

## History of Changes to CLARC (June 2004 – September 2012)

Sort by Date		Sort by Chemical		Sort by Parameter	
Date of Change	Chemical	Parameter			
9/26/2012	tetrachloroethylene	Oral Reference Dose (RfDo)			
	Changes Made		Comments		
previous value:	1.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (September 2012)		
changed to:	6.E-03	mg/kg-day			

Date of Change	Chemical	Parameter			
9/26/2012	tetrachloroethylene	Inhalation Reference Dose (RfDi)			
	Changes Made		Comments		
previous value:	see additional information		Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 2 on May 11 2011 3:54PM		
changed to:	1.1E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (September 2012)		

Date of Change	Chemical	Parameter			
9/26/2012	tetrachloroethylene	Oral Cancer Potency Factor (CPFo)			
	Changes Made		Comments		
changed to:	2.1E-03	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (September 2012)		

Date of Change	Chemical	Parameter			
9/26/2012	tetrachloroethylene	Ground Water, Method B, Carcinogen, Standard Formula Value			
	Changes Made		Comments		
changed to:	2.1E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)		

Date of Change	Chemical	Parameter			
9/26/2012	tetrachloroethylene	Ground Water, Method B, Non-carcinogen, Standard Formula Value			
	Changes Made		Comments		
previous value:	8.E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)		
changed to:	4.8E+01	µg/L			

Date of Change	Chemical	Parameter			
9/26/2012	tetrachloroethylene	Ground Water, Method C, Carcinogen, Standard Formula Value			
	Changes Made		Comments		
changed to:	2.1E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)		

Date of Change	Chemical	Parameter			
9/26/2012	tetrachloroethylene	Ground Water, Method C, Non-carcinogen, Standard Formula Value			
	Changes Made		Comments		
previous value:	1.8E+02	µg/L			
changed to:	1.1E+02	µg/L			

Date of Change	Chemical	Parameter			
9/26/2012	tetrachloroethylene	Surface Water, Method B, Carcinogen, Standard Formula Value			
	Changes Made		Comments		
changed to:	1.E+02	µg/L	Changes to CLARC cleanup levels based on updated		

		toxicity values (September 2012)
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Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	5.E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	2.5E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.3E+03	µg/L	Changes to CLARC cleanup levels based upon updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	4.8E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+02	mg/kg	
changed to:	4.8E+02	mg/kg	Updated CLARC toxicity values from IRIS or NCEA (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
changed to:	6.3E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E+04	mg/kg	
changed to:	2.1E+04	mg/kg	Updated CLARC toxicity values from IRIS or NCEA (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Oral Reference Dose (RfDo)

	Changes Made		Comments
changed to:	5.E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	5.7E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	5.4E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	9.4E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.3E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	3.2E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	1.2E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
changed to:	2.8E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	3.7E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	6.3E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )
changed to:	9.1E-04	kg-day/mg
Updated CLARC toxicity values from IRIS or NCEA (September 2012)		

Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Air, Method B, Non-Carcinogen, Standard Formula Value
changed to:	1.8E+01	µg/m3
Changes to CLARC cleanup levels based on updated toxicity values (September 2012)		

Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Air, Method B, Carcinogen, Standard Formula Value
changed to:	9.6E+00	µg/m3
Changes to CLARC cleanup levels based on updated toxicity values (September 2012)		

Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Air, Method C, Non-carcinogen, Standard Formula Value
changed to:	4.E+01	µg/m3
Changes to CLARC cleanup levels based on updated toxicity values (September 2012)		

Date of Change	Chemical	Parameter
9/26/2012	tetrachloroethylene	Air, Method C, Carcinogen, Standard Formula Value
changed to:	9.6E+01	µg/m3
Changes to CLARC cleanup levels based on updated toxicity values (September 2012)		

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Air, Method B, Non-Carcinogen, Standard Formula Value
changed to:	9.E-01	µg/m3
Changes to CLARC cleanup levels based on updated toxicity values (September 2012)		

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Air, Method C, Non-carcinogen, Standard Formula Value
changed to:	2.E+00	µg/m3
Changes to CLARC cleanup levels based on updated toxicity values (September 2012)		

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Ground Water, Method B, Non-carcinogen, Standard Formula Value
changed to:	4.E+00	µg/L
Changes to CLARC cleanup levels based on updated toxicity values (September 2012)		

Date of Change	Chemical	Parameter
9/26/2012	trichloroethylene	Ground Water, Method C, Non-carcinogen, Standard Formula Value
changed to:	8.8E+00	µg/L
Changes to CLARC cleanup levels based on updated toxicity values (September 2012)		

Date of Change	Chemical	Parameter	
9/26/2012	trichloroethylene	Surface Water, Method B, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	1.2E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter	
9/26/2012	trichloroethylene	Surface Water, Method C, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	3.E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter	
9/26/2012	trichloroethylene	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
changed to:	4.E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter	
9/26/2012	trichloroethylene	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
changed to:	1.8E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)

Date of Change	Chemical	Parameter	
5/25/2011	dinitrotoluene mixture;2,4-/2,6-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
changed to:	1.9E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
5/25/2011	dinitrotoluene mixture;2,4-/2,6-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
changed to:	1.5E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
5/25/2011	dinitrotoluene mixture;2,4-/2,6-	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	1.3E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
5/25/2011	dinitrotoluene mixture;2,4-/2,6-	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	1.3E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
5/25/2011	dinitrotoluene mixture;2,4-/2,6-	Oral Cancer Potency Factor (CPFo)	



	Changes Made		Comments
changed to:	6.8E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
5/11/2011	Hexachlorodibenzo-p-dioxin, Mixture	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.9E-05	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	Hexachlorodibenzo-p-dioxin, Mixture	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.9E-06	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	Hexachlorodibenzo-p-dioxin, Mixture	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
changed to:	2.1E-02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	Hexachlorodibenzo-p-dioxin, Mixture	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	1.6E-04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	Hexachlorodibenzo-p-dioxin, Mixture	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made		Comments
changed to:	4.6E+03	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
5/11/2011	Hexachlorodibenzo-p-dioxin, Mixture	Inhalation Reference Dose (RfD <sub>i</sub> )

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to Hexachlorodibenzo-p-dioxin, mixture based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	Hexachlorodibenzo-p-dioxin, Mixture	Oral Reference Dose (RfD <sub>o</sub> )

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to Hexachlorodibenzo-p-dioxin, mixture based on CLARC toxicity information

Date of Change	Chemical	Parameter
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5/11/2011	Hexachlorodibenzo-p-dioxin, Mixture	Oral Cancer Potency Factor (CPFo)	
	<b>Changes Made</b>		<b>Comments</b>
changed to:	6.2E+03	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
5/11/2011	tcdd;2,3,7,8-	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )	
	Changes Made		Comments
changed to:	No Data. What are my options?		Changes to tcdd;2,3,7,8- based on CLARC toxicity information

Date of Change	Chemical	Parameter	
5/11/2011	tcdd;2,3,7,8-	Inhalation Reference Dose (RfDi)	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to tcdd;2,3,7,8- based on CLARC toxicity information

Date of Change	Chemical	Parameter	
5/11/2011	tcdd;2,3,7,8-	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to tcdd;2,3,7,8- based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	tcdd;2,3,7,8-	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made	Comments
changed to:	Researched-No Data	Changes to tcdd;2,3,7,8- based on CLARC toxicity information

Note: Click [here](#) to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	tcdd;2,3,7,8-	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
changed to:	Researched-No Data	Changes to tcdd;2,3,7,8- based on CLARC toxicity information

Note: Click [here](#) to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter	
5/11/2011	benzo[a]pyrene	Air, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	Researched-No Data		Changes to Benzo(a)pyrene based on CLARC toxicity information

Date of Change	Chemical	Parameter	
5/11/2011	benzo[a]pyrene	Air, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	Researched-No Data		Changes to Benzo(a)pyrene based on CLARC toxicity information

Date of Change	Chemical	Parameter	
5/11/2011	indeno[1,2,3-cd]pyrene	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )	
	Changes Made		Comments
previous	Researched-No Data		

value:			
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	dibenzo[a,h]anthracene	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	chrysene	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[k]fluoranthene	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[b]fluoranthene	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[a]anthracene	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[a]pyrene	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made		Comments
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	indeno[1,2,3-cd]pyrene	Inhalation Reference Dose (RfD <sub>i</sub> )

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information



Date of Change	Chemical	Parameter
5/11/2011	dibenzo[a,h]anthracene	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	No Data. What are my options?	Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	chrysene	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	No Data. What are my options?	Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[k]fluoranthene	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	No Data. What are my options?	Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[b]fluoranthene	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	No Data. What are my options?	Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[a]anthracene	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	No Data. What are my options?	Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[a]pyrene	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	No Data. What are my options?	Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	indeno[1,2,3-cd]pyrene	Oral Reference Dose (RfDo)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	No Data. What are my options?	Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	dibenzo[a,h]anthracene	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	chrysene	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[k]fluoranthene	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[b]fluoranthene	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[a]anthracene	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	benzo[a]pyrene	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		Changes to cPAHs based on CLARC toxicity information

Date of Change	Chemical	Parameter
5/11/2011	vinyl chloride	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
changed to:	see additional information		Changes to Viny Chloride based on CLARC guidance document

Date of Change	Chemical	Parameter
5/11/2011	vinyl chloride	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	see additional information		Changes to Viny Chloride based on CLARC guidance document

Date of Change	Chemical	Parameter
5/11/2011	vinyl chloride	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made	Comments
changed to:	see additional information	Changes to Vinyl Chloride based on CLARC guidance document

Date of Change	Chemical	Parameter
5/11/2011	vinyl chloride	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
changed to:	see additional information	Changes to Vinyl Chloride based on CLARC guidance document

Date of Change	Chemical	Parameter
5/11/2011	vinyl chloride	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made	Comments
changed to:	see additional information	Changes to Vinyl Chloride based on CLARC guidance document

Date of Change	Chemical	Parameter
5/11/2011	vinyl chloride	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
changed to:	see additional information	Changes to Vinyl Chloride based on CLARC guidance document

Date of Change	Chemical	Parameter
5/11/2011	vinyl chloride	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made	Comments
changed to:	see additional information	Changes to Vinyl Chloride based on CLARC guidance document

Date of Change	Chemical	Parameter
5/11/2011	vinyl chloride	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
changed to:	see additional information	Changes to Vinyl Chloride based on CLARC guidance document

Date of Change	Chemical	Parameter
5/11/2011	vinyl chloride	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made	Comments
changed to:	see additional information	Changes to Vinyl Chloride based on CLARC guidance document

Date of Change	Chemical	Parameter
5/11/2011	vinyl chloride	Oral Cancer Potency Factor (CPF <sub>o</sub> )

	Changes Made	Comments
changed to:	see additional information	Changes to Vinyl Chloride based on CLARC guidance document

Date of Change	Chemical	Parameter
5/11/2011	tcdd;2,3,7,8-	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	2.2E-07	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter	
5/11/2011	tcdd;2,3,7,8-	Surface Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	8.6E-09	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	
5/11/2011	tcdd;2,3,7,8-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
changed to:	1.5E-03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Soil Methods B & C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only) soil cleanup levels for 2,3,7,8 - tetrachlorodibenzo-p-dioxin (tcdd;2,3,7,8-) based on Gastrointestinal absorption fraction (AB1) of 0.6, unitless.			
Date of Change	Chemical	Parameter	
5/11/2011	tcdd;2,3,7,8-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
changed to:	1.1E-05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Soil Methods B & C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only) soil cleanup levels for 2,3,7,8 - tetrachlorodibenzo-p-dioxin (tcdd;2,3,7,8-) based on Gastrointestinal absorption fraction (AB1) of 0.6, unitless.			
Date of Change	Chemical	Parameter	
5/11/2011	tcdd;2,3,7,8-	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	5.8E-06	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	
5/11/2011	tcdd;2,3,7,8-	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	5.8E-07	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	
5/11/2011	tcdd;2,3,7,8-	Oral Cancer Potency Factor (CPFo)	
	Changes Made		Comments
changed to:	1.5E+05	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical	Parameter	
5/11/2011	indeno[1,2,3-cd]pyrene	Surface Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	7.4E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	
5/11/2011	indeno[1,2,3-cd]pyrene	Surface Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	3.E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	
5/11/2011	indeno[1,2,3-cd]pyrene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	

	Changes Made		Comments
changed to:	1.8E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	indeno[1,2,3-cd]pyrene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	1.4E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	indeno[1,2,3-cd]pyrene	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.2E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	indeno[1,2,3-cd]pyrene	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.2E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	indeno[1,2,3-cd]pyrene	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
changed to:	7.3E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
5/11/2011	dibenzo[a,h]anthracene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	7.4E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	dibenzo[a,h]anthracene	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	3.E-02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	dibenzo[a,h]anthracene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
changed to:	1.8E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	dibenzo[a,h]anthracene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use



	Changes Made		Comments
changed to:	1.4E-01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	dibenzo[a,h]anthracene	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.2E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	dibenzo[a,h]anthracene	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.2E-02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	dibenzo[a,h]anthracene	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
changed to:	7.3E+00	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
5/11/2011	chrysene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	7.4E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	chrysene	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	3.E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	chrysene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
changed to:	1.8E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	chrysene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	1.4E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	chrysene	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.2E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.



evaluations.

Date of Change	Chemical	Parameter
5/11/2011	chrysene	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.2E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	chrysene	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
changed to:	7.3E-03	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
5/11/2011	benzo[k]fluoranthene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	7.4E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[k]fluoranthene	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	3.E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[k]fluoranthene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
changed to:	1.8E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[k]fluoranthene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	1.4E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[k]fluoranthene	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.2E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[k]fluoranthene	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.2E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[k]fluoranthene	Oral Cancer Potency Factor (CPFo)

	Changes Made	Comments
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changed to:	7.3E-02	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
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Date of Change	Chemical	Parameter
5/11/2011	benzo[b]fluoranthene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	7.4E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[b]fluoranthene	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	3.E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[b]fluoranthene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
changed to:	1.8E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[b]fluoranthene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	1.4E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[b]fluoranthene	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.2E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[b]fluoranthene	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.2E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[b]fluoranthene	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
changed to:	7.3E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
5/11/2011	benzo[a]anthracene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	7.4E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
5/11/2011	benzo[a]anthracene	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	3.E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
5/11/2011	benzo[a]anthracene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	

	Changes Made		Comments
changed to:	1.8E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
5/11/2011	benzo[a]anthracene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	

	Changes Made		Comments
changed to:	1.4E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
5/11/2011	benzo[a]anthracene	Ground Water, Method C, Carcinogen, Standard Formula Value	

	Changes Made		Comments
changed to:	1.2E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
5/11/2011	benzo[a]anthracene	Ground Water, Method B, Carcinogen, Standard Formula Value	

	Changes Made		Comments
changed to:	1.2E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
5/11/2011	benzo[a]anthracene	Oral Cancer Potency Factor (CPFo)	

	Changes Made		Comments
changed to:	7.3E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
5/11/2011	aroclor 1254	Oral Cancer Potency Factor (CPFo)	

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.E+00	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
5/11/2011	aroclor 1016	Oral Cancer Potency Factor (CPFo)	

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	7.E-02	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	zinc	Air, Method C, Non-carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	0.E+00	µg/m3	

changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	xlenes	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.E+02	µg/m3	
changed to:	1.E+02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xlenes	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.6E+01	µg/m3	
changed to:	4.6E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xlenes	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	2.9E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;o-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;o-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;o-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+06	mg/kg	
changed to:	7.E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;o-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+05	mg/kg	
changed to:	1.6E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;o-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+04	µg/L	

changed to:	3.5E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	xylene;o-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+04	µg/L	
changed to:	1.6E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;o-	Oral Reference Dose (RfDo)

	Changes Made		Comments
changed to:	2.E-01	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;o-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	xylene;m-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;m-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;m-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+06	mg/kg	
changed to:	7.E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;m-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+05	mg/kg	
changed to:	1.6E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;m-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

Changes Made	Comments
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previous value:	3.5E+04	µg/L	
changed to:	3.5E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;m-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+04	µg/L	
changed to:	1.6E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;m-	Oral Reference Dose (RfDo)

	Changes Made		Comments
changed to:	2.E-01	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	xylene;m-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	white mineral oil	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E+00	mg/kg-day	
changed to:	3.E+00	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	vinyl chloride	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.8E+00	µg/m3	
changed to:	5.7E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	vinyl chloride	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.8E-01	µg/m3	
changed to:	5.7E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	vinyl chloride	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	9.2E+01	µg/L	
changed to:	1.9E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	vinyl chloride	Surface Water, Method B, Carcinogen, Standard Formula Value	
		Changes Made	Comments
previous value:	3.7E+00	µg/L	
changed to:	7.7E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	vinyl chloride	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
		Changes Made	Comments
previous value:	8.8E+01	mg/kg	
changed to:	1.8E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	vinyl chloride	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
		Changes Made	Comments
previous value:	6.7E-01	mg/kg	
changed to:	1.4E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	vinyl chloride	Ground Water, Method C, Carcinogen, Standard Formula Value	
		Changes Made	Comments
previous value:	2.9E-01	µg/L	
changed to:	6.1E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	vinyl chloride	Ground Water, Method B, Carcinogen, Standard Formula Value	
		Changes Made	Comments
previous value:	2.9E-02	µg/L	
changed to:	6.1E-02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	vinyl chloride	Oral Cancer Potency Factor (CPFo)	
		Changes Made	Comments
changed to:	7.2E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	vinyl chloride	Inhalation Cancer Potency Factor (CPFi)	
		Changes Made	Comments
previous value:	3.1E-02	kg-day/mg	
changed to:	1.5E-02	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	vanadyl sulfate	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
		Changes Made	Comments
previous value:	7.E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	vanadyl sulfate	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	1.6E+03 mg/kg	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	vanadyl sulfate	Oral Reference Dose (RfDo)

Changes Made		Comments
previous value:	2.E-02 mg/kg-day	
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	vanadium pentoxide	Inhalation Reference Dose (RfDi)

Changes Made		Comments
previous value:	Researched-No Data	
changed to:	2.E-06 mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	vanadium pentoxide	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

Changes Made		Comments
previous value:	Researched-No Data	
changed to:	2.9E+01 kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	vanadium	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	2.5E+04 mg/kg	
changed to:	2.5E+02 mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	vanadium	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	5.6E+02 mg/kg	
changed to:	5.6E+00 mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	vanadium	Ground Water, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	2.5E+02 µg/L	
changed to:	2.5E+00 µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	vanadium	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.1E+02	µg/L	
changed to:	1.1E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	vanadium	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	7.E-03	mg/kg-day	
changed to:	7.E-05	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	uranium, soluble salts	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	1.1E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	uranium, soluble salts	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	2.4E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	uranium, soluble salts	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	3.E-03	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter	
4/13/2011	trinitrophenylmethylnitramine	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	3.5E+04	mg/kg	
changed to:	1.4E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trinitrophenylmethylnitramine	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	8.E+02	mg/kg	
changed to:	3.2E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trinitrophenylmethylnitramine	Ground Water, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.8E+02 µg/L	
changed to:	7.E+01 µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trinitrophenylmethylnitramine	Ground Water, Method B, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	8.E+01 µg/L	
changed to:	3.2E+01 µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trinitrophenylmethylnitramine	Oral Reference Dose (RfDo)

Changes Made		Comments
previous value:	1.E-02 mg/kg-day	
changed to:	4.E-03 mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trinitrobenzene;1,3,5-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	9.4E+06 mg/kg	
changed to:	1.1E+05 mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trinitrobenzene;1,3,5-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	2.1E+05 mg/kg	
changed to:	2.4E+03 mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trinitrobenzene;1,3,5-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	9.4E+04 µg/L	
changed to:	1.1E+03 µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trinitrobenzene;1,3,5-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	4.3E+04 µg/L	
changed to:	4.8E+02 µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trinitrobenzene;1,3,5-	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	2.7E+00	mg/kg-day	
changed to:	3.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	trimethylbenzene;1,3,5-	Air, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	6.E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	trimethylbenzene;1,3,5-	Air, Method B, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.7E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	trimethylbenzene;1,3,5-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	1.8E+05	mg/kg	
changed to:	3.5E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	trimethylbenzene;1,3,5-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	4.E+03	mg/kg	
changed to:	8.E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	trimethylbenzene;1,3,5-	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	8.8E+02	µg/L	
changed to:	1.8E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	trimethylbenzene;1,3,5-	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	4.E+02	µg/L	
changed to:	8.E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	

