	2.24E+01	3.29E+01	1.5	+	Change in SA, AF, IR, and RfDi
Ethylene glycol	107-21-1	NA	8.38E+04	5.54E+04	0.7	-	Changes in SA and AF
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	7.83E+01	3.83E+01	0.5	-	Changes in SA, AF, and oral/dermal reference doses
3-Nitroaniline	99-09-2	NIC	1.12E+02	1.75E+02	1.6	+	Changes in SA, AF, and RfDi
Pentachlorophenol	87-86-5	NA	1.29E+03	4.77E+03	3.7	+	Changes in SA and AF
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	1.29E+02	3.88E+02	3.0	+	Changes in SA and AF
alpha-Hexachlorocyclohexane	319-84-6	NA	4.85E+01	9.67E+01	2.0	+	Changes in SA and AF
Atrazine	1912-24-9	NA	1.51E+03	4.34E+03	2.9	+	Changes in SA and AF
Chlordane (technical)	12789-03-6	NA	2.34E+02	5.53E+02	2.4	+	Changes in SA and AF
DDT	50-29-3	NA	2.48E+02	7.13E+02	2.9	+	Changes in SA and AF
Diazinon	333-41-5	NA	4.00E+02	1.28E+03	3.2	+	Changes in SA and AF
Silvex (2,4,5-TP)	93-72-1	NA	3.24E+03	1.14E+04	3.5	+	Changes in SA and AF
Arsenic*	7440-38-2	NA	8.54E+02	8.87E+02	1.0	+	Changes in SA and AF
Cadmium*	7440-43-9	NA	9.65E+02	1.29E+03	1.3	+	Changes in SA and AF
Mercury	7439-97-6	NA	1.28E+00	7.90E-01	0.6	-	Changes in SA and AF
Cyanide	57-12-5	NA	9.93E+03	2.85E+04	2.9	+	Changes in SA and AF

Notes:

AF: Adherence factor
IR: Inhalation rate
NA: Not available
RBTL: Risk-based target level
CALM: Cleanup levels for Missouri
MRBCA: Missouri risk-based corrective action
NIC: Chemical not in CALM
SA: Skin surface area

*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 25
Changes in Risk-Based Target Levels for Construction Worker, Soil Type 2 (Silty)
Departmental MRBCA Technical Guidance
Groundwater (Outdoor Inhalation)

Chemical	CAS #	Equivalent CALM (mg/L)	Groundwater (Outdoor Inhalation of Vapors) Soil Type 2 (Silty)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/L)	RBTL Jan. 2006 (mg/L)			
Carbon tetrachloride	56-23-5	NA	6.79E+03	4.19E+03	0.6	-	Change in inhalation rate (IR)
1,1-Dichloroethane	75-34-3	NA	2.69E+05	1.86E+04	0.1	-	Changes in IR and inhalation reference dose (RfDi)
cis-1,2-Dichloroethylene	156-59-2	NIC	2.57E+04	1.59E+04	0.6	-	Change in IR
1,2-Dichloropropane	78-87-5	NA	3.93E+03	2.43E+03	0.6	-	Change in IR
1,3-Dichloropropene	542-75-6	NA	6.34E+03	3.90E+03	0.6	-	Changes in IR and RfDi
1,4-Dioxane	123-91-1	NA	4.45E+06	2.74E+06	0.6	-	Change in IR
Methyl ethyl ketone	78-93-3	NA	5.92E+07	3.65E+07	0.6	-	Change in IR
Methylene chloride	75-09-2	NA	3.42E+05	2.11E+05	0.6	-	Change in IR
Tetrachloroethylene	127-18-4	NA	6.96E+04	2.05E+04	0.3	-	Changes in IR and inhalation slope factor
1,1,1-Trichloroethane	71-55-6	NA	6.12E+05	3.77E+05	0.6	-	Change in IR
Trichloroethylene	79-01-6	NA	1.44E+05	8.89E+04	0.6	-	Change in IR
Vinyl chloride	75-01-4	NA	1.23E+04	7.60E+03	0.6	-	Change in IR
Bis(2-ethylhexyl)phthalate	117-81-7	NA	1.71E+08	1.05E+08	0.6	-	Change in IR
1,2-Dibromo-3-chloropropane	96-12-8	NA	3.53E+05	1.81E+05	0.5	-	Changes in IR and RfDi
Ethylene glycol	107-21-1	NA	3.15E+08	1.94E+08	0.6	-	Change in IR
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	4.36E+05	2.69E+05	0.6	-	Change in IR
3-Nitroaniline	99-09-2	NIC	1.22E+06	7.93E+05	0.6	-	Changes in IR and RfDi
Pentachlorophenol	87-86-5	NA	1.75E+08	1.08E+08	0.6	-	Change in IR
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	2.01E+04	1.24E+04	0.6	-	Change in IR
alpha-Hexachlorocyclohexane	319-84-6	NA	5.15E+04	7.07E+04	1.4	+	Changes in IR and RfDi
Atrazine	1912-24-9	NA	2.10E+07	1.29E+07	0.6	-	Change in IR
Chlordane (technical)	12789-03-6	NA	6.67E+04	4.11E+04	0.6	-	Change in IR
DDT	50-29-3	NA	7.11E+05	4.39E+05	0.6	-	Change in IR
Diazinon	333-41-5	NA	6.31E+06	3.89E+06	0.6	-	Change in IR
Silvex (2,4,5-TP)	93-72-1	NA	5.09E+07	3.14E+07	0.6	-	Change in IR
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	2.51E+02	1.55E+02	0.6	-	Change in IR
Cyanide	57-12-5	NA	NA	NA	NA	NA	

Notes:

CALM: Cleanup levels for Missouri

NA: Not available

RBTL: Risk-based target level

MRBCA: Missouri risk-based corrective action

NIC: Chemical not in CALM

*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf

+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.

-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative

=: January 2006 value is same as February 2005 value.

Table 26
Changes in Risk-Based Target Levels for Construction Worker, Soil Type 2 (Silty)
Departmental MRBCA Technical Guidance
Groundwater (Dermal Contact)

