

## 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 Refere	nce Dose (RfDo)
	Changes Mad		Comments
previous value:	1.E-02	mg/kg-day	
changed to:	6.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (September 2012)
Date of Change	Chemical		Parameter
9/26/2012	tetrachloroethylene	Inhalation R	eference Dose (RfDi)
·	Changes Mad	e	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 Mad	0	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		Ground Wat	
3/20/2012	tetrachloroethylene	Glouilu wa	ter, Method B, Carcinogen, Standard Formula Value
5/20/2012	-	I	
	Changes Made 2.1E+01	I	Comments
	Changes Mad	e	Comments Changes to CLARC cleanup levels based on update
changed to: Date of	Changes Mad	e	Comments Changes to CLARC cleanup levels based on update
changed to: Date of Change	Changes Made 2.1E+01	e µg/L	Comments Changes to CLARC cleanup levels based on update toxicity values (September 2012)
changed to: Date of Change	Changes Made 2.1E+01 Chemical tetrachloroethylene	e μg/L Ground Wat Value	Comments Changes to CLARC cleanup levels based on update toxicity values (September 2012) Parameter ter, Method B, Non-carcinogen, Standard Formula
changed to: Date of Change 9/26/2012 previous	Changes Made 2.1E+01 Chemical	e μg/L Ground Wat Value	Comments Changes to CLARC cleanup levels based on update toxicity values (September 2012) Parameter
changed to: Date of Change 9/26/2012 previous value:	Changes Made 2.1E+01 Chemical tetrachloroethylene Changes Made	e µg/L Ground Wat Value	Comments Changes to CLARC cleanup levels based on update toxicity values (September 2012) Parameter ter, Method B, Non-carcinogen, Standard Formula Comments
changed to: Date of Change 9/26/2012 previous value:	Changes Made 2.1E+01 Chemical tetrachloroethylene Changes Made 8.E+01	e μg/L Ground Wat Value e μg/L	Comments Changes to CLARC cleanup levels based on update toxicity values (September 2012) Parameter ter, Method B, Non-carcinogen, Standard Formula Comments Changes to CLARC cleanup levels based on update
changed to: Date of Change 9/26/2012 previous value: changed to: Date of Change	Changes Made 2.1E+01 Chemical tetrachloroethylene Changes Made 8.E+01	e μg/L Ground Wat Value e μg/L	Comments Changes to CLARC cleanup levels based on update toxicity values (September 2012) Parameter ter, Method B, Non-carcinogen, Standard Formula Comments Changes to CLARC cleanup levels based on update

Date of Change	Chemical		Parameter	
9/26/2012	tetrachloroethylene	Ground V Value	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Ma	ade	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 Ma	ade	Comments	
changed to:	1.E+02	µg/L	Changes to CLARC cleanup levels based on updated	

µg/L

Comments Changes to CLARC cleanup levels based on updated

toxicity values (September 2012)

changed to:

2.1E+02

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**Changes Made** 

Chemical Changes Made Changes Made Chemical Changes Made	Value µg/L Surface Wa µg/L µg/L µg/L µg/L Soil, Metho Contact (in mg/kg	toxicity values (September 2012)  Parameter  od B, Non-carcinogen, Standard Formula Value, Direct
Changes Made Chemical Changes Made	Value µg/L Surface Wa µg/L µg/L µg/L µg/L Soil, Metho Contact (in mg/kg	Comments         Changes to CLARC cleanup levels based on updated toxicity values (September 2012)         Parameter         ater, Method C, Carcinogen, Standard Formula Value         Comments         Changes to CLARC cleanup levels based on updated toxicity values (September 2012)         Parameter         ater, Method C, Non-Carcinogen, Standard Formula         Comments         Changes to CLARC cleanup levels based upon updated toxicity values (September 2012)         Parameter         ade B, Carcinogen, Standard Formula Value, Direct toxicity values (September 2012)         Parameter         Comments         Changes to CLARC cleanup levels based upon updated toxicity values (September 2012)         Parameter         Dot B, Carcinogen, Standard Formula Value, Direct toxicity values (September 2012)         Parameter         Dot B, Non-carcinogen, Standard Formula Value, Direct toxicity values (September 2012)
2 Chemical Changes Made	μg/L Surface Wa μg/L μg/L Surface Wa Value μg/L Soil, Metho Contact (in mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)  Parameter  ater, Method C, Carcinogen, Standard Formula Value  Comments Changes to CLARC cleanup levels based on updated toxicity values (September 2012)  Parameter  ater, Method C, Non-Carcinogen, Standard Formula  Comments Changes to CLARC cleanup levels based upon updated toxicity values (September 2012)  Parameter  d B, Carcinogen, Standard Formula Value, Direct  gestion only), unrestricted land use  Comments Changes to CLARC cleanup levels based on updated toxicity values (September 2012)  Parameter  d B, Carcinogen, Standard Formula Value, Direct toxicity values (September 2012)  Parameter  d B, Non-carcinogen, Standard Formula Value, Direct toxicity values (September 2012)
2 Chemical Changes Made	μg/L Surface Wa μg/L μg/L Surface Wa Value μg/L Soil, Metho Contact (in mg/kg	toxicity values (September 2012)  Parameter  ater, Method C, Carcinogen, Standard Formula Value  Comments Changes to CLARC cleanup levels based on updated toxicity values (September 2012)  Parameter  ater, Method C, Non-Carcinogen, Standard Formula  Comments Changes to CLARC cleanup levels based upon updated toxicity values (September 2012)  Parameter  od B, Carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use  Comments Changes to CLARC cleanup levels based on updated toxicity values (September 2012)  Parameter  od B, Carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use  Parameter  od B, Non-carcinogen, Standard Formula Value, Direct toxicity values (September 2012)
Iloroethylene Changes Made Chemical Changes Made	μg/L Surface Wa Value μg/L Soil, Metho Contact (in mg/kg	Parameter         ater, Method C, Carcinogen, Standard Formula Value         Comments         Changes to CLARC cleanup levels based on updated toxicity values (September 2012)         Parameter         ater, Method C, Non-Carcinogen, Standard Formula         Comments         Changes to CLARC cleanup levels based upon updated toxicity values (September 2012)         Parameter         od B, Carcinogen, Standard Formula Value, Direct updated toxicity values (September 2012)         Comments         Changes to CLARC cleanup levels based upon updated toxicity values (September 2012)         Parameter         od B, Carcinogen, Standard Formula Value, Direct updated toxicity values (September 2012)         Parameter         od B, Carcinogen, Standard Formula Value, Direct updated toxicity values (September 2012)         Parameter         Od B, Carcinogen, Standard Formula Value, Direct updated toxicity values (September 2012)         Parameter         Od B, Non-carcinogen, Standard Formula Value, Direct updated toxicity values (September 2012)
Iloroethylene Changes Made Chemical Changes Made	μg/L Surface Wa Value μg/L Soil, Metho Contact (in mg/kg	ater, Method C, Carcinogen, Standard Formula Value           Comments           Changes to CLARC cleanup levels based on updated toxicity values (September 2012)           Parameter           ater, Method C, Non-Carcinogen, Standard Formula           Comments           Changes to CLARC cleanup levels based upon updated toxicity values (September 2012)           Parameter           Od B, Carcinogen, Standard Formula Value, Direct upgestion only), unrestricted land use           Comments           Changes to CLARC cleanup levels based on updated toxicity values (September 2012)           Parameter           Od B, Carcinogen, Standard Formula Value, Direct upgestion only), unrestricted land use           Changes to CLARC cleanup levels based on updated toxicity values (September 2012)           Parameter           Od B, Non-carcinogen, Standard Formula Value, Direct toxicity values (September 2012)
Changes Made Chemical Chemical Changes Made Changes Made Changes Made Chemical Chemical Changes Made Changes Made Changes Made Changes Made	μg/L Surface Wa Value μg/L Soil, Metho Contact (in mg/kg	Comments         Changes to CLARC cleanup levels based on updated toxicity values (September 2012)         Parameter         ater, Method C, Non-Carcinogen, Standard Formula         Comments         Changes to CLARC cleanup levels based upon updated toxicity values (September 2012)         Parameter         Od B, Carcinogen, Standard Formula Value, Direct agestion only), unrestricted land use         Comments         Changes to CLARC cleanup levels based on updated toxicity values (September 2012)         Parameter         Dot B, Carcinogen, Standard Formula Value, Direct         Parameter         Parameter         Dot B, Non-carcinogen, Standard Formula Value, Direct         Parameter         Dot B, Non-carcinogen, Standard Formula Value, Direct
Chemical Changes Made Chemical Changes Made	μg/L Surface Wa Value μg/L Soil, Metho Contact (in mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)  Parameter  ater, Method C, Non-Carcinogen, Standard Formula  Comments Changes to CLARC cleanup levels based upon updated toxicity values (September 2012)  Parameter  od B, Carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use  Comments Changes to CLARC cleanup levels based on updated toxicity values (September 2012)  Parameter  od B, Carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use  Parameter  od B, Non-carcinogen, Standard Formula Value, Direct toxicity values (September 2012)
Chemical Changes Made Chemical Changes Made	μg/L Surface Wa Value μg/L Soil, Metho Contact (in mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)  Parameter  ater, Method C, Non-Carcinogen, Standard Formula  Comments Changes to CLARC cleanup levels based upon updated toxicity values (September 2012)  Parameter  od B, Carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use  Comments Changes to CLARC cleanup levels based on updated toxicity values (September 2012)  Parameter  od B, Carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use  Parameter  od B, Non-carcinogen, Standard Formula Value, Direct toxicity values (September 2012)
Chemical Changes Made Changes Made Chemical Chemical Changes Made Changes Made Changes Made Changes Made Changes Made	Soil, Metho Soil, Metho	toxicity values (September 2012)         Parameter         ater, Method C, Non-Carcinogen, Standard Formula         Comments         Changes to CLARC cleanup levels based upon updated toxicity values (September 2012)         Parameter         Dd B, Carcinogen, Standard Formula Value, Direct ugestion only), unrestricted land use         Comments         Changes to CLARC cleanup levels based on updated toxicity values (September 2012)         Parameter         Dd B, Carcinogen, Standard Formula Value, Direct updated toxicity values (September 2012)         Parameter         Dd B, Non-carcinogen, Standard Formula Value, Direct updated toxicity values (September 2012)
Chemical Changes Made Chemical Changes Made Changes Made Changes Made Changes Made Changes Made Changes Made	Value µg/L Soil, Metho Contact (in mg/kg Soil, Metho	ater, Method C, Non-Carcinogen, Standard Formula           Comments           Changes to CLARC cleanup levels based upon updated toxicity values (September 2012)           Parameter           od B, Carcinogen, Standard Formula Value, Direct agestion only), unrestricted land use           Comments           Changes to CLARC cleanup levels based on updated toxicity values (September 2012)           Parameter           Od B, Non-carcinogen, Standard Formula Value, Direct           Data Mathematical September 2012)
Chemical Changes Made Chemical Changes Made Changes Made Changes Made Changes Made Changes Made Changes Made	Value µg/L Soil, Metho Contact (in mg/kg Soil, Metho	ater, Method C, Non-Carcinogen, Standard Formula           Comments           Changes to CLARC cleanup levels based upon updated toxicity values (September 2012)           Parameter           od B, Carcinogen, Standard Formula Value, Direct agestion only), unrestricted land use           Comments           Changes to CLARC cleanup levels based on updated toxicity values (September 2012)           Parameter           Od B, Non-carcinogen, Standard Formula Value, Direct           Data Mathematical September 2012)
Changes Made	Value µg/L Soil, Metho Contact (in mg/kg Soil, Metho	Comments         Changes to CLARC cleanup levels based upon updated toxicity values (September 2012)         Parameter         od B, Carcinogen, Standard Formula Value, Direct agestion only), unrestricted land use         Comments         Changes to CLARC cleanup levels based on updated toxicity values (September 2012)         Parameter         Od B, Non-carcinogen, Standard Formula Value, Direct agestion on updated toxicity values (September 2012)
Chemical Noroethylene Changes Made D2 Chemical	μg/L Soil, Metho Contact (in mg/kg	Changes to CLARC cleanup levels based upon updated toxicity values (September 2012)  Parameter  Dod B, Carcinogen, Standard Formula Value, Direct Digestion only), unrestricted land use  Comments Changes to CLARC cleanup levels based on updated toxicity values (September 2012)  Parameter Dod B, Non-carcinogen, Standard Formula Value, Direct Dod B, Non-carcinogen, Standard Formula Value, Direct
Chemical Noroethylene Changes Made D2 Chemical	Soil, Metho Contact (in mg/kg	updated toxicity values (September 2012)         Parameter         Od B, Carcinogen, Standard Formula Value, Direct         od B, Carcinogen, Standard Formula Value, Direct         gestion only), unrestricted land use         Comments         Changes to CLARC cleanup levels based on updated         toxicity values (September 2012)         Parameter         Dd B, Non-carcinogen, Standard Formula Value, Direct
Changes Made	Contact (in mg/kg Soil, Metho	Parameter         od B, Carcinogen, Standard Formula Value, Direct         ogestion only), unrestricted land use         Comments         Changes to CLARC cleanup levels based on updated         toxicity values (September 2012)         Parameter         od B, Non-carcinogen, Standard Formula Value, Direct
Changes Made	Contact (in mg/kg Soil, Metho	Dd B, Carcinogen, Standard Formula Value, Direct Igestion only), unrestricted land use Comments Changes to CLARC cleanup levels based on updated toxicity values (September 2012) Parameter Dd B, Non-carcinogen, Standard Formula Value, Direct
Changes Made	Contact (in mg/kg Soil, Metho	Gestion only), unrestricted land use     Comments     Changes to CLARC cleanup levels based on updated     toxicity values (September 2012)     Parameter     Dod B, Non-carcinogen, Standard Formula Value, Direct
Changes Made	Contact (in mg/kg Soil, Metho	Gestion only), unrestricted land use     Comments     Changes to CLARC cleanup levels based on updated     toxicity values (September 2012)     Parameter     Dod B, Non-carcinogen, Standard Formula Value, Direct
Chemical	mg/kg Soil, Metho	Changes to CLARC cleanup levels based on updated toxicity values (September 2012) Parameter od B, Non-carcinogen, Standard Formula Value, Direct
Chemical	mg/kg Soil, Metho	toxicity values (September 2012)  Parameter  od B, Non-carcinogen, Standard Formula Value, Direct
		Parameter od B, Non-carcinogen, Standard Formula Value, Direct
		od B, Non-carcinogen, Standard Formula Value, Direct
loroethylene		
lioroetriylene		
		gestion only), unrestricted land use
Changes Made		Comments
2	mg/kg	
)2	mg/kg	Updated CLARC toxicity values from IRIS or NCEA
		(September 2012)
Chemical		Parameter
onemical		i arameter
lloroethylene		od C, Carcinogen, Standard Formula Value, Direct gestion only), industrial land use
Changes Made		Comments
)4	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (September 2012)
	·	,,,
Chemical		Parameter
loroethylene		od C, Non-carcinogen, Standard Fomula Value, Direct
	Contact (in	gestion only), industrial land use
Changes Made		Comments
)4	mg/kg	Updated CLARC toxicity values from IRIS or NCEA (September 2012)
Chemical		Parameter
Date of Chemical Change		ence Dose (RfDo)
oethylene		
oethylene Changes Made		Comments
	Chemical Noroethylene Changes Made 04 04 04 Chemical roethylene	Chemical       nloroethylene     Soil, Methor       Changes Made       04     mg/kg       04     mg/kg       04     mg/kg

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Date of Change	Chemical		Parameter
9/26/2012	trichloroethylene	Inhalation R	leference Dose (RfDi)
	Changes Ma	de	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 Wa	ter, Method B, Carcinogen, Standard Formula Value
	Changes Ma	de	Comments
changed to:	5.4E-01	μg/L	Changes to CLARC cleanup levels based on update toxicity values (September 2012)
Date of Change	Chemical		Parameter
9/26/2012	trichloroethylene	Ground Wa	ter, Method C, Carcinogen, Standard Formula Value
	Changes Ma	de	Comments
changed to:	9.4E+00	µg/L	Changes to CLARC cleanup levels based on update toxicity values (September 2012)
Date of	Chemical		Parameter
Change 9/26/2012	trichloroethylene	Surface Wa	ter, Method B, Carcinogen, Standard Formula Value
0/20/2012	thomorocarylene		
	Changes Ma		Comments
changed to:	1.3E+01	µg/L	Changes to CLARC cleanup levels based on update toxicity values (September 2012)
Date of Change	Chemical		Parameter
9/26/2012	trichloroethylene	Surface Wa	ter, Method C, Carcinogen, Standard Formula Value
	Changes Ma	de	Comments
changed to:	3.2E+02	µg/L	Changes to CLARC cleanup levels based on update toxicity values (September 2012)
Data of	Chamical		Doromotor
Date of Change	Chemical		Parameter
Change	Chemical trichloroethylene		Parameter d B, Carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use
		Contact (ing	d B, Carcinogen, Standard Formula Value, Direct
Change 9/26/2012	trichloroethylene	Contact (ing	d B, Carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use <b>Comments</b>
Change 9/26/2012 changed to: Date of	trichloroethylene Changes Ma	Contact (ing	d B, Carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use Comments Changes to CLARC cleanup levels based on update
Change	trichloroethylene Changes Mar 1.2E+01	Contact (ing de mg/kg Soil, Method	d B, Carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use Comments Changes to CLARC cleanup levels based on update toxicity values (September 2012)
Change 9/26/2012 changed to: Date of Change	trichloroethylene Changes Mar 1.2E+01 Chemical	Contact (ing de mg/kg Soil, Method Contact (ing	d B, Carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use Comments Changes to CLARC cleanup levels based on update toxicity values (September 2012) Parameter d C, Carcinogen, Standard Formula Value, Direct

Date of Change	Chemical		Parameter
9/26/2012	trichloroethylene	Air, Metho	od B, Carcinogen, Standard Formula Value
	Changes Ma	ade	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
	Chemical trichloroethylene	Air, Metho	Parameter od C, Carcinogen, Standard Formula Value
Change			

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Date of Change	Chemical		Parameter
9/26/2012	tetrachloroethylene	Inhalation	Cancer Potency Factor (CPFi)
	Changes Made		Comments
changed to:	9.1E-04	kg-day/mg	
-		_ ,, 9	(September 2012)
Date of Change	Chemical		Parameter
9/26/2012	tetrachloroethylene	Air, Method	d B, Non-Carcinogen, Standard Formula Value
	Changes Made	<u> </u>	Comments
changed to:	1.8E+01	µg/m3	Changes to CLARC cleanup levels based on update
changed to.	1.6E+01	µу/ш5	toxicity values (September 2012)
Data of	Chamical		Doromotor
Date of Change	Chemical		Parameter
9/26/2012	tetrachloroethylene	Air, Method	d B, Carcinogen, Standard Formula Value
	Changes Made		Comments
changed to:	9.6E+00	µg/m3	Changes to CLARC cleanup levels based on update
	5.02.00	P3/113	toxicity values (September 2012)
Date of Change	Chemical		Parameter
9/26/2012	tetrachloroethylene	Air, Method	d C, Non-carcinogen, Standard Formula Value
	Changes Made		Comments
changed to:	4.E+01	µg/m3	Changes to CLARC cleanup levels based on update
			toxicity values (September 2012)
Date of	Chemical		Parameter
Date of Change	Chemical		Faiameter
9/26/2012	tetrachloroethylene	Air, Method	d C, Carcinogen, Standard Formula Value
	Changes Made		Comments
changed to:	9.6E+01	µg/m3	Changes to CLARC cleanup levels based on update
		F-9,9	toxicity values (September 2012)
Date of Change	Chemical		Parameter
9/26/2012	trichloroethylene	Air, Metho	d B, Non-Carcinogen, Standard Formula Value
		,	
changed to:	Changes Made 9.E-01	ug/m2	Comments Changes to CLARC cleanup levels based on update
changed to.	9.E-01	µg/m3	toxicity values (September 2012)
Date of	Chamical		Doromotor
Date of Change	Chemical		Parameter
9/26/2012	trichloroethylene	Air, Method	d C, Non-carcinogen, Standard Formula Value
	Changes Made		Comments
changed to:	2.E+00	µg/m3	Changes to CLARC cleanup levels based on update
			toxicity values (September 2012)
Data of			Deveration
Date of Change	Chemical		Parameter
9/26/2012	trichloroethylene	Ground Wa	ater, Method B, Non-carcinogen, Standard Formula
	,	Value	, , , , , , , , , , , , , , , , , , ,
	Changes Made		Comments
changed to:	4.E+00	µg/L	Changes to CLARC cleanup levels based on update
<b>-</b>		,	toxicity values (September 2012)
Date of Change	Chemical		Parameter
9/26/2012	trichloroethylene	Ground Wa	ater, Method C, Non-carcinogen, Standard Formula
		Value	
	Changes Made		Comments
changed to:	Changes Made 8.8E+00	µg/L	Comments Changes to CLARC cleanup levels based on update toxicity values (September 2012)

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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	Chemical		Parameter
Change 9/26/2012	trichloroethylene	Surface V	Vater, Method C, Non-Carcinogen, Standard Formula
9/20/2012		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	Chemical		Parameter
Change 9/26/2012	trichloroethylene		nod B, Non-carcinogen, Standard Formula Value, Direct
		Contact (	ingestion only), unrestricted land use
changed to:	Changes Made 4.E+01	mg/kg	Comments Changes to CLARC cleanup levels based on updated toxicity values (September 2012)
Date of Change	Chemical		Parameter
9/26/2012	trichloroethylene		nod C, Non-carcinogen, Standard Fomula Value, Direct 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	Chemical		Parameter
Change 5/25/2011	dinitrotoluene mixture;2,4-/2,6-		nod 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	Chemical	Parameter	
Change 5/25/2011	dinitrotoluene mixture;2,4-/2,6-		nod B, Carcinogen, Standard Formula Value, Direct 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	Chemical		Parameter

	Changes Made		Comments
changed to:	1.3E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
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 update toxicity values (December 2010)
Date of	Chemical		Parameter
Date of	Unchinear		
Change	Onennear		

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	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 update toxicity values (December 2010)
Note: Click here to evaluations.	o review CLARC Guidance for toxicity equiv	alency factors wh	en congener-specific analysis is conducted for site-specific
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 evaluations.	o review CLARC Guidance for toxicity equiv	alency factors wh	en congener-specific analysis is conducted for site-specific
Date of Change	Chemical		Parameter
5/11/2011	Hexachlorodibenzo-p-dioxin, Mixture		I C, Carcinogen, Standard Formula Value, Direct estion 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 evaluations.	o review CLARC Guidance for toxicity equiv	alency factors wh	en congener-specific analysis is conducted for site-specific
Date of	Chemical		Parameter
Change 5/11/2011	Hexachlorodibenzo-p-dioxin, Mixture		B, Carcinogen, Standard Formula Value, Direct estion 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 evaluations.	preview CLARC Guidance for toxicity equiv	alency factors wh	en congener-specific analysis is conducted for site-specific
Date of Change	Chemical		Parameter
5/11/2011	Hexachlorodibenzo-p-dioxin, Mixture	Inhalation C	ancer Potency Factor (CPFi)
	Changes Made		Comments
changed to:	4.6E+03	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of	Chemical		Parameter
Date of Change	Chemical		Parameter
Change	Chemical Hexachlorodibenzo-p-dioxin, Mixture	Inhalation R	Parameter eference Dose (RfDi)
	Hexachlorodibenzo-p-dioxin,	Inhalation R	

	onunges 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 (RfDo)	
	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	Chemical	Parameter	