4/13/2011	trimethylbenzene;1,3,5-	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	5.E-02	mg/kg-day	
changed to:	1.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trimethylbenzene;1,3,5-	Inhalation Reference Dose (RfDi)	
	Changes Made		Comments
previous value:	1.7E-03	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter	
4/13/2011	trimethylbenzene;1,2,4-	Air, Method C, Non-carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	6.E+00	µg/m3	
changed to:	7.E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trimethylbenzene;1,2,4-	Air, Method B, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.7E+00	µg/m3	
changed to:	3.2E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trimethylbenzene;1,2,4-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	1.8E+05	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trimethylbenzene;1,2,4-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	4.E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trimethylbenzene;1,2,4-	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	8.8E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)



Date of Change	Chemical	Parameter
4/13/2011	trimethylbenzene;1,2,4-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	4.E+02 µg/L	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trimethylbenzene;1,2,4-	Oral Reference Dose (RfDo)

Changes Made		Comments
previous value:	5.E-02 mg/kg-day	
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	trimethylbenzene;1,2,4-	Inhalation Reference Dose (RfDi)

Changes Made		Comments
previous value:	1.7E-03 mg/kg-day	
changed to:	2.E-03 mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloropropene;1,2,3-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	1.8E+04 mg/kg	
changed to:	1.1E+04 mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloropropene;1,2,3-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	4.E+02 mg/kg	
changed to:	2.4E+02 mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloropropene;1,2,3-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	8.8E+01 µg/L	
changed to:	5.3E+01 µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloropropene;1,2,3-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	4.E+01 µg/L	
changed to:	2.4E+01 µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloropropene;1,2,3-	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	5.E-03	mg/kg-day	
changed to:	3.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloropropene;1,2,3-	Inhalation Reference Dose (RfDi)	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	8.6E-05	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloropropane;1,2,3-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	

	Changes Made		Comments
previous value:	1.9E+01	mg/kg	
changed to:	4.4E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloropropane;1,2,3-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	

	Changes Made		Comments
previous value:	2.1E+04	mg/kg	
changed to:	1.4E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloropropane;1,2,3-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	1.4E-01	mg/kg	
changed to:	3.3E-02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloropropane;1,2,3-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	4.8E+02	mg/kg	
changed to:	3.2E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloropropane;1,2,3-	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	6.3E-02	µg/L	
changed to:	1.5E-02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	trichloropropane;1,2,3-	Ground Water, Method C, Non-carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	1.1E+02	µg/L	
changed to:	7.E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloropropane;1,2,3-	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.3E-03	µg/L	
changed to:	1.5E-03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloropropane;1,2,3-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.8E+01	µg/L	
changed to:	3.2E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloropropane;1,2,3-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	6.E-03	mg/kg-day	
changed to:	4.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloropropane;1,2,3-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	8.6E-05	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloropropane;1,2,3-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	7.E+00	kg-day/mg	
changed to:	3.E+01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichlorophenol;2,4,6-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	3.5E+01	µg/m3
changed to:	see additional information	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
changed to:	see additional information	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.6E+01	µg/m3
changed to:	see additional information	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made	Comments
changed to:	see additional information	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.8E+02	µg/L
changed to:	see additional information	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
changed to:	see additional information	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	7.1E+01	µg/L
changed to:	see additional information	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made	Comments
changed to:	see additional information	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use
previous value:		1.1E+03
changed to:		see additional information
		mg/kg
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use
changed to:		see additional information
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use
previous value:		2.4E+01
changed to:		see additional information
		mg/kg
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Ground Water, Method C, Carcinogen, Standard Formula Value
changed to:		see additional information
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Ground Water, Method C, Non-carcinogen, Standard Formula Value
previous value:		5.3E+00
changed to:		see additional information
		µg/L
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Ground Water, Method B, Carcinogen, Standard Formula Value
changed to:		see additional information
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Ground Water, Method B, Non-carcinogen, Standard Formula Value
previous value:		2.4E+00
changed to:		see additional information
		µg/L
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Oral Reference Dose (RfDo)
changed to:		see additional information
		Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Inhalation Reference Dose (RfDi)

Changes Made		Comments
changed to:	see additional information	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Oral Cancer Potency Factor (CPFo)

Changes Made		Comments
changed to:	see additional information	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethylene	Inhalation Cancer Potency Factor (CPFi)

Changes Made		Comments
changed to:	see additional information	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethane;1,1,1,-	Air, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.1E+04	µg/m3
changed to:	5.E+03	µg/m3 Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethane;1,1,1,-	Air, Method B, Non-Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	4.8E+03	µg/m3
changed to:	2.3E+03	µg/m3 Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethane;1,1,1,-	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.E+06	µg/L IRIS update
changed to:	2.3E+06	µg/L Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichloroethane;1,1,1,-	Inhalation Reference Dose (RfDi)

Changes Made		Comments
previous value:	3.E+00	mg/kg-day
changed to:	1.4E+00	mg/kg-day Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichlorobenzene;1,2,4-	Air, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	2.E+02	µg/m3
changed to:	2.E+00	µg/m3 Changes to CLARC cleanup levels based on updated toxicity values (December 2010)



Date of Change	Chemical	Parameter
4/13/2011	trichlorobenzene;1,2,4-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	9.1E+01	µg/m3	
changed to:	9.1E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichlorobenzene;1,2,4-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	5.7E-02	mg/kg-day	
changed to:	5.7E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	trichlorobenzene;1,2,4-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.9E-02	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tributyltin oxide	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.1E+02	mg/kg	
changed to:	1.1E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tributyltin oxide	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.4E+00	mg/kg	
changed to:	2.4E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tributyltin oxide	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	3.E-05	mg/kg-day	
changed to:	3.E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluenediamine;2,6-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	toluenediamine;2,6-	Air, Method B, Non-Carcinogen, Standard Formula Value	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	3.2E+02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	toluenediamine;2,6-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	7.E+05	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	toluenediamine;2,6-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	1.6E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	toluenediamine;2,6-	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	7.E+03	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	toluenediamine;2,6-	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	3.2E+03	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	toluenediamine;2,6-	Oral Reference Dose (RfDo)	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	2.E-01	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	toluenediamine;2,6-	Inhalation Reference Dose (RfDi)	
		<b>Changes Made</b>	<b>Comments</b>
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	toluenediamine;2,5-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct	

		Contact (ingestion only), industrial land use
	<b>Changes Made</b>	
previous value:	2.1E+06	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	toluenediamine;2,5-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	<b>Changes Made</b>		<b>Comments</b>
previous value:	4.8E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	toluenediamine;2,5-	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	<b>Changes Made</b>		<b>Comments</b>
previous value:	2.1E+04	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	toluenediamine;2,5-	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	<b>Changes Made</b>		<b>Comments</b>
previous value:	9.6E+03	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	toluenediamine;2,5-	Oral Reference Dose (RfDo)	
	<b>Changes Made</b>		<b>Comments</b>
previous value:	6.E-01	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	toluenediamine;2,4-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	<b>Changes Made</b>		<b>Comments</b>
previous value:	4.1E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	toluenediamine;2,4-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	<b>Changes Made</b>		<b>Comments</b>
previous value:	3.1E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	toluenediamine;2,4-	Ground Water, Method C, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	2.7E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluenediamine;2,4-	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.7E-02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluenediamine;2,4-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	3.2E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	toluene diisocyanate mixture;2,4-/2,6-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E-02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluene diisocyanate mixture;2,4-/2,6-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E-02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluene diisocyanate mixture;2,4-/2,6-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	2.E-05	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	toluene	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	5.E+03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	toluene	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	2.3E+03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	toluene	Surface Water, Method C, Non-Carcinogen, Standard Formula Value	

	Changes Made		Comments
changed to:	4.9E+04	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	toluene	Surface Water, Method B, Non-Carcinogen, Standard Formula Value	

	Changes Made		Comments
changed to:	1.9E+04	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	toluene	Inhalation Reference Dose (RfDi)	

	Changes Made		Comments
changed to:	1.4E+00	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	thallium, soluble salts	Surface Water, Method C, Non-Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	3.9E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	thallium, soluble salts	Surface Water, Method B, Non-Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	1.6E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	thallium, soluble salts	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	

	Changes Made		Comments
previous value:	2.5E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	thallium, soluble salts	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	

	Changes Made		Comments
previous value:	5.6E+00	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
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4/13/2011	thallium, soluble salts	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.5E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	thallium, soluble salts	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.1E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	thallium, soluble salts	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	7.E-05	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM
Date of Change	Chemical	Parameter	
4/13/2011	thallium(I) sulfate	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	2.8E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	thallium(I) sulfate	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	6.4E+00	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	thallium(I) sulfate	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.8E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	thallium(I) sulfate	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.3E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium(I) sulfate	Oral Reference Dose (RfDo)

	Changes Made	Comments
previous value:	8.E-05	mg/kg-day
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	thallium nitrate	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made	Comments
previous value:	3.2E+02	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium nitrate	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made	Comments
previous value:	7.2E+00	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium nitrate	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	3.2E+00	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium nitrate	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.4E+00	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium nitrate	Oral Reference Dose (RfDo)

	Changes Made	Comments
previous value:	9.E-05	mg/kg-day
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	thallium chloride	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made	Comments
previous value:	2.8E+02	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium chloride	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	6.4E+00 mg/kg	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium chloride	Ground Water, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	2.8E+00 µg/L	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium chloride	Ground Water, Method B, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.3E+00 µg/L	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium chloride	Oral Reference Dose (RfDo)

Changes Made		Comments
previous value:	8.E-05 mg/kg-day	
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	thallium carbonate	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	2.8E+02 mg/kg	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium carbonate	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	6.4E+00 mg/kg	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium carbonate	Ground Water, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	2.8E+00 µg/L	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium carbonate	Ground Water, Method B, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.3E+00	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium carbonate	Oral Reference Dose (RfDo)

Changes Made		Comments
previous value:	8.E-05	mg/kg-day
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	thallium acetate	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	3.2E+02	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium acetate	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	7.2E+00	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium acetate	Ground Water, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	3.2E+00	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium acetate	Ground Water, Method B, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.4E+00	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallium acetate	Oral Reference Dose (RfDo)

Changes Made		Comments
previous value:	9.E-05	mg/kg-day
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from

			MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM
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Date of Change	Chemical	Parameter
4/13/2011	thallic oxide	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.5E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallic oxide	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	5.6E+00	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallic oxide	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.5E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallic oxide	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.1E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	thallic oxide	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	7.E-05	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethylene	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.2E+00	µg/m3	
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethylene	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+01	µg/m3	



changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethylene	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	4.2E-01	µg/m3
changed to:	see additional information	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethylene	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.6E+01	µg/m3
changed to:	see additional information	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethylene	Surface Water, Method C, Carcinogen, Standard Formula Value

changed to:	Changes Made	Comments
	see additional information	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethylene	Surface Water, Method B, Carcinogen, Standard Formula Value

changed to:	Changes Made	Comments
	see additional information	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethylene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

changed to:	Changes Made	Comments
	see additional information	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethylene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

changed to:	Changes Made	Comments
	see additional information	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethylene	Ground Water, Method C, Carcinogen, Standard Formula Value

changed to:	Changes Made	Comments
	see additional information	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethylene	Ground Water, Method B, Carcinogen, Standard Formula Value

changed to:	Changes Made	Comments
	see additional information	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethylene	Oral Cancer Potency Factor (CPFo)
changed to:	see additional information	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethylene	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )
changed to:	see additional information	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethane;1,1,2,2-	Air, Method C, Carcinogen, Standard Formula Value
previous value:	4.3E-01	µg/m <sup>3</sup>
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethane;1,1,2,2-	Air, Method B, Carcinogen, Standard Formula Value
previous value:	4.3E-02	µg/m <sup>3</sup>
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethane;1,1,2,2-	Oral Reference Dose (RfD <sub>o</sub> )
previous value:	Researched-No Data	
changed to:	2.E-02	mg/kg-day Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tetrachloroethane;1,1,2,2-	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )
previous value:	2.E-01	kg-day/mg
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	tetrabromodiphenyl ether 2,2',4,4'	Air, Method C, Non-carcinogen, Standard Formula Value
previous value:	3.5E-01	µg/m <sup>3</sup>
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	tetrabromodiphenyl ether 2,2',4,4'	Air, Method B, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.6E-01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>
4/13/2011	tcdd;2,3,7,8-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

		<b>Changes Made</b>	<b>Comments</b>
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Soil Methods B & C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only) soil cleanup levels for 2,3,7,8 - tetrachlorodibenzo-p-dioxin (tcdd;2,3,7,8-) based on Gastrointestinal absorption fraction (AB1) of 0.6, unitless.

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>
4/13/2011	tcdd;2,3,7,8-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

		<b>Changes Made</b>	<b>Comments</b>
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Note: Soil Methods B & C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only) soil cleanup levels for 2,3,7,8 - tetrachlorodibenzo-p-dioxin (tcdd;2,3,7,8-) based on Gastrointestinal absorption fraction (AB1) of 0.6, unitless.

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>
4/13/2011	tcdd;2,3,7,8-	Oral Cancer Potency Factor (CPFo)

		<b>Changes Made</b>	<b>Comments</b>
previous value:	1.5E+05	kg-day/mg	
changed to:	see additional information		Updated CLARC toxicity values from IRIS or NCEA (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>
4/13/2011	tcdd;2,3,7,8-	Inhalation Cancer Potency Factor (CPFi)

		<b>Changes Made</b>	<b>Comments</b>
previous value:	1.5E+05	kg-day/mg	
changed to:	see additional information		Updated CLARC toxicity values from IRIS or NCEA (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>
4/13/2011	styrene	Air, Method C, Carcinogen, Standard Formula Value

		<b>Changes Made</b>	<b>Comments</b>
previous value:	4.4E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>
4/13/2011	styrene	Air, Method B, Carcinogen, Standard Formula Value

		<b>Changes Made</b>	<b>Comments</b>
previous value:	4.4E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>
4/13/2011	styrene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

		<b>Changes Made</b>	<b>Comments</b>
previous value:	4.4E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	styrene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	3.3E+01 mg/kg	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	styrene	Ground Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.5E+01 µg/L	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	styrene	Ground Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.5E+00 µg/L	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	styrene	Oral Cancer Potency Factor (CPFo)

Changes Made		Comments
previous value:	3.E-02 kg-day/mg	
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	styrene	Inhalation Cancer Potency Factor (CPFi)

Changes Made		Comments
previous value:	2.E-03 kg-day/mg	
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	selenourea	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	1.8E+04 mg/kg	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	selenourea	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	4.E+02 mg/kg	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	selenourea	Oral Reference Dose (RfDo)

	Changes Made	Comments
previous value:	5.E-03	mg/kg-day
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	quinoline	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made	Comments
previous value:	1.1E+01	mg/kg
changed to:	4.4E+01	mg/kg
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	quinoline	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made	Comments
previous value:	8.3E-02	mg/kg
changed to:	3.3E-01	mg/kg
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	quinoline	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	3.6E-02	µg/L
changed to:	1.5E-01	µg/L
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	quinoline	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	3.6E-03	µg/L
changed to:	1.5E-02	µg/L
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	quinoline	Oral Cancer Potency Factor (CPFo)

	Changes Made	Comments
previous value:	1.2E+01	kg-day/mg
changed to:	3.E+00	kg-day/mg
		Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	propylene glycol	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	7.E+03	µg/m3
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)



Date of Change	Chemical	Parameter	
4/13/2011	propylene glycol	Air, Method B, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	3.2E+03	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	propylene glycol	Inhalation Reference Dose (RfDi)	
	Changes Made		Comments
previous value:	2.E+00	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter	
4/13/2011	polychlorinated biphenyls	Air, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	4.4E-02	µg/m3	
changed to:	4.4E-02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	polychlorinated biphenyls	Air, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	4.4E-03	µg/m3	
changed to:	4.4E-03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	polychlorinated biphenyls	Surface Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.6E-03	µg/L	
changed to:	2.6E-03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	polychlorinated biphenyls	Surface Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.1E-04	µg/L	
changed to:	1.E-04	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	polybrominated biphenyls	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	1.5E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	polybrominated biphenyls	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made	Comments
previous value:	1.1E-01	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	polybrominated biphenyls	Oral Cancer Potency Factor (CPFo)

	Changes Made	Comments
previous value:	8.9E+00	kg-day/mg
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	phthalic anhydride	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.2E+02	µg/m3
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	phthalic anhydride	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	5.5E+01	µg/m3
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	phthalic anhydride	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	3.4E-02	mg/kg-day
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	phenol	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	2.8E+06	µg/L
changed to:	1.4E+06	µg/L
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	phenol	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.1E+06	µg/L
changed to:	5.6E+05	µg/L
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	phenol	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	2.1E+06	mg/kg	
changed to:	1.1E+06	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	phenol	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	4.8E+04	mg/kg	
changed to:	2.4E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	phenol	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.1E+04	µg/L	
changed to:	5.3E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	phenol	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	4.8E+03	µg/L	
changed to:	2.4E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	phenol	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	6.E-01	mg/kg-day	
changed to:	3.E-01	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	perthane	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	4.E+05	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	perthane	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	1.1E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	perthane	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	3.E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	perthane	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	2.4E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	perthane	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	3.E-03	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM
Date of Change	Chemical	Parameter	
4/13/2011	perthane	Oral Cancer Potency Factor (CPFo)	
	Changes Made		Comments
previous value:	3.3E-04	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM
Date of Change	Chemical	Parameter	
4/13/2011	pentachlorophenol	Surface Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.2E+02	µg/L	
changed to:	3.7E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	pentachlorophenol	Surface Water, Method C, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.8E+04	µg/L	
changed to:	3.E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	pentachlorophenol	Surface Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	4.9E+00	µg/L	
changed to:	1.5E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	

4/13/2011	pentachlorophenol	Surface Water, Method B, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	7.1E+03	µg/L	
changed to:	1.2E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	pentachlorophenol	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	1.1E+03	mg/kg	
changed to:	3.3E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	pentachlorophenol	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	1.1E+05	mg/kg	
changed to:	1.8E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	pentachlorophenol	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	8.3E+00	mg/kg	
changed to:	2.5E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	pentachlorophenol	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	2.4E+03	mg/kg	
changed to:	4.E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	pentachlorophenol	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	7.3E+00	µg/L	
changed to:	2.2E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	pentachlorophenol	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.1E+03	µg/L	
changed to:	1.8E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	pentachlorophenol	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments



previous value:	7.3E-01	µg/L	
changed to:	2.2E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentachlorophenol	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.8E+02	µg/L	
changed to:	8.E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentachlorophenol	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	3.E-02	mg/kg-day	
changed to:	5.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentachlorophenol	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	1.2E-01	kg-day/mg	
changed to:	4.E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentabromodiphenyl ether; 2,2',4,4',5-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E-01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentabromodiphenyl ether; 2,2',4,4',5-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E-01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentabromodiphenyl ether; 2,2',4,4',5-	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.6E-01	µg/L	
changed to:	8.E-02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pentabromodiphenyl ether; 2,2',4,4',5-	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.E-01	µg/L	
changed to:	3.2E-02	µg/L	Changes to CLARC cleanup levels based on updated

		toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	paraquat	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.6E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	paraquat	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	3.6E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	paraquat	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	4.5E-03	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	pah	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.8E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pah	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.4E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	pah	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	7.3E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	octabromodiphenyl ethers	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous	1.1E+01	µg/m3	

value:			
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	octabromodiphenyl ethers	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.8E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluenes;o-,m-,p-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluenes;o-,m-,p-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluenes;o-,m-,p-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluenes;o-,m-,p-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluenes;o-,m-,p-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.E-02	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, p-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous	3.5E+04	mg/kg	

value:			
changed to:	1.4E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, p-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+02	mg/kg	
changed to:	3.2E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, p-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+02	µg/L	
changed to:	7.E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, p-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E+01	µg/L	
changed to:	3.2E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, p-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.E-02	mg/kg-day	
changed to:	4.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, p-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.6E-02	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, o-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E+04	mg/kg	
changed to:	3.2E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrotoluene, o-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+02	mg/kg	
changed to:	7.2E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	nitrotoluene, o-	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.8E+02	µg/L	
changed to:	1.6E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	nitrotoluene, o-	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	8.E+01	µg/L	
changed to:	7.2E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	nitrotoluene, o-	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	1.E-02	mg/kg-day	
changed to:	9.E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	nitrotoluene, o-	Oral Cancer Potency Factor (CPFo)	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.2E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	nitrotoluene, m-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	