Chemical	CAS #	Equivalent CALM (mg/L)	Groundwater (Dermal Contact) Soil Type 2 (Silty)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/L)	RBTL Jan. 2006 (mg/L)			
Carbon tetrachloride	56-23-5	NA	2.63E+00	1.55E+00	0.6	-	Adoption of RAGS Part E
1,1-Dichloroethane	75-34-3	NA	8.99E+02	7.30E+02	0.8	-	Adoption of RAGS Part E
cis-1,2-Dichloroethylene	156-59-2	NIC	7.85E+01	6.50E+01	0.8	-	Adoption of RAGS Part E
1,2-Dichloropropane	78-87-5	NA	8.49E+00	6.48E+00	0.8	-	Adoption of RAGS Part E
1,3-Dichloropropene	542-75-6	NA	9.80E+01	7.58E+01	0.8	-	Adoption of RAGS Part E
1,4-Dioxane	123-91-1	NA	1.16E+04	9.97E+03	0.9	-	Adoption of RAGS Part E
Methyl ethyl ketone	78-93-3	NA	3.76E+04	3.50E+04	0.9	-	Adoption of RAGS Part E
Methylene chloride	75-09-2	NA	1.03E+03	9.03E+02	0.9	-	Adoption of RAGS Part E
Tetrachloroethylene	127-18-4	NA	1.82E+01	1.28E+00	0.1	-	Adoption of RAGS Part E and change in dermal slope factor
1,1,1-Trichloroethane	71-55-6	NA	1.30E+03	8.68E+02	0.7	-	Adoption of RAGS Part E
Trichloroethylene	79-01-6	NA	2.70E+02	1.83E+02	0.7	-	Adoption of RAGS Part E
Vinyl chloride	75-01-4	NA	5.38E+00	5.23E+00	1.0	-	Adoption of RAGS Part E
Bis(2-ethylhexyl)phthalate	117-81-7	NA	4.82E+01	7.63E+00	0.2	-	Adoption of RAGS Part E
1,2-Dibromo-3-chloropropane	96-12-8	NA	7.77E-01	2.84E-01	0.4	-	Adoption of RAGS Part E
Ethylene glycol	107-21-1	NA	1.05E+06	1.02E+06	1.0	-	Adoption of RAGS Part E
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	3.89E+01	8.56E-01	0.02	-	Adoption of RAGS Part E and change in deraml reference dose
3-Nitroaniline**	99-09-2	NIC	5.75E+00	3.77E+00	0.7	-	Adoption of RAGS Part E
Pentachlorophenol	87-86-5	NA	9.01E-01	2.84E-01	0.3	-	Adoption of RAGS Part E
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	6.19E-02	1.61E-02	0.3	-	Adoption of RAGS Part E
alpha-Hexachlorocyclohexane	319-84-6	NA	2.77E-01	7.36E-02	0.3	-	Adoption of RAGS Part E
Atrazine	1912-24-9	NA	2.57E+01	1.07E+01	0.4	-	Adoption of RAGS Part E
Chlordane (technical)	12789-03-6	NA	1.65E-01	3.40E-02	0.2	-	Adoption of RAGS Part E
DDT	50-29-3	NA	1.12E-01	2.55E-02	0.2	-	Adoption of RAGS Part E
Diazinon	333-41-5	NA	4.88E+00	1.19E+00	0.2	-	Adoption of RAGS Part E
Silvex (2,4,5-TP)	93-72-1	NA	3.66E+01	1.08E+01	0.3	-	Adoption of RAGS Part E
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	NA	NA	NA	NA	
Cyanide	57-12-5	NA	1.20E+03	1.72E+03	1.4	+	Adoption of RAGS Part E and change in skin surface area

Notes:

CALM: Cleanup levels for Missouri
NA: Not available
RAGS: Risk assessment guidance for superfund
MRBCA: Missouri risk-based corrective action
NIC: Chemical not in CALM
RBTL: Risk-based target level

*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
**: February 2005 value was in error. Therefore, revised February 2005 value is shown.
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 27
Changes in Risk-Based Target Levels for Residential Land Use, Soil Type 3 (Clayey)
Departmental MRBCA Technical Guidance
Surficial Soil (Ingestion, Inhalation, and Dermal Contact)

Chemical	CAS #	Equivalent CALM (STARC Scenario A) (mg/kg)	Surficial Soil (Ingestion, Inhalation, and Dermal Contact) Soil Type 3 (Clayey)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/kg)	RBTL Jan. 2006 (mg/kg)			
Carbon tetrachloride	56-23-5	2.00E+00	8.03E+00	1.39E+01	1.7	+	Changes in skin surface area (SA) and soil adherence factor (AF)
1,1-Dichloroethane	75-34-3	NIC	1.20E+02	1.64E+02	1.4	+	Changes in SA, AF, and inhalation reference dose
cis-1,2-Dichloroethylene	156-59-2	1.20E+03	9.14E+01	1.16E+02	1.3	+	Changes in SA and AF
1,2-Dichloropropane	78-87-5	1.00E+01	1.17E+01	1.56E+01	1.3	+	Changes in SA and AF
1,3-Dichloropropene	542-75-6	9.00E-01	1.37E+01	3.06E+01	2.2	+	Changes in SA and AF
1,4-Dioxane	123-91-1	1.50E+02	1.20E+02	2.59E+02	2.2	+	Changes in SA and AF
Methyl ethyl ketone	78-93-3	7.40E+03	1.31E+04	2.71E+04	2.1	+	Changes in SA and AF
Methylene chloride	75-09-2	5.10E+01	1.69E+02	3.48E+02	2.1	+	Changes in SA and AF
Tetrachloroethylene	127-18-4	4.00E+01	2.48E+01	7.74E+00	0.3	-	Changes in SA, AF, and oral/inhalation slope factors
1,1,1-Trichloroethane	71-55-6	1.20E+03	3.41E+03	4.78E+03	1.4	+	Changes in SA and AF
Trichloroethylene	79-01-6	4.00E+01	7.93E+01	1.36E+02	1.7	+	Changes in SA and AF
Vinyl chloride	75-01-4	3.00E-01	1.14E+00	3.18E+00	2.8	+	Changes in SA and AF
Bis(2-ethylhexyl)phthalate	117-81-7	4.10E+02	1.17E+02	3.47E+02	3.0	+	Changes in SA and AF
1,2-Dibromo-3-chloropropane	96-12-8	1.00E+00	1.14E+00	3.18E+00	2.8	+	Changes in SA and AF
Ethylene glycol	107-21-1	1.24E+05	2.20E+04	2.98E+04	1.4	+	Changes in SA and AF
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	2.09E+01	5.22E+00	0.2	-	Changes in SA, AF, and oral reference dose
3-Nitroaniline	99-09-2	NIC	7.22E+00	1.67E+01	2.3	+	Changes in SA and AF
Pentachlorophenol	87-86-5	6.00E+00	6.45E+00	2.97E+01	4.6	+	Changes in SA and AF
Polychlorinated biphenyls (PCBs)	1336-36-3	6.00E-01	6.31E-01	2.21E+00	3.5	+	Changes in SA and AF
alpha-Hexachlorocyclohexane	319-84-6	3.00E-01	2.58E-01	7.52E-01	2.9	+	Changes in SA and AF
Atrazine	1912-24-9	7.00E+00	7.13E+00	2.11E+01	3.0	+	Changes in SA and AF
Chlordane (technical)	12789-03-6	7.00E+00	4.68E+00	1.38E+01	3.0	+	Changes in SA and AF
DDT	50-29-3	8.00E+00	4.82E+00	1.43E+01	3.0	+	Changes in SA and AF
Diazinon	333-41-5	5.90E+01	2.22E+01	5.50E+01	2.5	+	Changes in SA and AF
Silvex (2,4,5-TP)	93-72-1	5.60E+02	1.95E+02	4.89E+02	2.5	+	Changes in SA and AF
Arsenic*	7440-38-2	1.10E+01	4.35E+00	4.47E+00	1.0	+	Changes in SA and AF
Cadmium*	7440-43-9	1.10E+02	3.23E+01	3.80E+01	1.2	+	Changes in SA and AF
Mercury	7439-97-6	6.00E-01	9.31E-01	9.31E-01	1.0	+	Changes in SA and AF
Cyanide	57-12-5	5.48E+03	5.02E+02	1.22E+03	2.4	+	Changes in SA and AF

Notes:

CALM: Cleanup levels for Missouri
MRBCA: Missouri risk-based corrective action
NA: Not available
NIC: Chemical not in CALM
RBTL: Risk-based target level
STARC: Soil target concentration
*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 28
Changes in Risk-Based Target Levels for Residential Land Use, Soil Type 3 (Clayey)
Departmental MRBCA Technical Guidance
Subsurface Soil (Indoor Inhalation)

Chemical	CAS #	Equivalent CALM (mg/kg)	Subsurface Soil (Indoor Inhalation of Vapors) Soil Type 3 (Clayey)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/kg)	RBTL Jan. 2006 (mg/kg)			
Carbon tetrachloride	56-23-5	NA	2.64E-01	2.64E-01	1.0	=	
1,1-Dichloroethane	75-34-3	NA	3.77E+00	3.77E+00	1.0	=	
cis-1,2-Dichloroethylene	156-59-2	NIC	7.01E+00	7.01E+00	1.0	=	
1,2-Dichloropropane	78-87-5	NA	1.22E+00	1.22E+00	1.0	=	
1,3-Dichloropropene	542-75-6	NA	8.09E-01	8.09E-01	1.0	=	
1,4-Dioxane	123-91-1	NA	1.67E+02	1.67E+02	1.0	=	
Methyl ethyl ketone	78-93-3	NA	2.52E+04	2.52E+04	1.0	=	
Methylene chloride	75-09-2	NA	1.47E+01	1.47E+01	1.0	=	
Tetrachloroethylene	127-18-4	NA	2.14E+00	1.02E+00	0.5	-	Change in inhalation slope factor
1,1,1-Trichloroethane	71-55-6	NA	2.37E+02	2.37E+02	1.0	=	
Trichloroethylene	79-01-6	NA	5.04E+00	5.04E+00	1.0	=	
Vinyl chloride	75-01-4	NA	1.14E-01	1.14E-01	1.0	=	
Bis(2-ethylhexyl)phthalate	117-81-7	NA	1.45E+10	2.22E+09	0.2	-	Change in inhalation slope factor
1,2-Dibromo-3-chloropropane	96-12-8	NA	4.15E+01	4.15E+01	1.0	=	
Ethylene glycol	107-21-1	NA	4.60E+04	4.60E+04	1.0	=	
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	5.13E+01	5.13E+01	1.0	=	
3-Nitroaniline	99-09-2	NIC	3.87E+02	4.06E+02	1.05	+	Change in inhalation reference dose
Pentachlorophenol	87-86-5	NA	4.41E+04	4.41E+04	1.0	=	
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	4.28E+03	4.28E+03	1.0	=	
alpha-Hexachlorocyclohexane	319-84-6	NA	1.01E+02	1.01E+02	1.0	=	
Atrazine	1912-24-9	NA	3.32E+03	3.32E+03	1.0	=	
Chlordane (technical)	12789-03-6	NA	7.53E+04	7.53E+04	1.0	=	
DDT	50-29-3	NA	5.55E+06	5.55E+06	1.0	=	
Diazinon	333-41-5	NA	8.40E+03	8.40E+03	1.0	=	
Silvex (2,4,5-TP)	93-72-1	NA	2.03E+04	2.03E+04	1.0	=	
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	3.43E-02	3.43E-02	1.0	=	
Cyanide	57-12-5	NA	NA	NA	NA	NA	

Notes:
CALM: Cleanup levels for Missouri
NA: Not available
RBTL: Risk-based target level
MRBCA: Missouri risk-based corrective action
NIC: Chemical not in CALM
*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 29
Changes in Risk-Based Target Levels for Residential Land Use, Soil Type 3 (Clayey)
Departmental MRBCA Technical Guidance
Groundwater (Indoor Inhalation)

Chemical	CAS #	Equivalent CALM (mg/L)	Groundwater (Indoor Inhalation of Vapors) Soil Type 3 (Clayey)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/L)	RBTL Jan. 2006 (mg/L)			
Carbon tetrachloride	56-23-5	NA	2.08E-01	2.08E-01	1.0	=	
1,1-Dichloroethane	75-34-3	NA	1.08E+01	1.08E+01	1.0	=	
cis-1,2-Dichloroethylene	156-59-2	NIC	1.94E+01	1.94E+01	1.0	=	
1,2-Dichloropropane	78-87-5	NA	3.04E+00	3.04E+00	1.0	=	
1,3-Dichloropropene	542-75-6	NA	1.66E+00	1.66E+00	1.0	=	
1,4-Dioxane	123-91-1	NA	7.00E+02	7.00E+02	1.0	=	
Methyl ethyl ketone	78-93-3	NA	1.53E+05	1.53E+05	1.0	=	
Methylene chloride	75-09-2	NA	6.83E+01	6.83E+01	1.0	=	
Tetrachloroethylene	127-18-4	NA	1.95E+00	9.28E-01	0.5	-	Change in inhalation slope factor
1,1,1-Trichloroethane	71-55-6	NA	2.81E+02	2.81E+02	1.0	=	
Trichloroethylene	79-01-6	NA	4.49E+00	4.49E+00	1.0	=	
Vinyl chloride	75-01-4	NA	2.97E-01	2.97E-01	1.0	=	
Bis(2-ethylhexyl)phthalate	117-81-7	NA	1.62E+05	2.49E+04	0.2	-	Change in inhalation slope factor
1,2-Dibromo-3-chloropropane	96-12-8	NA	1.36E+02	1.36E+02	1.0	=	
Ethylene glycol	107-21-1	NA	2.84E+05	2.84E+05	1.0	=	
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	3.71E+02	3.71E+02	1.0	=	
3-Nitroaniline	99-09-2	NIC	1.04E+03	1.09E+03	1.05	+	Change in inhalation reference dose
Pentachlorophenol	87-86-5	NA	1.21E+04	1.21E+04	1.0	=	
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	2.35E+00	2.35E+00	1.0	=	
alpha-Hexachlorocyclohexane	319-84-6	NA	1.36E+01	1.36E+01	1.0	=	
Atrazine	1912-24-9	NA	1.09E+03	1.09E+03	1.0	=	
Chlordane (technical)	12789-03-6	NA	1.06E+02	1.06E+02	1.0	=	
DDT	50-29-3	NA	3.57E+02	3.57E+02	1.0	=	
Diazinon	333-41-5	NA	5.62E+03	5.62E+03	1.0	=	
Silvex (2,4,5-TP)	93-72-1	NA	4.31E+04	4.31E+04	1.0	=	
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	1.45E-01	1.45E-01	1.0	=	
Cyanide	57-12-5	NA	NA	NA	NA	NA	

Notes:

CALM: Cleanup levels for Missouri
NA: Not available
RBTL: Risk-based target level
MRBCA: Missouri risk-based corrective action
NIC: Chemical not in CALM
*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 30
Changes in Risk-Based Target Levels for Residential Land Use, Soil Type 3 (Clayey)
Departmental MRBCA Technical Guidance
Groundwater (Dermal Contact)