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	Mixture	Oral Cancer	Potency Factor (CPFo)
	Changes Made		Comments
changed to:	6.2E+03	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of	Chemical		Parameter
Change		lah alatian O	
5/11/2011	tcdd;2,3,7,8-		ancer Potency Factor (CPFi)
changed to:	Changes Made No Data. What are my options?		<b>Comments</b> Changes to tcdd;2,3,7,8- based on CLARC toxicity information
Date of	Chemical		Parameter
<b>Change</b> 5/11/2011	tcdd;2,3,7,8-	Inhalation R	eference Dose (RfDi)
	Changes Made	1	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	Chemical		Parameter
Change	Gheinicai		r ai ainetei
5/11/2011	tcdd;2,3,7,8-	Oral Referen	nce Dose (RfDo)
	Changes Made		Comments
previous	Researched-No Data		
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Page 7 of 203 CLARC on Ecology's website: https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC

changed to:       No Data. What are my options?       Changes to cPAHs based on CLARC toxicity information         Date of Change       Changes Made       Parameter         S/11/2011       dibenzo[a,h]anthracene       Inhalation Cancer Potency Factor (CPFI)         Previous       Researched-No Data       Changes to cPAHs based on CLARC toxicity information         Date of Change       Changes Made       Comments         Previous       Researched-No Data       Changes to cPAHs based on CLARC toxicity information         Date of Change       Changes Made       Comments         S/11/2011       chrysene       Inhalation Cancer Potency Factor (CPFI)         Changes to:       No Data. What are my options?       Changes to cPAHs based on CLARC toxicity information         Previous       Researched-No Data       Changes to cPAHs based on CLARC toxicity information         Date of Changes Made       Comments       Changes to cPAHs based on CLARC toxicity information         Date of Chemical       Parameter       Changes to cPAHs based on CLARC toxicity information         Date of Changes Made       Comments       Changes to cPAHs based on CLARC toxicity information         Date of Changes Made       Comments       Changes to cPAHs based on CLARC toxicity information         Date of Changes Made       Comments       Changes to cPAHs based on CLARC toxicity information<	value:		
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Changes Made       Comments         previous       Researched-No Data         value:       No Data. What are my options?       Changes to cPAHs based on CLARC toxicity information         Date of       Chemical       Parameter         5/11/2011       benzo[a]anthracene       Inhalation Cancer Potency Factor (CPFi)         Changes Made       Comments         previous       Researched-No Data		Chemical	Parameter
previous value:       Researched-No Data       Changes to cPAHs based on CLARC toxicity information         Date of Chemical       Parameter         Date of Change       Chemical       Parameter         5/11/2011       benzo[a]anthracene       Inhalation Cancer Potency Factor (CPFi)         Changes Made       Comments         previous       Researched-No Data	5/11/2011	benzo[b]fluoranthene	Inhalation Cancer Potency Factor (CPFi)
value:       Image:		Changes Made	Comments
Date of Change     Chemical     Parameter       5/11/2011     benzo[a]anthracene     Inhalation Cancer Potency Factor (CPFi)       Changes Made     Comments       previous     Researched-No Data     Interview	•	Researched-No Data	
Change         Inhalation Cancer Potency Factor (CPFi)           5/11/2011         benzo[a]anthracene         Inhalation Cancer Potency Factor (CPFi)           Changes Made         Comments           previous         Researched-No Data         Inhalation Cancer Potency Factor (CPFi)	changed to:	No Data. What are my options?	
Change         Inhalation Cancer Potency Factor (CPFi)           5/11/2011         benzo[a]anthracene         Inhalation Cancer Potency Factor (CPFi)           Changes Made         Comments           previous         Researched-No Data         Image: Changes Made			
Changes Made     Comments       previous     Researched-No Data		Chemical	Parameter
previous Researched-No Data	5/11/2011	benzo[a]anthracene	Inhalation Cancer Potency Factor (CPFi)
previous Researched-No Data		Changes Made	Comments
valuo.	previous value:	-	
		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 (CPFi)

	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 (RfDi)
5/11/2011		
5/11/2011 previous value:	indeno[1,2,3-cd]pyrene Changes Made Researched-No Data	Inhalation Reference Dose (RfDi) Comments

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Date of Change	Chemical		Parameter
5/11/2011	dibenzo[a,h]anthracene	Inhalation R	eference Dose (RfDi)
	Changes Made		Comments
previous	Researched-No Data		
value:			

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)	

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	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	e Comments	
changed to:	see additional information	Changes to Viny Chloride based on CLARC guidance document	
Date of Change	Chemical	Parameter	
Change	Chemical vinyl chloride	Parameter           Soil, Method B, Carcinogen, Standard Formula Value, Direct           Contact (ingestion only), unrestricted land use	
		Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	

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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 Viny Chloride based on CLARC guidance document	
Date of	Chemical	Parameter	
Change 5/11/2011	vinyl chloride	Air, Method B, Carcinogen, Standard Formula Value	
changed to:	Changes Made see additional information	Comments Changes to Viny 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 Viny 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 Viny 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:	Changes Made see additional information	Comments Changes to Viny Chloride based on CLARC guidance document	
	see additional information	Changes to Viny Chloride based on CLARC guidance document	
changed to: Date of Change	_	Changes to Viny Chloride based on CLARC	
Date of	see additional information	Changes to Viny Chloride based on CLARC guidance document	
Date of Change	see additional information Chemical	Changes to Viny Chloride based on CLARC guidance document Parameter	
Date of Change 5/11/2011	see additional information Chemical vinyl chloride	Changes to Viny Chloride based on CLARC guidance document Parameter Ground Water, Method B, Carcinogen, Standard Formula Value	
Date of Change 5/11/2011 changed to:	see additional information         Chemical         vinyl chloride         Changes Made         see additional information	Changes to Viny Chloride based on CLARC guidance document Parameter Ground Water, Method B, Carcinogen, Standard Formula Value Comments Changes to Viny Chloride based on CLARC guidance document	
Date of Change 5/11/2011 changed to: Date of	see additional information Chemical vinyl chloride Changes Made	Changes to Viny Chloride based on CLARC guidance document Parameter Ground Water, Method B, Carcinogen, Standard Formula Value Comments Changes to Viny Chloride based on CLARC	
Date of Change	see additional information         Chemical         vinyl chloride         Changes Made         see additional information	Changes to Viny Chloride based on CLARC guidance document Parameter Ground Water, Method B, Carcinogen, Standard Formula Value Comments Changes to Viny Chloride based on CLARC guidance document	

Date of Change	Chemical		Parameter	
5/11/2011	vinyl chloride	Oral Can	Oral Cancer Potency Factor (CPFo)	
	Changes Mad	e	Comments	
changed to:	see additional information		Changes to Viny 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 Valu		
	Changes Mad	e	Comments	
changed to:	2.2E-07	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	
Note: Click here to evaluations.	o review CLARC Guidance for toxicity e	quivalency factor	s when congener-specific analysis is conducted for site-specific	

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Date of Change	Chemical		Parameter
5/11/2011	tcdd;2,3,7,8-	Surface Wa	ter, Method B, Carcinogen, Standard Formula Value
	Changes Mad		Comments
changed to:	8.6E-09	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010) nen congener-specific analysis is conducted for site-specific
evaluations.	to review CLARC Guidance for toxicity e		
Date of Change	Chemical		Parameter
5/11/2011	tcdd;2,3,7,8-		d C, Carcinogen, Standard Formula Value, Direct estion only), industrial land use
		•	
abanged to:	Changes Mad		Comments
changed to:	1.5E-03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010) act (ingestion only) soil cleanup levels for 2,3,7,8 - tetrachlorodibenzo-
p-dioxin (tcdd;2,	3,7,8-) based on Gastrointestinal absorpt	tion fraction (AB1) of (	0.6, unitless.
Date of Change	Chemical		Parameter
5/11/2011	tcdd;2,3,7,8-		B, Carcinogen, Standard Formula Value, Direct estion only), unrestricted land use
	Changes Mad	le	Comments
changed to:	1.1E-05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
	ods B & C, Carcinogen, Standard Formula 3,7,8-) based on Gastrointestinal absorpt		act (ingestion only) soil cleanup levels for 2,3,7,8 - tetrachlorodibenzo-
Date of	Chemical		Parameter
Change	onennear		rarameter
5/11/2011	tcdd;2,3,7,8-	Ground Wat	ter, Method C, Carcinogen, Standard Formula Value
	Changes Mad	le	Comments
changed to:	5.8E-06	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here evaluations.	to review CLARC Guidance for toxicity e	equivalency factors wh	en congener-specific analysis is conducted for site-specific
Date of	Chemical		Parameter
Change			
5/11/2011	tcdd;2,3,7,8-	Ground Wat	ter, Method B, Carcinogen, Standard Formula Value
	Changes Mad	<u>ام</u>	Comments
changed to:	5.8E-07	μg/L	Changes to CLARC cleanup levels based on updated
Note: Click here evaluations.	to review CLARC Guidance for toxicity e	equivalency factors wh	toxicity values (December 2010) en congener-specific analysis is conducted for site-specific
Date of Change	Chemical		Parameter
5/11/2011	tcdd;2,3,7,8-	Oral Cancer	Potency Factor (CPFo)
		·	·
changed to:	Changes Mad 1.5E+05	le kg-day/mg	Comments Updated CLARC toxicity values from IRIS or NCEA
			(December 2010)
	Chemical		Parameter
Date of			ו מומוווכוכו
Date of Change	Onemical		
	indeno[1,2,3-cd]pyrene	Surface Wa	ter, Method C, Carcinogen, Standard Formula Value

changed to:	7.4E+00	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Note: Click here to evaluations.	preview CLARC Guidance for toxicity ec	quivalency factor	s when congener-specific analysis is conducted for site-specific	
Date of Change	Chemical	Parameter		
5/11/2011	indeno[1,2,3-cd]pyrene	Surface	Surface Water, Method B, Carcinogen, Standard Formula Value	
	Changes Made	9	Comments	
changed to:	3.E-01	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Note: Click here to evaluations.	o review CLARC Guidance for toxicity ec	quivalency factor	s when congener-specific analysis is conducted for site-specific	
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		

Comments

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**Changes Made** 

obonced to:	Changes Mac		Comments
changed to:	1.8E+02	mg/kg	Changes to CLARC cleanup levels based on updated
Note: Click here to	review CLARC Guidance for toxicity e	quivalency factors w	toxicity values (December 2010) hen congener-specific analysis is conducted for site-specific
evaluations.			
Date of	Chemical		Parameter
Change			
5/11/2011	indeno[1,2,3-cd]pyrene	Soil, Metho	d B, Carcinogen, Standard Formula Value, Direct
			gestion only), unrestricted land use
	Changes Mac		Comments
changed to:	1.4E+00		Changes to CLARC cleanup levels based on updated
changeu to.	1.40	mg/kg	toxicity values (December 2010)
Note: Click here to evaluations.	review CLARC Guidance for toxicity e	quivalency factors w	hen congener-specific analysis is conducted for site-specific
evaluations.			
Date of	Chemical		Parameter
Change			
5/11/2011	indeno[1,2,3-cd]pyrene	Ground Wa	ter, Method C, Carcinogen, Standard Formula Value
	Changes Mac	le	Comments
changed to:	1.2E+00	μg/L	Changes to CLARC cleanup levels based on updated
-			toxicity values (December 2010)
Note: Click here to evaluations.	preview CLARC Guidance for toxicity e	quivalency factors w	hen congener-specific analysis is conducted for site-specific
Date of	Chemical		Parameter
Change			
5/11/2011	indeno[1,2,3-cd]pyrene	Ground Wa	ter, Method B, Carcinogen, Standard Formula Value
	Changes Mac		Comments
changed to:	Changes Mac 1.2E-01	μg/L	Changes to CLARC cleanup levels based on updated
changed to.	1.22 01	pg/L	toxicity values (December 2010)
	review CLARC Guidance for toxicity e	quivalency factors w	hen congener-specific analysis is conducted for site-specific
evaluations.			
Date of			
	Chemical		Parameter
	Chemical indeno[1,2,3-cd]pyrene	Oral Cance	Parameter r Potency Factor (CPFo)
		Oral Cance	
5/11/2011	indeno[1,2,3-cd]pyrene Changes Mac	le	r Potency Factor (CPFo) Comments
5/11/2011	indeno[1,2,3-cd]pyrene		r Potency Factor (CPFo) Comments Updated CLARC toxicity values from IRIS or NCEA
5/11/2011	indeno[1,2,3-cd]pyrene Changes Mac	le	r Potency Factor (CPFo) Comments
5/11/2011 changed to:	indeno[1,2,3-cd]pyrene Changes Mac 7.3E-01	le	r Potency Factor (CPFo) Comments Updated CLARC toxicity values from IRIS or NCEA (December 2010)
5/11/2011 changed to: Date of	indeno[1,2,3-cd]pyrene Changes Mac	le	r Potency Factor (CPFo) Comments Updated CLARC toxicity values from IRIS or NCEA
5/11/2011 changed to: Date of Change	indeno[1,2,3-cd]pyrene Changes Mac 7.3E-01 Chemical	le kg-day/mg	r Potency Factor (CPFo) Comments Updated CLARC toxicity values from IRIS or NCEA (December 2010) Parameter
5/11/2011 changed to: Date of Change	indeno[1,2,3-cd]pyrene Changes Mac 7.3E-01	le kg-day/mg	r Potency Factor (CPFo) Comments Updated CLARC toxicity values from IRIS or NCEA (December 2010)
5/11/2011 changed to: Date of Change	indeno[1,2,3-cd]pyrene Changes Mac 7.3E-01 Chemical dibenzo[a,h]anthracene	le kg-day/mg	r Potency Factor (CPFo) Comments Updated CLARC toxicity values from IRIS or NCEA (December 2010) Parameter
5/11/2011 changed to: Date of Change 5/11/2011	indeno[1,2,3-cd]pyrene Changes Mac 7.3E-01 dibenzo[a,h]anthracene Changes Mac	le kg-day/mg Surface Wa	r Potency Factor (CPFo)  Comments Updated CLARC toxicity values from IRIS or NCEA (December 2010)  Parameter  ter, Method C, Carcinogen, Standard Formula Value Comments
5/11/2011 changed to: Date of Change 5/11/2011 changed to:	indeno[1,2,3-cd]pyrene Changes Mac 7.3E-01 dibenzo[a,h]anthracene Changes Mac 7.4E-01	le kg-day/mg Surface Wa	r Potency Factor (CPFo)  Comments Updated CLARC toxicity values from IRIS or NCEA (December 2010)  Parameter  ter, Method C, Carcinogen, Standard Formula Value  Comments Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
5/11/2011 changed to: Date of Change 5/11/2011 changed to: Note: Click here to	indeno[1,2,3-cd]pyrene Changes Mac 7.3E-01 dibenzo[a,h]anthracene Changes Mac 7.4E-01	le kg-day/mg Surface Wa	r Potency Factor (CPFo)  Comments Updated CLARC toxicity values from IRIS or NCEA (December 2010)  Parameter  ter, Method C, Carcinogen, Standard Formula Value  Comments Changes to CLARC cleanup levels based on updated
5/11/2011 changed to: Date of Change 5/11/2011 changed to: Note: Click here to evaluations.	indeno[1,2,3-cd]pyrene Changes Mac 7.3E-01 dibenzo[a,h]anthracene Changes Mac 7.4E-01 review CLARC Guidance for toxicity e	le kg-day/mg Surface Wa	r Potency Factor (CPFo)  Comments Updated CLARC toxicity values from IRIS or NCEA (December 2010)  Parameter  ter, Method C, Carcinogen, Standard Formula Value  Comments Changes to CLARC cleanup levels based on updated toxicity values (December 2010) hen congener-specific analysis is conducted for site-specific
evaluations.	indeno[1,2,3-cd]pyrene Changes Mac 7.3E-01 dibenzo[a,h]anthracene Changes Mac 7.4E-01	le kg-day/mg Surface Wa	r Potency Factor (CPFo)  Comments Updated CLARC toxicity values from IRIS or NCEA (December 2010)  Parameter  ter, Method C, Carcinogen, Standard Formula Value  Comments Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
5/11/2011 changed to: Date of Change 5/11/2011 changed to: Note: Click here to evaluations. Date of Change	indeno[1,2,3-cd]pyrene Changes Mac 7.3E-01 dibenzo[a,h]anthracene Changes Mac 7.4E-01 review CLARC Guidance for toxicity e Chemical	le kg-day/mg Surface Wa	r Potency Factor (CPFo)  Comments Updated CLARC toxicity values from IRIS or NCEA (December 2010)  Parameter  ter, Method C, Carcinogen, Standard Formula Value  Comments Changes to CLARC cleanup levels based on updated toxicity values (December 2010) hen congener-specific analysis is conducted for site-specific  Parameter
5/11/2011 changed to: Date of Change 5/11/2011 changed to: Note: Click here to evaluations.	indeno[1,2,3-cd]pyrene Changes Mac 7.3E-01 dibenzo[a,h]anthracene Changes Mac 7.4E-01 review CLARC Guidance for toxicity e	le kg-day/mg Surface Wa	r Potency Factor (CPFo)  Comments Updated CLARC toxicity values from IRIS or NCEA (December 2010)  Parameter  ter, Method C, Carcinogen, Standard Formula Value  Comments Changes to CLARC cleanup levels based on updated toxicity values (December 2010) hen congener-specific analysis is conducted for site-specific
5/11/2011 changed to: Date of Change 5/11/2011 changed to: Note: Click here to evaluations. Date of Change	indeno[1,2,3-cd]pyrene Changes Mac 7.3E-01 Chemical dibenzo[a,h]anthracene Changes Mac 7.4E-01 oreview CLARC Guidance for toxicity e Chemical dibenzo[a,h]anthracene	le kg-day/mg Surface Wa le µg/L quivalency factors w	r Potency Factor (CPFo)  Comments Updated CLARC toxicity values from IRIS or NCEA (December 2010)  Parameter  ter, Method C, Carcinogen, Standard Formula Value  Comments Changes to CLARC cleanup levels based on updated toxicity values (December 2010) hen congener-specific analysis is conducted for site-specific  Parameter ter, Method B, Carcinogen, Standard Formula Value
5/11/2011 changed to: Date of Change 5/11/2011 changed to: Note: Click here to evaluations. Date of Change	indeno[1,2,3-cd]pyrene Changes Mac 7.3E-01  Chemical dibenzo[a,h]anthracene Changes Mac 7.4E-01 review CLARC Guidance for toxicity e Chemical dibenzo[a,h]anthracene Changes Mac	le kg-day/mg Surface Wa le µg/L quivalency factors w	r Potency Factor (CPFo)  Comments Updated CLARC toxicity values from IRIS or NCEA (December 2010)  Parameter  ter, Method C, Carcinogen, Standard Formula Value  Comments Changes to CLARC cleanup levels based on updated toxicity values (December 2010) hen congener-specific analysis is conducted for site-specific  Parameter

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

µg/L

Changes to CLARC cleanup levels based on updated

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 Mad	de	Comments	
changed to:	1.8E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	
Note: Click here to evaluations.	o review CLARC Guidance for toxicity e	equivalency factors	when congener-specific analysis is conducted for site-specific	
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	

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3.E-02

changed to:

changed to:	Changes Made 1.4E-01	mg/kg	Comments Changes to CLARC cleanup levels based on updated
		, vy/vy	toxicity values (December 2010)
Note: Click here to evaluations.	preview CLARC Guidance for toxicity equ	vivalency factors wh	nen congener-specific analysis is conducted for site-specific
Date of Change	Chemical		Parameter
5/11/2011	dibenzo[a,h]anthracene	Ground Wa	ter, 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 evaluations.	review CLARC Guidance for toxicity equ	uivalency factors wh	nen congener-specific analysis is conducted for site-specific
Date of Change	Chemical		Parameter
5/11/2011	dibenzo[a,h]anthracene	Ground Wa	ter, 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 evaluations.	preview CLARC Guidance for toxicity equ	uivalency factors wh	hen congener-specific analysis is conducted for site-specific
	Chamical		Doromotor
Date of Change	Chemical		Parameter
5/11/2011	dibenzo[a,h]anthracene	Oral Cancer	r Potency Factor (CPFo)
			-
changed to:	Changes Made 7.3E+00	kg-day/mg	Comments Updated CLARC toxicity values from IRIS or NCEA
onunged to.		kg ddy/mg	(December 2010)
Date of Change	Chemical		Parameter
5/11/2011	chrysene	Surface Wa	ter, Method C, Carcinogen, Standard Formula Value
changed to:	Changes Made 7.4E+02	µg/L	Comments Changes to CLARC cleanup levels based on updated
-	-		toxicity values (December 2010) hen congener-specific analysis is conducted for site-specific
evaluations.		avaiency lactors wi	Ten congener-specific analysis is conducted for site-specific
Date of Change	Chemical		Parameter
5/11/2011	chrysene	Surface Wa	ter, Method B, Carcinogen, Standard Formula Value
changed to:	Changes Made 3.E+01	µg/L	Comments Changes to CLARC cleanup levels based on updated
Note: Click here to evaluations.	o review CLARC Guidance for toxicity equ	uivalency factors wh	toxicity values (December 2010) hen congener-specific analysis is conducted for site-specific
			Den de la companya de
Date of Change	Chemical		Parameter
5/11/2011	chrysene		d C, Carcinogen, Standard Formula Value, Direct gestion only), industrial land use
	Changes Made		Comments
	-		
changed to:	1.8E+04	mg/kg	Changes to CLARC cleanup levels based on updated

Date of Change	Chemical		Parameter	
5/11/2011	chrysene		nod B, Carcinogen, Standard Formula Value, Direct ngestion only), unrestricted land use	
	Changes Ma	ade	Comments	
changed to:	1.4E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	
	preview CLARC Guidance for toxicity	y equivalency factors	when congener-specific analysis is conducted for site-specific	
evaluations.	preview CLARC Guidance for toxicity	y equivalency factors		
evaluations.			when congener-specific analysis is conducted for site-specific	
evaluations. Date of Change	Chemical	Ground W	when congener-specific analysis is conducted for site-specific Parameter	

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evaluations.