	Changes Made		Comments
previous value:	3.5E+04	mg/kg	
changed to:	3.5E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	nitrotoluene, m-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	8.E+02	mg/kg	
changed to:	8.E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	nitrotoluene, m-	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.8E+02	µg/L	
changed to:	1.8E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	nitrotoluene, m-	Ground Water, Method B, Non-carcinogen, Standard Formula	



		Value	
	Changes Made		Comments
previous value:	8.E+01	µg/L	
changed to:	8.E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	nitrotoluene, m-	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	1.E-02	mg/kg-day	
changed to:	1.E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	nitroso-n-ethylurea;n-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	9.4E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	nitroso-n-ethylurea;n-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	7.1E-03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	nitroso-n-ethylurea;n-	Oral Cancer Potency Factor (CPFo)	
	Changes Made		Comments
previous value:	1.4E+02	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter	
4/13/2011	nitrosodimethylamine;N-	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	8.E-06	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	nitrosodimethylamine;N-	Inhalation Reference Dose (RfDi)	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.1E-05	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	nitropropane;2-	Air, Method C, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	9.3E-03	µg/m3	
changed to:	9.3E-03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitropropane;2-	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	9.3E-04	µg/m3	
changed to:	9.3E-04	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitropropane;2-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.4E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitropropane;2-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.1E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitropropane;2-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.6E-02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitropropane;2-	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.6E-03	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitropropane;2-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	9.5E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	nitropropane;2-	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	9.4E+00	kg-day/mg	

changed to:	9.5E+00	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	nitrofurazone	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	8.8E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrofurazone	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	6.7E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrofurazone	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.8E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrofurazone	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.8E-02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrofurazone	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	1.5E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	nitrobenzene	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.E-01	µg/m3	
changed to:	9.E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrobenzene	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.7E-01	µg/m3	
changed to:	4.1E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrobenzene	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.1E+03	µg/L	
changed to:	4.5E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrobenzene	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.5E+02	µg/L	
changed to:	1.8E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrobenzene	Soil, Method C, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.8E+03	mg/kg	
changed to:	7.E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrobenzene	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	4.E+01	mg/kg	
changed to:	1.6E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrobenzene	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.8E+00	µg/L	
changed to:	3.5E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrobenzene	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.E+00	µg/L	
changed to:	1.6E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrobenzene	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	5.E-04	mg/kg-day	
changed to:	2.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	nitrobenzene	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	1.7E-04	mg/kg-day	
changed to:	2.6E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	nitrobenzene	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )	

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.4E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	nitroaniline, 2-	Air, Method C, Non-carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	2.E-01	µg/m3	
changed to:	5.E-02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	nitroaniline, 2-	Air, Method B, Non-Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	9.1E-02	µg/m3	
changed to:	2.3E-02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	nitroaniline, 2-	Oral Reference Dose (RfD <sub>o</sub> )	

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	nitroaniline, 2-	Inhalation Reference Dose (RfD <sub>i</sub> )	

	Changes Made		Comments
previous value:	5.7E-05	mg/kg-day	
changed to:	1.4E-05	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	nitrite	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	

	Changes Made		Comments
changed to:	8.E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	nitrate	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	

	Changes Made		Comments
previous value:	3.5E+05	mg/kg	
changed to:	5.6E+06	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)



Date of Change	Chemical	Parameter
4/13/2011	nitrate	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+03	mg/kg	
changed to:	1.3E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	monochlorobutanes	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.4E+06	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	monochlorobutanes	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	3.2E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	monochlorobutanes	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	4.E-01	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	mirex	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.3E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	mirex	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	5.6E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	mirex	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.9E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	mirex	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	4.9E-02	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	mirex	Oral Cancer Potency Factor (CPFo)

	Changes Made	Comments
previous value:	1.8E+00	kg-day/mg
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	mevinphos	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made	Comments
previous value:	8.8E+02	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	mevinphos	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made	Comments
previous value:	2.E+01	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	mevinphos	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	8.8E+00	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	mevinphos	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	4.E+00	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	mevinphos	Oral Reference Dose (RfDo)

	Changes Made	Comments
previous value:	2.5E-04	mg/kg-day
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter	
4/13/2011	methylhydrazine	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	1.2E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	methylhydrazine	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	9.1E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	methylhydrazine	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	4.E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	methylhydrazine	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	4.E-02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	methylhydrazine	Oral Cancer Potency Factor (CPFo)	
	Changes Made		Comments
previous value:	1.1E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter	
4/13/2011	methylenebisbenzenamine;4,4-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	5.3E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	methylenebisbenzenamine;4,4-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	4.E+00	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylenebisbenzenamine;4,4-	Ground Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	3.5E+00 µg/L	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylenebisbenzenamine;4,4-	Ground Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	3.5E-01 µg/L	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylenebisbenzenamine;4,4-	Oral Cancer Potency Factor (CPFo)

Changes Made		Comments
previous value:	2.5E-01 kg-day/mg	
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	methylene diphenyl diisocyanate (PMDI)	Air, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	6.E-01 µg/m3	
changed to:	6.E-01 µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylene diphenyl diisocyanate (MDI)	Air, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	6.E-01 µg/m3	
changed to:	6.E-01 µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylene chloride	Air, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	3.E+03 µg/m3	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylene chloride	Air, Method B, Non-Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.4E+03 µg/m3	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylene chloride	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	8.6E-01	mg/kg-day
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	methylene bromide	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	1.1E-03	mg/kg-day Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylene bis(2-chloroaniline);4,4'-	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	6.7E-01	µg/m3
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylene bis(2-chloroaniline);4,4'-	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	6.7E-02	µg/m3
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylene bis(2-chloroaniline);4,4'-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made	Comments
previous value:	1.E+03	mg/kg
changed to:	1.3E+03	mg/kg Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylene bis(2-chloroaniline);4,4'-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made	Comments
previous value:	2.5E+03	mg/kg
changed to:	7.E+03	mg/kg Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylene bis(2-chloroaniline);4,4'-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made	Comments
previous value:	7.7E+00	mg/kg
changed to:	1.E+01	mg/kg Changes to CLARC cleanup levels based on updated toxicity values (December 2010)



Date of Change	Chemical	Parameter	
4/13/2011	methylene bis(2-chloroaniline);4,4'-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	5.6E+01	mg/kg	
changed to:	1.6E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	methylene bis(2-chloroaniline);4,4'-	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	7.E-04	mg/kg-day	
changed to:	2.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	methylene bis(2-chloroaniline);4,4'-	Oral Cancer Potency Factor (CPFo)	
	Changes Made		Comments
previous value:	1.3E-01	kg-day/mg	
changed to:	1.E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	methylene bis(2-chloroaniline);4,4'-	Inhalation Cancer Potency Factor (CPFi)	
	Changes Made		Comments
previous value:	1.3E-01	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter	
4/13/2011	methylcyclohexane	Air, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	3.E+03	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	methylcyclohexane	Air, Method B, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.4E+03	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	methylcyclohexane	Inhalation Reference Dose (RfDi)	
	Changes Made		Comments
previous value:	8.6E-01	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	methylaniline;2-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	5.5E+02	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylaniline;2-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	4.2E+00	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylaniline;2-	Ground Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.8E+00	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylaniline;2-	Ground Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.8E-01	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylaniline;2-	Oral Cancer Potency Factor (CPFo)

Changes Made		Comments
previous value:	2.4E-01	kg-day/mg
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	methylaniline hydrochloride;2-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	7.3E+02	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylaniline hydrochloride;2-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	5.6E+00	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylaniline hydrochloride;2-	Ground Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	4.9E+00 µg/L	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylaniline hydrochloride;2-	Ground Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	4.9E-01 µg/L	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methylaniline hydrochloride;2-	Oral Cancer Potency Factor (CPFo)

Changes Made		Comments
previous value:	1.8E-01 kg-day/mg	
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Air, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	9.6E+01 µg/m3	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Air, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	9.6E+00 µg/m3	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	7.3E+04 mg/kg	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	3.E+06 mg/kg	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated

		toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	5.6E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	6.9E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.4E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.5E+04	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.4E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.9E+03	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Oral Reference Dose (RfDo)

	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd

			updated from 0 to 3 on May 11 2011 3:54PM
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Date of Change	Chemical	Parameter
4/13/2011	methyl tert-butyl ether	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	methyl styrene	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+01	µg/m3	
changed to:	4.E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl styrene	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+01	µg/m3	
changed to:	1.8E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl styrene	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	1.E-02	mg/kg-day	
changed to:	1.1E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl isobutyl ketone	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+01	µg/m3	
changed to:	3.E+03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl isobutyl ketone	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+01	µg/m3	
changed to:	1.4E+03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl isobutyl ketone	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	2.E-02	mg/kg-day	
changed to:	8.6E-01	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)



Date of Change	Chemical	Parameter
4/13/2011	methyl ethyl ketone	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.E+03	µg/m3	
changed to:	5.E+03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl ethyl ketone	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.6E+02	µg/m3	
changed to:	2.3E+03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methyl ethyl ketone	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	2.9E-01	mg/kg-day	
changed to:	1.4E+00	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methoxyethanol;2-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E+03	mg/kg	
changed to:	1.1E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methoxyethanol;2-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+01	mg/kg	
changed to:	2.4E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methoxyethanol;2-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+01	µg/L	
changed to:	5.3E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methoxyethanol;2-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E+00	µg/L	
changed to:	2.4E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methoxyethanol;2-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.E-03	mg/kg-day	
changed to:	3.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methoxy-5-nitroaniline;2-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.9E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methoxy-5-nitroaniline;2-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.2E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	methoxy-5-nitroaniline;2-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	4.6E-02	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	mercury	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.1E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	mercury	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.4E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	mercury	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.1E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	mercury	Ground Water, Method B, Non-carcinogen, Standard Formula

		Value	
	Changes Made		Comments
previous value:	4.8E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	mercury	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	3.E-04	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM
Date of Change	Chemical	Parameter	
4/13/2011	manganese	Air, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	5.E-02	µg/m3	
changed to:	5.E-02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	malononitrile	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	7.E+01	mg/kg	
changed to:	3.5E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	malononitrile	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	1.6E+00	mg/kg	
changed to:	8.E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	malononitrile	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	3.5E-01	µg/L	
changed to:	1.8E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	malononitrile	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.6E-01	µg/L	
changed to:	8.E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	malononitrile	Oral Reference Dose (RfDo)	

	Changes Made		Comments
previous value:	2.E-05	mg/kg-day	
changed to:	1.E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	lead alkyls	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	lead alkyls	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E-03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	lead alkyls	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.E-07	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	indeno[1,2,3-cd]pyrene	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	7.3E+00	kg-day/mg	
changed to:	see additional information		Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydroquinone	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	6.E-02	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen sulfide	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.E+00	µg/m3	
changed to:	2.E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen sulfide	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous	4.6E-01	µg/m3	

value:			
changed to:	9.1E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen sulfide	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.1E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen sulfide	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.4E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen sulfide	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.3E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen sulfide	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.4E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen sulfide	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	3.E-03	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
4/13/2011	hydrogen sulfide	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	2.9E-04	mg/kg-day	
changed to:	5.7E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen cyanide	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.E+00	µg/m3	
changed to:	8.E-01	µg/m3	Changes to CLARC cleanup levels based on updated



			toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	hydrogen cyanide	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.4E+00	µg/m3
changed to:	3.7E-01	µg/m3 Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen cyanide	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made	Comments
previous value:	7.E+04	mg/kg
changed to:	2.1E+03	mg/kg Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen cyanide	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made	Comments
previous value:	1.6E+03	mg/kg
changed to:	4.8E+01	mg/kg Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen cyanide	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	3.5E+02	µg/L
changed to:	1.1E+01	µg/L Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen cyanide	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.6E+02	µg/L
changed to:	4.8E+00	µg/L Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen cyanide	Oral Reference Dose (RfDo)

	Changes Made	Comments
previous value:	2.E-02	mg/kg-day
changed to:	6.E-04	mg/kg-day Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrogen cyanide	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	8.6E-04	mg/kg-day
changed to:	2.3E-04	mg/kg-day Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrazine sulfate	Oral Cancer Potency Factor (CPFo)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	3.E+00	kg-day/mg Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrazine sulfate	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	1.7E+01	kg-day/mg Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hydrazine	Inhalation Reference Dose (RfD <sub>i</sub> )

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	8.6E-06	mg/kg-day Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexamethylene diisocyanate;1,6-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	4.6E-03	µg/m3
changed to:	4.6E-03	µg/m3 Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	Hexachlorodibenzo-p-dioxin, Mixture	Oral Cancer Potency Factor (CPFo)

	Changes Made	Comments
previous value:	6.2E+03	kg-day/mg
changed to:	see additional information	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	Hexachlorodibenzo-p-dioxin, Mixture	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made	Comments
previous value:	4.6E+03	kg-day/mg
changed to:	see additional information	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexachlorobutadiene	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	4.7E+02	µg/L
changed to:	2.3E+03	µg/L Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexachlorobutadiene	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.9E+02	µg/L	
changed to:	9.3E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexachlorobutadiene	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+02	mg/kg	
changed to:	3.5E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexachlorobutadiene	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+01	mg/kg	
changed to:	8.E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexachlorobutadiene	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+00	µg/L	
changed to:	1.8E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexachlorobutadiene	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+00	µg/L	
changed to:	8.E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexachlorobutadiene	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E-04	mg/kg-day	
changed to:	1.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexabromodiphenyl ether; 2,2',4,4',5,5'-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexabromodiphenyl ether; 2,2',4,4',5,5'-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
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previous value:	3.2E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexabromodiphenyl ether; 2,2',4,4',5,5'-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+04	mg/kg	
changed to:	7.E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexabromodiphenyl ether; 2,2',4,4',5,5'-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+03	mg/kg	
changed to:	1.6E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexabromodiphenyl ether; 2,2',4,4',5,5'-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+02	µg/L	
changed to:	7.E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexabromodiphenyl ether; 2,2',4,4',5,5'-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+02	µg/L	
changed to:	3.2E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	hexabromodiphenyl ether; 2,2',4,4',5,5'-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E-02	mg/kg-day	
changed to:	2.E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	glycidaldehyde	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.6E-01	µg/m3	
changed to:	4.6E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	furium	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.6E+00	mg/kg	

changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	furium	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.E-02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	furium	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	5.E+01	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	furfural	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+01	µg/m3	
changed to:	5.E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	furfural	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+01	µg/m3	
changed to:	2.3E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	furfural	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	1.E-02	mg/kg-day	
changed to:	1.4E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	formic acid	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	8.6E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	formaldehyde	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.9E+00	µg/m3	
changed to:	1.9E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)



Date of Change	Chemical	Parameter
4/13/2011	formaldehyde	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.9E-01	µg/m3
changed to:	1.9E-01	µg/m3 Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	formaldehyde	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made	Comments
previous value:	5.3E+05	mg/kg
changed to:	7.E+05	mg/kg Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	formaldehyde	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made	Comments
previous value:	1.2E+04	mg/kg
changed to:	1.6E+04	mg/kg Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	formaldehyde	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	2.6E+03	µg/L
changed to:	3.5E+03	µg/L Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	formaldehyde	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.2E+03	µg/L
changed to:	1.6E+03	µg/L Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	formaldehyde	Oral Reference Dose (RfDo)

	Changes Made	Comments
changed to:	2.E-01	mg/kg-day Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	formaldehyde	Inhalation Cancer Potency Factor (CPFi)

	Changes Made	Comments
changed to:	4.6E-02	kg-day/mg Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	fluoride	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made	Comments
previous value:	2.1E+05	mg/kg

changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	fluoride	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	4.8E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	fluoride	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	fluoride	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	fluoride	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	6.E-02	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	fensulfothion	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	8.8E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	fensulfothion	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	fensulfothion	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.8E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	fensulfothion	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	fensulfothion	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.5E-04	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	ethylene thiourea	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.2E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene thiourea	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	9.1E+00	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene thiourea	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	1.1E-01	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	ethylene oxide	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.5E-01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene oxide	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.5E-02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	ethylene oxide	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	

	Changes Made		Comments
previous value:	1.3E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	ethylene oxide	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	

	Changes Made		Comments
previous value:	9.8E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	ethylene oxide	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	4.3E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	ethylene oxide	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	4.3E-02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	ethylene oxide	Oral Cancer Potency Factor (CPFo)	
	Changes Made		Comments
previous value:	1.E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter	
4/13/2011	ethylene oxide	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )	
	Changes Made		Comments
previous value:	3.5E-01	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter	
4/13/2011	ethylene glycol monobutyl ether (EGBE)	Air, Method C, Non-carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	1.3E+04	µg/m3	
changed to:	1.6E+03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene glycol monobutyl ether (EGBE)	Air, Method B, Non-Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	5.9E+03 µg/m3	
changed to:	7.3E+02 µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene glycol monobutyl ether (EGBE)	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	1.8E+06 mg/kg	
changed to:	3.5E+05 mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene glycol monobutyl ether (EGBE)	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	4.E+04 mg/kg	
changed to:	8.E+03 mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene glycol monobutyl ether (EGBE)	Ground Water, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	8.8E+03 µg/L	
changed to:	1.8E+03 µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene glycol monobutyl ether (EGBE)	Ground Water, Method B, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	4.E+03 µg/L	
changed to:	8.E+02 µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene glycol monobutyl ether (EGBE)	Oral Reference Dose (RfDo)

Changes Made		Comments
previous value:	5.E-01 mg/kg-day	
changed to:	1.E-01 mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene glycol monobutyl ether (EGBE)	Inhalation Reference Dose (RfDi)



	Changes Made		Comments
previous value:	3.7E+00	mg/kg-day	
changed to:	4.6E-01	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene dibromide (EDB)	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.1E-01	µg/m3	
changed to:	4.2E-02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene dibromide (EDB)	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E-01	µg/m3	
changed to:	9.E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene dibromide (EDB)	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.1E-02	µg/m3	
changed to:	4.2E-03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene dibromide (EDB)	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E-01	µg/m3	
changed to:	4.1E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene dibromide (EDB)	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	1.E-04	mg/kg-day	
changed to:	2.6E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene dibromide (EDB)	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made		Comments
previous value:	7.7E-01	kg-day/mg	
changed to:	2.1E+00	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene diamine	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

Changes Made	Comments
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previous value:	7.E+04	mg/kg	
changed to:	3.2E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene diamine	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+03	mg/kg	
changed to:	7.2E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene diamine	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+02	µg/L	
changed to:	1.6E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene diamine	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+02	µg/L	
changed to:	7.2E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene diamine	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E-02	mg/kg-day	
changed to:	9.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene cyanohydrin	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.1E+06	mg/kg	
changed to:	1.1E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene cyanohydrin	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.4E+04	mg/kg	
changed to:	2.4E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene cyanohydrin	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.3E+03	µg/L	
changed to:	5.3E+02	µg/L	Changes to CLARC cleanup levels based on updated

		toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	ethylene cyanohydrin	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.4E+03	µg/L	
changed to:	2.4E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethylene cyanohydrin	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	3.E-01	mg/kg-day	
changed to:	3.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethyl chloride	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethyl chloride	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethyl chloride	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	4.5E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethyl chloride	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.4E+06	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethyl chloride	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	3.5E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethyl chloride	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use
	Changes Made	Comments
previous value:	3.2E+04	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethyl chloride	Ground Water, Method C, Carcinogen, Standard Formula Value
	Changes Made	Comments
previous value:	1.5E+02	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethyl chloride	Ground Water, Method C, Non-carcinogen, Standard Formula Value
	Changes Made	Comments
previous value:	7.E+03	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethyl chloride	Ground Water, Method B, Carcinogen, Standard Formula Value
	Changes Made	Comments
previous value:	1.5E+01	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethyl chloride	Ground Water, Method B, Non-carcinogen, Standard Formula Value
	Changes Made	Comments
previous value:	3.2E+03	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethyl chloride	Oral Reference Dose (RfDo)
	Changes Made	Comments
previous value:	4.E-01	mg/kg-day
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	ethyl chloride	Inhalation Reference Dose (RfDi)
	Changes Made	Comments
previous value:	2.9E+00	mg/kg-day
changed to:	2.9E+00	mg/kg-day Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethyl chloride	Oral Cancer Potency Factor (CPFo)