Chemical	CAS #	Equivalent CALM (mg/L)	Groundwater (Dermal Contact) Soil Type 3 (Clayey)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/L)	RBTL Jan. 2006 (mg/L)			
Carbon tetrachloride	56-23-5	NA	1.06E-01	4.69E-02	0.4	-	Adoption of RAGS Part E
1,1-Dichloroethane	75-34-3	NA	5.77E+00	3.53E+00	0.6	-	Adoption of RAGS Part E
cis-1,2-Dichloroethylene	156-59-2	NIC	4.82E+00	4.22E+00	0.9	-	Adoption of RAGS Part E
1,2-Dichloropropane	78-87-5	NA	5.21E-01	4.21E-01	0.8	-	Adoption of RAGS Part E
1,3-Dichloropropene	542-75-6	NA	5.13E-01	2.99E-01	0.6	-	Adoption of RAGS Part E
1,4-Dioxane	123-91-1	NA	6.07E+01	3.93E+01	0.6	-	Adoption of RAGS Part E
Methyl ethyl ketone	78-93-3	NA	2.31E+03	2.27E+03	0.98	-	Adoption of RAGS Part E
Methylene chloride	75-09-2	NA	8.40E+00	5.54E+00	0.7	-	Adoption of RAGS Part E
Tetrachloroethylene	127-18-4	NA	1.28E-01	5.06E-03	0.04	-	Adoption of RAGS Part E and change in deraml slope factor
1,1,1-Trichloroethane	71-55-6	NA	7.95E+01	5.64E+01	0.7	-	Adoption of RAGS Part E
Trichloroethylene	79-01-6	NA	1.41E+00	7.22E-01	0.5	-	Adoption of RAGS Part E
Vinyl chloride	75-01-4	NA	2.81E-02	2.06E-02	0.7	-	Adoption of RAGS Part E
Bis(2-ethylhexyl)phthalate	117-81-7	NA	6.30E-01	7.52E-02	0.1	-	Adoption of RAGS Part E
1,2-Dibromo-3-chloropropane	96-12-8	NA	3.56E-02	9.82E-03	0.3	-	Adoption of RAGS Part E
Ethylene glycol	107-21-1	NA	6.43E+04	6.62E+04	1.03	+	Adoption of RAGS Part E
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	2.38E+00	5.56E-02	0.02	-	Adoption of RAGS Part E and change in dermal reference dose
3-Nitroaniline**	99-09-2	NIC	3.53E-01	2.45E-01	0.7	-	Adoption of RAGS Part E
Pentachlorophenol	87-86-5	NA	4.71E-03	1.12E-03	0.2	-	Adoption of RAGS Part E
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	3.24E-04	6.34E-05	0.2	-	Adoption of RAGS Part E
alpha-Hexachlorocyclohexane	319-84-6	NA	1.45E-03	2.90E-04	0.2	-	Adoption of RAGS Part E
Atrazine	1912-24-9	NA	1.34E-01	4.23E-02	0.3	-	Adoption of RAGS Part E
Chlordane (technical)	12789-03-6	NA	3.45E-03	5.37E-04	0.2	-	Adoption of RAGS Part E
DDT	50-29-3	NA	2.40E-03	4.14E-04	0.2	-	Adoption of RAGS Part E
Diazinon	333-41-5	NA	2.99E-01	7.71E-02	0.3	-	Adoption of RAGS Part E
Silvex (2,4,5-TP)	93-72-1	NA	2.25E+00	7.02E-01	0.3	-	Adoption of RAGS Part E
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	NA	NA	NA	NA	
Cyanide	57-12-5	NA	7.39E+01	1.12E+02	1.5	+	Adoption of RAGS Part E and change in skin surface area

Notes:

CALM: Cleanup levels for Missouri
NA: Not available
RAGS: Risk assessment guidance for superfund
MRBCA: Missouri risk-based corrective action
NIC: Chemical not in CALM
RBTL: Risk-based target level

*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
**: February 2005 value was in error. Therefore, revised February 2005 value is shown.
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 31
Changes in Risk-Based Target Levels for Residential Land Use, Soil Type 3 (Clayey)
Departmental MRBCA Technical Guidance
Groundwater (Domestic Water Use)

Chemical	CAS #	Equivalent CALM (mg/L)	Groundwater (Domestic Water Use) Soil Type 3 (Clayey)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/L)	RBTL Jan. 2006 (mg/L)			
Carbon tetrachloride	56-23-5	NA	5.00E-03	5.00E-03	1.0	=	
1,1-Dichloroethane	75-34-3	NA	2.52E-02	2.49E-02	0.99	-	Inclusion of dermal contact (DC) per RAGS Part E
cis-1,2-Dichloroethylene	156-59-2	NIC	7.00E-02	7.00E-02	1.0	=	
1,2-Dichloropropane	78-87-5	NA	5.00E-03	5.00E-03	1.0	=	
1,3-Dichloropropene	542-75-6	NA	4.41E-03	4.31E-03	0.98	-	Inclusion of DC per RAGS Part E
1,4-Dioxane**	123-91-1	NA	6.11E-02	6.10E-02	0.998	-	Inclusion of DC per RAGS Part E
Methyl ethyl ketone	78-93-3	NA	3.65E+00	3.64E+00	0.998	-	Inclusion of DC per RAGS Part E
Methylene chloride	75-09-2	NA	5.00E-03	5.00E-03	1.0	=	
Tetrachloroethylene	127-18-4	NA	5.00E-03	5.00E-03	1.0	=	
1,1,1-Trichloroethane	71-55-6	NA	2.00E-01	2.00E-01	1.0	=	
Trichloroethylene	79-01-6	NA	5.00E-03	5.00E-03	1.0	=	
Vinyl chloride	75-01-4	NA	2.00E-03	2.00E-03	1.0	=	
Bis(2-ethylhexyl)phthalate	117-81-7	NA	6.00E-03	6.00E-03	1.0	=	
1,2-Dibromo-3-chloropropane	96-12-8	NA	2.00E-04	2.00E-04	1.0	=	
Ethylene glycol**	107-21-1	NA	3.13E+01	3.13E+01	0.999	-	Inclusion of DC per RAGS Part E
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	3.13E-02	1.51E-03	0.05	-	Inclusion of DC per RAGS Part E and changes in oral/dermal reference doses
3-Nitroaniline**	99-09-2	NIC	4.69E-03	4.57E-03	0.97	-	Inclusion of DC per RAGS Part E
Pentachlorophenol	87-86-5	NA	1.00E-03	1.00E-03	1.0	=	
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	5.00E-04	5.00E-04	1.0	=	
alpha-Hexachlorocyclohexane	319-84-6	NA	1.07E-04	6.88E-05	0.6	-	Inclusion of DC per RAGS Part E
Atrazine	1912-24-9	NA	3.00E-03	3.00E-03	1.0	=	
Chlordane (technical)	12789-03-6	NA	1.92E-03	3.02E-04	0.2	-	Inclusion of DC per RAGS Part E
DDT	50-29-3	NA	1.98E-03	2.42E-04	0.1	-	Inclusion of DC per RAGS Part E
Diazinon	333-41-5	NA	1.41E-02	1.13E-02	0.8	-	Inclusion of DC per RAGS Part E
Silvex (2,4,5-TP)	93-72-1	NA	5.00E-02	5.00E-02	1.0	=	
Arsenic*	7440-38-2	NA	1.00E-02	1.00E-02	1.0	=	
Cadmium*	7440-43-9	NA	5.00E-03	5.00E-03	1.0	=	
Mercury	7439-97-6	NA	NA	NA	NA	NA	
Cyanide	57-12-5	NA	3.13E-01	3.12E-01	0.998	-	Inclusion of DC per RAGS Part E