Date of	Chemical		Parameter
Change 5/11/2011	chrysene	Ground Wa	ter, Method B, Carcinogen, Standard Formula Value
5/11/2011	Chrysene		tier, wethou b, Carcinogen, Standard i officia value
changed to:	Changes Mac 1.2E+01		Comments Changes to CLARC cleanup levels based on updated
-		µg/L	toxicity values (December 2010) hen congener-specific analysis is conducted for site-specific
evaluations.	Teview CLARC Guidance for toxicity		Ten congener-specific analysis is conducted for site-specific
Date of Change	Chemical		Parameter
5/11/2011	chrysene	Oral Cance	r Potency Factor (CPFo)
	Changes Ma	de	Comments
changed to:	7.3E-03	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
		1	
Date of Change	Chemical		Parameter
5/11/2011	benzo[k]fluoranthene	Surface Wa	ater, Method C, Carcinogen, Standard Formula Value
	Changes Ma	de	Comments
changed to:	7.4E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to evaluations.	review CLARC Guidance for toxicity	equivalency factors w	hen congener-specific analysis is conducted for site-specific
Date of	Chemical		Parameter
Change 5/11/2011	benzo[k]fluoranthene	Surface W/c	ater, Method B, Carcinogen, Standard Formula Value
0/11/2011	benzo[k]ndoranthene		ater, Method B, Carcinogen, Standard Formula Value
changed to:	Changes Mac 3.E+00	de μg/L	Comments Changes to CLARC cleanup levels based on updated
-			toxicity values (December 2010) hen congener-specific analysis is conducted for site-specific
evaluations.			nen congener-specific analysis is conducted for site-specific
Date of Change	Chemical		Parameter
5/11/2011	benzo[k]fluoranthene		d C, Carcinogen, Standard Formula Value, Direct gestion only), industrial land use
	Changes Ma	de	Comments
changed to:	1.8E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to evaluations.	review CLARC Guidance for toxicity	equivalency factors w	hen congener-specific analysis is conducted for site-specific
Date of Change	Chemical		Parameter
5/11/2011	benzo[k]fluoranthene		d B, Carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use
	Changes Ma	le	Comments
changed to:	1.4E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
	review CLARC Guidance for toxicity	equivalency factors w	hen congener-specific analysis is conducted for site-specific
evaluations.			

	Changes Made		Comments
changed to:	nged to: 1.2E+01		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to evaluations.	o review CLARC Guidance for toxicity ec	uivalency factor	s when congener-specific analysis is conducted for site-specific
Date of Change	Chemical		Parameter
5/11/2011	1 benzo[k]fluoranthene		Vater, Method B, Carcinogen, Standard Formula Value
	Changes Made	9	Comments
changed to:	1.2E+00	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Click here to evaluations.	p review CLARC Guidance for toxicity ec	uivalency factor	s when congener-specific analysis is conducted for site-specific
Date of Change	Chemical		Parameter
5/11/2011	benzo[k]fluoranthene	Oral Can	cer Potency Factor (CPFo)
	Changes Mad	9	Comments

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changed to:	7.3E-02	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of Change	Chemical		Parameter
5/11/2011	benzo[b]fluoranthene	Surface Wa	ter, 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 evaluations.	review CLARC Guidance for toxicity equ	uivalency factors wh	nen congener-specific analysis is conducted for site-specific
Date of	Chemical		Parameter
Change			
5/11/2011	benzo[b]fluoranthene	Surface Wa	ter, 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 evaluations.	review CLARC Guidance for toxicity equ	uivalency factors wh	nen congener-specific analysis is conducted for site-specific
Date of	Chemical		Parameter
Change	Onemical		rataneter
5/11/2011	benzo[b]fluoranthene		d C, Carcinogen, Standard Formula Value, Direct gestion 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 evaluations.	review CLARC Guidance for toxicity equ	uivalency factors wh	nen congener-specific analysis is conducted for site-specific
Date of Change	Chemical		Parameter
5/11/2011	benzo[b]fluoranthene		d B, Carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use
	Changes Made		Commente
changed to:	Changes Made 1.4E+00	mg/kg	Comments Changes to CLARC cleanup levels based on updated
-			toxicity values (December 2010)
Note: Click here to evaluations.	review CLARC Guidance for toxicity equ	uivalency factors wh	nen congener-specific analysis is conducted for site-specific
Date of	Chemical		Parameter
Change	Chemical		
5/11/2011	benzo[b]fluoranthene	Ground Wa	ter, Method C, Carcinogen, Standard Formula Value
	Channes Made		Commente
changed to:	Changes Made	μg/L	Comments Changes to CLARC cleanup levels based on updated
	ereview CLARC Guidance for toxicity equ	uivalency factors wh	toxicity values (December 2010) nen congener-specific analysis is conducted for site-specific
evaluations.			
Date of Change	Chemical		Parameter
5/11/2011	benzo[b]fluoranthene	Ground Wa	ter, Method B, Carcinogen, Standard Formula Value
	Changes Made		Commonto
changed to:	Changes Made 1.2E-01	µg/L	Comments Changes to CLARC cleanup levels based on updated
Note: Click here to evaluations.	preview CLARC Guidance for toxicity equ	uivalency factors wh	toxicity values (December 2010) nen congener-specific analysis is conducted for site-specific
Date of Change	Chemical		Parameter

5/11/2011	benzo[b]fluoranthene	Oral Cancer	r 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 Wa	ter, 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 evaluations.	o review CLARC Guidance for toxicity equ	ivalency factors wh	nen congener-specific analysis is conducted for site-specific	
Date of Change	Chemical	Parameter		
5/11/2011	benzo[a]anthracene	Surface Wa	Surface Water, Method B, Carcinogen, Standard Formula Value	

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	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 evaluations.	p review CLARC Guidance for toxicity eq	uivalency factors wh	nen congener-specific analysis is conducted for site-specific
Date of Change	Chemical		Parameter
5/11/2011	benzo[a]anthracene		d C, Carcinogen, Standard Formula Value, Direct jestion 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 evaluations.	o review CLARC Guidance for toxicity eq	uivalency factors wh	nen congener-specific analysis is conducted for site-specific
Dete of	Chamical		Devementer
Date of Change	Chemical		Parameter
5/11/2011	benzo[a]anthracene		d B, Carcinogen, Standard Formula Value, Direct jestion only), unrestricted land use
changed to:	Changes Made 1.4E+00	mg/kg	Comments Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
	preview CLARC Guidance for toxicity eq	uivalency factors wh	textery values (December 2010) ten congener-specific analysis is conducted for site-specific
evaluations.			
Date of	Chemical		Parameter
Change	Chemical		rarameter
5/11/2011	benzo[a]anthracene	Ground Wat	ter, 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 evaluations.	o review CLARC Guidance for toxicity eq	uivalency factors wh	nen congener-specific analysis is conducted for site-specific
Date of Change	Chemical		Parameter
5/11/2011	benzo[a]anthracene	Ground Wat	ter, 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 evaluations.	o review CLARC Guidance for toxicity eq	uivalency factors wh	nen congener-specific analysis is conducted for site-specific
Date of	Chemical		Devenueder
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)
Data of	Ohemical		Devenueter
Date of Change	Chemical		Parameter
5/11/2011	aroclor 1254	Oral Cancer	Potency Factor (CPFo)
	Changes Made	<b>\</b>	Comments
previous	Researched-No Data	-	Comments
value:			
changed to:	2.E+00	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA

Date of Change	Chemical		Parameter
5/11/2011	aroclor 1016	Oral Cancer	Potency Factor (CPFo)
	Changes Ma	ade	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 Ma	ade	Comments
previous value:	0.E+00	µg/m3	

(December 2010)

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changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	
Date of Change	Chemical		Parameter	
4/13/2011	xylenes	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	xylenes	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	xylenes	Inhalation R	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	Chemical		Parameter	
Change				
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	Chemical		Parameter	
Change				
4/13/2011	xylene;o-		d C, Non-carcinogen, Standard Fomula Value, Direct estion 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	

Date of Change	Chemical		Parameter
4/13/2011	xylene;o-		od B, Non-carcinogen, Standard Formula Value, Direct ngestion only), unrestricted land use
	Changes Ma	ade	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	Chemical		Parameter
Change 4/13/2011	xylene;o-	Ground W Value	/ater, Method C, Non-carcinogen, Standard Formula
	Changes Ma	ade	Comments
previous	3.5E+04	µg/L	

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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;o-	Ground Wa Value	ter, Method B, Non-carcinogen, Standard Formula
	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 Refere	nce Dose (RfDo)
	Changes Made		Comments
changed to:	2.E-01	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Detroit			
Date of Change	Chemical		Parameter
4/13/2011	xylene;o-	Inhalation R	eference 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)
		1	
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	Chemical		Parameter
Change			
4/13/2011	xylene;m-		d C, Non-carcinogen, Standard Fomula Value, Direct jestion only), industrial land use
	Changes Made		Comments
previous value:	Changes Made 7.E+06	mg/kg	Comments

Date of Change	Chemical		Parameter
4/13/2011	xylene;m-		od B, Non-carcinogen, Standard Formula Value, Direct ngestion 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 W Value	/ater, Method C, Non-carcinogen, Standard Formula
	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 Refere	nce 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 Referen	nce Dose (RfDo)
	Changes Made		Comments
nrovieus		and a floor alars a	

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	

		ade	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 V	Surface Water, Method C, Carcinogen, Standard Formula Value	
	Changes Ma	ade	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 Wa	ater, Method B, Carcinogen, Standard Formula Value
	Changes M	lade	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		d C, Carcinogen, Standard Formula Value, Direct gestion only), industrial land use
	Changes M	lade	Comments
orevious /alue:	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		d B, Carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use
	Changes M	lade	Comments
orevious 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 Wa	ter, Method C, Carcinogen, Standard Formula Value
	Changes M	lade	Comments
orevious 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 Wa	ter, Method B, Carcinogen, Standard Formula Value
	Changes M	lade	Comments
orevious /alue:	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 Cance	r Potency Factor (CPFo)
changed to:	Changes M 7.2E-01	lade kg-day/mg	Comments Updated CLARC toxicity values from IRIS or NCEA (December 2010)
			· · · · · · · · · · · · · · · · · · ·

Change				
4/13/2011	vinyl chloride	Inhalation C	on Cancer Potency Factor (CPFi)	
	Changes Ma	ade	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	Chemical		Parameter	
Change			i didiliotoi	
-				
4/13/2011	vanadyl sulfate		d C, Non-carcinogen, Standard Fomula Value, Direct gestion only), industrial land use	
4/13/2011		Contact (ing		
4/13/2011 previous value:	vanadyl sulfate Changes Ma 7.E+04	Contact (ing	gestion only), industrial land use	

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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 Mad	le	Comments

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

	ite of nange	Chemical	Parameter
4/1	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_c 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 (CPFi)

	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 Ma	ade	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			Ground Water, Method C, Non-carcinogen, Standard Formula Value	
4/13/2011	vanadium		√ater, Method C, Non-carcinogen, Standard Formula	
4/13/2011	vanadium Changes Ma	Value	Vater, Method C, Non-carcinogen, Standard Formula Comments	
4/13/2011 previous value:		Value		

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Date of Change	Chemical		Parameter
4/13/2011	vanadium	Ground Wat	ter, Method B, Non-carcinogen, Standard Formula
	Changes Made		Comments
previous value:	1.1E+02	µg/L	Comments
changed to:	1.1E+00	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical	Parameter	
4/13/2011	vanadium	Oral Refere	nce 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		d C, Non-carcinogen, Standard Fomula Value, Direct gestion 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 update toxicity values (December 2010)
Date of	Chemical		Deremeter
Change	Chemical	Parameter	
4/13/2011	uranium, soluble salts		d B, Non-carcinogen, Standard Formula Value, Direct gestion 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 update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	uranium, soluble salts	Oral Refere	nce 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: Guidanc is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_c updated from 0 to 3 on May 11 2011 3:54PM
Date of	Chemical		Parameter

110/2011			ngestion 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
	trinitrophenylmethylnitramine	Soil, Method B, Non-carcinogen, Standard Formula Value, Direc	
			ngestion only), unrestricted land use
	Changes Made		Comments
previous	8.E+02	mg/kg	
value:			

Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct

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trinitrophenylmethylnitramine

Change

4/13/2011

Date of Change	Chemical		Parameter
4/13/2011	trinitrophenylmethylnitrami	ne Ground V Value	Vater, Method C, Non-carcinogen, Standard Formula
	Changes M	ade	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 Ma	ade	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 V Value	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Ma	ada	Comments	
previous value:	4.3E+04	µg/L		
	4.8E+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	trinitrobenzene;1,3,5-	Oral Refere	nce Dose (RfDo)	
	Changes Mad		Comments	
previous	2.7E+00	mg/kg-day	Comments	
value: 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 Mad	le	Comments	
previous value:	6.E+00	µg/m3		
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change				
4/13/2011	trimethylbenzene;1,3,5-	Air, Method	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 update toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change 4/13/2011	trimethylbenzene;1,3,5-		d C, Non-carcinogen, Standard Fomula Value, Direct gestion only), industrial land use	
	Changes Mad		Comments	
previous value:	1.8E+05	mg/kg		
changed to:	3.5E+04	mg/kg	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of Change	Chemical		Parameter	
4/13/2011	trimethylbenzene;1,3,5-		d B, Non-carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use	
	Changes Mad	le	Comments	
previous value:	4.E+03	mg/kg		
changed to:	8.E+02	mg/kg	Changes to CLARC cleanup levels based on update	

Date of Change	Chemical		Parameter
4/13/2011	trimethylbenzene;1,3,5-	Ground V Value	Water, Method C, Non-carcinogen, Standard Formula
	Changes Ma	de	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	
Change 4/13/2011	trimethylbenzene;1,3,5-	Ground Value	Water, Method B, Non-carcinogen, Standard Formula
	Changes Ma	de	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

toxicity values (December 2010)

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4/13/2011	trimethylbenzene;1,3,5-	Oral Referen	ice Dose (RfDo)	
	Changes M	ade	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_co 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 Mad	e	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 Ma	de	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 V Value	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Ma	do	Comments	
previous value:	8.8E+02	μg/L	Comments	
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	trimethylbenzene;1,2,4-	Ground V Value	Vater, Method B, Non-carcinogen, Standard Formula
	Changes Ma	de	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

	Change	es 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 V Value	Water, Method C, Non-carcinogen, Standard Formula
	Changes Ma	de	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
	Chemical trichloropropene;1,2,3-	Ground V Value	Parameter Water, Method B, Non-carcinogen, Standard Formula
Change	trichloropropene;1,2,3-	Value	
Change		Value	Water, Method B, Non-carcinogen, Standard Formula

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Date of Change	Chemical		Parameter	
4/13/2011	trichloropropene;1,2,3-	Oral Refere	nce Dose (RfDo)	
	Changes Mac	de	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	Chemical		Parameter	
Change				
4/13/2011	trichloropropene;1,2,3-	Inhalation R	eference Dose (RfDi)	
	Changes Mad	de	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	Chemical		Parameter	
Change				
4/13/2011	trichloropropane;1,2,3-		Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Mad	de	Comments	
previous value:	1.9E+01	mg/kg		
changed to:	4.4E+00	mg/kg	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of Change	Chemical		Parameter	
4/13/2011	trichloropropane;1,2,3-		d C, Non-carcinogen, Standard Fomula Value, Direct gestion only), industrial land use	
	Changes Mac	de	Comments	
previous value:	2.1E+04	mg/kg		
changed to:	1.4E+04	mg/kg	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change				
4/13/2011	trichloropropane;1,2,3-		d B, Carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use	
	Changes Mac	de	Comments	
previous value:	1.4E-01	mg/kg		
changed to:	3.3E-02	mg/kg	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change		Soil Mother		
4/13/2011	trichloropropane;1,2,3-		d B, Non-carcinogen, Standard Formula Value, Direct jestion only), unrestricted land use	

	Changes Ma	de	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 V	Vater, Method C, Carcinogen, Standard Formula Value	
	Changes Ma	40	Comments	
	Changes Ma		Comments	
previous value:	6.3E-02	µg/L		
changed to:	1.5E-02	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of Change	Chemical		Parameter	

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	Changes Ma	de	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)

	te of ange	Chemical	Parameter
4/1	3/2011	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

	Change	es 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 Mac	le	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 Refere	nce 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
<b>.</b>			(December 2010)
Data af	Chemical		
Date of Change	Chemical		(December 2010) Parameter
Change	Chemical trichloroethylene	Air, Method	
			Parameter

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Date of Change	Chemical		Parameter
4/13/2011	trichloroethylene	Air, Metho	od C, Non-carcinogen, Standard Formula Value
	Changes Made		Comments
previous	Changes Made 3.5E+01	µg/m3	Comments
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	Air, Metho	od B, Carcinogen, Standard Formula Value
	-		
changed to:	Changes Made see additional information		Comments Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	trichloroethylene	Air, Metho	od B, Non-Carcinogen, Standard Formula Value
	Changes Made		Comments
previous value:	1.6E+01	µg/m3	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 V	Vater, Method C, Carcinogen, Standard Formula Value
	Changes Made	1	Comments
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	trichloroethylene	Surface V Value	Vater, Method C, Non-Carcinogen, Standard Formula
	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 V	Vater, 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	Chemical		Parameter

	trichloroethylene	Value	Water, Method B, Non-Carcinogen, Standard Formula
	Changes Made	e	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	Chemical		Parameter
Change			
	Chemical trichloroethylene		Parameter hod C, Carcinogen, Standard Formula Value, Direct (ingestion only), industrial land use
Change		Contact (	hod C, Carcinogen, Standard Formula Value, Direct

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Change

Chemical		Parameter
trichloroethylene		d C, Non-carcinogen, Standard Fomula Value, Direct gestion only), industrial land use
Changes Made		Comments
1.1E+03	mg/kg	
see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Chomical		Parameter
Chemical	Farameter	
trichloroethylene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
Changes Made		Comments
see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Chemical		Parameter
trichloroethylene	Soil, Method B, Non-carcinogen, Standard Formula Value, Dire Contact (ingestion only), unrestricted land use	
Changes Made		Comments
2.4E+01	mg/kg	
see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Chemical	Parameter	
trichloroethylene	Ground Wa	ater, Method C, Carcinogen, Standard Formula Value
Changes Made		Comments
see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
		Parameter
trichloroethylene	Ground Wa	ater, Method C, Non-carcinogen, Standard Formula
		Comments
Changes Made		ooninienta
Changes Made 5.3E+00	µg/L	
-	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
5.3E+00	µg/L	
	Changes Made 1.1E+03 See additional information Chemical trichloroethylene See additional information Changes Made See additional information Changes Made 2.4E+01 See additional information Chemical trichloroethylene Changes Made See additional information Chemical trichloroethylene Chemical Chemical Chemical Changes Made	Changes Made         1.1E+03       mg/kg         see additional information       information         Chemical       Soil, Methor Contact (in         Changes Made       Soil, Methor Contact (in         Changes Made       See additional information         See additional information       Soil, Methor Contact (in         Chemical       Soil, Methor Contact (in         Chemical       Soil, Methor Contact (in         Chemical       Soil, Methor Contact (in         Changes Made       Ground Wa         Changes Made       Soil Changes Made         see additional information       Ground Wa         Changes Made       See additional information         Changes Made       Ground Wa         Chemical       Ground Wa         Chemical       Ground Wa

	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	Ground V Value	Vater, Method B, Non-carcinogen, Standard Formula
	Changes Made	)	Comments
previous value:	2.4E+00	µg/L	
changed to:	see additional information		Changes to CLARC cleanup levels based on updated
onungeu to.			toxicity values (December 2010)
			toxicity values (December 2010)
Date of Change	Chemical		toxicity values (December 2010) Parameter
Date of	Chemical trichloroethylene	Oral Refe	
Date of Change			Parameter

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Date of Change	Chemical		Parameter	
4/13/2011	trichloroethylene	Inhalation	n Reference Dose (RfDi)	
			_	
changed to:	Changes Mad see additional information	e	Comments Updated CLARC toxicity values from IRIS or NCEA (December 2010)	
Date of Change	Chemical		Parameter	
4/13/2011	trichloroethylene	Oral Cano	Oral Cancer Potency Factor (CPFo)	
	Changes Mad	e	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	n Cancer Potency Factor (CPFi)	
	Changes Mad	e	Comments	
changed to:	see additional information		Updated CLARC toxicity values from IRIS or NCEA (December 2010)	
	1			
Date of Change	Chemical		Parameter	
4/13/2011	trichloroethane;1,1,1-	Air, Metho	Air, Method C, Non-carcinogen, Standard Formula Value	
	Changes Mad	e	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	Chemical		Parameter	
Change	Chemical		Farameter	
4/13/2011	trichloroethane;1,1,1-	Air, Metho	od B, Non-Carcinogen, Standard Formula Value	
	Changes Mad	e	Comments	
previous	4.8E+03	μg/m3		
value: 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 V Value	Vater, Method C, Non-Carcinogen, Standard Formula	
	Changes Mad	e	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	Chemical		Parameter	

4/13/2011	trichloroethane;1,1,1-	Inhalation R	eference Dose (RfDi)
	Changes Ma	de	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 Ma	da	Commente
	Changes Ma		Comments
previous value:	Changes Ma 2.E+02	<b>de</b> μg/m3	Comments

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Change

Date of	Chemical		Parameter
Change			
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	Chemical		Parameter
Change			
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)
	Ohemiest		Devenator
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	Chemical		Parameter
Change		O all Mathem	
4/13/2011	tributyltin oxide		d C, Non-carcinogen, Standard Fomula Value, Direct gestion 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		d B, Non-carcinogen, Standard Formula Value, Direct gestion 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 Ma	ade	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	Chemical		Boromotor
Change	Chemical		Parameter
4/13/2011	toluenediamine;2,6-	Air, Method	C, Non-carcinogen, Standard Formula Value
	Changes Ma	ade	Comments
previous value:	7.E+02	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter

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4/13/2011	toluenediamine;2,6-	Air, Metho	od B, Non-Carcinogen, Standard Formula Value
	Changes Ma	ade	Comments
previous	3.2E+02	μg/m3	
value:	5.22102	µg/m5	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	toluenediamine;2,6-		nod C, Non-carcinogen, Standard Fomula Value, Direct ingestion only), industrial land use
	Changes Ma	ade	Comments
previous value:	7.E+05	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Dete of	Chemical		Demonster
Date of Change	Cnemical		Parameter
4/13/2011	toluenediamine;2,6-		nod B, Non-carcinogen, Standard Formula Value, Direct ingestion only), unrestricted land use
	Changes Ma	ade	Comments
previous value:	1.6E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	toluenediamine;2,6-	Ground W Value	Vater, Method C, Non-carcinogen, Standard Formula
	Changes Ma	ade	Comments
previous value:	7.E+03	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	toluenediamine;2,6-	Ground W Value	Vater, Method B, Non-carcinogen, Standard Formula
	Changes Ma	ade	Comments
previous value:	3.2E+03	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)

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

toxicity values (December 2010)

	Changes Made		Comments
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
Date of Change	Chemical	Parameter	
4/13/2011	toluenediamine;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 3:54PM
			MTCA information hierarchy (April 2011) and note_cd
Date of Change	Chemical		MTCA information hierarchy (April 2011) and note_cc