	Changes Made	Comments
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	ethyl chloride	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made	Comments
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	ethion	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	2.E+02	µg/m3
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethion	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	9.1E+01	µg/m3
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	ethion	Inhalation Reference Dose (RfD <sub>i</sub> )

	Changes Made	Comments
previous value:	5.7E-02	mg/kg-day
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	epichlorohydrin	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	4.6E-01	µg/m3
changed to:	4.6E-01	µg/m3
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	epichlorohydrin	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made	Comments
previous value:	7.E+03	mg/kg
changed to:	2.1E+04	mg/kg
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	epichlorohydrin	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made	Comments
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previous value:	1.6E+02	mg/kg	
changed to:	4.8E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	epichlorohydrin	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+01	µg/L	
changed to:	1.1E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	epichlorohydrin	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+01	µg/L	
changed to:	4.8E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	epichlorohydrin	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E-03	mg/kg-day	
changed to:	6.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	direct brown 95	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.4E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	direct brown 95	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.1E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	direct brown 95	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	9.3E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	direct blue 6	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous	1.6E+01	mg/kg	

value:			
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	direct blue 6	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.2E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	direct blue 6	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	8.1E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	direct black 38	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.5E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	direct black 38	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.2E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	direct black 38	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	8.6E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dioxane;1,4-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.2E+04	mg/kg	
changed to:	1.3E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dioxane;1,4-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	9.1E+01	mg/kg	
changed to:	1.E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dioxane;1,4-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.E+01	µg/L	
changed to:	4.4E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dioxane;1,4-	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.E+00	µg/L	
changed to:	4.4E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dioxane;1,4-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	3.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dioxane;1,4-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	1.1E-02	kg-day/mg	
changed to:	1.E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	di-n-octyl phthalate	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	di-n-octyl phthalate	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	di-n-octyl phthalate	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	di-n-octyl phthalate	Ground Water, Method B, Non-carcinogen, Standard Formula Value
	Changes Made	Comments
previous value:	3.2E+02	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	di-n-octyl phthalate	Oral Reference Dose (RfDo)
	Changes Made	Comments
previous value:	2.E-02	mg/kg-day
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene;2,6-	Air, Method C, Non-carcinogen, Standard Formula Value
	Changes Made	Comments
previous value:	3.5E+00	µg/m3
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene;2,6-	Air, Method B, Non-Carcinogen, Standard Formula Value
	Changes Made	Comments
previous value:	1.6E+00	µg/m3
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene;2,6-	Inhalation Reference Dose (RfDi)
	Changes Made	Comments
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene;2,4-	Air, Method C, Non-carcinogen, Standard Formula Value
	Changes Made	Comments
previous value:	7.E+00	µg/m3
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene;2,4-	Air, Method B, Non-Carcinogen, Standard Formula Value
	Changes Made	Comments
previous value:	3.2E+00	µg/m3
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	dinitrotoluene;2,4-	Inhalation Reference Dose (RfDi)
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	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene mixture;2,4-/2,6-	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.3E-01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene mixture;2,4-/2,6-	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.3E-02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene mixture;2,4-/2,6-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.9E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene mixture;2,4-/2,6-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.5E+00	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene mixture;2,4-/2,6-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.3E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrotoluene mixture;2,4-/2,6-	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.3E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	dinitrotoluene mixture;2,4-/2,6-	Oral Cancer Potency Factor (CPFo)	
	Changes Made		Comments
previous value:	6.8E-01	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM
Date of Change	Chemical	Parameter	
4/13/2011	dinitrotoluene mixture;2,4-/2,6-	Inhalation Cancer Potency Factor (CPFi)	
	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM
Date of Change	Chemical	Parameter	
4/13/2011	dinitrobenzene;p-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	1.4E+03	mg/kg	
changed to:	3.5E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dinitrobenzene;p-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	3.2E+01	mg/kg	
changed to:	8.E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dinitrobenzene;p-	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.4E+01	µg/L	
changed to:	3.5E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dinitrobenzene;p-	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	6.4E+00	µg/L	
changed to:	1.6E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dinitrobenzene;p-	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	4.E-04	mg/kg-day	
changed to:	1.E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrobenzene;o-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use
Changes Made		Comments
previous value:	1.4E+03	mg/kg
changed to:	3.5E+02	mg/kg Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrobenzene;o-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use
Changes Made		Comments
previous value:	3.2E+01	mg/kg
changed to:	8.E+00	mg/kg Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrobenzene;o-	Ground Water, Method C, Non-carcinogen, Standard Formula Value
Changes Made		Comments
previous value:	1.4E+01	µg/L
changed to:	3.5E+00	µg/L Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrobenzene;o-	Ground Water, Method B, Non-carcinogen, Standard Formula Value
Changes Made		Comments
previous value:	6.4E+00	µg/L
changed to:	1.6E+00	µg/L Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dinitrobenzene;o-	Oral Reference Dose (RfDo)
Changes Made		Comments
previous value:	4.E-04	mg/kg-day
changed to:	1.E-04	mg/kg-day Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylhydrazine;1,1-	Air, Method C, Carcinogen, Standard Formula Value
Changes Made		Comments
previous value:	2.5E-02	µg/m3
changed to:	Researched-No Data	 Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylhydrazine;1,1-	Air, Method B, Carcinogen, Standard Formula Value
Changes Made		Comments
previous value:	2.5E-03	µg/m3
changed to:	Researched-No Data	 Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	dimethylhydrazine;1,1-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	5.E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dimethylhydrazine;1,1-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	3.8E-01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dimethylhydrazine;1,1-	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.7E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dimethylhydrazine;1,1-	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.7E-02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dimethylhydrazine;1,1-	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dimethylhydrazine;1,1-	Inhalation Reference Dose (RfDi)	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	5.7E-07	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dimethylhydrazine;1,1-	Oral Cancer Potency Factor (CPFo)	
	Changes Made		Comments
previous value:	2.6E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dimethylhydrazine;1,1-	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

Changes Made		Comments
previous value:	3.5E+00 kg-day/mg	
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dimethylbenzidine;3,3'-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	1.4E+01 mg/kg	
changed to:	1.2E+01 mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylbenzidine;3,3'-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	1.1E-01 mg/kg	
changed to:	9.1E-02 mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylbenzidine;3,3'-	Ground Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	9.5E-02 µg/L	
changed to:	8.E-02 µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylbenzidine;3,3'-	Ground Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	9.5E-03 µg/L	
changed to:	8.E-03 µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylbenzidine;3,3'-	Oral Cancer Potency Factor (CPF <sub>o</sub> )

Changes Made		Comments
previous value:	9.2E+00 kg-day/mg	
changed to:	1.1E+01 kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylaniline;N,N-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	2.9E+03 mg/kg	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylaniline;N,N-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	2.2E+01 mg/kg	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylaniline;N,N-	Ground Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	9.5E+00 µg/L	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylaniline;N,N-	Ground Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	9.5E-01 µg/L	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethylaniline;N,N-	Oral Cancer Potency Factor (CPFo)

Changes Made		Comments
previous value:	4.6E-02 kg-day/mg	
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dimethyl phthalate	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.8E+05 µg/L	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethyl phthalate	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	7.2E+04 µg/L	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethyl phthalate	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	3.5E+06 mg/kg	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)



Date of Change	Chemical	Parameter
4/13/2011	dimethyl phthalate	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethyl phthalate	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+04	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethyl phthalate	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+04	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dimethyl phthalate	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.E+00	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	diethylstilbesterol	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E-04	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylstilbesterol	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E-05	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylstilbesterol	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.8E-02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	diethylstilbesterol	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	2.1E-04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	diethylstilbesterol	Oral Cancer Potency Factor (CPFo)	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	4.7E+03	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	diethylstilbesterol	Inhalation Cancer Potency Factor (CPFi)	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	4.9E+02	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	diethylformamide	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	3.9E+04	mg/kg	
changed to:	3.5E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	diethylformamide	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	8.8E+02	mg/kg	
changed to:	8.E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	diethylformamide	Oral Reference Dose (RfDo)	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	1.1E-02	mg/kg-day	
changed to:	1.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	diethylene glycol monoethyl ether	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	7.E+06	mg/kg	
changed to:	2.1E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	diethylene glycol monoethyl ether	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	

	Changes Made		Comments
previous value:	1.6E+05	mg/kg	
changed to:	4.8E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	diethylene glycol monoethyl ether	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	3.5E+04	µg/L	
changed to:	1.1E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	diethylene glycol monoethyl ether	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.6E+04	µg/L	
changed to:	4.8E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	diethylene glycol monoethyl ether	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	2.E+00	mg/kg-day	
changed to:	6.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	diethylene glycol monoethyl ether	Inhalation Reference Dose (RfDi)	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	8.6E-05	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	diethylene glycol monobutyl ether	Air, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.E+01	µg/m3	
changed to:	1.E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	diethylene glycol monobutyl ether	Air, Method B, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	9.1E+00	µg/m3	
changed to:	4.6E-02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylene glycol monobutyl ether	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	3.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylene glycol monobutyl ether	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	5.7E-03	mg/kg-day	
changed to:	2.9E-05	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylene glycol	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+06	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylene glycol	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+05	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylene glycol	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+04	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylene glycol	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+04	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diethylene glycol	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E+00	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter	
4/13/2011	dicyclopentadiene	Air, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.1E-01	µg/m3	
changed to:	7.E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dicyclopentadiene	Air, Method B, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	9.6E-02	µg/m3	
changed to:	3.2E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dicyclopentadiene	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	1.1E+05	mg/kg	
changed to:	2.8E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dicyclopentadiene	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	2.4E+03	mg/kg	
changed to:	6.4E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dicyclopentadiene	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	5.3E+02	µg/L	
changed to:	1.4E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dicyclopentadiene	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.4E+02	µg/L	
changed to:	6.4E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dicyclopentadiene	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	3.E-02	mg/kg-day	
changed to:	8.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	dicyclopentadiene	Inhalation Reference Dose (RfDi)	



	Changes Made		Comments
previous value:	6.E-05	mg/kg-day	
changed to:	2.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorvos	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.E-01	µg/m3	
changed to:	5.E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorvos	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	4.5E+02	mg/kg	
changed to:	4.5E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorvos	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	3.4E+00	mg/kg	
changed to:	3.5E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorvos	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.5E+00	µg/L	
changed to:	1.5E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorvos	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.5E-01	µg/L	
changed to:	1.5E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorvos	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	2.9E-01	kg-day/mg	
changed to:	2.9E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloropropene;1,3-	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.7E+02	µg/L	
changed to:	8.5E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	dichloropropene;1,3-	Surface Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.9E+01	µg/L	
changed to:	3.4E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloropropene;1,3-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.3E+02	mg/kg	
changed to:	1.3E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	dichloropropene;1,3-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	5.6E+00	mg/kg	
changed to:	1.E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	dichloropropene;1,3-	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.4E+00	µg/L	
changed to:	4.4E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	dichloropropene;1,3-	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.4E-01	µg/L	
changed to:	4.4E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	dichloropropene;1,3-	Oral Cancer Potency Factor (CPFo)	
	Changes Made		Comments
previous value:	1.8E-01	kg-day/mg	
changed to:	1.E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	dichloropropane;1,2-	Surface Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	5.8E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloropropane;1,2-	Surface Water, Method B, Carcinogen, Standard Formula Value
Changes Made		Comments

previous value:	2.3E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloropropane;1,2-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.9E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloropropane;1,2-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.5E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloropropane;1,2-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.4E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloropropane;1,2-	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.4E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloropropane;1,2-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	6.8E-02	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,2-,trans	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+01	µg/m3	
changed to:	6.E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,2-,trans	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+01	µg/m3	

changed to:	2.7E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,2-,trans	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	1.7E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,2-,cis	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,2-,cis	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,2-,cis	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E+04	mg/kg	
changed to:	7.E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,2-,cis	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+02	mg/kg	
changed to:	1.6E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,2-,cis	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+02	µg/L	
changed to:	3.5E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,2-,cis	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E+01	µg/L	
changed to:	1.6E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,2-,cis	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.E-02	mg/kg-day	
changed to:	2.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,2-,cis	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,1-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	9.1E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethylene;1,1-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	5.7E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethane;1,2-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.9E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethane;1,2-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.2E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethane;1,2-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dichloroethane;1,1-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)



Date of Change	Chemical	Parameter
4/13/2011	dichloroethane;1,1-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloroethane;1,1-	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dichlorodifluoromethane	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.8E+02	µg/m3
changed to:	2.E+02	µg/m3 Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorodifluoromethane	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	8.E+01	µg/m3
changed to:	9.1E+01	µg/m3 Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorodifluoromethane	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	5.E-02	mg/kg-day
changed to:	5.7E-02	mg/kg-day Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorobenzene;1,4-	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.2E+02	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorobenzene;1,4-	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	4.9E+00	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorobenzene;1,4-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	5.5E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorobenzene;1,4-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	4.2E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorobenzene;1,4-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorobenzene;1,4-	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorobenzene;1,4-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	2.4E-02	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	dichlorobenzene;1,2-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E+02	µg/m3	
changed to:	2.E+02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorobenzene;1,2-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.4E+01	µg/m3	
changed to:	9.1E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichlorobenzene;1,2-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	4.E-02	mg/kg-day	

changed to:	5.7E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	dichloro-2-butene;1,4-	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	9.4E-03	µg/m3
changed to:	6.E-03	µg/m3
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloro-2-butene;1,4-	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	9.4E-04	µg/m3
changed to:	6.E-04	µg/m3
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dichloro-2-butene;1,4-	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made	Comments
previous value:	9.3E+00	kg-day/mg
changed to:	1.5E+01	kg-day/mg
		Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibromo-3-chloropropane;1,2-	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	3.6E+01	µg/m3
changed to:	4.2E-03	µg/m3
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibromo-3-chloropropane;1,2-	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	3.6E+00	µg/m3
changed to:	4.2E-04	µg/m3
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibromo-3-chloropropane;1,2-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made	Comments
previous value:	9.4E+01	mg/kg
changed to:	1.6E+02	mg/kg
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibromo-3-chloropropane;1,2-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made	Comments
previous value:	7.1E-01	mg/kg
changed to:	1.3E+00	mg/kg
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibromo-3-chloropropane;1,2-	Ground Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	3.1E-01 µg/L	
changed to:	5.5E-01 µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibromo-3-chloropropane;1,2-	Ground Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	3.1E-02 µg/L	
changed to:	5.5E-02 µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibromo-3-chloropropane;1,2-	Oral Reference Dose (RfDo)

Changes Made		Comments
previous value:	Researched-No Data	
changed to:	2.E-04 mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibromo-3-chloropropane;1,2-	Oral Cancer Potency Factor (CPFo)

Changes Made		Comments
previous value:	1.4E+00 kg-day/mg	
changed to:	8.E-01 kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibromo-3-chloropropane;1,2-	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

Changes Made		Comments
previous value:	2.4E-03 kg-day/mg	
changed to:	2.1E+01 kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibenzofuran	Air, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	7.E+00 µg/m3	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibenzofuran	Air, Method B, Non-Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	3.2E+00 µg/m3	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibenzofuran	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct

		Contact (ingestion only), industrial land use
	Changes Made	
previous value:	7.E+03	mg/kg
changed to:	3.5E+03	mg/kg
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibenzofuran	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use
	Changes Made	
previous value:	1.6E+02	mg/kg
changed to:	8.E+01	mg/kg
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibenzofuran	Ground Water, Method C, Non-carcinogen, Standard Formula Value
	Changes Made	
previous value:	7.E+01	µg/L
changed to:	3.5E+01	µg/L
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibenzofuran	Ground Water, Method B, Non-carcinogen, Standard Formula Value
	Changes Made	
previous value:	3.2E+01	µg/L
changed to:	1.6E+01	µg/L
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibenzofuran	Oral Reference Dose (RfDo)
	Changes Made	
changed to:	1.E-03	mg/kg-day
		Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	dibenzo[a,h]anthracene	Oral Cancer Potency Factor (CPFo)
	Changes Made	
previous value:	7.3E+00	kg-day/mg
changed to:	see additional information	
		Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diazinon	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use
	Changes Made	
previous value:	3.2E+03	mg/kg
changed to:	Researched-No Data	
		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diazinon	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use
	Changes Made	
previous	7.2E+01	mg/kg



value:			
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diazinon	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diazinon	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	diazinon	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	9.E-04	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.3E+02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.5E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.3E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Air, Method B, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.1E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	1.9E+04	mg/kg	
changed to:	1.9E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	ddd	Air, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	3.7E-01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	ddd	Air, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	3.7E-02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	ddd	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM
Date of Change	Chemical	Parameter	
4/13/2011	cyclohexane	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	1.7E+00	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM
Date of Change	Chemical	Parameter	
4/13/2011	cyclohexane	Inhalation Reference Dose (RfDi)	
	Changes Made		Comments
previous value:	1.7E+00	mg/kg-day	
changed to:	1.7E+00	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical	Parameter	

4/13/2011	copper	Surface Water, Method C, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	6.7E+03	µg/L	
changed to:	7.2E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	copper	Surface Water, Method B, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.7E+03	µg/L	
changed to:	2.9E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	copper	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	1.3E+05	mg/kg	
changed to:	1.4E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	copper	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	3.E+03	mg/kg	
changed to:	3.2E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	copper	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.3E+03	µg/L	
changed to:	1.4E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	copper	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	5.9E+02	µg/L	
changed to:	6.4E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	copper	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	3.7E-02	mg/kg-day	
changed to:	4.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	chrysene	Oral Cancer Potency Factor (CPFo)	
	Changes Made		Comments

previous value:	7.3E+00	kg-day/mg	
changed to:	see additional information		Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chromium(VI)	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.1E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chromium(VI)	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E-03	µg/m3	
changed to:	1.E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chromium(VI)	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.1E-01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chromium(VI)	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.7E-03	µg/m3	
changed to:	4.6E-02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chromium(VI)	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	2.3E-06	mg/kg-day	
changed to:	2.9E-05	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chromium(VI)	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made		Comments
previous value:	4.2E-02	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	chlorothalonil	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.2E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorothalonil	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	9.1E+01 mg/kg	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorothalonil	Ground Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	8.E+01 µg/L	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorothalonil	Ground Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	8.E+00 µg/L	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorothalonil	Oral Cancer Potency Factor (CPFo)

Changes Made		Comments
previous value:	1.1E-02 kg-day/mg	
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	chloropropane;2-	Air, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.E+01 µg/m3	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloropropane;2-	Air, Method B, Non-Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	4.6E+00 µg/m3	
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloropropane;2-	Inhalation Reference Dose (RfDi)