Notes:

CALM: Cleanup levels for Missouri
MRBCA: Missouri risk-based corrective action
NA: Not available
NIC: Chemical not in CALM
RAGS: Risk assessment guidance for superfund
RBTL: Risk-based target level
*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
**: February 2005 value was in error. Therefore, revised February 2005 value is shown.
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 32
Changes in Risk-Based Target Levels for Non-residential Land Use, Soil Type 3 (Clayey)
Departmental MRBCA Technical Guidance
Surficial Soil (Ingestion, Inhalation, and Dermal Contact)

Chemical	CAS #	Equivalent CALM (STARC Scenario B) (mg/kg)	Surficial Soil (Ingestion, Inhalation, and Dermal Contact) Soil Type 3 (Clayey)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/kg)	RBTL Jan. 2006 (mg/kg)			
Carbon tetrachloride	56-23-5	3.00E+00	1.94E+01	3.03E+01	1.6	+	Changes in skin surface area (SA) and soil adherence factor (AF)
1,1-Dichloroethane	75-34-3	NIC	2.75E+02	3.54E+02	1.3	+	Changes in SA, AF, and inhalation reference dose
cis-1,2-Dichloroethylene	156-59-2	1.20E+03	6.24E+02	8.29E+02	1.3	+	Changes in SA and AF
1,2-Dichloropropane	78-87-5	1.40E+01	5.63E+01	7.71E+01	1.4	+	Changes in SA and AF
1,3-Dichloropropene	542-75-6	1.00E+00	3.73E+01	7.93E+01	2.1	+	Changes in SA and AF
1,4-Dioxane	123-91-1	2.10E+02	3.31E+02	6.85E+02	2.1	+	Changes in SA and AF
Methyl ethyl ketone	78-93-3	1.00E+04	9.28E+04	2.40E+05	2.6	+	Changes in SA and AF
Methylene chloride	75-09-2	7.10E+01	4.58E+02	8.93E+02	1.9	+	Changes in SA and AF
Tetrachloroethylene	127-18-4	5.50E+01	6.75E+01	2.46E+01	0.4	-	Changes in SA, AF, and oral/inhalation slope factors
1,1,1-Trichloroethane	71-55-6	1.20E+03	2.40E+04	3.64E+04	1.5	+	Changes in SA and AF
Trichloroethylene	79-01-6	5.60E+01	2.00E+02	3.16E+02	1.6	+	Changes in SA and AF
Vinyl chloride	75-01-4	4.00E-01	3.40E+00	1.04E+01	3.1	+	Changes in SA and AF
Bis(2-ethylhexyl)phthalate	117-81-7	5.70E+02	3.58E+02	1.23E+03	3.4	+	Changes in SA and AF
1,2-Dibromo-3-chloropropane	96-12-8	2.00E+00	3.43E+00	1.07E+01	3.1	+	Changes in SA and AF
Ethylene glycol	107-21-1	1.24E+05	1.51E+05	2.16E+05	1.4	+	Changes in SA and AF
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	1.43E+02	4.90E+01	0.3	-	Changes in SA, AF, and oral reference dose
3-Nitroaniline	99-09-2	NIC	5.14E+01	1.61E+02	3.1	+	Changes in SA and AF
Pentachlorophenol	87-86-5	9.00E+00	1.86E+01	9.00E+01	4.8	+	Changes in SA and AF
Polychlorinated biphenyls (PCBs)	1336-36-3	9.00E-01	1.88E+00	7.40E+00	3.9	+	Changes in SA and AF
alpha-Hexachlorocyclohexane	319-84-6	4.00E-01	7.85E-01	2.62E+00	3.3	+	Changes in SA and AF
Atrazine	1912-24-9	1.00E+01	2.18E+01	7.49E+01	3.4	+	Changes in SA and AF
Chlordane (technical)	12789-03-6	1.00E+01	1.43E+01	4.89E+01	3.4	+	Changes in SA and AF
DDT	50-29-3	1.20E+01	1.47E+01	5.07E+01	3.4	+	Changes in SA and AF
Diazinon	333-41-5	5.90E+01	1.58E+02	5.54E+02	3.5	+	Changes in SA and AF
Silvex (2,4,5-TP)	93-72-1	7.90E+02	1.39E+03	4.93E+03	3.5	+	Changes in SA and AF
Arsenic*	7440-38-2	1.10E+01	1.91E+01	1.99E+01	1.0	+	Changes in SA and AF
Cadmium*	7440-43-9	1.50E+02	3.47E+02	4.79E+02	1.4	+	Changes in SA and AF
Mercury	7439-97-6	8.00E-01	6.30E+00	6.30E+00	1.0	+	Changes in SA and AF
Cyanide	57-12-5	7.67E+03	3.58E+03	1.23E+04	3.4	+	Changes in SA and AF

Notes:

CALM: Cleanup levels for Missouri
MRBCA: Missouri risk-based corrective action
NA: Not available
NIC: Chemical not in CALM
RBTL: Risk-based target level
STARC: Soil target concentration
*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 33
Changes in Risk-Based Target Levels for Non-residential Land Use, Soil Type 3 (Clayey)
Departmental MRBCA Technical Guidance
Subsurface Soil (Indoor Inhalation)

Chemical	CAS #	Equivalent CALM (mg/kg)	Subsurface Soil (Indoor Inhalation of Vapors) Soil Type 3 (Clayey)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/kg)	RBTL Jan. 2006 (mg/kg)			
Carbon tetrachloride	56-23-5	NA	1.38E+00	1.38E+00	1.0	=	
1,1-Dichloroethane	75-34-3	NA	1.98E+01	1.98E+01	1.0	=	
cis-1,2-Dichloroethylene	156-59-2	NIC	5.64E+01	5.64E+01	1.0	=	
1,2-Dichloropropane	78-87-5	NA	6.86E+00	6.67E+00	0.97	-	Change in inhalation slope factor
1,3-Dichloropropene	542-75-6	NA	4.24E+00	4.24E+00	1.0	=	
1,4-Dioxane	123-91-1	NA	8.76E+02	8.76E+02	1.0	=	
Methyl ethyl ketone	78-93-3	NA	2.03E+05	2.03E+05	1.0	=	
Methylene chloride	75-09-2	NA	7.70E+01	7.70E+01	1.0	=	
Tetrachloroethylene	127-18-4	NA	1.12E+01	5.34E+00	0.5	-	Change in inhalation slope factor
1,1,1-Trichloroethane	71-55-6	NA	1.90E+03	1.90E+03	1.0	=	
Trichloroethylene	79-01-6	NA	2.64E+01	2.64E+01	1.0	=	
Vinyl chloride	75-01-4	NA	5.99E-01	5.99E-01	1.0	=	
Bis(2-ethylhexyl)phthalate	117-81-7	NA	1.17E+11	1.17E+10	0.1	-	Change in inhalation slope factor
1,2-Dibromo-3-chloropropane	96-12-8	NA	2.17E+02	2.17E+02	1.0	=	
Ethylene glycol	107-21-1	NA	3.70E+05	3.70E+05	1.0	=	
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	4.11E+02	4.11E+02	1.0	=	
3-Nitroaniline	99-09-2	NIC	3.11E+03	3.26E+03	1.05	+	Change in inhalation reference dose
Pentachlorophenol	87-86-5	NA	2.31E+05	2.31E+05	1.0	=	
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	2.24E+04	2.24E+04	1.0	=	
alpha-Hexachlorocyclohexane	319-84-6	NA	5.29E+02	5.29E+02	1.0	=	
Atrazine	1912-24-9	NA	1.74E+04	1.74E+04	1.0	=	
Chlordane (technical)	12789-03-6	NA	3.95E+05	3.95E+05	1.0	=	
DDT	50-29-3	NA	2.91E+07	2.91E+07	1.0	=	
Diazinon	333-41-5	NA	6.75E+04	6.75E+04	1.0	=	
Silvex (2,4,5-TP)	93-72-1	NA	1.63E+05	1.63E+05	1.0	=	
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	2.76E-01	2.76E-01	1.0	=	
Cyanide	57-12-5	NA	NA	NA	NA	NA	

Notes:

CALM: Cleanup levels for Missouri

NA: Not available

RBTL: Risk-based target level

MRBCA: Missouri risk-based corrective action

NIC: Chemical not in CALM

*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf

+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.