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		Contact (ing	gestion only), industrial land use
	Changes Made		Comments
previous value:	2.1E+06	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	toluenediamine;2,5-		d B, Non-carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use
	Changes Made		Comments
previous value:	4.8E+04	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
	Oherrigel		Denomotor
Date of Change	Chemical		Parameter
4/13/2011	toluenediamine;2,5-	Ground War Value	ter, Method C, Non-carcinogen, Standard Formula
	Changes Made		Comments
previous value:	2.1E+04	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	toluenediamine;2,5-	Ground War Value	ter, Method B, Non-carcinogen, Standard Formula
	Changes Made		Comments
previous value:	9.6E+03	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	toluenediamine;2,5-	Oral Refere	nce Dose (RfDo)
	Changes Made		Comments
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_co updated from 0 to 3 on May 11 2011 3:54PM

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

	Changes Ma	ade	Comments	
previous value:	4.1E+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	toluenediamine;2,4-		Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Ma	ade	Comments	
previous value:	3.1E-01	mg/kg		
	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
changed to:	Researched-No Data			
changed to:	Researched-No Data			
changed to: Date of Change	Researched-No Data Chemical			

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	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 Cha		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
	Chang	es Made Comments

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

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	Changes Ma	de	Comments
changed to:	2.3E+03	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	toluene	Surface Wa	ter, Method C, Non-Carcinogen, Standard Formula
	Changes Ma	de	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 Wa Value	ter, Method B, Non-Carcinogen, Standard Formula
	Changes Ma	de	Comments
changed to:	1.9E+04	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of	Chemical		Parameter
Change	tabiana -		
4/13/2011	toluene	Inhalation Reference Dose (RfDi)	
	Changes Ma		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 Wa Value	ter, Method C, Non-Carcinogen, Standard Formula
	Changes Ma	de	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 Wa Value	ter, Method B, Non-Carcinogen, Standard Formula
	Changes Ma	de	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

	Changes Ma	ade	Comments	
previous value:	2.5E+02	mg/kg		
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change				
4/13/2011	thallium, soluble salts		Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Ma	ade	Comments	
previous value:	5.6E+00	mg/kg		
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of Change	Chemical		Parameter	

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4/13/2011	thallium, soluble salts	Ground V Value	Vater, Method C, Non-carcinogen, Standard Formula
	Changes Ma	ade	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 Ma	de	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 Ma	ade	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 V Value	Vater, Method B, Non-carcinogen, Standard Formula	
	Changes Ma	ade	Comments	
	1.3E+00	µg/L		
previous value:				

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Date of Change	Chemical		Parameter
4/13/2011	thallium(I) sulfate	Oral Refere	nce 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
	1		
Date of Change	Chemical		Parameter
4/13/2011	thallium chloride		d C, Non-carcinogen, Standard Fomula Value, Direct
		Contact (ing	estion only), industrial land use
			jestion only), industrial land use
	Changes Made	Contact (ing	Comments
previous value:	Changes Made 2.8E+02	mg/kg	

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Date of	Chemical		Parameter
Change			
4/13/2011	thallium chloride		d B, Non-carcinogen, Standard Formula Value, Direct jestion only), unrestricted land use
	Changes Made		Comments
previous	6.4E+00	mg/kg	
value: changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
			loxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	thallium chloride	Value	ter, Method C, Non-carcinogen, Standard Formula
	Changes Made		Comments
previous	2.8E+00	µg/L	
value: changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
	Ohemiegi		Denomotor
Date of Change	Chemical		Parameter
4/13/2011	thallium chloride	Ground Wa Value	ter, Method B, Non-carcinogen, Standard Formula
	Changes Made		Comments
previous	1.3E+00	µg/L	
value:	Decorrelad No Data		Changes to CLARC cleanup levels based on updated
changed to:	Researched-No Data		toxicity values (December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	thallium chloride	Oral Refere	nce Dose (RfDo)
+/13/2011		Olaritelele	
previous value:	Changes Made 8.E-05	mg/kg-day	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	Chemical		Parameter
Change	onemical		raiameter
4/13/2011	thallium carbonate		d C, Non-carcinogen, Standard Fomula Value, Direct jestion only), industrial land use
	Changes Made		Comments
previous	2.8E+02	mg/kg	
value: changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	thallium carbonate		d B, Non-carcinogen, Standard Formula Value, Direct jestion only), unrestricted land use
previous	Changes Made 6.4E+00	mg/kg	Comments
value:		ציי וצייי	Changes to CLADC cleanus levels have done we do to d
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of	Chemical		Parameter
	thallium carbonate		ter, Method C, Non-carcinogen, Standard Formula
		Value	
		Value	
Change 4/13/2011 previous value:	Changes Made 2.8E+00	Value µg/L	Comments

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Date of Change	Chemical		Parameter
4/13/2011	thallium carbonate	Ground Value	Water, Method B, Non-carcinogen, Standard Formula
	Changes Ma	ade	Comments
previous value:	Changes Ma 1.3E+00	ade µg/L	Comments

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	Commonts

	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 W Value	ater, Method C, Non-carcinogen, Standard Formula
	Changes Made	<u> </u>	Comments
	Changes wau	5	Comments
previous value:	3.2E+00	μg/L	

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	Chemical		Parameter
Change	Chemical thallium acetate	Oral Referen	Parameter nce Dose (RfDo)
	thallium acetate	Oral Refere	nce Dose (RfDo)
Change		Oral Referen	
Change	thallium acetate	Oral Referen	nce Dose (RfDo)

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			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	thallic oxide		d C, Non-carcinogen, Standard Fomula Value, Direct gestion only), industrial land use
n na sia sa	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	Chemical		Parameter
Change	Chemical		Falameter
4/13/2011	thallic oxide		d B, Non-carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use
	Changes Made		Comments
previous value:	5.6E+00	mg/kg	Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	thallic oxide	Ground Wa	ter, Method C, Non-carcinogen, Standard Formula
4/13/2011		Value	
	Changes Made		Comments
previous value:		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 Wa Value	ter, Method B, Non-carcinogen, Standard Formula
	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 Refere	nce Dose (RfDo)
previous	Changes Made 7.E-05	mg/kg-day	Comments
value:	/.L-UJ	my/ky-udy	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments ds extended: Guidance

ged 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	9	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, Metho	d C, Non-carcinogen, Standard Formula Value	
	Changes Made	)	Comments	
previous value:	3.5E+01	µg/m3		

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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)

4/13/2011 tetrachloroethylene Air, Method B, Non-Carcinogen, Standard Formula	i 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	
	Changes Made	Comments	

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

Date of Change	Chemical	Parameter	
4/13/2011	tetrachloroethylene	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	tetrachloroethylene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Made	e Comments	
	see additional information	Changes to CLARC cleanup levels based on updated	

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

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Date of Change	Chemical		Parameter	
4/13/2011	tetrachloroethylene	Oral Cancer	r Potency Factor (CPFo)	
			-	
changed to:	Changes Made see additional information	•	Comments Updated CLARC toxicity values from IRIS or NCEA (December 2010)	
Date of Change	Chemical		Parameter	
4/13/2011	tetrachloroethylene	Inhalation C	Inhalation Cancer Potency Factor (CPFi)	
changed to:	Changes Made see additional information	)	Comments 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	
	Changes Made		Comments	
previous	4.3E-01	<del>,</del> μg/m3	Comments	
value:		μg/115		
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of Change	Chemical		Parameter	
4/13/2011	tetrachloroethane;1,1,2,2-	Air, Method	B, Carcinogen, Standard Formula Value	
	Changes Made		Comments	
previous	4.3E-02	μg/m3	Comments	
value: changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update	
			toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change 4/13/2011	tetrachloroethane;1,1,2,2-	Oral Refere	nce Dose (RfDo)	
	Changes Made	•	Comments	
previous value:	Researched-No Data			
changed to:	2.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)	
Data				
Date of Change	Chemical		Parameter	

Change	onennoar	
4/13/2011	tetrachloroethane;1,1,2,2-	Inhalation Cancer Potency Factor (CPFi)

	Changes Made		Comments	
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		
	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	

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4/13/2011	tetrabromodiphenyl ether 2,2',4,4'		B, Non-Carcinogen, Standard Formula Value
	Changes Made	)	Comments
previous	1.6E-01	µg/m3	
value: changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	tcdd;2,3,7,8-	Soil Methor	I C, Carcinogen, Standard Formula Value, Direct
			estion only), industrial land use
	Changes Made	)	Comments
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Soil Methods p-dioxin (tcdd;2,3,	s B & C, Carcinogen, Standard Formula ` 7,8-) based on Gastrointestinal absorptio	Value, Direct Conta on fraction (AB1) of (	t (ingestion only) soil cleanup levels for 2,3,7,8 - tetrachlorodibenzo
Date of	Chemical		Parameter
Change			
4/13/2011	tcdd;2,3,7,8-		B, Carcinogen, Standard Formula Value, Direct estion only), unrestricted land use
	Changes Made	•	Comments
changed to:	see additional information		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Note: Soil Method p-dioxin (tcdd;2,3,	s B & C, Carcinogen, Standard Formula ` 7,8-) based on Gastrointestinal absorptio	Value, Direct Conta on fraction (AB1) of (	ict (ingestion only) soil cleanup levels for 2,3,7,8 - tetrachlorodibenzo- 0.6, unitless.
Date of	Chemical		Parameter
Change 4/13/2011	tcdd;2,3,7,8-	Oral Cancer	Potency Factor (CPFo)
	Changes Made		Comments
previous	Changes Made 1.5E+05	kg-day/mg	Comments
value: changed to:	see additional information		Updated CLARC toxicity values from IRIS or NCEA
			(December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	tcdd;2,3,7,8-	Inhalation C	ancer Potency Factor (CPFi)
previous	Changes Made 1.5E+05	e kg-day/mg	Comments
value: changed to:	see additional information		Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	styrene	Air, Method	C, Carcinogen, Standard Formula Value
	Changes Made		Comments
previous value:	4.4E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	styrene	Air, Method	B, Carcinogen, Standard Formula Value
previous	Changes Made		Comments
value:	4.4E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
			Parameter
Date of	Chemical	Parameter	
Change		Oct Matt	C. Coreinagen Standard Farmula Malas Dia (
	Chemical styrene		I C, Carcinogen, Standard Formula Value, Direct estion only), industrial land use
Change 4/13/2011	styrene Changes Made	Contact (ing	
Change	styrene	Contact (ing	estion only), industrial land use

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Date of Change	Chemical		Parameter
4/13/2011	styrene		d B, Carcinogen, Standard Formula Value, Direct jestion 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 upda toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	styrene	Ground Wat	ter, Method C, Carcinogen, Standard Formula Value
	Changes Made		Comments
previous	1.5E+01	µg/L	
value: changed to:	Researched-No Data		Changes to CLARC cleanup levels based on upda toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	styrene	Ground Wat	ter, Method B, Carcinogen, Standard Formula Value
		1	
previous value:	Changes Made 1.5E+00	µg/L	Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on upda toxicity values (December 2010)
Date of	Chemical		Parameter
Change		Oral Caraca	
4/13/2011	styrene	Oral Cancer	Potency Factor (CPFo)
	Changes Made	1	Comments
previous value:	3.E-02	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCE. (December 2010) comments_ds extended: Guidar is provided when toxicity values are unavailable fro MTCA information hierarchy (April 2011) and note updated from 0 to 3 on May 11 2011 3:54PM
Date of	Chemical		Parameter
Change 4/13/2011	aturana	Inhelation O	anger Detenov Egeter (CDEi)
	styrene		ancer Potency Factor (CPFi)
	Changes Made	1.	Comments
previous value:	2.E-03	kg-day/mg	
changed to:	No Data. What are my options?		Updated CLARC toxicity values from IRIS or NCE. (December 2010) comments_ds extended: Guidar is provided when toxicity values are unavailable fro MTCA information hierarchy (April 2011) and note updated from 0 to 3 on May 11 2011 3:54PM

selenourea		od C, Non-carcinogen, Standard Fomula Value, Direct ngestion only), industrial land use	
Changes Ma	ade	Comments	
1.8E+04	mg/kg		
Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	
		Parameter	
Chemical		Parameter	
	Soil Moth		
selenourea		od B, Non-carcinogen, Standard Formula Value, Direct ngestion only), unrestricted land use	
	Contact (i	od B, Non-carcinogen, Standard Formula Value, Direct	
selenourea	Contact (i	od B, Non-carcinogen, Standard Formula Value, Direct ngestion only), unrestricted land use	
	Changes Ma 1.8E+04 Researched-No Data	Changes Made       1.8E+04     mg/kg       Researched-No Data     Instruction	

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Change

Date of Change	Chemical		Parameter	
4/13/2011	selenourea	Oral Refere	ence 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_co 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 Mad	e Comments

	3		
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 V	Ground Water, Method B, Carcinogen, Standard Formula Value	
	Changes Ma	de	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 Ma	ade	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	Chemical		Parameter	
Change				
4/13/2011	propylene glycol	Air, Method	Air, Method C, Non-carcinogen, Standard Formula Value	
	Changes Ma	ade	Comments	
previous	7.E+03	µg/m3		
value:			Changes to CLARC cleanup levels based on updated	

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Date of Change	Chemical		Parameter
4/13/2011	propylene glycol	Air, Metho	d B, Non-Carcinogen, Standard Formula Value
	Changes Ma	ade	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

	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 Mad	е	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 Mad	e	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)	

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Date of Change	Chemical		Parameter
4/13/2011	polybrominated biphenyls		d B, Carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use
	Changes Made	)	Comments
previous value:	1.1E-01	mg/kg	

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

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Date of Change	Chemical		Parameter	
4/13/2011	phenol		d C, Non-carcinogen, Standard Fomula Value, Direct gestion only), industrial land use	
	Changes N	lada	Comments	
previous value:	2.1E+06	mg/kg	Comments	
changed to:	1.1E+06	mg/kg	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change 4/13/2011	phenol		d B, Non-carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use	
	Changes N	lado	Comments	
previous value:	4.8E+04	mg/kg	Comments	
changed to:	2.4E+04	mg/kg	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of Change	Chemical		Parameter	
4/13/2011	phenol	Ground Wa Value	ter, Method C, Non-carcinogen, Standard Formula	
	Changes N	lade	Comments	
previous	1.1E+04	μg/L		
value: changed to:	5.3E+03	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change				
4/13/2011	phenol	Ground Wa Value	und Water, Method B, Non-carcinogen, Standard Formula Je	
	Changes N	lade	Comments	
previous value:	4.8E+03	µg/L		
changed to:	2.4E+03	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
	1	I		
Date of Change	Chemical		Parameter	
4/13/2011	phenol	Oral Refere	nce Dose (RfDo)	
	Changes N	lade	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)	
	1			
Date of Change	Chemical		Parameter	
			Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	

	Changes Ma	ade	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 Ma	ade	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		d B, Carcinogen, Standard Formula Value, Direct jestion 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	Chemical		Parameter
Change	onemical		T drameter
4/13/2011			d B, Non-carcinogen, Standard Formula Value, Direct jestion 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 Refer		nce Dose (RfDo)
proviouo	Changes Made	no a llea dasse	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_co 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_co 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 M	ade	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	Chemical		Parameter	
Change		Surface Water, Method C, Non-Carcinogen, Standard Formul		

	Changes Ma	ade	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	Surface Water, Method B, Carcinogen, Standard Formula Value	
	Changes Ma	ade	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	

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4/13/2011	pentachlorophenol	Surface V Value	Vater, Method B, Non-Carcinogen, Standard Formula
	Changes Ma	ade	Comments
previous value:	7.1E+03	μg/L	
changed to:	1.2E+03	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	pentachlorophenol		nod C, Carcinogen, Standard Formula Value, Direct ingestion only), industrial land use
		• •	
previous	Changes Ma	ade mg/kg	Comments
value:			
changed to:	3.3E+02	mg/kg	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	pentachlorophenol		nod C, Non-carcinogen, Standard Fomula Value, Direct ingestion only), industrial land use
	Changes Ma	ade	Comments
previous value:	1.1E+05	mg/kg	
changed to:	1.8E+04	mg/kg	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	pentachlorophenol		nod B, Carcinogen, Standard Formula Value, Direct ingestion only), unrestricted land use
	Changes Ma	ade	Comments
previous value:	8.3E+00	mg/kg	
changed to:	2.5E+00	mg/kg	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	pentachlorophenol		nod B, Non-carcinogen, Standard Formula Value, Direct ingestion only), unrestricted land use
	Changes Ma	ade	Comments
previous value:	2.4E+03	mg/kg	
changed to:	4.E+02	mg/kg	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
<b>Change</b> 4/13/2011	pentachlorophenol	Ground	Vater, Method C, Carcinogen, Standard Formula Value
			valer, method C, Carchogen, Standald Formula Value
	Changes Ma		Comments
previous value:	7.3E+00	µg/L	
changed to:	2 2E+00	ua/l	Changes to CLARC cleanup levels based on update

Date of Change	Chemical	Parameter		
4/13/2011	pentachlorophenol	Ground Value	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Ma	ade	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 V	Ground Water, Method B, Carcinogen, Standard Formula Value	

µg/L

Changes to CLARC cleanup levels based on updated

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changed to:

2.2E+00

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 Wat Value	er, Method B, Non-carcinogen, Standard Formula
	Changes Made		Comments

	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 Mac	de	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 Value	Water, Method C, Non-Carcinogen, Standard Formula
	Changes Made	<u> </u>	Comments
previous value:	3.6E-01	µg/L	
changed to:	8.E-02	µg/L	Changes to CLARC cleanup levels based on updated
	Chemical		toxicity values (December 2010)
	Chemical		
Date of Change 4/13/2011	Chemical pentabromodiphenyl ether:	Surface	Parameter
Date of Change	Chemical pentabromodiphenyl ether; 2,2',4,4',5-	Surface Value	
Date of Change	pentabromodiphenyl ether;	Value	Parameter
Date of Change	pentabromodiphenyl ether; 2,2',4,4',5-	Value	Parameter Water, Method B, Non-Carcinogen, Standard Formula

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			toxicity values (December 2010)
Date of	Chemical		Parameter
Change	Chemical		Farameter
4/13/2011	paraquat		C, Non-carcinogen, Standard Fomula Value, Direct estion 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 update toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	paraquat		B, Non-carcinogen, Standard Formula Value, Direct estion 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 update toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	paraquat	Oral Refere	nce Dose (RfDo)
	Changes Made		Comments
	0		
previous value:	4.5E-03	mg/kg-day	
•	-	mg/kg-day	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_c updated from 0 to 3 on May 11 2011 3:54PM
value: changed to:	4.5E-03 No Data. What are my options?	mg/kg-day	(December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_c updated from 0 to 3 on May 11 2011 3:54PM
value:	4.5E-03	mg/kg-day	(December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_c
value: changed to: Date of	4.5E-03 No Data. What are my options?	Soil, Method	(December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_c updated from 0 to 3 on May 11 2011 3:54PM
value: changed to: Date of Change	4.5E-03 No Data. What are my options?	Soil, Method	(December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_c updated from 0 to 3 on May 11 2011 3:54PM Parameter
value: changed to: Date of Change	4.5E-03 No Data. What are my options?	Soil, Method	(December 2010) comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_c updated from 0 to 3 on May 11 2011 3:54PM Parameter C, Carcinogen, Standard Formula Value, Direct estion only), industrial land use

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_co 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	
		1	Comments	
	Changes Made		Comments	

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changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated
			toxicity values (December 2010)
Data of	Chamical		Donomotor
Date of Change	Chemical		Parameter
4/13/2011	octabromodiphenyl ethers	Air, Metho	d B, Non-Carcinogen, Standard Formula Value
	Changes Mad	e	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-		od C, Non-carcinogen, Standard Fomula Value, Direct ngestion only), industrial land use
	Changes Mad	9	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-		od B, Non-carcinogen, Standard Formula Value, Direct ngestion only), unrestricted land use
	Changes Mad	· · ·	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 W Value	ater, Method C, Non-carcinogen, Standard Formula
	Changes Mad	e	Comments
previous	1.8E+02	µg/L	
value: changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of	Chemical		Parameter
Change	Chemical		Farameter
4/13/2011	nitrotoluenes;o-,m-,p-	Ground W Value	ater, Method B, Non-carcinogen, Standard Formula
	Changes Mad	e	Comments
	_		
•	8.E+01	µg/L	
previous value: changed to:	_	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Change			
4/13/2011	nitrotoluenes;o-,m-,p-	Oral Refere	nce 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_co updated from 0 to 3 on May 11 2011 3:54PM
Date of Change	Chemical		Parameter
	Chemical nitrotoluene, p-		Parameter d C, Non-carcinogen, Standard Fomula Value, Direct estion only), industrial land use
Change	nitrotoluene, p-		d C, Non-carcinogen, Standard Fomula Value, Direct estion only), industrial land use
Change			C, Non-carcinogen, Standard Fomula Value, Direct

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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-		d B, Non-carcinogen, Standard Formula Value, Direct jestion only), unrestricted land use
	Changes Ma	do	Comments
previous value:	8.E+02	mg/kg	Comments
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 Wat Value	ter, Method C, Non-carcinogen, Standard Formula
	Changes Ma	de	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 Wat Value	ter, Method B, Non-carcinogen, Standard Formula
	Changes Ma	de	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	Chemical		Parameter
Change	Chemical		Falameter
4/13/2011	nitrotoluene, p-	Oral Refere	nce Dose (RfDo)
	Changes Ma	de	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 Ma	de	Comments
previous	Researched-No Data		
value:			

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 M	ade	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)		
Data of	Chomical		Paramotor		
_	Chemical	Soil Meth	Parameter		
Change	Chemical nitrotoluene, o-		Parameter nod B, Non-carcinogen, Standard Formula Value, Direct ingestion only), unrestricted land use		
Change		Contact (i	nod B, Non-carcinogen, Standard Formula Value, Direct		
Date of Change 4/13/2011 previous value:	nitrotoluene, o-	Contact (i	nod B, Non-carcinogen, Standard Formula Value, Direct ingestion only), unrestricted land use		

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4/13/2011 previous	nitrotoluene, o-	Ground W/a	
previous	1	Value	ter, Method C, Non-carcinogen, Standard Formula
previous	Changes Ma		Commonto
value:	Changes Ma 1.8E+02	μg/L	Comments
changed to:	1.6E+01	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	nitrotoluene, o-		ter, Method B, Non-carcinogen, Standard Formula
		Value	
providuo	Changes Ma		Comments
previous value:	8.E+01	µg/L	
changed to:	7.2E+00	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	nitrotoluene, o-	Oral Refere	ence Dose (RfDo)
	Changes Ma	do	Commonto
previous	Changes Ma 1.E-02	nde mg/kg-day	Comments
value: changed to:	9.E-04	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	nitrotoluene, o-	Oral Cance	r Potency Factor (CPFo)
	Changes Ma	do	Comments
previous	Changes Ma Researched-No Data		Comments
value:			
changed to:	2.2E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of	Chemical		Parameter
Change	Citeriou		
4/13/2011	nitrotoluene, m-		d C, Non-carcinogen, Standard Fomula Value, Direct gestion only), industrial land use
	Changes Ma	ide	Comments
previous value:	3.5E+04	mg/kg	
changed to:	3.5E+02	mg/kg	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	nitrotoluene, m-		d B, Non-carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use
previous	Changes Ma	ade ma/ka	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 W Value	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes M	ade	Comments	
previous value:	1.8E+02	μg/L		
changed to:	1.8E+00	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of Change	Chemical		Parameter	
-		Ground Water, Method B, Non-carcinogen, Standard Formula		