Changes Made		Comments
previous value:	2.9E-03 mg/kg-day	
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter	
4/13/2011	chloronitrobenzene;p-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	7.3E+03	mg/kg	
changed to:	2.1E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chloronitrobenzene;p-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	5.6E+01	mg/kg	
changed to:	1.6E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chloronitrobenzene;p-	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.4E+01	µg/L	
changed to:	6.9E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chloronitrobenzene;p-	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.4E+00	µg/L	
changed to:	6.9E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chloronitrobenzene;p-	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chloronitrobenzene;p-	Inhalation Reference Dose (RfDi)	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.7E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chloronitrobenzene;p-	Oral Cancer Potency Factor (CPFo)	
	Changes Made		Comments
previous value:	1.8E-02	kg-day/mg	
changed to:	6.3E-03	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloronitrobenzene;o-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use
Changes Made		Comments



previous value:	5.3E+03	mg/kg	
changed to:	4.4E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloronitrobenzene;o-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	4.E+01	mg/kg	
changed to:	3.3E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloronitrobenzene;o-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+01	µg/L	
changed to:	2.9E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloronitrobenzene;o-	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+00	µg/L	
changed to:	2.9E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloronitrobenzene;o-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	3.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloronitrobenzene;o-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.9E-06	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloronitrobenzene;o-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	2.5E-02	kg-day/mg	
changed to:	3.E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloromethane	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloromethane	Air, Method B, Carcinogen, Standard Formula Value
	Changes Made	Comments
previous value:	1.4E+00	µg/m3
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter
4/13/2011	chloromethane	Surface Water, Method C, Carcinogen, Standard Formula Value
	Changes Made	Comments
previous value:	3.3E+03	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter
4/13/2011	chloromethane	Surface Water, Method B, Carcinogen, Standard Formula Value
	Changes Made	Comments
previous value:	1.3E+02	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter
4/13/2011	chloromethane	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use
	Changes Made	Comments
previous value:	1.E+04	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter
4/13/2011	chloromethane	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use
	Changes Made	Comments
previous value:	7.7E+01	mg/kg
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter
4/13/2011	chloromethane	Ground Water, Method C, Carcinogen, Standard Formula Value
	Changes Made	Comments
previous value:	3.4E+01	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter
4/13/2011	chloromethane	Ground Water, Method B, Carcinogen, Standard Formula Value
	Changes Made	Comments
previous value:	3.4E+00	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter
4/13/2011	chloromethane	Inhalation Reference Dose (RfDi)
	Changes Made	Comments
previous	Researched-No Data	

value:			
changed to:	2.6E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloromethane	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	1.3E-02	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	chloromethane	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	6.3E-03	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	chloroform	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.1E+03	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloroform	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.8E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloroform	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.2E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloroform	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloroform	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.2E+01	µg/L	

changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	chloroform	Ground Water, Method B, Carcinogen, Standard Formula Value
Changes Made		Comments
previous value:	7.2E+00	µg/L
changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloroform	Oral Cancer Potency Factor (CPFo)
Changes Made		Comments
previous value:	6.1E-03	kg-day/mg
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	chlorobutane;1-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use
Changes Made		Comments
previous value:	1.4E+06	mg/kg
changed to:	1.4E+05	mg/kg Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobutane;1-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use
Changes Made		Comments
previous value:	3.2E+04	mg/kg
changed to:	3.2E+03	mg/kg Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobutane;1-	Ground Water, Method C, Non-carcinogen, Standard Formula Value
Changes Made		Comments
previous value:	7.E+03	µg/L
changed to:	7.E+02	µg/L Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobutane;1-	Ground Water, Method B, Non-carcinogen, Standard Formula Value
Changes Made		Comments
previous value:	3.2E+03	µg/L
changed to:	3.2E+02	µg/L Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobutane;1-	Oral Reference Dose (RfDo)
Changes Made		Comments
previous value:	4.E-01	mg/kg-day
changed to:	4.E-02	mg/kg-day Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzotrifluoride;4-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	7.E+04 mg/kg	
changed to:	1.1E+04 mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzotrifluoride;4-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	1.6E+03 mg/kg	
changed to:	2.4E+02 mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzotrifluoride;4-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	3.5E+02 µg/L	
changed to:	5.3E+01 µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzotrifluoride;4-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.6E+02 µg/L	
changed to:	2.4E+01 µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzotrifluoride;4-	Oral Reference Dose (RfDo)

Changes Made		Comments
previous value:	2.E-02 mg/kg-day	
changed to:	3.E-03 mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzotrifluoride;4-	Inhalation Reference Dose (RfDi)

Changes Made		Comments
previous value:	Researched-No Data	
changed to:	8.6E-02 mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzoic acid;p-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	7.E+05 mg/kg	
changed to:	1.1E+05 mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chlorobenzoic acid;p-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	1.6E+04	mg/kg	
changed to:	2.4E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chlorobenzoic acid;p-	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	7.E+03	µg/L	
changed to:	1.1E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chlorobenzoic acid;p-	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	3.2E+03	µg/L	
changed to:	4.8E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chlorobenzoic acid;p-	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	2.E-01	mg/kg-day	
changed to:	3.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chlorobenzilate	Air, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	3.2E-01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chlorobenzilate	Air, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	3.2E-02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chlorobenzilate	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	4.9E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chlorobenzilate	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use



	Changes Made		Comments
previous value:	3.7E+00	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chlorobenzilate	Ground Water, Method C, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	3.2E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chlorobenzilate	Ground Water, Method B, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	3.2E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chlorobenzilate	Oral Cancer Potency Factor (CPFo)	

	Changes Made		Comments
previous value:	2.7E-01	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter	
4/13/2011	chlorobenzilate	Inhalation Cancer Potency Factor (CPFi)	

	Changes Made		Comments
previous value:	2.7E-01	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter	
4/13/2011	chlorobenzene	Air, Method C, Non-carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	1.8E+01	µg/m3	
changed to:	5.E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chlorobenzene	Air, Method B, Non-Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	8.E+00	µg/m3	
changed to:	2.3E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	chlorobenzene	Inhalation Reference Dose (RfDi)	

Changes Made	Comments
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previous value:	5.E-03	mg/kg-day	
changed to:	1.4E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloroaniline;p-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloroaniline;p-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.4E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloroaniline;p-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	chloroaniline;p-	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloro-2-methylaniline;4-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.3E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloro-2-methylaniline;4-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.7E+00	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloro-2-methylaniline;4-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.5E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloro-2-methylaniline;4-	Ground Water, Method B, Carcinogen, Standard Formula Value

Changes Made			Comments
previous value:	1.5E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloro-2-methylaniline;4-	Oral Cancer Potency Factor (CPFo)

Changes Made			Comments
previous value:	5.8E-01	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	chloranil	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made			Comments
previous value:	3.3E+02	mg/kg	
changed to:	3.3E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloranil	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made			Comments
previous value:	2.5E+00	mg/kg	
changed to:	2.5E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloranil	Ground Water, Method C, Carcinogen, Standard Formula Value

Changes Made			Comments
previous value:	2.2E+00	µg/L	
changed to:	2.2E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloranil	Ground Water, Method B, Carcinogen, Standard Formula Value

Changes Made			Comments
previous value:	2.2E-01	µg/L	
changed to:	2.2E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloranil	Oral Cancer Potency Factor (CPFo)

Changes Made			Comments
previous value:	4.E-01	kg-day/mg	
changed to:	4.E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloral	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloral	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloral	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloral	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	chloral	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E-03	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	carbophenothion	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	4.6E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	carbophenothion	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbophenothion	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	4.6E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbophenothion	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.1E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbophenothion	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	1.3E-04	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter	
4/13/2011	carbon tetrachloride	Air, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.7E+00	µg/m3	
changed to:	4.2E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbon tetrachloride	Air, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.7E-01	µg/m3	
changed to:	4.2E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbon tetrachloride	Surface Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	6.6E+01	µg/L	
changed to:	1.2E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbon tetrachloride	Surface Water, Method C, Non-Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	2.4E+02	µg/L	
changed to:	1.4E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
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4/13/2011	carbon tetrachloride	Surface Water, Method B, Carcinogen, Standard Formula Value	
		Changes Made	Comments
previous value:	2.7E+00	µg/L	
changed to:	4.9E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbon tetrachloride	Surface Water, Method B, Non-Carcinogen, Standard Formula Value	
		Changes Made	Comments
previous value:	9.7E+01	µg/L	
changed to:	5.5E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbon tetrachloride	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
		Changes Made	Comments
previous value:	1.E+03	mg/kg	
changed to:	1.9E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbon tetrachloride	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
		Changes Made	Comments
previous value:	2.5E+03	mg/kg	
changed to:	1.4E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbon tetrachloride	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
		Changes Made	Comments
previous value:	7.7E+00	mg/kg	
changed to:	1.4E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbon tetrachloride	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
		Changes Made	Comments
previous value:	5.6E+01	mg/kg	
changed to:	3.2E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbon tetrachloride	Ground Water, Method C, Carcinogen, Standard Formula Value	
		Changes Made	Comments
previous value:	3.4E+00	µg/L	
changed to:	6.3E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbon tetrachloride	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
		Changes Made	Comments



previous value:	1.2E+01	µg/L	
changed to:	7.E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	carbon tetrachloride	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.4E-01	µg/L	
changed to:	6.3E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	carbon tetrachloride	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.6E+00	µg/L	
changed to:	3.2E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	carbon tetrachloride	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	7.E-04	mg/kg-day	
changed to:	4.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	carbon tetrachloride	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.9E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	carbon tetrachloride	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	1.3E-01	kg-day/mg	
changed to:	7.E-02	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	carbon tetrachloride	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	5.3E-02	kg-day/mg	
changed to:	2.1E-02	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	carbazole	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	6.6E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbazole	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	

	Changes Made		Comments
previous value:	5.E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbazole	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	4.4E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbazole	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	4.4E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	carbazole	Oral Cancer Potency Factor (CPFo)	
	Changes Made		Comments
previous value:	2.E-02	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter	
4/13/2011	captan	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	3.8E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	captan	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	2.9E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	captan	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.5E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	captan	Ground Water, Method B, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	2.5E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	captan	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	3.5E-03	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	captafol	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.5E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	captafol	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.2E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	captafol	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	captafol	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	captafol	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	8.6E-03	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	cadmium in water	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.1E+01	µg/L	
changed to:	1.E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in water	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.E+01	µg/L	
changed to:	4.1E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in water	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
changed to:	3.5E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in water	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	8.E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in water	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+01	µg/L	
changed to:	3.5E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in water	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E+00	µg/L	
changed to:	1.6E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in water	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	5.E-04	mg/kg-day	
changed to:	1.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in soil	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E-02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in soil	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E-03	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in soil	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in soil	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in soil	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in soil	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in soil	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in soil	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cadmium in soil	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.E-03	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd



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Date of Change	Chemical	Parameter
4/13/2011	cadmium in soil	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	6.3E+00	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	cacodylic acid	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.1E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cacodylic acid	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.4E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	cacodylic acid	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	3.E-03	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	butyl benzyl phthalate	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butyl benzyl phthalate	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butyl benzyl phthalate	Surface Water, Method C, Non-Carcinogen, Standard Formula Value



	Changes Made		Comments
previous value:	3.2E+03	µg/L	
changed to:	3.1E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butyl benzyl phthalate	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.3E+03	µg/L	
changed to:	1.3E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butyl benzyl phthalate	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	butyl benzyl phthalate	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.9E-03	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E-01	µg/m3	
changed to:	8.3E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E-02	µg/m3	
changed to:	8.3E-02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	9.1E-01	µg/m3	
changed to:	9.1E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.2E+03	mg/kg	

changed to:	Researched-No Data	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	9.1E+00	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	4.6E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.6E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Oral Reference Dose (RfDo)

	Changes Made	Comments
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	5.7E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Oral Cancer Potency Factor (CPFo)

	Changes Made	Comments
changed to:	No Data. What are my options?	Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	butadiene;1,3-	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
changed to:	1.1E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bromoethene	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E-01	µg/m3	
changed to:	7.8E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bromoethene	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E-02	µg/m3	
changed to:	7.8E-02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bromoethene	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	8.6E-04	mg/kg-day	
changed to:	8.6E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bromoethene	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	1.1E-01	kg-day/mg	
changed to:	1.1E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bromate	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	9.4E+02	mg/kg	
changed to:	1.9E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bromate	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+04	mg/kg	
changed to:	1.4E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bromate	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	7.1E+00	mg/kg	
changed to:	1.4E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bromate	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+03	mg/kg	
changed to:	3.2E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	boron	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.E+01	µg/m3	
changed to:	2.E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	boron	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	9.1E+00	µg/m3	
changed to:	9.1E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	boron	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	5.7E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	bis(2-chloroisopropyl) ether	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.E+05	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	bis(2-chloroisopropyl) ether	Surface Water, Method B, Non-Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	4.2E+04	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	bis(2-chloroisopropyl) ether	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	

	Changes Made		Comments
previous value:	1.4E+05	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	bis(2-chloroisopropyl) ether	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	

	Changes Made		Comments
previous value:	3.2E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	bis(2-chloroisopropyl) ether	Ground Water, Method C, Non-carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	7.E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	bis(2-chloroisopropyl) ether	Ground Water, Method B, Non-carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	3.2E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	bis(2-chloroisopropyl) ether	Oral Reference Dose (RfDo)	

	Changes Made		Comments
previous value:	4.E-02	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter	
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4/13/2011	bis(2-chloro-1-methyl-ethyl)ether	Oral Reference Dose (RfDo)	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	Researched-No Data		
changed to:	4.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	biphenyl;1,1-	Inhalation Reference Dose (RfDi)	
		<b>Changes Made</b>	<b>Comments</b>
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	benzyl chloride	Air, Method C, Carcinogen, Standard Formula Value	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	5.2E-01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	benzyl chloride	Air, Method C, Non-carcinogen, Standard Formula Value	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	1.E+01	µg/m3	
changed to:	1.E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	benzyl chloride	Air, Method B, Carcinogen, Standard Formula Value	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	5.2E+02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	benzyl chloride	Air, Method B, Non-Carcinogen, Standard Formula Value	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	4.6E+00	µg/m3	
changed to:	4.6E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	benzyl chloride	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	1.E+04	mg/kg	
changed to:	7.E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	benzyl chloride	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
		<b>Changes Made</b>	<b>Comments</b>
previous	2.3E+02	mg/kg	



value:			
changed to:	1.6E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzyl chloride	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.1E+01	µg/L	
changed to:	3.5E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzyl chloride	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.3E+01	µg/L	
changed to:	1.6E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzyl chloride	Oral Reference Dose (RfDo)

	Changes Made		Comments
changed to:	2.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzyl chloride	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	2.9E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzyl chloride	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made		Comments
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	benzyl alcohol	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.1E+06	mg/kg	
changed to:	3.5E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzyl alcohol	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.4E+04	mg/kg	
changed to:	8.E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	benzyl alcohol	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	5.3E+03	µg/L	
changed to:	1.8E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	benzyl alcohol	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	2.4E+03	µg/L	
changed to:	8.E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	benzyl alcohol	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	3.E-01	mg/kg-day	
changed to:	1.E-01	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	benzo[k]fluoranthene	Oral Cancer Potency Factor (CPFo)	
	Changes Made		Comments
previous value:	7.3E+00	kg-day/mg	
changed to:	see additional information		Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	benzo[b]fluoranthene	Oral Cancer Potency Factor (CPFo)	
	Changes Made		Comments
previous value:	7.3E+00	kg-day/mg	
changed to:	see additional information		Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	benzo[a]pyrene	Air, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.4E-02	µg/m3	
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	benzo[a]pyrene	Air, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.4E-03	µg/m3	
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	benzo[a]pyrene	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )	
	Changes Made		Comments
previous value:	6.1E+00	kg-day/mg	

changed to:	see additional information	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	benzo[a]anthracene	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	7.3E+00	kg-day/mg	
changed to:	see additional information		Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzene	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	3.E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzene	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.4E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	benzene	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
changed to:	8.6E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	barium cyanide	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E+05	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	barium cyanide	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	barium cyanide	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.E-01	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	barium and compounds	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	5.E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	barium and compounds	Air, Method B, Non-Carcinogen, Standard Formula Value	

	Changes Made		Comments
changed to:	2.3E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	barium and compounds	Inhalation Reference Dose (RfDi)	

	Changes Made		Comments
changed to:	1.4E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	azobenzene	Air, Method C, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	8.1E+02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
changed to:	8.1E-01	µg/m3	

Date of Change	Chemical	Parameter	
4/13/2011	azobenzene	Air, Method B, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	8.1E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
changed to:	8.1E-02	µg/m3	

Date of Change	Chemical	Parameter	
4/13/2011	azobenzene	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )	

	Changes Made		Comments
previous value:	1.1E-04	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
changed to:	1.1E-01	kg-day/mg	

Date of Change	Chemical	Parameter	
4/13/2011	atrazine	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	

	Changes Made		Comments
previous value:	6.E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
changed to:	Researched-No Data		

Date of Change	Chemical	Parameter	
4/13/2011	atrazine	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	

	Changes Made		Comments
previous value:	4.5E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
changed to:	Researched-No Data		

Date of Change	Chemical	Parameter	
4/13/2011	atrazine	Ground Water, Method C, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	4.E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	atrazine	Ground Water, Method B, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	4.E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	atrazine	Oral Cancer Potency Factor (CPFo)	

	Changes Made		Comments
previous value:	2.2E-01	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter	
4/13/2011	arsine	Air, Method C, Non-carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	5.E-02	µg/m3	
changed to:	5.E-02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	arsenic, inorganic	Air, Method C, Non-carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	5.3E+04	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	arsenic, inorganic	Air, Method B, Non-Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	2.4E+04	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	arsenic, inorganic	Inhalation Reference Dose (RfDi)	

	Changes Made		Comments
previous value:	1.5E+01	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter	
4/13/2011	aramite	Air, Method C, Carcinogen, Standard Formula Value	

Changes Made		Comments
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previous value:	3.5E+00	µg/m3	
changed to:	3.5E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	aramite	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E-01	µg/m3	
changed to:	3.5E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	aramite	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made		Comments
previous value:	2.5E-02	kg-day/mg	
changed to:	2.5E-02	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	antimony trioxide	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.4E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	antimony trioxide	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	3.2E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	antimony trioxide	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	antimony trioxide	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.4E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	antimony trioxide	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	4.E-04	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from



		MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM
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Date of Change	Chemical	Parameter
4/13/2011	aniline	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.6E-01	µg/m3	
changed to:	4.6E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	aniline	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	7.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	aminopyridine;4-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	aminopyridine;4-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+00	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	aminopyridine;4-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	aminopyridine;4-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E-01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	aminopyridine;4-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E-05	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	aminophenol;m-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.5E+05	mg/kg	
changed to:	2.8E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	aminophenol;m-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	5.6E+03	mg/kg	
changed to:	6.4E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	aminophenol;m-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	7.E-02	mg/kg-day	
changed to:	8.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	allyl chloride	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.6E-01	µg/m3	
changed to:	4.6E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	allyl chloride	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.8E+05	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	allyl chloride	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	4.E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	allyl chloride	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.8E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	allyl chloride	Ground Water, Method B, Non-carcinogen, Standard Formula Value
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	Changes Made		Comments
previous value:	4.E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	allyl chloride	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	5.E-02	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	allyl alcohol	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.9E-05	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	alachlor	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.6E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	alachlor	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.2E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	alachlor	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.1E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	alachlor	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.1E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	alachlor	Oral Cancer Potency Factor (CPFo)

Changes Made			Comments
previous value:	8.1E-02	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	acrylonitrile	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

Changes Made			Comments
previous value:	2.2E+02	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylonitrile	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

Changes Made			Comments
previous value:	8.6E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylonitrile	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

Changes Made			Comments
previous value:	3.5E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylonitrile	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made			Comments
previous value:	8.E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylonitrile	Ground Water, Method C, Non-carcinogen, Standard Formula Value

Changes Made			Comments
previous value:	1.8E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylonitrile	Ground Water, Method B, Non-carcinogen, Standard Formula Value

Changes Made			Comments
previous value:	8.E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylonitrile	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.E-03	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	acrylic acid	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.6E-01	µg/m3	
changed to:	4.6E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylamide	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.9E-02	µg/m3	
changed to:	2.5E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylamide	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.9E-03	µg/m3	
changed to:	2.5E-02	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylamide	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.9E+01	mg/kg	
changed to:	2.6E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylamide	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+02	mg/kg	
changed to:	7.E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylamide	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.2E-01	mg/kg	
changed to:	2.E+00	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrylamide	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous	1.6E+01	mg/kg	

value:			
changed to:	1.6E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	acrylamide	Ground Water, Method C, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	9.7E-02	µg/L	
changed to:	8.8E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	acrylamide	Ground Water, Method C, Non-carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	3.5E+00	µg/L	
changed to:	3.5E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	acrylamide	Ground Water, Method B, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	9.7E-03	µg/L	
changed to:	8.8E-02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	acrylamide	Ground Water, Method B, Non-carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	1.6E+00	µg/L	
changed to:	1.6E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	acrylamide	Oral Reference Dose (RfDo)	