-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative

=: January 2006 value is same as February 2005 value.

Table 34
Changes in Risk-Based Target Levels for Non-residential Land Use, Soil Type 3 (Clayey)
Departmental MRBCA Technical Guidance
Groundwater (Indoor Inhalation)

Chemical	CAS #	Equivalent CALM (mg/L)	Groundwater (Indoor Inhalation of Vapors) Soil Type 3 (Clayey)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/L)	RBTL Jan. 2006 (mg/L)			
Carbon tetrachloride	56-23-5	NA	1.09E+00	1.09E+00	1.0	=	
1,1-Dichloroethane	75-34-3	NA	5.68E+01	5.68E+01	1.0	=	
cis-1,2-Dichloroethylene	156-59-2	NIC	1.56E+02	1.56E+02	1.0	=	
1,2-Dichloropropane	78-87-5	NA	1.71E+01	1.66E+01	0.97	-	Change in inhalation slope factor
1,3-Dichloropropene	542-75-6	NA	8.68E+00	8.68E+00	1.0	=	
1,4-Dioxane	123-91-1	NA	3.67E+03	3.67E+03	1.0	=	
Methyl ethyl ketone	78-93-3	NA	1.23E+06	1.23E+06	1.0	=	
Methylene chloride	75-09-2	NA	3.58E+02	3.58E+02	1.0	=	
Tetrachloroethylene	127-18-4	NA	1.02E+01	4.86E+00	0.5	-	Change in inhalation slope factor
1,1,1-Trichloroethane	71-55-6	NA	2.26E+03	2.26E+03	1.0	=	
Trichloroethylene	79-01-6	NA	2.36E+01	2.36E+01	1.0	=	
Vinyl chloride	75-01-4	NA	1.55E+00	1.55E+00	1.0	=	
Bis(2-ethylhexyl)phthalate	117-81-7	NA	1.30E+06	1.30E+05	0.1	-	Change in inhalation slope factor
1,2-Dibromo-3-chloropropane	96-12-8	NA	7.13E+02	7.13E+02	1.0	=	
Ethylene glycol	107-21-1	NA	2.28E+06	2.28E+06	1.0	=	
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	2.97E+03	2.97E+03	1.0	=	
3-Nitroaniline	99-09-2	NIC	8.37E+03	8.78E+03	1.05	+	Change in inhalaion reference dose
Pentachlorophenol	87-86-5	NA	6.34E+04	6.34E+04	1.0	=	
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	1.23E+01	1.23E+01	1.0	=	
alpha-Hexachlorocyclohexane	319-84-6	NA	7.13E+01	7.13E+01	1.0	=	
Atrazine	1912-24-9	NA	5.73E+03	5.73E+03	1.0	=	
Chlordane (technical)	12789-03-6	NA	5.56E+02	5.56E+02	1.0	=	
DDT	50-29-3	NA	1.87E+03	1.87E+03	1.0	=	
Diazinon	333-41-5	NA	4.52E+04	4.52E+04	1.0	=	
Silvex (2,4,5-TP)	93-72-1	NA	3.47E+05	3.47E+05	1.0	=	
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	1.16E+00	1.16E+00	1.0	=	
Cyanide	57-12-5	NA	NA	NA	NA	NA	

Notes:

CALM: Cleanup levels for Missouri

NA: Not available

RBTL: Risk-based target level

MRBCA: Missouri risk-based corrective action

NIC: Chemical not in CALM

*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf

+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.

-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative

=: January 2006 value is same as February 2005 value.

Table 35
Changes in Risk-Based Target Levels for Non-residential Land Use, Soil Type 3 (Clayey)
Departmental MRBCA Technical Guidance
Groundwater (Dermal Contact)

Chemical	CAS #	Equivalent CALM (mg/L)	Groundwater (Dermal Contact) Soil Type 3 (Clayey)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/L)	RBTL Jan. 2006 (mg/L)			
Carbon tetrachloride	56-23-5	NA	2.92E-01	1.71E-01	0.6	-	Adoption of RAGS Part E
1,1-Dichloroethane	75-34-3	NA	1.59E+01	1.29E+01	0.8	-	Adoption of RAGS Part E
cis-1,2-Dichloroethylene	156-59-2	NIC	2.83E+01	2.34E+01	0.8	-	Adoption of RAGS Part E
1,2-Dichloropropane	78-87-5	NA	2.16E+00	1.65E+00	0.8	-	Adoption of RAGS Part E
1,3-Dichloropropene	542-75-6	NA	1.41E+00	1.09E+00	0.8	-	Adoption of RAGS Part E
1,4-Dioxane	123-91-1	NA	1.67E+02	1.44E+02	0.9	-	Adoption of RAGS Part E
Methyl ethyl ketone	78-93-3	NA	1.36E+04	1.26E+04	0.9	-	Adoption of RAGS Part E
Methylene chloride	75-09-2	NA	2.31E+01	2.02E+01	0.9	-	Adoption of RAGS Part E
Tetrachloroethylene	127-18-4	NA	3.54E-01	1.85E-02	0.1	-	Adoption of RAGS Part E and change in dermal slope factor
1,1,1-Trichloroethane	71-55-6	NA	4.67E+02	3.13E+02	0.7	-	Adoption of RAGS Part E
Trichloroethylene	79-01-6	NA	3.89E+00	2.64E+00	0.7	-	Adoption of RAGS Part E
Vinyl chloride	75-01-4	NA	7.74E-02	7.53E-02	1.0	-	Adoption of RAGS Part E
Bis(2-ethylhexyl)phthalate	117-81-7	NA	1.73E+00	2.75E-01	0.2	-	Adoption of RAGS Part E
1,2-Dibromo-3-chloropropane	96-12-8	NA	9.81E-02	3.59E-02	0.4	-	Adoption of RAGS Part E
Ethylene glycol	107-21-1	NA	3.77E+05	3.67E+05	1.0	-	Adoption of RAGS Part E
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	1.40E+01	3.08E-01	0.02	-	Adoption of RAGS Part E and change in dermal reference dose
3-Nitroaniline**	99-09-2	NIC	2.07E+00	1.36E+00	0.7	-	Adoption of RAGS Part E
Pentachlorophenol	87-86-5	NA	1.30E-02	4.08E-03	0.3	-	Adoption of RAGS Part E
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	8.91E-04	2.31E-04	0.3	-	Adoption of RAGS Part E
alpha-Hexachlorocyclohexane	319-84-6	NA	3.99E-03	1.06E-03	0.3	-	Adoption of RAGS Part E
Atrazine	1912-24-9	NA	3.70E-01	1.55E-01	0.4	-	Adoption of RAGS Part E
Chlordane (technical)	12789-03-6	NA	9.50E-03	1.96E-03	0.2	-	Adoption of RAGS Part E
DDT	50-29-3	NA	6.61E-03	1.51E-03	0.2	-	Adoption of RAGS Part E
Diazinon	333-41-5	NA	1.76E+00	4.27E-01	0.2	-	Adoption of RAGS Part E
Silvex (2,4,5-TP)	93-72-1	NA	1.32E+01	3.89E+00	0.3	-	Adoption of RAGS Part E
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	NA	NA	NA	NA	
Cyanide	57-12-5	NA	4.34E+02	6.19E+02	1.4	+	Adoption of RAGS Part E and change in skin surface area