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previous value:       8.E+01       μg/L         changed to:       8.E-01       μg/L       Changes to CLARC di toxicity values (Decem         Date of Chemical Changes Made       Oral Reference Dose (RfDo)       Parame         previous value:       1.E-02       mg/kg-day       Updated CLARC toxic (December 2010)         Date of Changes Made       Mg/kg-day       Updated CLARC toxic (December 2010)         Date of Changes Made       Parame       Changes to CLARC toxic (December 2010)         Date of Changes Made       Parame       Changes to CLARC toxic (December 2010)         Date of Changes Made       Parame       Contact (Ingestion only), Industrial la Contact (		Value	
previous       8.E+01       μg/L         value:       8.E-01       μg/L         Changed to:       8.E-01       μg/L         Date of Chemical Changes Made       Parame         previous value:       1.E-02       mg/kg-day         Date of Change to:       1.E-04       mg/kg-day         Date of Changes Made       C         previous value:       1.E-04       mg/kg-day         Date of Changes Made       Parame         Change to:       1.E-04       mg/kg-day         Updated CLARC toxic (December 2010)       Parame         Change to:       0.4E-01       mg/kg         Previous       9.4E-01       mg/kg         Value:       Researched-No Data       Changes to CLARC of toxicity values (December 2010)         Date of Changes Made       C       C         previous       9.4E-01       mg/kg       Changes to CLARC of toxicity values (December 2010)         Date of Changes Made       C       C       C         Change to:       Researched-No Data       Changes to CLARC of toxicity values (December 2010)         Change to:       Researched-No Data       Changes to CLARC of toxicity values (December 2010)         Change to:       Researched-No Data       Changes to CLARC of toxici		1	
value:       No. 1       <			Comments
Date of Change     Chemical     Parametric       A/13/2011     nitrotoluene, m-     Oral Reference Dose (RfDo)       Changes Made previous     mail     Changes Made       previous     1.E-02     mg/kg-day       ulue:     1.E-02     mg/kg-day       changed to:     1.E-04     mg/kg-day       Updated CLARC toxic (December 2010)     Date of       Change     Chemical     Parametric       Change     Soil, Method C, Carcinogen, Stande Contact (ingestion only), industrial k       Changes Made     O       previous     9.4E-01     mg/kg       value:     Researched-No Data     Changes to CLARC of toxicity values (December 2010)       Date of Change     Chemical     Parametric       Changes Made     O     O       previous     9.4E-01     mg/kg       value:     Researched-No Data     Changes to CLARC of toxicity values (Decemberric)       Date of Change     Chemical     Parametric       Changes Made     O     O       previous     7.1E-03     mg/kg       value:     Researched-No Data     Changes to CLARC of toxicity values (Decemberric)       Date of Change     Chemical     Parametric       Changes Made     O     O       previous     7.1E-03     mg/kg <td></td> <td>µg/L</td> <td></td>		µg/L	
Change       Oral Reference Dose (RfDo)         4/13/2011       nitrotoluene, m-       Oral Reference Dose (RfDo)         Changes Made       mg/kg-day         previous       1.E-02       mg/kg-day         value:       1.E-04       mg/kg-day         Date of       Chemical       Parame         Change       A/13/2011       nitroso-n-ethylurea;n-       Soil, Method C, Carcinogen, Standa         Changes Made       O       O         previous       9.4E-01       mg/kg         value:       changes to CLARC of toxicity values (December 2010)         Changes Made       O         previous       9.4E-01       mg/kg         value:       Researched-No Data       Changes to CLARC of toxicity values (December 2010), unrestricte         Date of       Chemical       Parame         Change       O       Changes to CLARC of toxicity values (December 2010), unrestricte         Evolution       7.1E-03       mg/kg       O         Value:       Researched-No Data       Changes to CLARC of toxicity values (December 2010), unrestricte         Date of       Changes Made       O       O         previous       7.1E-03       mg/kg       Changes to CLARC of toxicity values (December 2010), com ethylurea;n- <td></td> <td>µg/L</td> <td>Changes to CLARC cleanup levels based on updat toxicity values (December 2010)</td>		µg/L	Changes to CLARC cleanup levels based on updat toxicity values (December 2010)
4/13/2011       nitrotoluene, m-       Oral Reference Dose (RfDo)         Changes Made value:       mg/kg-day 1.E-02       mg/kg-day mg/kg-day       Updated CLARC toxic (December 2010)         Date of Change       Chemical       Parametric Marametric (December 2010)         Date of Change       Chemical Changes Made       Parametric Contact (ingestion only), industrial la Contact (ingestion only), industrial la Changes to CLARC of toxicity values (December 2010)         Date of Change       Chemical Changes Made       Mg/kg         Date of Change       Chemical Changes Made       Parametric Changes to CLARC of toxicity values (December 2010)         Date of Change       Chemical Changes Made       Parametric Changes to CLARC of toxicity values (December 2010)         Date of Changes Made       Contact (ingestion only), unrestricte         Date of Changes Made       Changes to CLARC of toxicity values (December 2010)       Changes to CLARC of toxicity values (December 2010)         Date of Change       Changes Made       Changes to CLARC of toxicity values (December 2010)       Parametric Changes Made       Parametric Changes to CLARC of toxicity values (December 2010)         Date of Changes Made       Changes Made       Changes to CLARC of toxicity values (December 2010)       Parametric Changes Made         Date of Changes Made       Changes Made       Changes Made       Changes Made       Changes Made         Previo			Parameter
previous value:     1.E-02     mg/kg-day mg/kg-day     Updated CLARC toxic (December 2010)       Date of Change     Chemical     Parametric (December 2010)       Date of Change     Chemical     Parametric (December 2010)       Date of Changes     Chemical     Parametric Contact (ingestion only), industrial la Contact (ingestion only), industrial la contact (ingestion only), industrial la contact (ingestion only), industrial la changed to:     Parametric Researched-No Data       Date of Changes     Chemical     Parametric mg/kg       Date of Changes     Chemical     Parametric mg/kg       Date of Changes     Chemical     Parametric mg/kg       Date of Changes     Chemical     Parametric mg/kg       Value: changed to:     Researched-No Data     Soil, Method B, Carcinogen, Standa Contact (ingestion only), unrestricte       Date of Changes     Changes Made     O       Value: change     7.1E-03     mg/kg       Value: change     Chemical     Parametric Changes to CLARC cl toxicity values (December Value:       Date of Changes     Chemical     Parametric Changes Made       Oral Cancer Potency Factor (CPFo)       Changes Made value:     Oral Cancer Potency Factor (CPFo)       Changes Made value:     Oral Cancer Potency Factor (CPFo)       Changes Made value:     Oral Cancer Potency Factor (CPFo)       Changes to:     No Data. What are my options?	ence Dose	Oral Referer	rence Dose (RfDo)
previous value:       1.E-02       mg/kg-day       Updated CLARC toxic (December 2010)         Date of Change       Chemical       Parame         A/13/2011       nitroso-n-ethylurea;n-       Soil, Method C, Carcinogen, Standa Contact (ingestion only), industrial la Changes Made       C         Previous       9.4E-01       mg/kg       Changes to CLARC of toxicity values (December 2010)         Date of Chemical Changes Made       Changes to CLARC of toxicity values (December 2010)       Changes to CLARC of toxicity values (December 2010)         Date of Chemical Changes Made       Changes to CLARC of toxicity values (December 2010)       Parame         Value:       nitroso-n-ethylurea;n-       Soil, Method B, Carcinogen, Standa Contact (ingestion only), unrestricte         Changes Made       C       C         previous value:       7.1E-03       mg/kg         change to:       Researched-No Data       Changes to CLARC of toxicity values (December 2010) com         Date of Chemical Changes Made       C       C         previous value:       7.1E-03       mg/kg       C         changed to:       Researched-No Data       Changes to CLARC of toxicity values (December 2010) com       C         Changes Made       C       C       C       <			
Value:     L.E-04     mg/kg-day     Updated CLARC toxic (December 2010)       Date of Change     Chemical     Parametric (December 2010)       Date of Change     Chemical     Parametric (December 2010)       Date of Change     Chemical     Parametric Contact (ingestion only), industrial k       Previous value:     9.4E-01     mg/kg       Changes Made     C       Date of Change     Chemical     Parametric (December 2010)       Date of Change     Chemical     Parametric (Date of Changes to CLARC cl toxicity values (December 2011)       Date of Change     Chemical     Parametric (Date of Changes Made     Parametric (Date of Chemical Contact (ingestion only), unrestricte       Date of Changes Made     Contact (ingestion only), unrestricte     Changes Made     C       Date of Changes Made     Changes to CLARC cl toxicity values (December 2010) com     Changes to CLARC cl toxicity values (December 2010) com       Date of Changes Made     Changes Made     C       Date of Changes Made     C       Date of Changes Made     C       Previous value:     1.4E+02     kg-day/mg       Updated CLARC toxic (December 2010) com     C       Changes Made     C       Previous value:     No Data. What are my options?     Updated CLARC toxic (December 2010) com			Comments
Date of Change     Chemical     Parame       4/13/2011     nitroso-n-ethylurea;n-     Soil, Method C, Carcinogen, Stande Contact (ingestion only), industrial la Changes Made     C       previous     9.4E-01     mg/kg     C       value:     changes to:     Researched-No Data     Changes to CLARC of toxicity values (Decem       Date of Change     Chemical     Parame       Change     Chemical     Parame       Change     Changes to CLARC of toxicity values (Decem       Date of Change     Chemical     Parame       Value:     nitroso-n-ethylurea;n-     Soil, Method B, Carcinogen, Standa Contact (ingestion only), unrestricte       Changes Made     C       previous value:     7.1E-03     mg/kg       Changes to CLARC of toxicity values (Decem     Changes to CLARC of toxicity values (Decem       Date of Change     Changes Made     C       Value:     Researched-No Data     Changes to CLARC of toxicity values (Decem       Date of Change     Chemical     Parame       (J13/2011     nitroso-n-ethylurea;n-     Oral Cancer Potency Factor (CPFo)       Changes Made     C     C       previous value:     1.4E+02     kg-day/mg       changed to:     No Data. What are my options?     Updated CLARC toxic (December 2010) com       Walue:     No Data. What are my opt		mg/kg-day	/
Change       Initroso-n-ethylurea;n-       Soil, Method C, Carcinogen, Standa Contact (ingestion only), industrial la Contact (ingestion cluster), values (Decemposities), industrial la Contact (ingestion only), unrestricte         Date of Changes Made       Changes Made       Contact (ingestion only), unrestricte         Changes Made       Contact (ingestion only), unrestricte       Changes Made       Contact (ingestion only), unrestricte         Date of Changes Made       Changes to CLARC cl toxicity values (Decemposities), unrestricte       Changes Made       Contact (ingestion only), unrestricte         Date of Changes Made       Changes to CLARC cl toxicity values (Decemposities), unrestricte       Changes to CLARC cl toxicity values (Decemposities), unrestricte         Date of Chemical       Parametric       Parametric         Changes Made       Contact Class to CLARC toxic (CPFo)         Date of Changes Made       Contact Changes Made       Contact Changes Made         Updated CLARC toxic (December 2010) corr is provided when toxic (December		mg/kg-day	
Change       Changes         4/13/2011       nitroso-n-ethylurea;n-       Soil, Method C, Carcinogen, Standa Contact (ingestion only), industrial later transmission only), industrial later transmission only), industrial later transmission only         Changes Made       Changes Made         previous       9.4E-01       mg/kg         value:       Researched-No Data       Changes to CLARC cl toxicity values (Decempoint)         Change       Chemical       Parametric         Date of       Chemical       Parametric         Changes       Soil, Method B, Carcinogen, Standa Contact (ingestion only), unrestricte         Changes Made       Contact (ingestion only), unrestricte         Changes to:       Researched-No Data       Changes to CLARC cl toxicity values (Decempoint)         changed to:       Researched-No Data       Changes to CLARC for toxicity values (Decempoint)         change       Chemical       Parametric         Changes       Chemical       Parametric         Value:       nitroso-n-ethylurea;n-       Oral Cancer Potency Factor (CPFo)		1	
Changes Made       Contact (ingestion only), industrial la         Changes Made       Contact (ingestion only), industrial la         Previous       9.4E-01       mg/kg         value:       Researched-No Data       Changes to CLARC cl         Date of Chemical       Parame         Change       Changes to CLARC cl         toxicity values (Decem       Parame         A/13/2011       nitroso-n-ethylurea;n-       Soil, Method B, Carcinogen, Standa Contact (ingestion only), unrestricte         Changes Made       Contact (ingestion only), unrestricte         Changes Made       Contact (ingestion only), unrestricte         Changes Made       Contact (ingestion only), unrestricte         Date of Chemical       Parame         Changes Made       Contact Clarce			Parameter
previous value:       9.4E-01       mg/kg         changed to:       Researched-No Data       Changes to CLARC cl toxicity values (Decemendent of the toxicity values (Decemendent of toxicity values (December 2010) comendent of to			
previous value:       9.4E-01       mg/kg         changed to:       Researched-No Data       Changes to CLARC cl toxicity values (Decemendent of the toxicity values (Decemendent of toxicity values (December 2010) comendent of toxicity values (December 2			Comments
changed to:       Researched-No Data       Changes to CLARC cl toxicity values (Decem         Date of Change       Chemical       Parama         4/13/2011       nitroso-n-ethylurea;n-       Soil, Method B, Carcinogen, Standa Contact (ingestion only), unrestricte         Changes Made       Contact (ingestion only), unrestricte         previous value:       7.1E-03       mg/kg         Changes to:       Researched-No Data       Changes to CLARC cl toxicity values (Decem         Date of Change       Changes to CLARC cl toxicity values (Decem         Jate of Change       Changes to CLARC cl toxicity values (Decem         Value:       nitroso-n-ethylurea;n-       Oral Cancer Potency Factor (CPFo)         Changes Made       C         previous value:       1.4E+02       kg-day/mg         changed to:       No Data. What are my options?       Updated CLARC toxic (December 2010) com is provided when toxic MTCA information hier		mg/kg	Comments
Change       Initroso-n-ethylurea;n-       Soil, Method B, Carcinogen, Standa Contact (ingestion only), unrestricter         Changes Made       Contact (ingestion only), unrestricter         Changes Made       Contact (ingestion only), unrestricter         Previous       7.1E-03       mg/kg         value:       Changes to CLARC of toxicity values (December 2010)       Changes to CLARC of toxicity values (December 2010)         Date of Chemical       Parameter         Change       Changes Made       Contact (CPFo)         Changes Made       Contact (CPFo)         Changed to:       No Data. What are my options?       Updated CLARC toxic (December 2010) com is provided when toxic MTCA information hield			Changes to CLARC cleanup levels based on updat toxicity values (December 2010)
Change       Initroso-n-ethylurea;n-       Soil, Method B, Carcinogen, Standa Contact (ingestion only), unrestricter         Changes Made       Contact (ingestion only), unrestricter         Changes Made       Contact (ingestion only), unrestricter         Previous       7.1E-03       mg/kg         value:       Changes to CLARC of toxicity values (December 2010)       Changes to CLARC of toxicity values (December 2010)         Date of Chemical       Parameter         Change       Changes Made       Parameter         4/13/2011       nitroso-n-ethylurea;n-       Oral Cancer Potency Factor (CPFo)         Changes Made       Contact (December 2010) compareter       Contact (December 2010) compareter         Previous       1.4E+02       kg-day/mg       Updated CLARC toxic (December 2010) compareter         value:       No Data. What are my options?       Updated CLARC toxic (December 2010) compareter			
4/13/2011       nitroso-n-ethylurea;n-       Soil, Method B, Carcinogen, Standa Contact (ingestion only), unrestricte         Changes Made       Contact (ingestion only), unrestricte         previous       7.1E-03       mg/kg         value:       Researched-No Data       Changes to CLARC cl toxicity values (Decem         Date of       Chemical       Parame         Change       Oral Cancer Potency Factor (CPFo)         Changes Made       C         previous       1.4E+02       kg-day/mg         value:       No Data. What are my options?       Updated CLARC toxic (December 2010) com is provided when toxic MTCA information hier			Parameter
previous value:       7.1E-03       mg/kg         changed to:       Researched-No Data       Changes to CLARC cl toxicity values (Decerr         Date of Change       Chemical       Parame         4/13/2011       nitroso-n-ethylurea;n-       Oral Cancer Potency Factor (CPFo)         Changes Made       C         previous value:       1.4E+02       kg-day/mg         changed to:       No Data. What are my options?       Updated CLARC toxic (December 2010) com is provided when toxic MTCA information hier			od B, Carcinogen, Standard Formula Value, Direct ngestion only), unrestricted land use
Value:     Date of     Chemical     Changes to CLARC cl toxicity values (Decemination of the construction of the construct			Comments
Date of Change       Chemical       Parameter         4/13/2011       nitroso-n-ethylurea;n-       Oral Cancer Potency Factor (CPFo)         Changes Made       Composition       Composition         previous value:       1.4E+02       kg-day/mg       Composition         changed to:       No Data. What are my options?       Updated CLARC toxic (December 2010) composition       Updated when toxic MTCA information hier		mg/kg	
Change       Oral Cancer Potency Factor (CPFo)         4/13/2011       nitroso-n-ethylurea;n-       Oral Cancer Potency Factor (CPFo)         Changes Made       C         previous       1.4E+02       kg-day/mg         value:       1.4E+02       kg-day/mg         changed to:       No Data. What are my options?       Updated CLARC toxic (December 2010) com is provided when toxic MTCA information hier			Changes to CLARC cleanup levels based on updat toxicity values (December 2010)
Change       Oral Cancer Potency Factor (CPFo)         4/13/2011       nitroso-n-ethylurea;n-       Oral Cancer Potency Factor (CPFo)         Changes Made       C         previous       1.4E+02       kg-day/mg         value:       1.4E+02       kg-day/mg         changed to:       No Data. What are my options?       Updated CLARC toxic (December 2010) com is provided when toxic MTCA information hier			
4/13/2011       nitroso-n-ethylurea;n-       Oral Cancer Potency Factor (CPFo)         Changes Made       C         previous       1.4E+02       kg-day/mg         value:       No Data. What are my options?       Updated CLARC toxic (December 2010) com is provided when toxic MTCA information hier			Parameter
previous value:       1.4E+02       kg-day/mg         changed to:       No Data. What are my options?       Updated CLARC toxic (December 2010) com is provided when toxic MTCA information hier	r Potency	Oral Cancer	er Potency Factor (CPFo)
previous value:       1.4E+02       kg-day/mg         changed to:       No Data. What are my options?       Updated CLARC toxic (December 2010) com is provided when toxic MTCA information hier			0
value: changed to: No Data. What are my options? Updated CLARC toxic (December 2010) com is provided when toxic MTCA information hier		ka davi/mar	Comments
(December 2010) com is provided when toxic MTCA information hier	l - 4 -	кg-aay/mg	
	(Decem is provid MTCA in		Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidan is provided when toxicity values are unavailable fro MTCA information hierarchy (April 2011) and note_ updated from 0 to 3 on May 11 2011 3:54PM
Date of Chemical Parame			Parameter

Change	Cnemical	Parameter
4/13/2011	nitrosodimethylamine;N-	Oral Reference Dose (RfDo)

	Changes Mad	е	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 R	eference Dose (RfDi)
	Changes Mad	<b>e</b>	Comments
previous value:	Researched-No Data		
changed to:	1.1E-05	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA
-			(December 2010)
			(December 2010)
Date of Change	Chemical		(December 2010) Parameter

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	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 Char		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	Chemical	Parameter

Change			
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_co updated from 0 to 3 on May 11 2011 3:54PM
Date of	Chemical		Parameter
Change			
4/13/2011	nitropropane;2-	Inhalation C	ancer Potency Factor (CPFi)
	Changes Made		Comments

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changed to:	9.5E+00	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)	
Date of	Chemical		Parameter	
Change	onemical		r urumotor	
4/13/2011	nitrofurazone		d C, Carcinogen, Standard Formula Value, Direct jestion 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		B, Carcinogen, Standard Formula Value, Direct lestion 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 Wat	Vater, 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_co	

Data of	Chamical	Baramatar
Date of	Chemical	Parameter
Ohenne		
Change		
J		

4/13/2011	nitrobenzene	Air, Metho	Air, Method C, Non-carcinogen, Standard Formula Value	
	Changes Mac	le	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	Chemical		Parameter	
Change				
Change 4/13/2011	nitrobenzene	Air, Metho	od B, Non-Carcinogen, Standard Formula Value	
	nitrobenzene	Air, Metho	od B, Non-Carcinogen, Standard Formula Value	
	nitrobenzene Changes Mac		od B, Non-Carcinogen, Standard Formula Value Comments	

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

	Chang	jes 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 Fomula 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

	Change	es 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

	Chang	jes 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 Wat Value	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Ma	de	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	Chemical		Parameter	
Change				
4/13/2011	nitrobenzene	Oral Referen	Oral Reference Dose (RfDo)	
	Changes Ma	de	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 R	Inhalation Reference Dose (RfDi)	

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	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 (CPFi)

	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

	Chan	ges 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 (RfDo)

	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 R	eference Dose (RfDi)
	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		od B, Non-carcinogen, Standard Formula Value, Direct ngestion only), unrestricted land use
	Changes Ma	Ide	Comments
changed to:	8.E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of	Chemical	Parameter	
	Chemical	Parameter	
Change	a llas da	0.1 1.4.4	A D NIAR AND A REAL OF A DIAL FRANK IN A DIAL AND A
4/13/2011	nitrate		od C, Non-carcinogen, Standard Fomula Value, Direct ngestion only), industrial land use
•	nitrate Changes Ma	Contact (i	
-		Contact (i	ngestion only), industrial land use

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Date of Change	Chemical	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 Ma	ade	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   Chemical   Parameter     Change		Parameter	
4/13/2011	mirex Ground Water, Method C, Carcinogen, Standard Formula V		Vater, Method C, Carcinogen, Standard Formula Value
	Changes Ma	ade	Comments
previous value:	4.9E-01	µg/L	
	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	mirex	Ground Wat	ter, 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_co updated from 0 to 3 on May 11 2011 3:54PM
Date of Change	Chemical		Parameter
4/13/2011	mevinphos		d C, Non-carcinogen, Standard Fomula Value, Direct jestion only), industrial land use
	Changes Made		Comments
previous	8.8E+02	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	mevinphos	Soil, Method B, Non-carcinogen, Standard Formula Value, Dire 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 Wat	ter, Method C, Non-carcinogen, Standard Formula
	·		
previous	Changes Made 8.8E+00	ua/I	Comments
value: changed to:	8.8⊑+00 Researched-No Data	µg/L	Changes to CLARC cleanup levels based on updated
<b>J</b>			toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	mevinphos	Ground Wat	ter, Method B, Non-carcinogen, Standard Formula