	Changes Made		Comments
previous value:	2.E-04	mg/kg-day	
changed to:	2.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	acrylamide	Inhalation Reference Dose (RfDi)	

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.7E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter	
4/13/2011	acrylamide	Oral Cancer Potency Factor (CPFo)	

	Changes Made		Comments
previous value:	4.5E+00	kg-day/mg	
changed to:	5.E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)



Date of Change	Chemical	Parameter
4/13/2011	acrylamide	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made	Comments
previous value:	4.6E+00	kg-day/mg
changed to:	3.5E-01	kg-day/mg Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrolein	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made	Comments
previous value:	7.E+04	mg/kg
changed to:	1.8E+03	mg/kg Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrolein	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made	Comments
previous value:	1.6E+03	mg/kg
changed to:	4.E+01	mg/kg Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrolein	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	3.5E+02	µg/L
changed to:	8.8E+00	µg/L Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrolein	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.6E+02	µg/L
changed to:	4.E+00	µg/L Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acrolein	Oral Reference Dose (RfDo)

	Changes Made	Comments
previous value:	2.E-02	mg/kg-day
changed to:	5.E-04	mg/kg-day Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acifluorfen, sodium	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made	Comments
previous value:	4.6E+04	mg/kg
changed to:	4.6E+04	mg/kg Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acifluorfen, sodium	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.1E+03	mg/kg	
changed to:	1.E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acifluorfen, sodium	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.3E+02	µg/L	
changed to:	2.3E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acifluorfen, sodium	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.1E+02	µg/L	
changed to:	1.E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acifluorfen, sodium	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.3E-02	mg/kg-day	
changed to:	1.3E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acetophenone	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E-02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acetophenone	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E-03	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acetophenone	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	5.E-06	mg/kg-day	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/13/2011	acetone cyanohydrin	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E+02	µg/m3	

changed to:	6.E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
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Date of Change	Chemical	Parameter
4/13/2011	acetone cyanohydrin	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.4E+01	µg/m3	
changed to:	2.7E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acetone cyanohydrin	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.8E+03	mg/kg	
changed to:	1.1E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acetone cyanohydrin	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
changed to:	2.4E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acetone cyanohydrin	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.4E+01	µg/L	
changed to:	5.3E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acetone cyanohydrin	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.4E+00	µg/L	
changed to:	2.4E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acetone cyanohydrin	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	8.E-04	mg/kg-day	
changed to:	3.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	acetone cyanohydrin	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	4.E-02	mg/kg-day	
changed to:	1.7E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
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4/13/2011	acetone	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	3.5E+05	mg/kg	
changed to:	3.2E+06	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	acetone	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	8.E+03	mg/kg	
changed to:	7.2E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	acetone	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	1.8E+03	µg/L	
changed to:	1.6E+04	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	acetone	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	8.E+02	µg/L	
changed to:	7.2E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	acetone	Oral Reference Dose (RfDo)	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	1.E-01	mg/kg-day	
changed to:	9.E-01	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	2-chloro-1,3-butadiene	Air, Method C, Non-carcinogen, Standard Formula Value	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	7.E+00	µg/m3	
changed to:	2.E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	2-chloro-1,3-butadiene	Air, Method B, Non-Carcinogen, Standard Formula Value	
		<b>Changes Made</b>	<b>Comments</b>
previous value:	3.2E+00	µg/m3	
changed to:	9.1E+00	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/13/2011	2-chloro-1,3-butadiene	Inhalation Reference Dose (RfDi)	

	Changes Made		Comments
previous value:	2.E-03	mg/kg-day	
changed to:	5.7E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	2-chloro-1,3-butadiene	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.1E+00	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)

Date of Change	Chemical	Parameter
4/13/2011	tph, mineral oil	Ground Water, Method A, Table Value

	Changes Made		Comments
previous value:	1.E+03	µg/L	
changed to:	5.E+02	µg/L	Correction to CLARC cleanup level based on Method A table

Date of Change	Chemical	Parameter
4/22/2010	trichloroethane;1,1,1-	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.2E+05	µg/L	
changed to:	9.3E+05	µg/L	IRIS update

Date of Change	Chemical	Parameter
4/22/2010	trichloroethane;1,1,1-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.2E+06	mg/kg	
changed to:	7.E+06	mg/kg	IRIS update

Date of Change	Chemical	Parameter
4/22/2010	trichloroethane;1,1,1-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	7.2E+04	mg/kg	
changed to:	1.6E+05	mg/kg	IRIS update

Date of Change	Chemical	Parameter
4/22/2010	trichloroethane;1,1,1-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+04	µg/L	IRIS update
changed to:	3.5E+04	µg/L	IRIS update

Date of Change	Chemical	Parameter
4/22/2010	trichloroethane;1,1,1-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.2E+03	µg/L	
changed to:	1.6E+04	µg/L	IRIS update

Date of Change	Chemical	Parameter
4/22/2010	trichloroethane;1,1,1-	Oral Reference Dose (RfDo)

Changes Made		Comments
previous value:	9.E-01 mg/kg-day	
changed to:	2.E+00 mg/kg-day	IRIS update

Date of Change	Chemical	Parameter
4/22/2010	lindane	Surface Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	9.6E-01 µg/L	
changed to:	Researched-No Data	IRIS deleted cancer potency value.

Date of Change	Chemical	Parameter
4/22/2010	lindane	Surface Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	3.8E-02 µg/L	
changed to:	Researched-No Data	IRIS deleted cancer potency value.

Date of Change	Chemical	Parameter
4/22/2010	lindane	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	1.E+02 mg/kg	
changed to:	Researched-No Data	IRIS deleted cancer potency value.

Date of Change	Chemical	Parameter
4/22/2010	lindane	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	7.7E-01 mg/kg	
changed to:	Researched-No Data	IRIS deleted cancer potency value.

Date of Change	Chemical	Parameter
4/22/2010	lindane	Ground Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	6.7E-01 µg/L	
changed to:	Researched-No Data	IRIS deleted cancer potency value.

Date of Change	Chemical	Parameter
4/22/2010	lindane	Ground Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	6.7E-02 µg/L	
changed to:	Researched-No Data	IRIS deleted cancer potency value.

Date of Change	Chemical	Parameter
4/22/2010	lindane	Oral Cancer Potency Factor (CPFo)

Changes Made		Comments
previous value:	1.3E+00 kg-day/mg	
changed to:	No Data. What are my options?	IRIS deleted cancer potency value. comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May



			11 2011 3:54PM
<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/22/2010	ethylene dibromide (EDB)	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	<b>Changes Made</b>		<b>Comments</b>
previous value:	1.5E+00	mg/kg	
changed to:	6.6E+01	mg/kg	Changed due to change in current IRIS value
<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/22/2010	ethylene dibromide (EDB)	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	<b>Changes Made</b>		<b>Comments</b>
previous value:	1.2E-02	mg/kg	
changed to:	5.E-01	mg/kg	Changed due to change in current IRIS value
<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/22/2010	ethylene dibromide (EDB)	Ground Water, Method C, Carcinogen, Standard Formula Value	
	<b>Changes Made</b>		<b>Comments</b>
previous value:	5.1E-03	µg/L	
changed to:	2.2E-01	µg/L	Changed due to change in current IRIS value
<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/22/2010	ethylene dibromide (EDB)	Ground Water, Method B, Carcinogen, Standard Formula Value	
	<b>Changes Made</b>		<b>Comments</b>
previous value:	5.1E-04	µg/L	
changed to:	2.2E-02	µg/L	Changed due to change in current IRIS value
<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/22/2010	ethylene dibromide (EDB)	Oral Cancer Potency Factor (CPFo)	
	<b>Changes Made</b>		<b>Comments</b>
previous value:	8.5E+01	kg-day/mg	
changed to:	2.E+00	kg-day/mg	Changed to current IRIS value
<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
4/22/2010	ethylene dibromide (EDB)	Oral Reference Dose (RfDo)	
	<b>Changes Made</b>		<b>Comments</b>
previous value:	Researched-No Data		
changed to:	9.E-03	mg/kg-day	Changed to current IRIS value
<b>Date of Change</b>	<b>Chemical</b>	<b>Parameter</b>	
12/22/2008	octabromodiphenyl ethers	Ground Water, Method C, Carcinogen, Standard Formula Value	
	<b>Changes Made</b>		<b>Comments</b>
previous value:	Researched-No Data		
changed to:	Researched-No Data		Oral cancer potency factor unavailable in IRIS to calculate Method C Ground water value.

Date of Change	Chemical	Parameter
12/22/2008	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.3E+03	µg/L	

Date of Change	Chemical	Parameter
12/22/2008	octabromodiphenyl ethers	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.1E+02	µg/L	

Date of Change	Chemical	Parameter
12/22/2008	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.5E+02	µg/L	

Date of Change	Chemical	Parameter
12/22/2008	octabromodiphenyl ethers	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	Researched-No Data		Oral cancer potency factor unavailable in IRIS to calculate Method B Ground water value.

Date of Change	Chemical	Parameter
12/22/2008	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.3E+02	µg/L	

Date of Change	Chemical	Parameter
12/22/2008	octabromodiphenyl ethers	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	4.8E+01	µg/L	

Date of Change	Chemical	Parameter
12/22/2008	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.1E+02	µg/L	

Date of Change	Chemical	Parameter
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12/22/2008	octabromodiphenyl ethers	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use
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	Changes Made		Comments
previous value:	1.1E+04	mg/kg	
changed to:	1.1E+04	mg/kg	

Date of Change	Chemical	Parameter
12/22/2008	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E+04	mg/kg	
changed to:	2.5E+04	mg/kg	

Date of Change	Chemical	Parameter
12/22/2008	octabromodiphenyl ethers	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.4E+02	mg/kg	
changed to:	2.4E+02	mg/kg	

Date of Change	Chemical	Parameter
12/22/2008	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+02	mg/kg	
changed to:	5.6E+02	mg/kg	

Date of Change	Chemical	Parameter
12/22/2008	octabromodiphenyl ethers	Inhalation Correction Factor (INH)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.E+00	unitless	VP: 9E-10-1.7E-09 mmHg; Decomposes >330oC

Date of Change	Chemical	Parameter
12/22/2008	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Inhalation Correction Factor (INH)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.E+00	unitless	VP: 3.2E-08-3.47E-08; Decomposes >320oC

Date of Change	Chemical	Parameter
12/22/2008	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	7.E-04	kg-day/mg	

Date of Change	Chemical	Parameter
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12/22/2008	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	1.E-02	mg/kg-day	
changed to:	7.E-03	mg/kg-day	
Date of Change	Chemical	Parameter	
12/22/2008	octabromodiphenyl ethers	Oral Cancer Potency Factor (CPFo)	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	No Data. What are my options?		IRIS Researched. No data available. comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM
Date of Change	Chemical	Parameter	
12/22/2008	octabromodiphenyl ethers	Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous value:	3.E-03	mg/kg-day	
changed to:	3.E-03	mg/kg-day	
Date of Change	Chemical	Parameter	
11/3/2008	trichloroethylene	Surface Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	1.7E+02	µg/L	Changed consistent with EPA Region 10
Date of Change	Chemical	Parameter	
11/3/2008	trichloroethylene	Surface Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	6.7E+00	µg/L	Changed consistent with EPA Region 10
Date of Change	Chemical	Parameter	
11/3/2008	trichloroethylene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
changed to:	1.5E+03	mg/kg	Changed consistent with EPA Region 10
Date of Change	Chemical	Parameter	
11/3/2008	trichloroethylene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
changed to:	1.1E+01	mg/kg	Changed consistent with EPA Region 10
Date of Change	Chemical	Parameter	
11/3/2008	trichloroethylene	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
changed to:	5.E+00	µg/L	Changed consistent with EPA Region 10
Date of Change	Chemical	Parameter	
11/3/2008	trichloroethylene	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments

changed to:	4.9E-01	µg/L	Changed consistent with EPA Region 10
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Date of Change	Chemical	Parameter
11/3/2008	trichloroethylene	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.E+00	µg/m3	Changed consistent with EPA Region 10

Date of Change	Chemical	Parameter
11/3/2008	trichloroethylene	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
changed to:	1.E-01	µg/m3	Changed consistent with EPA Region 10

Date of Change	Chemical	Parameter
11/3/2008	trichloroethylene	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made		Comments
changed to:	8.9E-02	kg-day/mg	Changed consistent with EPA Region 10

Date of Change	Chemical	Parameter
11/3/2008	trichloroethylene	Oral Cancer Potency Factor (CPF <sub>o</sub> )

	Changes Made		Comments
changed to:	8.9E-02	kg-day/mg	Changed consistent with EPA Region 10

Date of Change	Chemical	Parameter
9/19/2008	xylene;o-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E+00	mg/kg-day	
changed to:	Researched-No Data		Xylene occurs in the environment as a mixture of o-, m-, p- xylene. Refer to xylenes (CAS 1330-20-7) for cleanup information

Date of Change	Chemical	Parameter
9/19/2008	xylene;m-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E+00	mg/kg-day	
changed to:	Researched-No Data		Xylene occurs in the environment as a mixture of o-, m-, p- xylene. Refer to xylenes (CAS 1330-20-7) for cleanup information.

Date of Change	Chemical	Parameter
9/19/2008	methyl naphthalene;1-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	3.E-04	mg/kg-day	
changed to:	No Data. What are my options?		Toxicity is accounted for in the aromatic TPH fraction greater than EC10 to EC12 with an oral RfD of .02 mg/kg-day. comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:54PM

Date of Change	Chemical	Parameter
8/14/2008	rdx	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.1E+02	µg/L	Revised INH Factor based on HSDB database

Date of Change	Chemical	Parameter
8/14/2008	rdx	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	4.8E+01	µg/L	Revised INH Factor based on HSDB database

Date of Change	Chemical	Parameter
8/14/2008	rdx	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	8.E-01	µg/L	Revised INH Factor based on HSDB database

Date of Change	Chemical	Parameter
8/14/2008	rdx	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	8.E+00	µg/L	Revised INH Factor based on HSDB database

Date of Change	Chemical	Parameter
8/14/2008	rdx	Inhalation Correction Factor (INH)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.E+00	unitless	Based on revised HSDB data

Date of Change	Chemical	Parameter
8/14/2008	cadmium in water	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.8E+03	mg/kg	
changed to:	0.E+00	mg/kg	See cadmium in soil

Date of Change	Chemical	Parameter
8/14/2008	cadmium in water	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	4.E+01	mg/kg	
changed to:	0.E+00	mg/kg	See cadmium in soil

Date of Change	Chemical	Parameter
8/14/2008	cadmium in soil	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.E+02	µg/L	
changed to:	0.E+00	µg/L	See cadmium in water

Date of Change	Chemical	Parameter
8/14/2008	cadmium in soil	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.1E+01	µg/L	
changed to:	0.E+00	µg/L	See cadmium in water



Date of Change	Chemical	Parameter
8/14/2008	cadmium in soil	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+01	µg/L	
changed to:	0.E+00	µg/L	See cadmium in water

Date of Change	Chemical	Parameter
8/14/2008	cadmium in soil	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+01	µg/L	
changed to:	0.E+00	µg/L	See cadmium in water

Date of Change	Chemical	Parameter
8/14/2008	dichloroethylene;1,2-,cis	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.E-02	mg/kg-day	

Date of Change	Chemical	Parameter
8/14/2008	dichloroethane;1,1-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.8E+03	µg/L	
changed to:	3.5E+03	µg/L	

Date of Change	Chemical	Parameter
8/14/2008	dichloroethane;1,1-	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	8.E+02	µg/L	
changed to:	1.6E+03	µg/L	

Date of Change	Chemical	Parameter
8/14/2008	dichloroethane;1,1-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.5E+05	mg/kg	
changed to:	7.E+05	mg/kg	

Date of Change	Chemical	Parameter
8/14/2008	dichloroethane;1,1-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+03	mg/kg	
changed to:	1.6E+04	mg/kg	

Date of Change	Chemical	Parameter
8/14/2008	dichloroethane;1,1-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made	Comments
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previous value:	3.5E+02	µg/m3	
changed to:	7.E+02	µg/m3	

Date of Change	Chemical	Parameter
8/14/2008	dichloroethane;1,1-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.6E+02	µg/m3
changed to:	3.2E+02	µg/m3

Date of Change	Chemical	Parameter
8/14/2008	dichloroethane;1,1-	Oral Reference Dose (RfDo)

	Changes Made	Comments
previous value:	1.E-01	mg/kg-day
changed to:	2.E-01	mg/kg-day

Date of Change	Chemical	Parameter
8/14/2008	dichloroethane;1,1-	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	1.E-01	mg/kg-day
changed to:	2.E-01	mg/kg-day

Date of Change	Chemical	Parameter
4/28/2008	dichloroethylene;1,1-	Oral Cancer Potency Factor (CPFo)

	Changes Made	Comments
previous value:	6.E-01	kg-day/mg
changed to:	No Data. What are my options?	Updated to correspond to IRIS for toxicity values comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/28/2008	dichloroethylene;1,1-	Inhalation Cancer Potency Factor (CPFi)

	Changes Made	Comments
previous value:	1.8E-01	kg-day/mg
changed to:	No Data. What are my options?	Updated to correspond to IRIS for toxicity values comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM

Date of Change	Chemical	Parameter
4/2/2008	tcdd;2,3,7,8-	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	5.8E-07	µg/m3
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	tcdd;2,3,7,8-	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	5.8E-08	µg/m3
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	tcdd;2,3,7,8-	Surface Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	2.2E-07 µg/L	
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	tcdd;2,3,7,8-	Surface Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	8.6E-09 µg/L	
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	tcdd;2,3,7,8-	Ground Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	5.8E-06 µg/L	
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	tcdd;2,3,7,8-	Ground Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	5.8E-07 µg/L	
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	benzo[a]anthracene	Surface Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	7.4E-01 µg/L	
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	benzo[a]anthracene	Surface Water, Method B, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	3.E-02 µg/L	
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	benzo[a]anthracene	Ground Water, Method C, Carcinogen, Standard Formula Value

Changes Made		Comments
previous value:	1.2E-01 µg/L	
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
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4/2/2008	benzo[a]anthracene	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.2E-02	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
4/2/2008	benzo[b]fluoranthene	Surface Water, Method C, Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	7.4E-01	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments

Note: Click [here](#) to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter	
4/2/2008	benzo[b]fluoranthene	Surface Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	3.E-02	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
4/2/2008	benzo[b]fluoranthene	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.2E-01	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
4/2/2008	benzo[b]fluoranthene	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.2E-02	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
4/2/2008	benzo[k]fluoranthene	Surface Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	7.4E-01	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter	
4/2/2008	benzo[k]fluoranthene	Surface Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	3.E-02	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			

Date of Change	Chemical	Parameter
4/2/2008	benzo[k]fluoranthene	Ground Water, Method C, Carcinogen, Standard Formula Value
	Changes Made	Comments

previous value:	1.2E-01	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	benzo[k]fluoranthene	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.2E-02	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	chrysene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.4E-01	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	chrysene	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.E-02	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	chrysene	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.2E-01	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	chrysene	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.2E-02	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	dibenzo[a,h]anthracene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.4E-01	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	dibenzo[a,h]anthracene	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous	3.E-02	µg/L	

value:			
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	
4/2/2008	dibenzo[a,h]anthracene	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.2E-01	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	
4/2/2008	dibenzo[a,h]anthracene	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.2E-02	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	
4/2/2008	Hexachlorodibenzo-p-dioxin, Mixture	Air, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.9E-05	µg/m3	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	
4/2/2008	Hexachlorodibenzo-p-dioxin, Mixture	Air, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.9E-06	µg/m3	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	
4/2/2008	indeno[1,2,3-cd]pyrene	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.2E-02	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	
4/2/2008	indeno[1,2,3-cd]pyrene	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.2E-01	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	



4/2/2008	indeno[1,2,3-cd]pyrene	Surface Water, Method B, Carcinogen, Standard Formula Value
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	Changes Made		Comments
previous value:	3.E-02	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	indeno[1,2,3-cd]pyrene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.4E-01	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
4/2/2008	gross alpha particle activity	Ground Water, Method A, Table Value