Notes:

CALM: Cleanup levels for Missouri
NA: Not available
RAGS: Risk assessment guidance for superfund
MRBCA: Missouri risk-based corrective action
NIC: Chemical not in CALM
RBTL: Risk-based target level

*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
**: February 2005 value was in error. Therefore, revised February 2005 value is shown.
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 36
Changes in Risk-Based Target Levels for Construction Worker, Soil Type 3 (Clayey)
Departmental MRBCA Technical Guidance
Soil (Ingestion, Inhalation, and Dermal Contact)

Chemical	CAS #	Equivalent CALM (mg/kg)	Soil (Ingestion, Inhalation, and Dermal Contact) Soil Type 3 (Clayey)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/kg)	RBTL Jan. 2006 (mg/kg)			
Carbon tetrachloride	56-23-5	NA	1.29E+02	1.13E+02	0.9	-	Changes in skin SA, soil AF, and IR
1,1-Dichloroethane	75-34-3	NA	2.66E+03	1.92E+02	0.1	-	Changes in SA, AF, and inhalation reference dose (RfDi)
cis-1,2-Dichloroethylene	156-59-2	NIC	2.53E+02	1.62E+02	0.6	-	Changes in SA and AF
1,2-Dichloropropane	78-87-5	NA	3.51E+01	2.28E+01	0.6	-	Changes in skin SA, soil AF, IR, and RfDi
1,3-Dichloropropene	542-75-6	NA	9.27E+01	5.73E+01	0.6	-	Changes in skin SA, soil AF, IR, and RfDi
1,4-Dioxane	123-91-1	NA	6.67E+03	4.93E+03	0.7	-	Changes in SA and AF
Methyl ethyl ketone	78-93-3	NA	1.16E+05	1.04E+05	0.9	-	Changes in SA and AF
Methylene chloride	75-09-2	NA	2.50E+03	1.65E+03	0.7	-	Changes in SA and AF
Tetrachloroethylene	127-18-4	NA	1.27E+03	3.69E+02	0.3	-	Changes in SA, AF, IR, and oral/inhalation/dermal slope factors
1,1,1-Trichloroethane	71-55-6	NA	1.13E+04	7.42E+03	0.7	-	Changes in SA and AF
Trichloroethylene	79-01-6	NA	2.60E+03	1.74E+03	0.7	-	Changes in SA and AF
Vinyl chloride	75-01-4	NA	1.13E+02	1.08E+02	1.0	-	Changes in SA and AF
Bis(2-ethylhexyl)phthalate	117-81-7	NA	9.93E+03	2.85E+04	2.9	+	Changes in SA and AF
1,2-Dibromo-3-chloropropane	96-12-8	NA	2.09E+01	2.73E+01	1.3	+	Change in SA, AF, IR, and RfDi
Ethylene glycol	107-21-1	NA	6.78E+04	4.42E+04	0.7	-	Changes in SA and AF
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	6.23E+01	3.19E+01	0.5	-	Changes in SA, AF, and oral/dermal reference doses
3-Nitroaniline	99-09-2	NIC	1.03E+02	1.44E+02	1.4	+	Changes in SA, AF, and RfDi
Pentachlorophenol	87-86-5	NA	1.29E+03	4.77E+03	3.7	+	Changes in SA and AF
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	1.29E+02	3.94E+02	3.0	+	Changes in SA and AF
alpha-Hexachlorocyclohexane	319-84-6	NA	4.89E+01	9.92E+01	2.0	+	Changes in SA and AF
Atrazine	1912-24-9	NA	1.51E+03	4.34E+03	2.9	+	Changes in SA and AF
Chlordane (technical)	12789-03-6	NA	2.37E+02	5.79E+02	2.4	+	Changes in SA and AF
DDT	50-29-3	NA	2.48E+02	7.13E+02	2.9	+	Changes in SA and AF
Diazinon	333-41-5	NA	3.85E+02	1.28E+03	3.3	+	Changes in SA and AF
Silvex (2,4,5-TP)	93-72-1	NA	3.03E+03	1.14E+04	3.8	+	Changes in SA and AF
Arsenic*	7440-38-2	NA	8.54E+02	8.87E+02	1.0	+	Changes in SA and AF
Cadmium*	7440-43-9	NA	9.65E+02	1.29E+03	1.3	+	Changes in SA and AF
Mercury	7439-97-6	NA	1.72E+00	1.06E+00	0.6	-	Changes in SA and AF
Cyanide	57-12-5	NA	9.93E+03	2.85E+04	2.9	+	Changes in SA and AF

Notes:

AF: Adherence factor
IR: Inhalation rate
NA: Not available
RBTL: Risk-based target level
CALM: Cleanup levels for Missouri
MRBCA: Missouri risk-based corrective action
NIC: Chemical not in CALM
SA: Skin surface area

*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 37
Changes in Risk-Based Target Levels for Construction Worker, Soil Type 3 (Clayey)
Departmental MRBCA Technical Guidance
Groundwater (Outdoor Inhalation)