	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 Refere	nce 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_c updated from 0 to 3 on May 11 2011 3:54PM

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Date of Change	Chemical		Parameter
4/13/2011	methylhydrazine		d C, Carcinogen, Standard Formula Value, Direct gestion 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 update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	methylhydrazine		d B, Carcinogen, Standard Formula Value, Direct gestion 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 update toxicity values (December 2010)
Date of	Chemical		Parameter
Change	Cnemical	Parameter	
4/13/2011	methylhydrazine	Ground Wat	ter, 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 update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	methylhydrazine	Ground Wat	ter, 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 updat toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	methylhydrazine	Oral Cancer	r 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: Guidand is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_ 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 update 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	4.E+00	mg/kg	
value:	Researched-No Data		Changes to CLARC cleanup levels based on update

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Date of Change	Chemical		Parameter	
4/13/2011	methylenebisbenzenamine	;4,4- Ground	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Ma	ade	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

	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, Metho	Air, Method C, Non-carcinogen, Standard Formula Value	
	Changes Ma	ade	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	Chemical		Parameter	
Change		Air Metho		
Change	Chemical methylene chloride	Air, Metho	Parameter od B, Non-Carcinogen, Standard Formula Value	
Date of Change 4/13/2011				
Change	methylene chloride		od B, Non-Carcinogen, Standard Formula Value	

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Date of Change	Chemical	Parameter	
4/13/2011	methylene chloride	Inhalation R	eference 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_cc 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		s 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 Ma	ade	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	Chemical		Parameter	
Change				
4/13/2011	methylene bis(2- chloroaniline);4,4'-		Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Ma	ade	Comments	
previous value:	7.7E+00	mg/kg		
	1.E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	

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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, Metho	d C, Non-carcinogen, Standard Formula Value
	Changes Ma	ada	Comments
			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 update toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	methylcyclohexane	Inhalation R	eference 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_c updated from 0 to 3 on May 11 2011 3:54PM

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Date of Change	Chemical		Parameter
4/13/2011	methylaniline;2-		d C, Carcinogen, Standard Formula Value, Direct jestion only), industrial land use
	Changes Made		Comments
previous	5.5E+02	mg/kg	
value:	5.52 1 02	iiig/itg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change	onemiour		
4/13/2011	methylaniline;2-		d B, Carcinogen, Standard Formula Value, Direct jestion only), unrestricted land use
	Changes Made		Comments
previous	4.2E+00	mg/kg	
value: changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	methylaniline;2-	Ground Wa	ter, Method C, Carcinogen, Standard Formula Value
	1	1	
	Changes Made		Comments
previous value:	1.8E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	methylaniline;2-	Ground Wa	ter, Method B, Carcinogen, Standard Formula Value
	Changes Made		Comments
previous	Changes Made	µg/L	Comments
value:		- <i>i</i> - <i>j</i> -	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
		1	
Date of Change	Chemical		Parameter
4/13/2011	methylaniline;2-	Oral Cancer	Potency Factor (CPFo)
	Changes Made		Comments
previous	2.4E-01	kg-day/mg	
value: 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_c

Date of Change	Chemical		Parameter
4/13/2011	methylaniline hydrochloride;2-		od C, Carcinogen, Standard Formula Value, Direct ngestion 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	Chemical		Parameter
Date of Change 4/13/2011	Chemical methylaniline hydrochloride;2-		Parameter od B, Carcinogen, Standard Formula Value, Direct
Change	methylaniline hydrochloride;2-		Parameter od B, Carcinogen, Standard Formula Value, Direct ngestion only), unrestricted land use
Change			Parameter od B, Carcinogen, Standard Formula Value, Direct

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Date of Change	Chemical		Parameter	
4/13/2011	methylaniline hydrochloride;2-	Ground W	Ground Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made		Comments	
previous value:	4.9E+00	µg/L		

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, Metho	d B, Carcinogen, Standard Formula Value
	Changes Ma	ade	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)

Change			
4/13/2011	methyl tert-butyl ether		od C, Carcinogen, Standard Formula Value, Direct ngestion only), industrial land use
	Changes Ma	ade	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	Chemical		Parameter
Date of Change	Chemical		Parameter
	Chemical methyl tert-butyl ether		od C, Non-carcinogen, Standard Fomula Value, Direct
Change	methyl tert-butyl ether	Contact (i	od C, Non-carcinogen, Standard Fomula Value, Direct ngestion only), industrial land use
Change		Contact (i	od C, Non-carcinogen, Standard Fomula Value, Direct

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			toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	methyl tert-butyl ether		d B, Carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use
	Changes Mac	le	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		d B, Non-carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use
	Changes Mad	le	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 Wa	ter, Method C, Carcinogen, Standard Formula Value
	Changes Mac		Comments
previous	2.4E+02	μg/L	Comments
value:	Decembed No Data		Changes to CLADC sleepup lovels based on undeted
changed 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 Wa Value	ter, Method C, Non-carcinogen, Standard Formula
	Changes Mac	le .	Comments
previous	1.5E+04	μg/L	
value: changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated
			toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	methyl tert-butyl ether	Ground Wa	ter, Method B, Carcinogen, Standard Formula Value
	Changes Mad	le	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	Chemical		Parameter

4/13/2011	11 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	
Change 4/13/2011	methyl tert-butyl ether	Oral Refe	erence 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	

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Change

			updated from 0 to 3 on May 11 2011 3:54PM
Date of Change	Chemical		Parameter
4/13/2011	methyl tert-butyl ether	Oral Cancer	r 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	Chemical		Parameter
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	Chemical		Parameter
Change	Chemioar		
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	Chemical		Parameter
Change	Chemical		Farameter
4/13/2011	methyl styrene	Inhalation R	eference 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	Chemical		Parameter
Change			
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	Chemical		Parameter
Change			
1/12/2011	mothyl jegbytyl kotopo	Also Martha al	P. Non Carainagan, Standard Formula Value

	Changes Ma	de	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 R	Reference Dose (RfDi)
	Changes Ma	de	Comments
previous value:	2.E-02	mg/kg-day	
	8.6E-01	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA

Air, Method B, Non-Carcinogen, Standard Formula Value

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4/13/2011

methyl isobutyl ketone

Date of Change	Chemical		Parameter
4/13/2011	methyl ethyl ketone	Air, Method	C, Non-carcinogen, Standard Formula Value
previous	Changes Ma	ae µg/m3	Comments
value:	1.LTUJ	µg/ms	
changed to:	5.E+03	µg/m3	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	methyl ethyl ketone	Air, Method	B, Non-Carcinogen, Standard Formula Value
	Changes Ma	de	Comments
previous value:	4.6E+02	μg/m3	
changed to:	2.3E+03	µg/m3	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	mothyl othyl kotore	Inholation D	Peference Dece (PfDi)
4/13/2011	methyl ethyl ketone		teference Dose (RfDi)
	Changes Ma	de	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-		d C, Non-carcinogen, Standard Fomula Value, Direct gestion only), industrial land use
	Changes Ma	de	Comments
previous	3.5E+03	mg/kg	
value: changed to:	1.1E+04	mg/kg	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	methoxyethanol;2-		d B, Non-carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use
	Changes Ma	de	Comments
previous value:	8.E+01	mg/kg	
changed to:	2.4E+02	mg/kg	Changes to CLARC cleanup levels based on update 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	

5.3E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	
Chemical	Parameter		
methoxyethanol;2-	Ground Value	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
Changes M	ade	Comments	
8.E+00	µg/L		
2.4E+01	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Chemical		Parameter	
	Chemical methoxyethanol;2- Changes M 8.E+00 2.4E+01	Chemical       methoxyethanol;2-     Ground V       Changes Made       8.E+00     µg/L       2.4E+01     µg/L	

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	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		od B, Non-carcinogen, Standard Formula Value, Direct ngestion only), unrestricted land use	
	Changes Ma	ade	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 W Value	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		

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		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	Chemical		Parameter	
Change				
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_cc updated from 0 to 3 on May 11 2011 3:54PM	
Date of	Chemical		Parameter	
Change				
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

unungou to. 1.0L	changed	to:	1.8E
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Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

Date of Change	Chemical		Parameter	
4/13/2011	malononitrile	Ground \ Value	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes M	ade	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	Chemical		Parameter	
Change	Chemiour			
4/13/2011	malononitrile	Oral Ref	Oral Reference Dose (RfDo)	

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	Changes Made	1	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	Chemical		Parameter
Change			
4/13/2011	lead alkyls		d C, Non-carcinogen, Standard Fomula Value, Direct gestion 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 update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	lead alkyls	Soil, Method B, Non-carcinogen, Standard Formula Value, Dir Contact (ingestion only), unrestricted land use	
	Changes Made		Comments
previous value:	8.E-03	mg/kg	Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change		Parameter	
4/13/2011	lead alkyls	Oral Refere	nce 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: Guidanc is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_c 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 Cance	r 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	Chemical		Parameter
Change	hydroquinone		
4/13/2011		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, Metho	Air, Method C, Non-carcinogen, Standard Formula Value	
	Changes Ma	ade	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, Metho	Air, Method B, Non-Carcinogen, Standard Formula Value	
	Changes Ma	ade	Comments	
previous	4.6E-01	µg/m3		

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value:				
changed to:	9.1E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change 4/13/2011	hydrogen sulfide		d C, Non-carcinogen, Standard Fomula Value, Direct	
		Contact (ing	jestion 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	Chemical		Parameter	
Change	budrogon oulfido	Coil Mothor	d D. Non-consistence. Standard Formula Value Direct	
4/13/2011	hydrogen sulfide		d B, Non-carcinogen, Standard Formula Value, Direct jestion 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	Chemical		Parameter	
Change				
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)	
Data of	Ohemiaal		Denemator	
Date of Change	Chemical		Parameter	
4/13/2011	hydrogen sulfide	Ground War Value	ter, Method B, Non-carcinogen, Standard Formula	
	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 Refere	nce 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_co updated from 0 to 3 on May 11 2011 3:54PM	

Date of Change	Chemical		Parameter
4/13/2011	hydrogen sulfide	Inhalation R	leference Dose (RfDi)
	Changes Ma	ade	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
	Chemical		(December 2010) Parameter
Change		Air Method	Parameter
Change	Chemical hydrogen cyanide	Air, Method	
Change			Parameter
Date of Change 4/13/2011 previous value:	hydrogen cyanide		Parameter C, Non-carcinogen, Standard Formula Value

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			toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change 4/13/2011	hydrogen cyanide	Air Mothe	od B, Non-Carcinogen, Standard Formula Value	
4/13/2011	Hydrogen cyanide		Su B, Non-Carcinogen, Standard Formula Value	
	Changes Ma	de	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	Chemical		Parameter	
Change				
4/13/2011	hydrogen cyanide		nod C, Non-carcinogen, Standard Fomula Value, Direct ngestion only), industrial land use	
	Changes Ma	de	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	Chemical		Parameter	
Change				
4/13/2011	hydrogen cyanide		Soil, Method B, Non-carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Ma	de	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	Chemical		Parameter	
Change				
4/13/2011	hydrogen cyanide	Ground W Value	/ater, Method C, Non-carcinogen, Standard Formula	
	Changes Ma	de	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 W Value	/ater, Method B, Non-carcinogen, Standard Formula	
	Changes Ma	de	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	Chemical		Parameter	
Change				
4/13/2011	hydrogen cyanide	Oral Refe	rence Dose (RfDo)	

	Changes Ma	de	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	Chemical		Parameter	
Change				
4/13/2011	hydrogen cyanide	Inhalation R	Inhalation Reference Dose (RfDi)	
	Changes Ma	de	Comments	
	8.6E-04	mg/kg-day		
previous value:				

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Date of Change	Chemical		Parameter
4/13/2011	hydrazine sulfate	Oral Cancer	r Potency Factor (CPFo)
			-
nrovieus	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	Chemical		Parameter
Change 4/13/2011	hydrazine sulfate	Inholation C	Cancer Potency Factor (CPFi)
4/13/2011			
	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	Chemical		Parameter
Change			
4/13/2011	hydrazine	Inhalation R	leference Dose (RfDi)
	Changes Made		Comments
previous	Changes Made Researched-No Data		Comments
value:			
changed to:	8.6E-06	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of	Chemical		Parameter
Change	onemioar		i didilotor
4/13/2011	hexamethylene diisocyanate;1,6-	Air, Method	B, Non-Carcinogen, Standard Formula Value
	Changes Made		Comments
previous	4.6E-03	µg/m3	
value:			
changed to:	4.6E-03	µg/m3	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	Hexachlorodibenzo-p-dioxin, Mixture	Oral Cancer	r 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	Chemical		Parameter
Change			
4/13/2011	Hexachlorodibenzo-p-dioxin, Mixture	Inhalation C	ancer Potency Factor (CPFi)
	Changes Made		Comments
nrevious	Changes Made	ka-dav/ma	Comments

changed to:	see additional information		Updated CLARC toxicity values from IRIS or NCEA
stanges to			(December 2010)
Date of Change	Chemical		Parameter
4/13/2011	hexachlorobutadiene	Surface Water, Method C, Non-Carcinogen, Standard Forn 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 W Value	Vater, Method B, Non-Carcinogen, Standard Formula

kg-day/mg

previous

value:

4.6E+03

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previous value:	Chang	ges Made	Comments
	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 Mad	e	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 Ma	de	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

Date of Change	Chemical		Parameter
4/13/2011	hexabromodiphenyl ether; 2,2',4,4',5,5'-	Air, Metho	d 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, Metho	d 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

	Chang	jes 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, Metho	Air, Method B, Non-Carcinogen, Standard Formula Value	
	Changes Ma	ade	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		od C, Carcinogen, Standard Formula Value, Direct	
4/13/2011		Contact (i	ngestion only), industrial land use	
4/13/2011	Changes Ma		ngestion only), industrial land use Comments	

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changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	furium		B, Carcinogen, Standard Formula Value, Direct estion only), unrestricted land use
	Changes Made		Comments
previous	2.E-02	mg/kg	oonincitta
value: changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
		1	·····
Date of Change	Chemical		Parameter
4/13/2011	furium	Oral Cancer	Potency Factor (CPFo)
		•	-
nrovious	Changes Made	ka davilar -	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_c updated from 0 to 3 on May 11 2011 3:53PM
Date of	Chemical		Parameter
Change			
4/13/2011	furfural	Air, Method	C, Non-carcinogen, Standard Formula Value
	Changes Made		Comments
previous value:	3.5E+01	µg/m3	Comments
changed to:	5.E+01	µg/m3	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	furfural	Air, Method	B, Non-Carcinogen, Standard Formula Value
	Charges Made		Comments
previous value:	Changes Made 1.6E+01	µg/m3	Comments
changed to:	2.3E+01	µg/m3	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change	Chemical		Faiallietei
4/13/2011	furfural	Inhalation R	eference Dose (RfDi)
	Changes Made		Comments
previous value:	1.E-02	mg/kg-day	
	1.4E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA

Date of Change	Chemical		Parameter	
4/13/2011	formic acid	Inhalation R	Inhalation Reference Dose (RfDi)	
	Changes Ma	de	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	Chemical		Parameter	
Change		Air Method		
Change	Chemical formaldehyde	Air, Method	Parameter C, Carcinogen, Standard Formula Value	
Change				
Date of Change 4/13/2011 previous value:	formaldehyde		C, Carcinogen, Standard Formula Value	

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Date of Change	Chemical		Parameter
4/13/2011	formaldehyde	Air, Metho	od B, Carcinogen, Standard Formula Value
	Changes Ma		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		nod C, Non-carcinogen, Standard Fomula Value, Direct ingestion only), industrial land use
	Changes Ma	de	Comments
previous	5.3E+05	mg/kg	
value: 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		nod B, Non-carcinogen, Standard Formula Value, Direct ingestion only), unrestricted land use
	Changes Ma	de	Comments
previous value:	1.2E+04	mg/kg	Comments
changed to:	1.6E+04	mg/kg	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	formaldehyde	Ground W Value	Vater, Method C, Non-carcinogen, Standard Formula
	Changes Ma	de	Comments
previous	2.6E+03	µg/L	
value: changed to:	3.5E+03	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change	Chemical		Falalletei
4/13/2011	formaldehyde	Ground W Value	Vater, Method B, Non-carcinogen, Standard Formula
	Changes Ma	de	Comments
previous value:	1.2E+03	μg/L	
changed to:	1.6E+03	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	formaldehyde	Oral Refe	erence Dose (RfDo)
	Changes Ma	de	Comments
changed to:			Comments

Date of Change	Chemical		Parameter
4/13/2011	formaldehyde	Inhalation C	ancer 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			
	Chemical		Parameter
Change 4/13/2011	fluoride		d C, Non-carcinogen, Standard Fomula Value, Direct
Change	fluoride	Contact (ing	
Change		Contact (ing	d C, Non-carcinogen, Standard Fomula Value, Direct

mg/kg-day

Updated CLARC toxicity values from IRIS or NCEA (December 2010)

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changed to:

2.E-01

changed 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	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 update toxicity values (December 2010)	
Date of Change	Chemical		Parameter	
4/13/2011	fluoride	Ground Wa Value	ter, Method C, Non-carcinogen, Standard Formula	
	Changes Made		Comments	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change				
4/13/2011	fluoride	Ground Wa Value	ter, Method B, Non-carcinogen, Standard Formula	
	Changes Made		Comments	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
			Descention	
Date of Change	Chemical		Parameter	
4/13/2011	fluoride	Oral Refere	nce 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_co updated from 0 to 3 on May 11 2011 3:53PM	
	1	1		
Date of Change	Chemical		Parameter	
4/13/2011	fensulfothion		d C, Non-carcinogen, Standard Fomula Value, Direct jestion 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 update toxicity values (December 2010)	
Date of	Ohomiaal		Devenuetor	
Date of Change	Chemical	0	Parameter	
4/13/2011	fensulfothion		d B, Non-carcinogen, Standard Formula Value, Direct jestion only), unrestricted land use	

	Changes Ma	ade	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	
Change 4/13/2011	fensulfothion	Ground V Value	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
		- d -	Comments	
	Changes Ma	ade	Comments	
previous value:	Changes Ma 8.8E+00	μg/L	Comments	

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Date of Change	Chemical		Parameter	
4/13/2011	fensulfothion	Ground V Value	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Ma	ade	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)	

	ite of nange	Chemical	Parameter
4/1	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, Metho	od C, Carcinogen, Standard Formula Value
	Changes Ma	ade	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)
	Chemical		Parameter
Date of Change 4/13/2011	Chemical ethylene oxide	Air, Metho	Parameter od B, Carcinogen, Standard Formula Value
Change	ethylene oxide		od B, Carcinogen, Standard Formula Value
Change			

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Date of Change	Chemical		Parameter
4/13/2011	ethylene oxide		C, Carcinogen, Standard Formula Value, Direct estion only), industrial land use
	Changes Made		Comments
previous	1 3E+02	ma/ka	

value:	1.50102	iiig/ 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	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 C	ancer Potency Factor (CPFi)
	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 Ma	de	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)

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Date of Change	Chemical		Parameter
4/13/2011	ethylene glycol monobutyl ether (EGBE)	Air, Metho	od 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)		od C, Non-carcinogen, Standard Fomula Value, Direct ngestion 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			od B, Non-carcinogen, Standard Formula Value, Direct ngestion 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 update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	ethylene glycol monobutyl ether (EGBE)	Ground W Value	/ater, Method C, Non-carcinogen, Standard Formula
	Changes Made	<u>.</u>	Comments
previous value:	8.8E+03	µg/L	
changed to:	1.8E+03	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
<b>Change</b> 4/13/2011	ethylene glycol monobutyl ether (EGBE)	Ground W Value	/ater, Method B, Non-carcinogen, Standard Formula
previous	Changes Made 4.E+03	μg/L	Comments
value:			

Date of Change	Chemical		Parameter
4/13/2011	ethylene glycol monobutyl ether (EGBE)	Oral Refere	nce 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 R	eference Dose (RfDi)

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	Changes Made	9	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	Chemical		Parameter
Change 4/13/2011	ethylene dibromide (EDB)	Air, Method	C, Carcinogen, Standard Formula Value
	Changes Made	e	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	9	Comments
previous value:	3.5E-01	µg/m3	
changed to:	9.E+00	µg/m3	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	ethylene dibromide (EDB)	Air, Method	B, Carcinogen, Standard Formula Value
	Changes Made	9	Comments
previous value:	1.1E-02	µg/m3	
changed to:	4.2E-03	µg/m3	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Data of	Chemisel		Deremeter
Date of Change	Chemical		Parameter
4/13/2011	ethylene dibromide (EDB)	Air, Method	B, Non-Carcinogen, Standard Formula Value
	Changes Made	e	Comments
previous value:	1.6E-01	µg/m3	
changed to:	4 1F+00	ua/m3	Changes to CLARC cleanup levels based on update

Date of Change	Chemical	Parameter
4/13/2011	ethylene dibromide (EDB)	Inhalation Reference Dose (RfDi)

µg/m3

changed to:

4.1E+00

Changes to CLARC cleanup levels based on updated toxicity values (December 2010)

	Chang	ges 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 (CPFi)	
	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, D Contact (ingestion only), industrial land use	
	Changes Made		

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4/13/2011	ethylene cyanohydrin		d C, Non-carcinogen, Standard Fomula Value, Direct gestion only), industrial land use
Date of Change	Chemical		Parameter
changed to:	9.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
previous value:	2.E-02	mg/kg-day	
	Changes Ma	de	Comments
4/13/2011	ethylene diamine	Oral Refere	nce Dose (RfDo)
Date of Change	Chemical		Parameter
changed to:	7.2E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
previous value:	1.6E+02	µg/L	Changes to CLARC alsonius lovels based as us date
	Changes Ma	de	Comments
		Value	
Change 4/13/2011	ethylene diamine	Ground Wa	ter, Method B, Non-carcinogen, Standard Formula
Date of	Chemical		Parameter
changed to:	1.6E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
previous value:		µg/L	
previous	Changes Ma		Comments
4/13/2011	ethylene diamine	Ground Wa Value	ter, Method C, Non-carcinogen, Standard Formula
Date of Change	Chemical		Parameter
changed to:	7.2E+03	mg/kg	toxicity values (December 2010)
previous value:	1.6E+03	mg/kg	Changes to CLARC cleanup levels based on update
	Changes Ma		Comments
4/13/2011	ethylene diamine	Soil, Method B, Non-carcinogen, Standard Formula Va Contact (ingestion only), unrestricted land use	
Date of Change	Chemical		Parameter
changed to:	3.2E+05	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
previous value:	7.E+04	mg/kg	