	Changes Made		Comments
previous value:	1.5E+01	pCi/L	
changed to:	1.5E+01		Radionuclides with different Unit of Measure than parameter

Gross alpha particle activity and radium 226 and 228 values are in pCi/L

Date of Change	Chemical	Parameter
4/2/2008	gross beta particle activity	Ground Water, Method A, Table Value

	Changes Made		Comments
previous value:	4.E+00	mrem/year	
changed to:	4.E+00		Radionuclides with different Unit of Measure than parameter

Gross beta particle activity values are in mrem/year

Date of Change	Chemical	Parameter
4/2/2008	pah	Ground Water, Method A, Table Value

	Changes Made		Comments
previous value:	Researched-No Data		see benzo(a)pyrene
changed to:	Researched-No Data		

Date of Change	Chemical	Parameter
4/2/2008	radium 226	Ground Water, Method A, Table Value

	Changes Made		Comments
previous value:	3.E+00	pCi/L	
changed to:	3.E+00		Radionuclides with different Unit of Measure than parameter

Gross alpha particle activity and radium 226 and 228 values are in pCi/L

Date of Change	Chemical	Parameter
4/2/2008	radium 226 and 228	Ground Water, Method A, Table Value

	Changes Made		Comments
previous value:	5.E+00	pCi/L	
changed to:	5.E+00		Radionuclides with different Unit of Measure than parameter

Gross alpha particle activity and radium 226 and 228 values are in pCi/L

Date of Change	Chemical	Parameter
4/2/2008	gross alpha particle activity	Ground Water ARAR - Federal Primary Maximum Contaminant Level (MCL)

	Changes Made		Comments
previous value:	5.E+00	pCi/L	Radionuclides with different Unit of Measure than parameter
changed to:	5.E+00		
Gross alpha particle activity and radium 226 and 228 values are in pCi/L			

Date of Change	Chemical	Parameter
4/2/2008	gross beta particle activity	Ground Water ARAR - Federal Primary Maximum Contaminant Level (MCL)

	Changes Made		Comments
previous value:	4.E+00	mrem/year	Radionuclides with different Unit of Measure than parameter
changed to:	4.E+00		
Gross beta particle activity values are in mrem/year			

Date of Change	Chemical	Parameter
4/2/2008	radium 226 and 228	Ground Water ARAR - Federal Primary Maximum Contaminant Level (MCL)

	Changes Made		Comments
previous value:	5.E+00	pCi/L	Radionuclides with different Unit of Measure than parameter
changed to:	5.E+00		
Gross alpha particle activity and radium 226 and 228 values are in pCi/L			

Date of Change	Chemical	Parameter
4/1/2008	dichloroethylene;1,1-	Air, Method C, Non-carcinogen, Standard Formula Value

Changes Made			Comments
previous value:	Researched-No Data		Updated to correspond to IRIS for toxicity values
changed to:	2.E+02	µg/m3	

Date of Change	Chemical	Parameter
4/1/2008	dichloroethylene;1,1-	Air, Method B, Non-Carcinogen, Standard Formula Value

Changes Made			Comments
previous value:	Researched-No Data		Updated to correspond to IRIS for toxicity values
changed to:	9.1E+01	µg/m3	

Date of Change	Chemical	Parameter
4/1/2008	dichloroethylene;1,1-	Air, Method C, Carcinogen, Standard Formula Value

Changes Made			Comments
previous value:	5.E-01	µg/m3	Updated to correspond to IRIS for toxicity values
changed to:	Researched-No Data		

Date of Change	Chemical	Parameter
4/1/2008	dichloroethylene;1,1-	Air, Method B, Carcinogen, Standard Formula Value

Changes Made			Comments
previous value:	5.E-02	µg/m3	Updated to correspond to IRIS for toxicity values
changed to:	Researched-No Data		

Date of Change	Chemical	Parameter
4/1/2008	dichloroethylene;1,1-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made			Comments
previous value:	2.2E+02	mg/kg	Updated to correspond to IRIS for toxicity values
changed to:	Researched-No Data		

Date of Change	Chemical	Parameter
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4/1/2008	dichloroethylene;1,1-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
		Changes Made	Comments
previous value:	1.7E+00	mg/kg	
changed to:	Researched-No Data		Updated to correspond to IRIS for toxicity values

Date of Change	Chemical	Parameter	
4/1/2008	dichloroethylene;1,1-	Surface Water, Method C, Carcinogen, Standard Formula Value	
		Changes Made	Comments
previous value:	4.8E+01	µg/L	
changed to:	Researched-No Data		Updated to correspond to IRIS for toxicity values

Date of Change	Chemical	Parameter	
4/1/2008	dichloroethylene;1,1-	Surface Water, Method B, Carcinogen, Standard Formula Value	
		Changes Made	Comments
previous value:	1.9E+00	µg/L	
changed to:	Researched-No Data		Updated to correspond to IRIS for toxicity values

Date of Change	Chemical	Parameter	
4/1/2008	dichloroethylene;1,1-	Ground Water, Method C, Carcinogen, Standard Formula Value	
		Changes Made	Comments
previous value:	7.3E-01	µg/L	
changed to:	Researched-No Data		Updated to correspond to IRIS for toxicity values

Date of Change	Chemical	Parameter	
4/1/2008	dichloroethylene;1,1-	Ground Water, Method B, Carcinogen, Standard Formula Value	
		Changes Made	Comments
previous value:	7.3E-02	µg/L	
changed to:	Researched-No Data		Updated to correspond to IRIS for toxicity values

Date of Change	Chemical	Parameter	
4/1/2008	dichloroethylene;1,1-	Inhalation Reference Dose (RfDi)	
		Changes Made	Comments
previous value:	Researched-No Data		
changed to:	5.7E-02	mg/kg-day	Updated to correspond to IRIS for toxicity values

Date of Change	Chemical	Parameter	
4/1/2008	dinitrotoluene mixture;2,4-/2,6-	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )	
		Changes Made	Comments
previous value:	6.8E-01	kg-day/mg	
changed to:	6.8E-01	kg-day/mg	

Date of Change	Chemical	Parameter	
11/6/2007	Hexachlorodibenzo-p-dioxin, Mixture	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
		Changes Made	Comments
previous value:	2.1E-02	mg/kg	
changed to:	see additional information		Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	Hexachlorodibenzo-p-dioxin, Mixture	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	1.6E-04 mg/kg	
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	tcdd;2,3,7,8-	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	8.8E-04 mg/kg	
changed to:	1.5E-03 mg/kg	Updated to reflect MTCA rule amendments

Note: Soil Methods B & C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only) soil cleanup levels for 2,3,7,8 - tetrachlorodibenzo-p-dioxin (tcdd;2,3,7,8-) based on Gastrointestinal absorption fraction (AB1) of 0.6, unitless.

Date of Change	Chemical	Parameter
11/6/2007	tcdd;2,3,7,8-	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	6.7E-06 mg/kg	
changed to:	1.1E-05 mg/kg	Updated to reflect MTCA rule amendments

Note: Soil Methods B & C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only) soil cleanup levels for 2,3,7,8 - tetrachlorodibenzo-p-dioxin (tcdd;2,3,7,8-) based on Gastrointestinal absorption fraction (AB1) of 0.6, unitless.

Date of Change	Chemical	Parameter
11/6/2007	indeno[1,2,3-cd]pyrene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	1.8E+01 mg/kg	
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	indeno[1,2,3-cd]pyrene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	1.4E-01 mg/kg	
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	dibenzo[a,h]anthracene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	1.8E+01 mg/kg	
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	dibenzo[a,h]anthracene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	1.4E-01 mg/kg	
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	chrysene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	1.8E+01	mg/kg
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	chrysene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	1.4E-01	mg/kg
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	benzo[k]fluoranthene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	1.8E+01	mg/kg
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	benzo[k]fluoranthene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	1.4E-01	mg/kg
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	benzo[b]fluoranthene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	1.8E+01	mg/kg
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	benzo[b]fluoranthene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

Changes Made		Comments
previous value:	1.4E-01	mg/kg
changed to:	see additional information	Updated to reflect MTCA rule amendments

Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.

Date of Change	Chemical	Parameter
11/6/2007	benzo[a]anthracene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

Changes Made		Comments
previous value:	1.8E+01	mg/kg

changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	
11/6/2007	benzo[a]anthracene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	1.4E-01	mg/kg	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific evaluations.			
Date of Change	Chemical	Parameter	
8/9/2007	ethylbenzene	Air, Method B, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	4.6E+03	µg/m3	
changed to:	4.6E+02	µg/m3	
Date of Change	Chemical	Parameter	
8/9/2007	ethylbenzene	Air, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.E+04	µg/m3	
changed to:	1.E+03	µg/m3	
Date of Change	Chemical	Parameter	
11/22/2006	arsenic, inorganic	Ground Water ARAR - State Primary Maximum Contaminant Level (MCL)	
	Changes Made		Comments
previous value:	5.E-02	mg/L	
changed to:	1.E-02	mg/L	
Date of Change	Chemical	Parameter	
5/22/2006	dichloroethylene;1,1-	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	7.2E+01	µg/L	
changed to:	4.E+02	µg/L	
Date of Change	Chemical	Parameter	
1/17/2006	butadiene;1,3-	Oral Cancer Potency Factor (CPFo)	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.1E-01	kg-day/mg	
Date of Change	Chemical	Parameter	
1/17/2006	toluene	Surface Water, Method C, Non-Carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	1.2E+05	µg/L	
changed to:	4.7E+04	µg/L	
Date of Change	Chemical	Parameter	
1/17/2006	toluene	Surface Water, Method B, Non-Carcinogen, Standard Formula Value	



	Changes Made		Comments
previous value:	4.8E+04	µg/L	
changed to:	1.9E+04	µg/L	

Date of Change	Chemical	Parameter
1/17/2006	toluene	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+03	µg/L	
changed to:	1.4E+03	µg/L	

Date of Change	Chemical	Parameter
1/17/2006	toluene	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+03	µg/L	
changed to:	6.4E+02	µg/L	

Date of Change	Chemical	Parameter
1/17/2006	toluene	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+05	mg/kg	
changed to:	2.8E+05	mg/kg	

Date of Change	Chemical	Parameter
1/17/2006	toluene	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+04	mg/kg	
changed to:	6.4E+03	mg/kg	

Date of Change	Chemical	Parameter
1/17/2006	toluene	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E-01	mg/kg-day	
changed to:	8.E-02	mg/kg-day	

Date of Change	Chemical	Parameter
1/17/2006	butadiene;1,3-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	5.7E-04	mg/kg-day	

Date of Change	Chemical	Parameter
1/17/2006	butadiene;1,3-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	5.7E-04	mg/kg-day	

Date of Change	Chemical	Parameter
1/3/2006	toluene	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.E+02	µg/m3	
changed to:	4.9E+03	µg/m3	

Date of Change	Chemical	Parameter	
1/3/2006	toluene	Air, Method B, Non-Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	1.8E+02	µg/m3	
changed to:	2.2E+03	µg/m3	

Date of Change	Chemical	Parameter	
1/3/2006	hexane;n-	Air, Method C, Non-carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	2.E+02	µg/m3	
changed to:	7.E+02	µg/m3	

Date of Change	Chemical	Parameter	
1/3/2006	hexane;n-	Air, Method B, Non-Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	9.1E+01	µg/m3	
changed to:	3.2E+02	µg/m3	

Date of Change	Chemical	Parameter	
1/3/2006	toluene	Inhalation Reference Dose (RfDi)	

	Changes Made		Comments
previous value:	1.1E-01	mg/kg-day	
changed to:	1.4E+00	mg/kg-day	

Date of Change	Chemical	Parameter	
1/3/2006	hexane;n-	Inhalation Reference Dose (RfDi)	

	Changes Made		Comments
previous value:	5.7E-02	mg/kg-day	
changed to:	2.E-01	mg/kg-day	

Date of Change	Chemical	Parameter	
12/19/2005	xylene;o-	Air, Method C, Non-carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	7.E+02	µg/m3	
changed to:	1.E+02	µg/m3	

Date of Change	Chemical	Parameter	
12/19/2005	xylene;o-	Air, Method B, Non-Carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	3.2E+02	µg/m3	
changed to:	4.6E+01	µg/m3	

Date of Change	Chemical	Parameter	
12/19/2005	xylene;m-	Air, Method C, Non-carcinogen, Standard Formula Value	

	Changes Made		Comments
previous	7.E+02	µg/m3	

value:			
changed to:	1.E+02	µg/m3	

Date of Change	Chemical	Parameter
12/19/2005	xylene;m-	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.2E+02	µg/m3	
changed to:	4.6E+01	µg/m3	

Date of Change	Chemical	Parameter
12/19/2005	xylenes	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E+04	µg/L	
changed to:	3.5E+03	µg/L	

Date of Change	Chemical	Parameter
12/19/2005	xylenes	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+04	µg/L	
changed to:	1.6E+03	µg/L	

Date of Change	Chemical	Parameter
12/19/2005	xylenes	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	7.E+06	mg/kg	
changed to:	7.E+05	mg/kg	

Date of Change	Chemical	Parameter
12/19/2005	xylenes	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	1.6E+05	mg/kg	
changed to:	1.6E+04	mg/kg	

Date of Change	Chemical	Parameter
12/19/2005	benzene	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.7E+03	µg/L	
changed to:	5.E+03	µg/L	

Date of Change	Chemical	Parameter
12/19/2005	benzene	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.5E+03	µg/L	
changed to:	2.E+03	µg/L	

Date of Change	Chemical	Parameter
12/19/2005	benzene	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.3E+01	µg/L	
changed to:	7.E+01	µg/L	

Date of Change	Chemical	Parameter
12/19/2005	benzene	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.4E+01	µg/L	
changed to:	3.2E+01	µg/L	

Date of Change	Chemical	Parameter
12/19/2005	benzene	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.1E+04	mg/kg	
changed to:	1.4E+04	mg/kg	

Date of Change	Chemical	Parameter
12/19/2005	benzene	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.4E+02	mg/kg	
changed to:	3.2E+02	mg/kg	

Date of Change	Chemical	Parameter
12/19/2005	benzene	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	6.E+00	µg/m3	
changed to:	3.E+01	µg/m3	

Date of Change	Chemical	Parameter
12/19/2005	benzene	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.7E+00	µg/m3	
changed to:	1.4E+01	µg/m3	

Date of Change	Chemical	Parameter
12/19/2005	butadiene;1,3-	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made		Comments
previous value:	9.8E-01	kg-day/mg	
changed to:	1.1E-01	kg-day/mg	

Date of Change	Chemical	Parameter
12/19/2005	xylene;o-	Inhalation Reference Dose (Rf <sub>Di</sub> )

	Changes Made		Comments
previous value:	2.E-01	mg/kg-day	
changed to:	2.9E-02	mg/kg-day	

Date of Change	Chemical	Parameter
12/19/2005	xylene;m-	Inhalation Reference Dose (Rf <sub>Di</sub> )

	Changes Made		Comments
previous value:	2.E-01	mg/kg-day	
changed to:	2.9E-02	mg/kg-day	

Date of Change	Chemical	Parameter
12/19/2005	benzene	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	1.7E-03	mg/kg-day	
changed to:	8.6E-03	mg/kg-day	

Date of Change	Chemical	Parameter
10/4/2005	formaldehyde	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made		Comments
previous value:	4.6E-02	kg-day/mg	
changed to:	4.6E-02	kg-day/mg	

Date of Change	Chemical	Parameter
10/4/2005	formaldehyde	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E-01	mg/kg-day	
changed to:	1.5E-01	mg/kg-day	

Date of Change	Chemical	Parameter
10/3/2005	toluenediamine;2,6-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.E-01	mg/kg-day	

Date of Change	Chemical	Parameter
10/3/2005	methyl tert-butyl ether	Oral Cancer Potency Factor (CPF <sub>o</sub> )

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.8E-03	kg-day/mg	

Date of Change	Chemical	Parameter
10/3/2005	ethyl chloride	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.9E-03	kg-day/mg	

Date of Change	Chemical	Parameter
10/3/2005	ethyl chloride	Oral Cancer Potency Factor (CPF <sub>o</sub> )

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.9E-03	kg-day/mg	

Date of Change	Chemical	Parameter
10/3/2005	dichloroethylene;1,2-,trans	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
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previous value:	Researched-No Data		
changed to:	2.E-02	mg/kg-day	

Date of Change	Chemical	Parameter
10/3/2005	dichloroethane;1,2-	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	1.4E-03	mg/kg-day

Date of Change	Chemical	Parameter
10/3/2005	dichloroethane;1,2-	Oral Reference Dose (RfDo)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	2.E-02	mg/kg-day

Date of Change	Chemical	Parameter
10/3/2005	dibenzofuran	Oral Reference Dose (RfDo)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	2.E-03	mg/kg-day

Date of Change	Chemical	Parameter
10/3/2005	ddd	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	2.4E-01	kg-day/mg

Date of Change	Chemical	Parameter
10/3/2005	chloroaniline;p-	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	4.E-03	mg/kg-day

Date of Change	Chemical	Parameter
10/3/2005	butyl benzyl phthalate	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	2.E-01	mg/kg-day

Date of Change	Chemical	Parameter
10/3/2005	benzyl chloride	Oral Reference Dose (RfDo)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	2.9E-03	mg/kg-day

Date of Change	Chemical	Parameter
10/3/2005	benzyl chloride	Inhalation Cancer Potency Factor (CPF <sub>i</sub> )

	Changes Made	Comments
previous value:	Researched-No Data	



changed to:	1.7E-01	kg-day/mg	
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Date of Change	Chemical	Parameter
10/3/2005	benzyl chloride	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	2.9E-03	mg/kg-day

Date of Change	Chemical	Parameter
9/28/2005	polychlorinated biphenyls	Ground Water, Method A, Table Value

	Changes Made	Comments
previous value:	Researched-No Data	see PCB Mixtures
changed to:	1.E-01	µg/L

Date of Change	Chemical	Parameter
9/21/2005	cyanide	Surface Water ARAR - Aquatic Life - Marine/Chronic - Ch. 173-201A WAC

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	1.E+00	µg/L

Date of Change	Chemical	Parameter
9/21/2005	ammonia	Surface Water ARAR - Aquatic Life - Marine/Chronic - Ch. 173-201A WAC

	Changes Made	Comments
previous value:	3.5E-02	µg/L
changed to:	3.5E+01	µg/L

Date of Change	Chemical	Parameter
9/21/2005	ammonia	Surface Water ARAR - Aquatic Life - Marine/Acute - Ch. 173-201A WAC

	Changes Made	Comments
previous value:	2.3E-01	µg/L
changed to:	2.3E+02	µg/L

Date of Change	Chemical	Parameter
9/21/2005	dinitrotoluene;2,6-	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	1.E-03	mg/kg-day

Date of Change	Chemical	Parameter
9/21/2005	dinitrotoluene;2,4-	Inhalation Reference Dose (RfDi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	2.E-03	mg/kg-day

Date of Change	Chemical	Parameter
9/20/2005	zinc	Surface Water ARAR - Aquatic Life - Marine/Chronic - National Toxics Rule, 40 CFR 131

	Changes Made	Comments
previous	8.6E+01	µg/L

value:			
changed to:	8.1E+01	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	zinc	Surface Water ARAR - Aquatic Life - Marine/Acute - National Toxics Rule, 40 CFR 131

	Changes Made		Comments
previous value:	9.5E+01	µg/L	
changed to:	9.E+01	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	zinc	Surface Water ARAR - Aquatic Life - Fresh/Chronic - National Toxics Rule, 40 CFR 131

	Changes Made		Comments
previous value:	1.1E+02	µg/L	
changed to:	1.E+02	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	zinc	Surface Water ARAR - Aquatic Life - Fresh/Acute - National Toxics Rule - 40 CFR 131

	Changes Made		Comments
previous value:	1.2E+02	µg/L	
changed to:	1.1E+02	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	silver	Surface Water ARAR - Aquatic Life - Marine/Acute - National Toxics Rule, 40 CFR 131