Chemical	CAS #	Equivalent CALM (mg/L)	Groundwater (Outdoor Inhalation of Vapors) Soil Type 3 (Clayey)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/L)	RBTL Jan. 2006 (mg/L)			
Carbon tetrachloride	56-23-5	NA	7.44E+03	4.59E+03	0.6	-	Change in inhalation rate (IR)
1,1-Dichloroethane	75-34-3	NA	3.10E+05	2.14E+04	0.1	-	Changes in IR and inhalation reference dose (RfDi)
cis-1,2-Dichloroethylene	156-59-2	NIC	3.03E+04	1.87E+04	0.6	-	Change in IR
1,2-Dichloropropane	78-87-5	NA	4.65E+03	2.87E+03	0.6	-	Change in IR
1,3-Dichloropropene	542-75-6	NA	7.05E+03	4.34E+03	0.6	-	Changes in IR and RfDi
1,4-Dioxane	123-91-1	NA	6.78E+06	4.18E+06	0.6	-	Change in IR
Methyl ethyl ketone	78-93-3	NA	9.49E+07	5.86E+07	0.6	-	Change in IR
Methylene chloride	75-09-2	NA	4.13E+05	2.55E+05	0.6	-	Change in IR
Tetrachloroethylene	127-18-4	NA	7.69E+04	2.26E+04	0.3	-	Changes in IR and inhalation slope factor
1,1,1-Trichloroethane	71-55-6	NA	6.76E+05	4.17E+05	0.6	-	Change in IR
Trichloroethylene	79-01-6	NA	1.61E+05	9.92E+04	0.6	-	Change in IR
Vinyl chloride	75-01-4	NA	1.34E+04	8.27E+03	0.6	-	Change in IR
Bis(2-ethylhexyl)phthalate	117-81-7	NA	9.52E+07	5.87E+07	0.6	-	Change in IR
1,2-Dibromo-3-chloropropane	96-12-8	NA	1.78E+05	9.15E+04	0.5	-	Changes in IR and RfDi
Ethylene glycol	107-21-1	NA	1.67E+08	1.03E+08	0.6	-	Change in IR
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	2.16E+05	1.34E+05	0.6	-	Change in IR
3-Nitroaniline	99-09-2	NIC	6.10E+05	3.95E+05	0.6	-	Changes in IR and RfDi
Pentachlorophenol	87-86-5	NA	8.92E+07	5.51E+07	0.6	-	Change in IR
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	2.93E+04	1.81E+04	0.6	-	Change in IR
alpha-Hexachlorocyclohexane	319-84-6	NA	5.87E+04	8.05E+04	1.4	+	Changes in IR and RfDi
Atrazine	1912-24-9	NA	1.04E+07	6.45E+06	0.6	-	Change in IR
Chlordane (technical)	12789-03-6	NA	1.03E+05	6.35E+04	0.6	-	Change in IR
DDT	50-29-3	NA	8.29E+05	5.11E+05	0.6	-	Change in IR
Diazinon	333-41-5	NA	3.30E+06	2.03E+06	0.6	-	Change in IR
Silvex (2,4,5-TP)	93-72-1	NA	2.53E+07	1.56E+07	0.6	-	Change in IR
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	2.84E+02	1.75E+02	0.6	-	Change in IR
Cyanide	57-12-5	NA	NA	NA	NA	NA	

Notes:
CALM: Cleanup levels for Missouri
NA: Not available
RBTL: Risk-based target level
MRBCA: Missouri risk-based corrective action
NIC: Chemical not in CALM
*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.

Table 38
Changes in Risk-Based Target Levels for Construction Worker, Soil Type 3 (Clayey)
Departmental MRBCA Technical Guidance
Groundwater (Dermal Contact)

Chemical	CAS #	Equivalent CALM (mg/L)	Groundwater (Dermal Contact) Soil Type 3 (Clayey)		Ratio of Jan. 2006/Feb. 2005		Why Changed
			RBTL Feb. 2005 (mg/L)	RBTL Jan. 2006 (mg/L)			
Carbon tetrachloride	56-23-5	NA	2.63E+00	1.55E+00	0.6	-	Adoption of RAGS Part E
1,1-Dichloroethane	75-34-3	NA	8.99E+02	7.30E+02	0.8	-	Adoption of RAGS Part E
cis-1,2-Dichloroethylene	156-59-2	NIC	7.85E+01	6.50E+01	0.8	-	Adoption of RAGS Part E
1,2-Dichloropropane	78-87-5	NA	8.49E+00	6.48E+00	0.8	-	Adoption of RAGS Part E
1,3-Dichloropropene	542-75-6	NA	9.80E+01	7.58E+01	0.8	-	Adoption of RAGS Part E
1,4-Dioxane	123-91-1	NA	1.16E+04	9.97E+03	0.9	-	Adoption of RAGS Part E
Methyl ethyl ketone	78-93-3	NA	3.76E+04	3.50E+04	0.9	-	Adoption of RAGS Part E
Methylene chloride	75-09-2	NA	1.03E+03	9.03E+02	0.9	-	Adoption of RAGS Part E
Tetrachloroethylene	127-18-4	NA	1.82E+01	1.28E+00	0.1	-	Adoption of RAGS Part E and change in dermal slope factor
1,1,1-Trichloroethane	71-55-6	NA	1.30E+03	8.68E+02	0.7	-	Adoption of RAGS Part E
Trichloroethylene	79-01-6	NA	2.70E+02	1.83E+02	0.7	-	Adoption of RAGS Part E
Vinyl chloride	75-01-4	NA	5.38E+00	5.23E+00	1.0	-	Adoption of RAGS Part E
Bis(2-ethylhexyl)phthalate	117-81-7	NA	4.82E+01	7.63E+00	0.2	-	Adoption of RAGS Part E
1,2-Dibromo-3-chloropropane	96-12-8	NA	7.77E-01	2.84E-01	0.4	-	Adoption of RAGS Part E
Ethylene glycol	107-21-1	NA	1.05E+06	1.02E+06	1.0	-	Adoption of RAGS Part E
2-Methyl-4,6-dinitrophenol	534-52-1	NIC	3.89E+01	8.56E-01	0.02	-	Adoption of RAGS Part E and change in deraml reference dose
3-Nitroaniline**	99-09-2	NIC	5.75E+00	3.77E+00	0.7	-	Adoption of RAGS Part E
Pentachlorophenol	87-86-5	NA	9.01E-01	2.84E-01	0.3	-	Adoption of RAGS Part E
Polychlorinated biphenyls (PCBs)	1336-36-3	NA	6.19E-02	1.61E-02	0.3	-	Adoption of RAGS Part E
alpha-Hexachlorocyclohexane	319-84-6	NA	2.77E-01	7.36E-02	0.3	-	Adoption of RAGS Part E
Atrazine	1912-24-9	NA	2.57E+01	1.07E+01	0.4	-	Adoption of RAGS Part E
Chlordane (technical)	12789-03-6	NA	1.65E-01	3.40E-02	0.2	-	Adoption of RAGS Part E
DDT	50-29-3	NA	1.12E-01	2.55E-02	0.2	-	Adoption of RAGS Part E
Diazinon	333-41-5	NA	4.88E+00	1.19E+00	0.2	-	Adoption of RAGS Part E
Silvex (2,4,5-TP)	93-72-1	NA	3.66E+01	1.08E+01	0.3	-	Adoption of RAGS Part E
Arsenic*	7440-38-2	NA	NA	NA	NA	NA	
Cadmium*	7440-43-9	NA	NA	NA	NA	NA	
Mercury	7439-97-6	NA	NA	NA	NA	NA	
Cyanide	57-12-5	NA	1.20E+03	1.72E+03	1.4	+	Adoption of RAGS Part E and change in skin surface area

Notes:

CALM: Cleanup levels for Missouri
NA: Not available
RAGS: Risk assessment guidance for superfund
MRBCA: Missouri risk-based corrective action
NIC: Chemical not in CALM
RBTL: Risk-based target level

*: Chemicals in Tanks program. RBTLs obtained from Soil Type Dependent Tier 1 RBTLs available at http://www.dnr.state.mo.us/env/hwp/mrbca/tank-files/all-xls-3-18-05.pdf
**: February 2005 value was in error. Therefore, revised February 2005 value is shown.
+: January 2006 value is higher than February 2005 value. Therefore, January 2006 value is less conservative.
-: January 2006 value is lower than February 2005 value. Therefore, January 2006 value is more conservative
=: January 2006 value is same as February 2005 value.