	Chang	jes 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 Ma	ade	Comments	
previous value:	2.4E+04	mg/kg		
changed to:	2.4E+03	mg/kg	Changes to CLARC cleanup levels based on updated	
Date of	Chemical		toxicity values (December 2010) Parameter	
Date of Change 4/13/2011				
Date of Change	Chemical ethylene cyanohydrin	Ground W Value	Parameter	
Date of Change	Chemical	Ground W Value	Parameter Vater, Method C, Non-carcinogen, Standard Formula	

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			toxicity values (December 2010)	
Date of Change	Chemical		Parameter	
4/13/2011	ethylene cyanohydrin	Ground Wat Value	ter, Method B, Non-carcinogen, Standard Formula	
	Changes Ma		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 Refere	nce Dose (RfDo)	
	Changes Ma	de	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	Air, Method C, Carcinogen, Standard Formula Value	
	Changes Ma	de	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 Ma	de	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		d C, Carcinogen, Standard Formula Value, Direct jestion only), industrial land use	
	Changes Ma	de	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)	
g				
Date of Change	Chemical		Parameter	

	Changes Ma	ade	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 Ma	ade	Comments	
previous value:	3.5E+02	mg/kg		
	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	ethyl chloride		Soil, Method B, Non-carcinogen, Standard Formula Value, Dire Contact (ingestion only), unrestricted land use	
	<u> </u>		Commente	
previous value:	Changes Ma 3.2E+04	mg/kg	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	ethyl chloride	Ground Wa	ter, Method C, Carcinogen, Standard Formula Value	
		•		
previous	Changes Ma 1.5E+02	μg/L	Comments	
value: changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	
Date of	Chemical		Peromotor	
Change			Parameter	
4/13/2011	ethyl chloride	Ground Wa Value	ter, Method C, Non-carcinogen, Standard Formula	
	Changes Ma	de	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 Wa	ter, Method B, Carcinogen, Standard Formula Value	
	Changes Ma	do	Comments	
previous value:	1.5E+01	μg/L	Comments	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change				
4/13/2011	ethyl chloride	Ground Wa Value	ter, Method B, Non-carcinogen, Standard Formula	
	Changes Ma	de	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 Refere	nce Dose (RfDo)	
	Changes Ma	de	Comments	
previous value:	4.E-01	mg/kg-day		

value.			
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_c updated from 0 to 3 on May 11 2011 3:53PM
Date of Change	Chemical		Parameter
4/13/2011	ethyl chloride	Inhalation R	eference 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)

value:

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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

	ate of hange	Chemical	Parameter
4/	/13/2011	ethyl chloride	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 3:53PM

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 (RfDi)

	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 Cha	e of inge	Chemical	Parameter
4/13	3/2011	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, Direc Contact (ingestion only), industrial land use	
	Changes Ma	ade	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		od B, Non-carcinogen, Standard Formula Value, Direct ngestion only), unrestricted land use	

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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 update toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change				
4/13/2011	epichlorohydrin	Ground Wa Value	ter, Method C, Non-carcinogen, Standard Formula	
	Changes Ma	de	Comments	
previous value:	3.5E+01	µg/L		
changed to:	1.1E+02	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change 4/13/2011	epichlorohydrin	Ground Wa Value	ter, Method B, Non-carcinogen, Standard Formula	
	Changes Ma	Ide	Comments	
previous value:	1.6E+01	µg/L		
changed to:	4.8E+01	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change				
4/13/2011	epichlorohydrin	Oral Refere	nce Dose (RfDo)	
	Changes Ma	de	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		d C, Carcinogen, Standard Formula Value, Direct gestion only), industrial land use	
	Changes Ma	de	Comments	
previous value:	1.4E+01	mg/kg		
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change			Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	

	Changes Mad	е	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_co updated from 0 to 3 on May 11 2011 3:53PM
Date of	Chemical		Parameter
Change	Chemical	Farameter	
4/13/2011	direct blue 6	Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
	Changes Made		Comments
		mg/kg	

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value:			
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	direct blue 6	Soil Methor	d B, Carcinogen, Standard Formula Value, Direct
4/13/2011			jestion 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	Chemical		Parameter
Change	Unchildan .		rannotor
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
Data of	Chemical		Demonster
Date of Change	Chemical	Parameter	
4/13/2011	direct black 38	Soil, Method C, Carcinogen, Standard Formula Value, Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous value:	1.5E+01	mg/kg	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	direct black 38		d B, Carcinogen, Standard Formula Value, Direct jestion only), unrestricted land use
	Changes Made		Comments
previous	1.2E-01	mg/kg	Comments
value: changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated
			toxicity values (December 2010)
Date of	Chemical		Parameter
Change 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

dioxane;1,4-	Soil, Method B, Carcinogen, Standard Formula Value, Direc Contact (ingestion only), unrestricted land use		
Chemical		Parameter	
1.3E+U3	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	
1 25 + 02	malles	Changes to CLAPC algorith lovals based on undeted	
1.2E+04	mg/kg		
Changes Ma	Ide	Comments	
		Contact (ingestion only), industrial land use	
dioxane <sup>.</sup> 1 4-	Soil Meth	od C, Carcinogen, Standard Formula Value, Direct	
Chemical		Parameter	
	dioxane;1,4- Changes Ma 1.2E+04 1.3E+03 Chemical	dioxane;1,4-     Soil, Meth Contact (i       Changes Made       1.2E+04     mg/kg       1.3E+03     mg/kg	

(December 2010) comments\_ds extended: Guidance

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	Chang	es 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 Wat	er, 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

	Change	es 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	e	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		nod B, Non-carcinogen, Standard Formula Value, Direct ingestion only), unrestricted land use
	Changes Ma	Ide	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	Chemical		Parameter
Date of Change 4/13/2011	Chemical di-n-octyl phthalate		Parameter Vater, Method C, Non-carcinogen, Standard Formula
Change		Ground W Value	
Change		Value	
Change	di-n-octyl phthalate	Value	Vater, Method C, Non-carcinogen, Standard Formula

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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	

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 Cha	e of inge	Chemical	Parameter
4/13	8/2011	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, Metho	od C, Non-carcinogen, Standard Formula Value	
	Changes Ma	ade	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, Metho	Air, Method B, Non-Carcinogen, Standard Formula Value	
	Changes Ma	ade	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)	
	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, Ca		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 Cance	r 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		s 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 M	lade	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 Ma	ade	Comments	
previous value:	6.4E+00	µg/L		
changed to:	1.6E+00	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of Change	Chemical		Parameter	
4/13/2011	dinitrobenzene;p-	Oral Refere	Oral Reference Dose (RfDo)	
	Changes Ma	ade	Comments	
previous value:	4.E-04	mg/kg-day		
	1.E-04	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	dinitrobenzene;o-		od C, Non-carcinogen, Standard Fomula Value, Direct ngestion only), industrial land use	
	Changes Ma	ade	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, Direc Contact (ingestion only), unrestricted land use	
		Contact (i	ngestion only), unrestricted land use	
	Changes Ma	· · ·	ngestion only), unrestricted land use Comments	
previous value:	Changes Ma 3.2E+01	· · ·		

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

	Chang	ges 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

	Chang	ges 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, Metho	od C, Carcinogen, Standard Formula Value
	Changes Ma	de	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 Ma	de	Comments
previous value:	2.5E-03	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter

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4/13/2011	dimethylhydrazine;1,1-		d C, Carcinogen, Standard Formula Value, Direct jestion only), industrial land use
	Changes Mad	de	Comments
previous value:	5.E+01	mg/kg	Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of	Chemical		Parameter
<b>Change</b> 4/13/2011	dimethylhydrazine;1,1-	Soil Methor	d B, Carcinogen, Standard Formula Value, Direct
4/13/2011			jestion only), unrestricted land use
	Changes Mad	de	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)
			D
Date of Change	Chemical		Parameter
4/13/2011	dimethylhydrazine;1,1-	Ground Wat	ter, Method C, Carcinogen, Standard Formula Value
	Changes Mad	de	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 Wat	ter, Method B, Carcinogen, Standard Formula Value
previous	Changes Mac 1.7E-02	de μg/L	Comments
value:		μ9/ L	Changes to CLARC cleanup levels based on updated
changed to:	Researched-No Data		toxicity values (December 2010)
	1	1	
Date of Change	Chemical		Parameter
4/13/2011	dimethylhydrazine;1,1-	Oral Refere	nce Dose (RfDo)
	Changes Mac	de	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	Chemical		Parameter
Change		John John D	
4/13/2011	dimethylhydrazine;1,1-	Inhalation R	eference 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	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

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Date of Change	Chemical		Parameter
4/13/2011	dimethylhydrazine;1,1-	Inhalation Cancer Potency Factor (CPFi)	
	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'-	C, Carcinogen, Standard Formula Value, Direct estion only), industrial land use
	Changes Made	 Comments

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 Wat	er, Method B, Carcinogen, Standard Formula Value
	Changes Made		Comments
nrevious	0 5E-03	ua/l	

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	Oral Cancer Potency Factor (CPFo)	
	Changes Ma	de	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	Chemical		Parameter	
Change				
4/13/2011	dimethylaniline;N,N-	Soil, Method C, Carcinogen, Standard Formula Value, Dir Contact (ingestion only), industrial land use		
	Changes Ma	de	Comments	
	2.9E+03	mg/kg		
previous value:	2.92+03	5, 5		

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Date of Change	Chemical	Parameter	
4/13/2011	dimethylaniline;N,N-	Soil, Method B, Carcinogen, Standard Formula Value, Direc 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 update toxicity values (December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	dimethylaniline;N,N-	Ground Wa	ter, Method C, Carcinogen, Standard Formula Value
4/13/2011	unteurylarinite, N, N-		ter, Method C, Carcinogen, Standard Formula Value
	Changes Made		Comments
previous	9.5E+00	µg/L	
value: changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Dete of	Ohemied		Demonster
Date of Change	Chemical	Parameter	
4/13/2011	dimethylaniline;N,N-	Ground Wa	ter, 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 update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	dimethylaniline;N,N-	Oral Cance	r 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_oupdated from 0 to 3 on May 11 2011 3:53PM
	1	1	
Date of Change	Chemical	Parameter	
4/13/2011	dimethyl phthalate	Surface Wa Value	ter, Method C, Non-Carcinogen, Standard Formula
	Changes Made		Comments
previous	1.8E+05	µg/L	
value:			

	Changes Ma	ade	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 Ma	ade	Comments	
previous value:	3.5E+06	mg/kg		
	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	

Value

Surface Water, Method B, Non-Carcinogen, Standard Formula

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Change

4/13/2011

dimethyl phthalate

Date of Change	Chemical		Parameter
4/13/2011	dimethyl phthalate		B, Non-carcinogen, Standard Formula Value, Direct estion only), unrestricted land use
	Changes	Made	Comments
previous value:	8.E+04	mg/kg	

value:			
changed to:	Researched-No Data	Changes to CLAR toxicity values (De	C cleanup levels based on updated ecember 2010)

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

	Changes Ma	ade	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, Metho	od C, Carcinogen, Standard Formula Value	
	Changes Mag	de	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	Chemical		Parameter	
Change	Chemical		i di dificici	
4/40/0044	diethylstilbesterol	Air, Metho	Air, Method B, Carcinogen, Standard Formula Value	
4/13/2011	,			

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			od C, Carcinogen, Standard Formula Value, Direct ngestion only), industrial land use
	Changes Ma	ade	Comments
previous value:	2.8E-02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter

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4/13/2011	diethylstilbesterol		od B, Carcinogen, Standard Formula Value, Direct ngestion only), unrestricted land use
	Changes M	ade	Comments
previous value:	2.1E-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	diethylstilbesterol	Oral Cancer Potency Factor (CPFo)

	Changes Made		Comments
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

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

	Changes Made		Comments
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

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

	Changes Made		Comments
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)

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

	Changes M	lade	Comments
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)

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

	Changes Made		Comments	
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)	
Date of Change	Chemical		Parameter	
4/13/2011	diethylene glycol monoethyl ether		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		
	2.1E+05	mg/kg	Changes to CLARC cleanup levels based on updated	

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Date of Change	Chemical		Parameter	
4/13/2011	diethylene glycol monoethyl ether		d B, Non-carcinogen, Standard Formula Value, Direct jestion only), unrestricted land use	
	Changes Made		Comments	
previous value:	1.6E+05	mg/kg	Comments	
changed to:	4.8E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	
Date of	Chemical		Parameter	
			ter, Method C, Non-carcinogen, Standard Formula	
	ether	Value		
	Changes Made		Comments	
previous	3.5E+04	µg/L		
value: changed to:	1.1E+03	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	
	1			
Date of Change	Chemical		Parameter	
4/13/2011 diethylene glycol monoethyl ether		Ground Wat Value	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)	
			<b>•</b>	
Date of Change	Chemical		Parameter	
4/13/2011	diethylene glycol monoethyl ether	Oral Refere	nce 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	
	diethylene glycol monoethyl ether	Inhalation R	eference Dose (RfDi)	
4/13/2011				
4/13/2011			Commente	
previous	Changes Made Researched-No Data		Comments	
previous value:	Changes Made	mg/kg-day	Comments Updated CLARC toxicity values from IRIS or NCEA (December 2010)	
previous value:	Changes Made Researched-No Data	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA	
4/13/2011 previous value: changed to: Date of Change	Changes Made Researched-No Data	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA	

	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)		
		1			
Date of Change	Chemical		Parameter		
4/13/2011	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)		

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Date of Change	Chemical		Parameter	
4/13/2011	diethylene glycol monobutyl ether	Oral Refere	Oral Reference Dose (RfDo)	
	Changes Ma	de	Comments	
previous value:	Researched-No Data			
changed to:	3.E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA	

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)
Change 4/13/2011	diethylene glycol	Oral Reference Dose (RfDo)	
4/13/2011	diethylene glycol	Oral Refere	nce Dose (RfDo)
	Changes Made		Comments
	2.E+00	mg/kg-day	
previous value:	2.LT00		

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Date of Change	Chemical		Parameter	
4/13/2011	dicyclopentadiene	Air, Metho	Air, Method C, Non-carcinogen, Standard Formula Value	
previous	Changes Mad		Comments	
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	Chemical		Parameter	
Change				
4/13/2011	dicyclopentadiene	Air, Metho	od B, Non-Carcinogen, Standard Formula Value	
	Changes Mad		Comments	
previous	9.6E-02	μg/m3	Comments	
value:	5102 02	P9/113		
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		od C, Non-carcinogen, Standard Fomula Value, Direct ngestion only), industrial land use	
	Changes Mad	e	Comments	
previous value:	1.1E+05	mg/kg		
changed to:	2.8E+04	mg/kg	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change				
4/13/2011	dicyclopentadiene		od B, Non-carcinogen, Standard Formula Value, Direct ngestion only), unrestricted land use	
	Changes Mad	e	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 W Value	ater, Method C, Non-carcinogen, Standard Formula	
	Changes Med		Comments	
previous	Changes Mad 5.3E+02	μg/L	Comments	
value:	JIJLTUZ	μ9/ L		
changed to:	1.4E+02	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	
	1			
Date of Change	Chemical		Parameter	
4/13/2011	dicyclopentadiene	Ground W Value	ater, Method B, Non-carcinogen, Standard Formula	
	Changes Mad	e	Comments	
previous value:	2.4E+02	µg/L		

value:		- 19.	
changed to:	6.4E+01	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	dicyclopentadiene	Oral Refere	nce 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	Chemical		Perameter
Change	Chemical	Parameter	
4/13/2011	dicyclopentadiene	Inhalation Reference Dose (RfDi)	

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previous value:	Changes Made		Comments
	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

	Change	es 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

	Change	es 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	r Potency Factor (CPFo)
	Changes Ma	ade	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	Chemical		Parameter
Date of Change	Chemical		
Change	Chemical dichloropropene;1,3-	Surface Wa	
			Parameter
Change	dichloropropene;1,3-		Parameter Iter, Method C, Carcinogen, Standard Formula Value

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Date of Change	Chemical		Parameter	
4/13/2011	dichloropropene;1,3- Sur		urface Water, Method B, Carcinogen, Standard Formula Value	
	Changes M	ade	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

previous value:	Changes Made		Comments
	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 Ma	ade	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 Wa	Surface Water, Method C, Carcinogen, Standard Formula Value	
	Changes Mr	do	Comments	
	Changes Ma		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	Chemical		Parameter	
Change				
4/13/2011	dichloropropane;1,2-	Surface Wa	ter, Method B, Carcinogen, Standard Formula Value	
	Changes Ma	do	Comments	

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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, Metho	d 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	Chemical		Parameter
Change	Chemical		i di
	dichloroethylene;1,2-,trans	Air, Metho	d B, Non-Carcinogen, Standard Formula Value
Change			

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changed to:	2.7E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	
		1		
Date of Change	Chemical		Parameter	
4/13/2011	dichloroethylene;1,2-,trans	Inhalation R	eference Dose (RfDi)	
	Changes Mad	e	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 Mad	e	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	Chemical		Parameter	
Change	Cnemical		Parameter	
4/13/2011	dichloroethylene;1,2-,cis	Air, Method	Air, Method B, Non-Carcinogen, Standard Formula Value	
	Changes Mad	e	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	Chemical		Parameter	
Change 4/13/2011	dichloroethylene;1,2-,cis	Soil, Method	d C, Non-carcinogen, Standard Fomula Value, Direct	
	,,,,,,, _		jestion only), industrial land use	
	Changes Mad	e	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	Chemical		Parameter	
Change 4/13/2011	dichloroethylene;1,2-,cis		d B, Non-carcinogen, Standard Formula Value, Direct jestion only), unrestricted land use	
	Changes Mad			
previous value:	Changes Mad 8.E+02	e mg/kg	Comments	
changed to:	1.6E+02	mg/kg	Changes to CLARC cleanup levels based on updated	

Date of Change	Chemical		Parameter	
4/13/2011	dichloroethylene;1,2-,cis	Ground \ Value	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Mad	le	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	Ground	Parameter	
	Chemical dichloroethylene;1,2-,cis	Ground V Value		
Change		Value	Parameter	
Change	dichloroethylene;1,2-,cis	Value	Parameter Water, Method B, Non-carcinogen, Standard Formula	

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Date of Change	Chemical		Parameter
4/13/2011 dichloroethylene;1,2-,cis		Oral Reference Dose (RfDo)	
	Changes Made		Comments
previous	1.F-02	ma/ka-dav	

changed to: 2.E-03 mg/kg-day Updated CLARC toxicity values from IRIS or NCEA (December 2010)		value:	1.2 02	ing/kg ddy	
	-		2.E-03	mg/kg-day	

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- Inhalat		Reference Dose (RfDi)	
	Changes Made		Commonto	
	Changes Made		Comments	

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)	

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

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

Ch	anges Made	Comments
changed to: No Data. What ar	e 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, Metho	Air, Method C, Non-carcinogen, Standard Formula Value	
	Changes Ma	de	Comments	
previous value:	Changes Ma 1.8E+02	de µg/m3	Comments	

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

	Changes	s 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 Mac	de	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 Ma	ade	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	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		

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	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 Ma	ade	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 R	eference Dose (RfDi)
	Changes Ma	ade	Comments
previous value:	4.E-02	mg/kg-day	

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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	dichloro-2-butene;1,4-	Air, Method	C, Carcinogen, Standard Formula Value
	Changes Ma	de	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 Ma	de	Comments
previous value:	9.4E-04	µg/m3	
changed to:	6.E-04	µg/m3	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	dichloro-2-butene;1,4-	Inhalation C	ancer Potency Factor (CPFi)
	Changes Ma	de	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

	onanges made		Commenta
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 3.6F+00 ug/m3		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)
		1	
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)

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Date of Change	Chemical		Parameter
4/13/2011	dibromo-3-chloropropane;1,2-	Ground Wat	ter, 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	Chemical		Parameter
Change 4/13/2011	dibromo-3-chloropropane;1,2-	Ground Wat	ter, 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	Chemical		Parameter
Change			
4/13/2011	dibromo-3-chloropropane;1,2-	Oral Refere	nce 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	r 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)
Detroit			
Date of Change	Chemical		Parameter
4/13/2011	dibromo-3-chloropropane;1,2-	Inhalation C	Cancer Potency Factor (CPFi)
	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	Chemical		Parameter
Change	Chemica		Falameter
4/13/2011	dibenzofuran	Air, Method	C, Non-carcinogen, Standard Formula Value

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, Metho	od B, Non-Carcinogen, Standard Formula Value
	Changes Ma	ade	Comments
previous value:	3.2E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	dibenzofuran	Soil Meth	od C, Non-carcinogen, Standard Fomula Value, Direct

Comments

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**Changes Made** 

			gestion only), industrial land use
	Changes Made	9	Comments
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		d B, Non-carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use
previous	Changes Made		Comments
value:	1.0E+02	mg/kg	
changed to:	8.E+01	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of	Chemical		Parameter
Change	Chemical		Falameter
4/13/2011	dibenzofuran	Ground Wa Value	ter, Method C, Non-carcinogen, Standard Formula
	Changes Mad	6	Comments
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	Chemical		Parameter
Change	dibenzofuran	Cround Wa	ter, Method B, Non-carcinogen, Standard Formula
4/13/2011		Value	ter, method B, Non-carchogen, Standard Formula
	Changes Made	e	Comments
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 Refere	nce Dose (RfDo)
	Changes Mad	9	Comments
changed to:	1.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
	Chemical		Poromotor
Date of Change	Chemical		Parameter
4/13/2011	dibenzo[a,h]anthracene	Oral Cance	r Potency Factor (CPFo)
	Changes Made	e	Comments
previous value:	7.3E+00	kg-day/mg	
changed to:	see additional information		Updated CLARC toxicity values from IRIS or NCEA

Date of Change	Chemical	Parameter	
4/13/2011	diazinon	Soil, Method C, Non-carcinogen, Standard Fomula Value, Contact (ingestion only), industrial land use	
	Changes Ma	ade	Comments
previous value:	3.2E+03	mg/kg	
ala ava ar a di Ala i	Researched-No Data		Changes to CLARC cleanup levels based on updated
changed to:			toxicity values (December 2010)
Date of	Chemical		
			toxicity values (December 2010)
Date of			toxicity values (December 2010)
Date of Change	Chemical	Contact (i	toxicity values (December 2010) Parameter nod B, Non-carcinogen, Standard Formula Value, Direct

Updated CLARC toxicity values from IRIS or NCEA (December 2010)

changed to:

see additional information

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value:			
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	diazinon	Ground Wat	ter, 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)
	Ohemieel		Denemation
Date of Change	Chemical		Parameter
4/13/2011	diazinon	Ground Wate Value	ter, Method B, Non-carcinogen, Standard Formula
	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)
	1		
Date of Change	Chemical		Parameter
4/13/2011	diazinon	Oral Refere	nce 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_co 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
•	Changes Made 1.3E+02	µg/m3	Comments
previous value: changed to:	-	µg/m3	Comments Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
value:	1.3E+02	µg/m3	Changes to CLARC cleanup levels based on update