	Changes Made		Comments
previous value:	2.3E+00	µg/L	
changed to:	1.9E+00	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	silver	Surface Water ARAR - Aquatic Life - Fresh/Acute - National Toxics Rule - 40 CFR 131

	Changes Made		Comments
previous value:	4.1E+00	µg/L	
changed to:	3.4E+00	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	selenium and compounds	Surface Water ARAR - Aquatic Life - Marine/Acute - National Toxics Rule, 40 CFR 131

	Changes Made		Comments
previous value:	3.E+02	µg/L	
changed to:	2.9E+02	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	nickel soluble salts	Surface Water ARAR - Aquatic Life - Marine/Chronic - National Toxics Rule, 40 CFR 131

	Changes Made		Comments
previous value:	8.3E+00	µg/L	
changed to:	8.2E+00	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	nickel soluble salts	Surface Water ARAR - Aquatic Life - Marine/Acute - National

		Toxics Rule, 40 CFR 131	
	Changes Made		Comments
previous value:	7.5E+01	µg/L	
changed to:	7.4E+01	µg/L	

Date of Change	Chemical	Parameter	
9/20/2005	mercury	Surface Water ARAR - Aquatic Life - Fresh/Acute - National Toxics Rule - 40 CFR 131	

	Changes Made		Comments
previous value:	2.4E+00	µg/L	
changed to:	2.1E+00	µg/L	

Date of Change	Chemical	Parameter	
9/20/2005	lead	Surface Water ARAR - Aquatic Life - Marine/Chronic - National Toxics Rule, 40 CFR 131	

	Changes Made		Comments
previous value:	8.5E+00	µg/L	
changed to:	8.1E+00	µg/L	

Date of Change	Chemical	Parameter	
9/20/2005	lead	Surface Water ARAR - Aquatic Life - Marine/Acute - National Toxics Rule, 40 CFR 131	

	Changes Made		Comments
previous value:	2.2E+02	µg/L	
changed to:	2.1E+02	µg/L	

Date of Change	Chemical	Parameter	
9/20/2005	lead	Surface Water ARAR - Aquatic Life - Fresh/Chronic - National Toxics Rule, 40 CFR 131	

	Changes Made		Comments
previous value:	3.2E+00	µg/L	
changed to:	2.5E+00	µg/L	

Date of Change	Chemical	Parameter	
9/20/2005	lead	Surface Water ARAR - Aquatic Life - Fresh/Acute - National Toxics Rule - 40 CFR 131	

	Changes Made		Comments
previous value:	8.2E+01	µg/L	
changed to:	6.5E+01	µg/L	

Date of Change	Chemical	Parameter	
9/20/2005	copper	Surface Water ARAR - Aquatic Life - Marine/Chronic - National Toxics Rule, 40 CFR 131	

	Changes Made		Comments
previous value:	2.9E+00	µg/L	
changed to:	2.4E+00	µg/L	

Date of Change	Chemical	Parameter	
9/20/2005	copper	Surface Water ARAR - Aquatic Life - Marine/Acute - National Toxics Rule, 40 CFR 131	

	Changes Made		Comments
previous value:	2.9E+00	µg/L	
changed to:	2.4E+00	µg/L	

Date of Change	Chemical	Parameter
9/20/2005	copper	Surface Water ARAR - Aquatic Life - Fresh/Chronic - National Toxics Rule, 40 CFR 131
	Changes Made	Comments
previous value:	1.2E+01	µg/L
changed to:	1.1E+01	µg/L

Date of Change	Chemical	Parameter
9/20/2005	copper	Surface Water ARAR - Aquatic Life - Fresh/Acute - National Toxics Rule - 40 CFR 131
	Changes Made	Comments
previous value:	1.8E+01	µg/L
changed to:	1.7E+01	µg/L

Date of Change	Chemical	Parameter
9/20/2005	chromium(VI)	Surface Water ARAR - Aquatic Life - Fresh/Chronic - National Toxics Rule, 40 CFR 131
	Changes Made	Comments
previous value:	1.1E+01	µg/L
changed to:	1.E+01	µg/L

Date of Change	Chemical	Parameter
9/20/2005	chromium(VI)	Surface Water ARAR - Aquatic Life - Fresh/Acute - National Toxics Rule - 40 CFR 131
	Changes Made	Comments
previous value:	1.6E+01	µg/L
changed to:	1.5E+01	µg/L

Date of Change	Chemical	Parameter
9/20/2005	chromium(III)	Surface Water ARAR - Aquatic Life - Fresh/Chronic - National Toxics Rule, 40 CFR 131
	Changes Made	Comments
previous value:	2.1E+02	µg/L
changed to:	1.8E+02	µg/L

Date of Change	Chemical	Parameter
9/20/2005	chromium(III)	Surface Water ARAR - Aquatic Life - Fresh/Acute - National Toxics Rule - 40 CFR 131
	Changes Made	Comments
previous value:	1.7E+03	µg/L
changed to:	5.5E+02	µg/L

Date of Change	Chemical	Parameter
9/20/2005	cadmium in water	Surface Water ARAR - Aquatic Life - Marine/Acute - National Toxics Rule, 40 CFR 131
	Changes Made	Comments
previous value:	4.3E+01	µg/L
changed to:	4.2E+01	µg/L

Date of Change	Chemical	Parameter
9/20/2005	cadmium in water	Surface Water ARAR - Aquatic Life - Fresh/Chronic - National Toxics Rule, 40 CFR 131
	Changes Made	Comments
previous value:	1.1E+00	µg/L

changed to:	1.E+00	µg/L	
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Date of Change	Chemical	Parameter
9/20/2005	cadmium in water	Surface Water ARAR - Aquatic Life - Fresh/Acute - National Toxics Rule - 40 CFR 131

	Changes Made		Comments
previous value:	3.9E+00	µg/L	
changed to:	3.9E+00	µg/L	

Date of Change	Chemical	Parameter
9/19/2005	dieldrin	Surface Water ARAR - Aquatic Life - Marine/Chronic - Clean Water Act §304

	Changes Made		Comments
previous value:	2.E-03	µg/L	
changed to:	1.9E-03	µg/L	

Date of Change	Chemical	Parameter
9/19/2005	dieldrin	Surface Water ARAR - Aquatic Life - Marine/Acute - Clean Water Act §304

	Changes Made		Comments
previous value:	7.E-01	µg/L	
changed to:	7.1E-01	µg/L	

Date of Change	Chemical	Parameter
9/14/2005	naphthalene	Ground Water, Method A, Table Value

	Changes Made		Comments
previous value:	2.E+01	µg/L	
changed to:	1.6E+02	µg/L	

Date of Change	Chemical	Parameter
9/12/2005	cyanide	Surface Water ARAR - Human Health – Fresh Water – Clean Water Act §304

	Changes Made		Comments
previous value:	7.E+02	µg/L	
changed to:	1.4E+02	µg/L	

Date of Change	Chemical	Parameter
9/12/2005	dichloroethylene;1,2-,trans	Surface Water ARAR - Human Health – Fresh Water – Clean Water Act §304

	Changes Made		Comments
previous value:	7.E+02	µg/L	
changed to:	1.4E+05	µg/L	

Date of Change	Chemical	Parameter
8/25/2005	nickel soluble salts	Ground Water ARAR - Federal Primary Maximum Contaminant Level (MCL)

	Changes Made		Comments
previous value:	1.E-01	mg/L	
changed to:	Researched-No Data		

Date of Change	Chemical	Parameter
8/25/2005	dichloroethylene;1,1-	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.E+04	µg/L	
changed to:	5.8E+04	µg/L	

Date of Change	Chemical	Parameter
8/25/2005	dichloroethylene;1,1-	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.2E+03	µg/L	
changed to:	2.3E+04	µg/L	

Date of Change	Chemical	Parameter
8/25/2005	dichloroethylene;1,1-	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E+02	µg/L	
changed to:	8.8E+02	µg/L	

Date of Change	Chemical	Parameter
8/25/2005	dichloroethylene;1,1-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	3.2E+04	mg/kg	
changed to:	1.8E+05	mg/kg	

Date of Change	Chemical	Parameter
8/25/2005	dichloroethylene;1,1-	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	7.2E+02	mg/kg	
changed to:	4.E+03	mg/kg	

Date of Change	Chemical	Parameter
8/25/2005	dichloroethylene;1,1-	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	9.E-03	mg/kg-day	
changed to:	5.E-02	mg/kg-day	

Date of Change	Chemical	Parameter
8/23/2005	chlorpyrifos	Surface Water ARAR - Aquatic Life - Marine/Acute - Clean Water Act §304

	Changes Made		Comments
previous value:	0.E+00	µg/L	
changed to:	1.1E-02	µg/L	

Date of Change	Chemical	Parameter
8/22/2005	bromoform	Ground Water ARAR - Federal Maximum Contaminant Level Goal (MCLG)

	Changes Made		Comments
previous value:	0.E+00	mg/L	
changed to:	8.E-02	mg/L	

Date of Change	Chemical	Parameter
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8/22/2005	fluoride	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	<b>Changes Made</b>		<b>Comments</b>
previous value:	Researched-No Data		
changed to:	2.1E+03	µg/L	

Date of Change	Chemical	Parameter	
8/22/2005	fluoride	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	9.6E+02	µg/L	

Date of Change	Chemical	Parameter	
8/22/2005	fluoride	Inhalation Correction Factor (INH)	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.E+00	unitless	

Date of Change	Chemical	Parameter	
8/18/2005	boron	Inhalation Reference Dose (RfDi)	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	5.7E-03	mg/kg-day	

Date of Change	Chemical	Parameter	
8/18/2005	boron	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous value:	3.2E+03	µg/L	
changed to:	7.E+03	µg/L	

Date of Change	Chemical	Parameter	
8/18/2005	boron	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use	

	Changes Made		Comments
previous value:	3.2E+05	mg/kg	
changed to:	7.E+05	mg/kg	

Date of Change	Chemical	Parameter	
8/18/2005	boron	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	

	Changes Made		Comments
previous value:	7.2E+03	mg/kg	
changed to:	1.6E+04	mg/kg	

Date of Change	Chemical	Parameter	
8/18/2005	boron	Ground Water, Method B, Non-carcinogen, Standard Formula Value	

	Changes Made		Comments
previous value:	1.4E+03	µg/L	
changed to:	3.2E+03	µg/L	

Date of Change	Chemical	Parameter
8/18/2005	barium and compounds	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	3.5E-01	µg/m3	
changed to:	7.E+02	µg/m3	

Date of Change	Chemical	Parameter
8/18/2005	barium and compounds	Air, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.6E-01	µg/m3	
changed to:	3.2E+02	µg/m3	

Date of Change	Chemical	Parameter
8/18/2005	barium and compounds	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.5E+05	mg/kg	
changed to:	7.E+05	mg/kg	

Date of Change	Chemical	Parameter
8/18/2005	barium and compounds	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	5.6E+03	mg/kg	
changed to:	1.6E+04	mg/kg	

Date of Change	Chemical	Parameter
8/18/2005	barium and compounds	Ground Water, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	2.5E+03	µg/L	
changed to:	7.E+03	µg/L	

Date of Change	Chemical	Parameter
8/18/2005	barium and compounds	Ground Water, Method B, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	1.1E+03	µg/L	
changed to:	3.2E+03	µg/L	

Date of Change	Chemical	Parameter
8/18/2005	barium and compounds	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	1.E-04	mg/kg-day	
changed to:	2.E-01	mg/kg-day	

Date of Change	Chemical	Parameter
8/17/2005	barium and compounds	Oral Reference Dose (RfDo)

	Changes Made	Comments
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previous value:	7.E-02	mg/kg-day	
changed to:	2.E-01	mg/kg-day	

Date of Change	Chemical	Parameter
8/17/2005	boron	Oral Reference Dose (RfDo)

	Changes Made	Comments
previous value:	9.E-02	mg/kg-day
changed to:	2.E-01	mg/kg-day

Date of Change	Chemical	Parameter
8/16/2005	vinyl chloride	Oral Cancer Potency Factor (CPFo)

	Changes Made	Comments
previous value:	7.5E-01	kg-day/mg
changed to:	1.5E+00	kg-day/mg

Date of Change	Chemical	Parameter
7/12/2005	polychlorinated biphenyls	Inhalation Cancer Potency Factor (CPFi)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	2.E+00	kg-day/mg

Date of Change	Chemical	Parameter
7/12/2005	polychlorinated biphenyls	Oral Cancer Potency Factor (CPFo)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	2.E+00	kg-day/mg

Date of Change	Chemical	Parameter
7/6/2005	methyl tert-butyl ether	Oral Reference Dose (RfDo)

	Changes Made	Comments
previous value:	Researched-No Data	
changed to:	8.6E-01	mg/kg-day

Date of Change	Chemical	Parameter
6/22/2005	trichloroethylene	Air, Method C, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	5.1E+00	µg/m3
changed to:	2.2E-01	µg/m3

Date of Change	Chemical	Parameter
6/22/2005	trichloroethylene	Air, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	5.1E-01	µg/m3
changed to:	2.2E-02	µg/m3

Date of Change	Chemical	Parameter
6/22/2005	trichloroethylene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	1.2E+04	mg/kg	
changed to:	3.3E+02	mg/kg	

Date of Change	Chemical	Parameter
6/22/2005	trichloroethylene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	9.1E+01	mg/kg	
changed to:	2.5E+00	mg/kg	

Date of Change	Chemical	Parameter
6/22/2005	trichloroethylene	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.E+01	µg/L	
changed to:	1.1E+00	µg/L	

Date of Change	Chemical	Parameter
6/22/2005	trichloroethylene	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	4.E+00	µg/L	
changed to:	1.1E-01	µg/L	

Date of Change	Chemical	Parameter
6/22/2005	trichloroethylene	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	5.6E+01	µg/L	
changed to:	1.5E+00	µg/L	

Date of Change	Chemical	Parameter
6/22/2005	trichloroethylene	Bioconcentration Factor (BCF)

	Changes Made		Comments
previous value:	1.1E+01	L/kg	
changed to:	1.1E+01	L/kg	

Date of Change	Chemical	Parameter
6/22/2005	tetrachloroethylene	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use

	Changes Made		Comments
previous value:	2.6E+03	mg/kg	
changed to:	2.4E+02	mg/kg	

Date of Change	Chemical	Parameter
6/22/2005	tetrachloroethylene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	2.E+01	mg/kg	
changed to:	1.9E+00	mg/kg	

Date of Change	Chemical	Parameter
6/22/2005	tetrachloroethylene	Ground Water, Method C, Carcinogen, Standard Formula Value

	Changes Made	Comments
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previous value:	8.6E+00	µg/L	
changed to:	8.1E-01	µg/L	

Date of Change	Chemical	Parameter
6/22/2005	tetrachloroethylene	Ground Water, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	8.6E-01 µg/L	
changed to:	8.1E-02 µg/L	

Date of Change	Chemical	Parameter
6/22/2005	tetrachloroethylene	Surface Water, Method C, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	2.1E+03 µg/L	
changed to:	2.1E+03 µg/L	

Date of Change	Chemical	Parameter
6/22/2005	tetrachloroethylene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.E+02 µg/L	
changed to:	9.7E+00 µg/L	

Date of Change	Chemical	Parameter
6/22/2005	tetrachloroethylene	Surface Water, Method B, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	4.2E+00 µg/L	
changed to:	3.9E-01 µg/L	

Date of Change	Chemical	Parameter
6/22/2005	tetrachloroethylene	Surface Water, Method B, Non-Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	8.5E+02 µg/L	
changed to:	8.4E+02 µg/L	

Date of Change	Chemical	Parameter
6/22/2005	tetrachloroethylene	Bioconcentration Factor (BCF)

	Changes Made	Comments
previous value:	3.1E+01 L/kg	
changed to:	3.1E+01 L/kg	

Date of Change	Chemical	Parameter
6/22/2005	trichloroethylene	Surface Water, Method C, Carcinogen, Standard Formula Value

	Changes Made	Comments
previous value:	1.4E+03 µg/L	
changed to:	3.7E+01 µg/L	

Date of Change	Chemical	Parameter
6/15/2005	trichloroethylene	Oral Cancer Potency Factor (CPFo)

	Changes Made	Comments
previous value:	1.1E-02 kg-day/mg	

changed to:	4.E-01	kg-day/mg	
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Date of Change	Chemical	Parameter
6/15/2005	trichloroethylene	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	1.7E-02	kg-day/mg	
changed to:	4.E-01	kg-day/mg	

Date of Change	Chemical	Parameter
5/18/2005	methyl naphthalene;2-	Vapor Pressure (VP)

	Changes Made		Comments
previous value:	6.8E-02	mmHg	
changed to:	5.5E-02	mmHg	

Date of Change	Chemical	Parameter
5/18/2005	naphthalene	Vapor Pressure (VP)

	Changes Made		Comments
previous value:	7.5E-02	mmHg	converted 0.01 kPA (as listed in HSDB) to mm Hg 1/3/2003
changed to:	8.5E-02	mmHg	

Date of Change	Chemical	Parameter
3/2/2005	tetrachloroethylene	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.1E-02	kg-day/mg	

Date of Change	Chemical	Parameter
3/2/2005	tetrachloroethylene	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
previous value:	5.1E-02	kg-day/mg	
changed to:	5.4E-01	kg-day/mg	

Date of Change	Chemical	Parameter
2/9/2005	nitrite	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	8.E+03	mg/kg	
changed to:	1.3E+05	mg/kg	

Date of Change	Chemical	Parameter
2/9/2005	trichloroethylene	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.E-02	mg/kg-day	

Date of Change	Chemical	Parameter
2/9/2005	trichloroethylene	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	3.E-04	mg/kg-day	



Date of Change	Chemical	Parameter
2/9/2005	xlenes	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.9E-02	mg/kg-day	

Date of Change	Chemical	Parameter
2/9/2005	xlenes	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	2.E+00	mg/kg-day	
changed to:	2.E-01	mg/kg-day	

Date of Change	Chemical	Parameter
2/9/2005	benzene	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	3.E-03	mg/kg-day	
changed to:	4.E-03	mg/kg-day	

Date of Change	Chemical	Parameter
12/21/2004	biphenyl;1,1-	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	5.E-02	mg/kg-day	

Date of Change	Chemical	Parameter
12/21/2004	ethylbenzene	Inhalation Reference Dose (RfDi)

	Changes Made		Comments
previous value:	2.9E+00	mg/kg-day	
changed to:	2.9E-01	mg/kg-day	

Date of Change	Chemical	Parameter
12/10/2004	nitrate	Oral Reference Dose (RfDo)

	Changes Made		Comments
previous value:	1.E-01	mg/kg-day	
changed to:	1.6E+00	mg/kg-day	

Date of Change	Chemical	Parameter
12/1/2004	trichlorobenzene;1,2,4-	Surface Water ARAR - Human Health – Fresh Water – Clean Water Act §304

	Changes Made		Comments
previous value:	2.6E+02	µg/L	
changed to:	3.5E+01	µg/L	

Date of Change	Chemical	Parameter
12/1/2004	thallium, soluble salts	Surface Water ARAR - Human Health – Fresh Water – Clean Water Act §304

	Changes Made		Comments
previous value:	1.7E+00	µg/L	
changed to:	2.4E-01	µg/L	

Date of Change	Chemical	Parameter
8/6/2004	acetone cyanohydrin	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use

	Changes Made		Comments
previous value:	6.4E+01	mg/kg	
changed to:	6.4E+01	mg/kg	

Date of Change	Chemical	Parameter
7/1/2004	carbon disulfide	Inhalation Correction Factor (INH)

	Changes Made		Comments
previous value:	2.E+00	unitless	
changed to:	2.E+00	unitless	

Date of Change	Chemical	Parameter
7/1/2004	propylene glycol monoethyl ether	Inhalation Correction Factor (INH)

	Changes Made		Comments
previous value:	2.E+00	unitless	Based on chemical similiarities with other propylene glycols.
changed to:	2.E+00	unitless	Based on chemical similiarities with other propylene glycols.

Date of Change	Chemical	Parameter
6/25/2004	thallic oxide	Inhalation Correction Factor (INH)

	Changes Made		Comments
previous value:	1.E+00	unitless	Thalliumsolublesalt.
changed to:	1.E+00	unitless	Thalliumsolublesalt.