	Changes Ma	Ide	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)	
			<b>D</b>	
Date of Change	Chemical		Parameter	
4/13/2011	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Air, Metho	Air, Method B, Carcinogen, Standard Formula Value	
	Changes Ma	Ide	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)	
	Chemical		Parameter	

Air, Method C, Non-carcinogen, Standard Formula Value

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4/13/2011

decabromodiphenyl

ether;2,2',3,3',4,4',5,5',6,6'

4/13/2011	decabromodiphenyl Air ether;2,2',3,3',4,4',5,5',6,6'		hod B, Non-Carcinogen, Standard Formula Value		
	Changes Ma	ade	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 (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 3:53PM

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

<b>J</b>			
4/13/2011	cyclohexane	Inhalation R	eference Dose (RfDi)
	Changes	Made	Comments
			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	Chemical	Parameter
Change		

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4/13/2011	copper	Surface V Value	Vater, Method C, Non-Carcinogen, Standard Formula
	Changes Ma	de	Comments
previous value:	6.7E+03	µg/L	
changed to:	7.2E+03	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	copper	Surface V	Vater, Method B, Non-Carcinogen, Standard Formula
		ł	
previous	Changes Ma 2.7E+03	ide µg/L	Comments
value: changed to:	2.9E+03	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	copper		nod C, Non-carcinogen, Standard Fomula Value, Direct ingestion only), industrial land use
	Changes Ma	de	Comments
previous value:	1.3E+05	mg/kg	
changed to:	1.4E+05	mg/kg	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	copper		nod B, Non-carcinogen, Standard Formula Value, Direct ingestion only), unrestricted land use
		· · ·	
previous	Changes Ma 3.E+03	ade mg/kg	Comments
value: changed to:	3.2E+03	mg/kg	Changes to CLARC cleanup levels based on update
		5, 5	toxicity values (December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	copper	Ground W Value	Vater, Method C, Non-carcinogen, Standard Formula
		ł	
previous	Changes Ma	a <b>de</b> μg/L	Comments
value: changed to:	1.4E+03	µg/L	Changes to CLARC cleanup levels based on update
			toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	copper	Ground W Value	Vater, Method B, Non-carcinogen, Standard Formula
	Changes Ma	ade	Comments
previous value:	5.9E+02	µg/L	

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 Refere	nce Dose (RfDo)	
	Changes Mad	le	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 Mad	ade Comments		

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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	
previous value:	Changes Made 2.1E+00	e μg/m3	Comments	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of Change	Chemical		Parameter	
4/13/2011	chromium(VI)	Air, Method	C, Non-carcinogen, Standard Formula Value	
previous value:	Changes Made 8.E-03	e μg/m3	Comments	
changed to:	1.E-01	µg/m3	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of Change	Chemical		Parameter	
4/13/2011	chromium(VI)	Air, Method	B, Carcinogen, Standard Formula Value	
	Oh en nee Med		O a management of	
previous	Changes Made 2.1E-01	e μg/m3	Comments	
value: changed to:	Researched-No Data	μ9/113	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of Change	Chemical	Parameter		
4/13/2011	chromium(VI)	Air, Method	B, Non-Carcinogen, Standard Formula Value	
	Changes Med	•	Comments	
previous value:	Changes Made 3.7E-03	μg/m3	Comments	
changed to:	4.6E-02	µg/m3	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of Change	Chemical		Parameter	
4/13/2011	chromium(VI)	Inhalation R	eference Dose (RfDi)	
previous value:	Changes Made 2.3E-06	e mg/kg-day	Comments	
changed to:	2.9E-05	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)	
Date of Change	Chemical		Parameter	
4/12/2011	obromium()/I)	Inhelation Concer Dataney Factor (CDEi)		

	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	Chemical		Parameter
Change			
4/13/2011			d C, Carcinogen, Standard Formula Value, Direct jestion only), industrial land use
	Changes Made		Comments
previous	1.2E+04	mg/kg	
value:			

Inhalation Cancer Potency Factor (CPFi)

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4/13/2011

chromium(VI)

Date of	Chemical		Parameter
Change 4/13/2011	chlorothalonil	Soil, Method	d B, Carcinogen, Standard Formula Value, Direct
			gestion 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 update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	chlorothalonil	Ground Wa	ter, Method C, Carcinogen, Standard Formula Value
	Changes Made		Comments
previous	8.E+01	µg/L	
value: changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	chlorothalonil	Ground Wa	ter, Method B, Carcinogen, Standard Formula Value
	Changes Made	1	Comments
previous value:	8.E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Dete			Denemeter
Date of Change	Chemical		Parameter
4/13/2011	chlorothalonil	Oral Cance	r Potency Factor (CPFo)
	Changes Made		Comments
previous	1.1E-02	kg-day/mg	
value: 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_oupdated from 0 to 3 on May 11 2011 3:53PM
Date of	Chemical		Parameter
Change 4/13/2011	chloropropane;2-	Air, Method C, Non-carcinogen, Standard Formula	
4/13/2011	chloropropane,2-	AII, 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 update 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 update toxicity values (December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	chloropropane;2-	Inhalation R	Reference Dose (RfDi)
	· · ·		
previous	Changes Made 2.9E-03	mg/kg-day	Comments
value:			
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

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Date of Change	Chemical		Parameter	
4/13/2011	chloronitrobenzene;p-		d C, Carcinogen, Standard Formula Value, Direct gestion only), industrial land use	
	Changes Mac	le	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-		d B, Carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use	
	Changes Mac	de	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 Wa	ter, 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	Chemical		Parameter	
Change	Chonnoul			
4/13/2011	chloronitrobenzene;p-	Ground Wa	ter, Method B, Carcinogen, Standard Formula Value	
	Changes Mac	de	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 Refere	nce Dose (RfDo)	
	Changes Mac	de	Comments	
previous value:	Researched-No Data			
changed to:	1.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)	
Dete			Demonstration	
Date of Change	Chemical		Parameter	
4/13/2011	chloronitrobenzene;p-	Inhalation R	Reference Dose (RfDi)	
	Changes Mag	40	Comments	

	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 Ma	de	Comments
previous value:	1.8E-02	kg-day/mg	
changed to:	6.3E-03	kg-day/mg Updated CLARC toxicity values from IRIS or I (December 2010)	
Date of Change			Parameter
4/13/2011	chloronitrobenzene;o-		d C, Carcinogen, Standard Formula Value, Direct jestion only), industrial land use

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nged to: 4.4E+02 mg/kg Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	previous value:	5.3E+03	mg/kg	
	changed to:	4.4E+02	mg/kg	
	changed to:	4.4E+02	mg/kg	

enange			
4/13/2011	chloronitrobenzene;o-		d B, Carcinogen, Standard Formula Value, Direct gestion 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	s 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 R	eference Dose (RfDi)
	Changes Ma	de	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 Ma	ade	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 Ma	ade	Comments
previous	1.4E+01	µg/m3	
value:			Changes to CLARC cleanup levels based on updated

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Date of Change	Chemical		Parameter
4/13/2011	chloromethane	Air, Metho	od B, Carcinogen, Standard Formula Value
	Changes Ma		Comments
previous value:	1.4E+00	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	chloromethane	Surface M	Votor, Mothod C. Coroinagon, Standard Formula Value
4/13/2011	chioromethane	Surface w	Vater, 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 update toxicity values (December 2010)
Data			Demonster
Date of Change	Chemical		Parameter
4/13/2011	chloromethane	Surface V	Vater, Method B, Carcinogen, Standard Formula Value
	Changes Ma	ade	Comments
previous value:	1.3E+02	μg/L	Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	chloromethane		od C, Carcinogen, Standard Formula Value, Direct ngestion only), industrial land use
	Changes Ma	do	Comments
previous value:	1.E+04	mg/kg	Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	chloromethane		od B, Carcinogen, Standard Formula Value, Direct ngestion only), unrestricted land use
	Changes Ma	ada	Comments
previous value:	7.7E+01	mg/kg	Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	chloromethane	Cround M	/ater, Method C, Carcinogen, Standard Formula Value

	Changes Ma	de	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 V	Water, Method B, Carcinogen, Standard Formula Value
	Changes Ma	de	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	n Reference Dose (RfDi)
	Changes Ma	de	Comments
previous	Researched-No Data		

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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: Guidar is provided when toxicity values are unavailable fro MTCA information hierarchy (April 2011) and note_ updated from 0 to 3 on May 11 2011 3:53PM
Date of	Chemical		Parameter
Change			
	Chemical chloromethane	Inhalation C	Parameter ancer Potency Factor (CPFi)
Change		Inhalation C	
Change	chloromethane	Inhalation C kg-day/mg	ancer Potency Factor (CPFi) Comments
Change 4/13/2011 previous	chloromethane Changes Made	1	Comments Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidan is provided when toxicity values are unavailable fro
Change 4/13/2011 previous value:	chloromethane Changes Made 6.3E-03	1	ancer Potency Factor (CPFi) Comments Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidan is provided when toxicity values are unavailable fro MTCA information hierarchy (April 2011) and note_
Change 4/13/2011 previous value:	chloromethane Changes Made 6.3E-03	1	ancer Potency Factor (CPFi) Comments Updated CLARC toxicity values from IRIS or NCEA (December 2010) comments_ds extended: Guidan is provided when toxicity values are unavailable fro MTCA information hierarchy (April 2011) and note_

	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		od B, Carcinogen, Standard Formula Value, Direct ngestion only), unrestricted land use
	Changes Ma	ade	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 W	/ater, Method C, Carcinogen, Standard Formula Value
	Changes Ma	ade	Comments
previous value:	7.2E+01	µg/L	

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changed 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 Wat	ter, Method B, Carcinogen, Standard Formula Value
	Changes Made		Comments
	1	1	

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	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 M	lade	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)

1	Date of	Chemical	Parameter

Change			
4/13/2011	chlorobutane;1-	Ground Wat Value	ter, Method B, Non-carcinogen, Standard Formula
	Changes	lade	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)
Data of	Ohamiaal		Denemerican
Date of	Chemical		Parameter
Date of Change 4/13/2011	Chemical chlorobutane;1-	Oral Refere	Parameter nce Dose (RfDo)
Change	chlorobutane;1-		nce Dose (RfDo)
Change			
Change	chlorobutane;1-		nce Dose (RfDo)

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Chemical		Parameter	
chlorobenzotrifluoride;4-	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct		
	Contact (ing	jestion only), industrial land use	
Changes Mag	le	Comments	
7.E+04	mg/kg		
1.1E+04	mg/kg	Changes to CLARC cleanup levels based on updated	
		toxicity values (December 2010)	
Chemical		Parameter	
chlorobenzotrifluoride;4-		d B, Non-carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use	
Changes Mar	10	Comments	
1.6E+03	mg/kg		
2.4E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	
Chemical		Parameter	
chlorobenzotrifluoride;4-	Ground Wa Value	ter, Method C, Non-carcinogen, Standard Formula	
Changes Mac	le	Comments	
3.5E+02	µg/L		
5.3E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	
Chemical		Parameter	
chlorobenzotrifluoride;4-	Ground Wa Value	ter, Method B, Non-carcinogen, Standard Formula	
Changes Mac	le	Comments	
1.6E+02	µg/L		
2.4E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	
		Parameter	
chlorobenzotrifluoride;4-	Oral Refere	nce Dose (RfDo)	
		Comments	
2.E-02	mg/kg-day		
3.E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)	
		(December 2010)	
	Chlorobenzotrifluoride;4-         Changes Mac         7.E+04         1.1E+04         Chemical         Changes Mac         1.6E+03         2.4E+02         Changes Mac         3.5E+02         5.3E+01         Changes Mac         1.6E+03         2.4E+02         Changes Mac         1.6E+03         2.4E+02         Changes Mac         1.6E+03         2.4E+01	chlorobenzotrifluoride;4-       Soil, Method Contact (ing         Changes Made       mg/kg         7.E+04       mg/kg         1.1E+04       mg/kg         chlorobenzotrifluoride;4-       Soil, Method Contact (ing         chlorobenzotrifluoride;4-       Mg/kg         chlorobenzotrifluoride;4-       Ground War Value         chlorobenzotrifluoride;4-       Oral Reference         chlorobenzotrifluoride;4-       Oral Refe	

	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	Chemical		Parameter
Change			
	a la la via la la via da la	Soil Mothor	d C, Non-carcinogen, Standard Fomula Value, Direct
4/13/2011	chlorobenzoic acid;p-		jestion only), industrial land use
4/13/2011	chlorobenzoic acid;p-		
4/13/2011	Chioropenzoic acid;p-		
4/13/2011 previous value:			estion only), industrial land use

Inhalation Reference Dose (RfDi)

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Change 4/13/2011

chlorobenzotrifluoride;4-

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 Ma	de	Comments	
previous value:	1.6E+04	mg/kg	Comments	
changed to:	2.4E+03	mg/kg	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of Change	Chemical		Parameter	
4/13/2011	chlorobenzoic acid;p-	Ground Wa Value	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Channes Ma	-l	Commonto	
previous	Changes Ma 7.E+03	l <b>de</b> μg/L	Comments	
value: changed to:	1.1E+03	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of Change	Chemical		Parameter	
4/13/2011	chlorobenzoic acid;p-	Ground Wa Value	ter, Method B, Non-carcinogen, Standard Formula	
	Changes Ma	do	Comments	
previous value:	3.2E+03	μg/L	Comments	
changed to:	4.8E+02	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of Change	Chemical		Parameter	
4/13/2011	chlorobenzoic acid;p-	Oral Refere	nce Dose (RfDo)	
	Channes Ma	-l	Comments	
previous value:	Changes Ma 2.E-01	mg/kg-day	Comments	
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 Ma	de	Comments	
previous	3.2E-01	μg/m3		
value: changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update	
			toxicity values (December 2010)	
	T	1		
Date of Change	Chemical		Parameter	
4/13/2011	chlorobenzilate	Air, Method	B, Carcinogen, Standard Formula Value	

	Chang	es Made	Comments
previous value:	3.2E-02	μg/m3	

raido.			
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	······································		od C, Carcinogen, Standard Formula Value, Direct ngestion only), industrial land use
	Changes Made	9	Comments
previous value:	4.9E+02	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	chlorobenzilate		od B, Carcinogen, Standard Formula Value, Direct ngestion only), unrestricted land use

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	Changes Made	9	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 Ma	ade	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	Chemical		Parameter	
Change	Chemical		Farameter	
4/13/2011	chlorobenzene	Air, Metho	Air, Method B, Non-Carcinogen, Standard Formula Value	
	•	· · ·		
	Changes Ma	ade	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 Mr	ada a	Commonto	
	Changes Ma	aue	Comments	

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abanged to:	5.E-03	mg/kg-day	Lindeted CLARC toxisity yolyop from IDIC on NOTA
changed to:	1.4E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	chloroaniline;p-	Air, Method C, Non-carcinogen, Standard Formula Value	
410/2011	onioroaninine,p		
· ·	Changes Made		Comments
previous value:	1.4E+01	µg/m3	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
		1	
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 update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	chloroaniline;p-	Inhalation R	eference 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_c 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		
	2.E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
changed to: Date of Change	Chemical		Parameter
changed to: Date of	Chemical chloro-2-methylaniline;4-		Parameter d C, Carcinogen, Standard Formula Value, Direct estion only), industrial land use

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 Mad	e	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 Va		
	Changes Mad	e	Comments	
previous value:		e µg/L		

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Date of Change	Chemical				Parameter	
4/13/2011	chloro-2-methylaniline;4-	Ground \	Ground Water, Method B, Carcinogen, Standard Formula Value			
	Changes Ma	de	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
	Chang	es 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 Wa	ter, Method B, Carcinogen, Standard Formula Value
	Changes Ma	ade	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
Date of Change 4/13/2011	Chemical	Oral Cancer	Parameter r Potency Factor (CPFo)
Change	chloranil		r Potency Factor (CPFo)
Change			
Change	chloranil		r Potency Factor (CPFo)

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Date of Change	Chemical		Parameter
4/13/2011	chloral		d C, Non-carcinogen, Standard Fomula Value, Direc jestion 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 upda toxicity values (December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	chloral		d B, Non-carcinogen, Standard Formula Value, Direc jestion 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 upda toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	chloral	Ground Wa Value	ter, Method C, Non-carcinogen, Standard Formula
	Changes Made		Comments
previous value:	3.5E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on upda toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	chloral	Ground Wa Value	ter, Method B, Non-carcinogen, Standard Formula
	Changes Made	•	Comments
previous	1.6E+01	µg/L	
value: changed to:	Researched-No Data		Changes to CLARC cleanup levels based on upda toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	chloral	Oral Refere	nce 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: Guidan is provided when toxicity values are unavailable fro MTCA information hierarchy (April 2011) and note_ updated from 0 to 3 on May 11 2011 3:53PM
Date of	Chemical		Parameter
Change			

		Contact (ii	ngestion only), industrial land use	
	Changes Ma	ade	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	Chemical		Parameter	
Change				
4/13/2011	carbophenothion		Method B, Non-carcinogen, Standard Formula Value, Direct act (ingestion only), unrestricted land use	
		•		
	Changes Ma	ade	Comments	
previous value:	Changes Ma 1.E+01	ade mg/kg	Comments	

Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct

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4/13/2011

carbophenothion

Date of	Chemical		Parameter
Change 4/13/2011	carbophenothion	Ground W/o	ter, Method C, Non-carcinogen, Standard Formula
<del>,</del> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Value	ter, methou C, mon-carcinogen, Standard Formula
	Changes Made		Comments
previous	4.6E+00	µg/L	
value: changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update
changed to.	Researcheu-no Data		toxicity values (December 2010)
		1	<b>D</b>
Date of Change	Chemical		Parameter
4/13/2011	carbophenothion	Ground Wa Value	ter, Method B, Non-carcinogen, Standard Formula
	Changes Made		Comments
previous	2.1E+00	µg/L	
value:			
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of	Chemical		Daramatar
Date of Change	Chemical		Parameter
4/13/2011	carbophenothion	Oral Refere	nce Dose (RfDo)
provious	Changes Made	malle de	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 co
			updated from 0 to 3 on May 11 2011 3:53PM
Date of	Chemical		Parameter
Change 4/13/2011	carbon tetrachloride	Air Mathed	C. Carologon, Standard Formula Valua
			C, Carcinogen, Standard Formula Value
-	Changes Made		Comments
previous	1.7E+00	µg/m3	
value: changed to:	4.2E+00	µg/m3	Changes to CLARC cleanup levels based on updated
		P9/110	toxicity values (December 2010)
	· · · · · · · · · · · · · · · · · · ·		
Date of	Chemical		Parameter
Change 4/13/2011	carbon tetrachloride	Air Mothod	B, Carcinogen, Standard Formula Value
4/13/2011			D, Carcinogen, Standard i Ornula Value
	Changes Made	1	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 Wa	ter, Method C, Carcinogen, Standard Formula Value
	Changes Made		Comments
previous	6.6E+01	µg/L	
value: changed to:	1.2E+02	ua/l	Changes to CLARC cleanup levels based on updated
unungeu iu.	1.22 1 92	µg/L	toxicity values (December 2010)
Date of	Chemical		Parameter
Date of Change	Cnemical		Farameter
4/13/2011	carbon tetrachloride	Surface Wa Value	ter, Method C, Non-Carcinogen, Standard Formula
	Changes Made		Comments
previous	Changes Made 2.4E+02	µg/L	Comments
value:		P3/ F	
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 Ma	ade	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 V Value	Water, Method B, Non-Carcinogen, Standard Formula
	Changes Ma	ade	Comments
previous value:	9.7E+01	µg/L	
changed to:	5.5E+02	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change	Cnemical		Parameter
4/13/2011	carbon tetrachloride		hod C, Carcinogen, Standard Formula Value, Direct (ingestion only), industrial land use
	Changes Ma	ade	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		hod C, Non-carcinogen, Standard Fomula Value, Direct (ingestion only), industrial land use
	Changes Ma	ade	Comments
previous value:	2.5E+03	mg/kg	
changed to:	1.4E+04	mg/kg	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	carbon tetrachloride		hod B, Carcinogen, Standard Formula Value, Direct (ingestion only), unrestricted land use
	Changes Ma	ade	Comments
previous value:	7.7E+00	mg/kg	
changed to:	1.4E+01	mg/kg	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter

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 Ma	ade	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 V	Vater, Method C, Carcinogen, Standard Formula Value	
	Oliver Ma			
	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 V Value	Vater, Method C, Non-carcinogen, Standard Formula	
	Changes Ma	ade	Comments	

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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	Chemical		Parameter
Change 4/13/2011	carbon tetrachloride	Ground Wa	ter, Method B, Carcinogen, Standard Formula Value
	Changes Made		Comments
previous value:	3.4E-01	µg/L	Comments
changed to:	6.3E-01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	carbon tetrachloride		ter, Method B, Non-carcinogen, Standard Formula
		Value	
previous	Changes Made 5.6E+00	µg/L	Comments
value:		μ9/ L	
changed to:	3.2E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of	Chemical		Parameter
Change			i di dificici
4/13/2011	carbon tetrachloride	Oral Refere	nce 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	Chemical	1	Parameter
Change 4/13/2011	carbon tetrachloride	Inhalation R	eference Dose (RfDi)
previous	Changes Made Researched-No Data		Comments
value: changed to:	2.9E-02	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
		1	
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 C	ancer Potency Factor (CPFi)
	Changes Made		Comments
previous	5.3E-02	kg-day/mg	Comments
value: 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		d C, Carcinogen, Standard Formula Value, Direct Jestion only), industrial land use
	Changes Made		Comments
previous value:	6.6E+03	mg/kg	Johnnents

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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 update toxicity values (December 2010)
	1	1	
Date of Change	Chemical		Parameter
4/13/2011	carbazole	Ground Wat	ter, 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 update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	carbazole	Ground Water, Method B, Carcinogen, Standard Formula Va	
	Changes Made		Comments
previous value:	4.4E+00	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	carbazole	Oral Cancer	r 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: Guidanc is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_c updated from 0 to 3 on May 11 2011 3:53PM
Dete			
Date of Change	Chemical		Parameter
4/13/2011	captan		d C, Carcinogen, Standard Formula Value, Direct gestion 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 update toxicity values (December 2010)

Date of Change	Chemical		Parameter	
4/13/2011	captan		nod B, Carcinogen, Standard Formula Value, Direct ingestion only), unrestricted land use	
	Changes Ma	ade	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 4/13/2011	Chemical	Ground W	Parameter           Ground Water, Method C, Carcinogen, Standard Formula Value	
4/10/2011				
	Changes Ma		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	One used M	Ground Water, Method B, Carcinogen, Standard Formula Value	

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	Changes Ma	ade	Comments
previous value:	2.5E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update 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 Oral Cancer Potency Factor (CPFo)	
4/13/2011	captafol		
	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_co updated from 0 to 3 on May 11 2011 3:53PM
Date of	Chemical		Parameter
Change			
4/13/2011	cadmium in water	Surface Wa Value	ter, Method C, Non-Carcinogen, Standard Formula

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	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 Wat Value	er, Method C, Non-carcinogen, Standard Formula
	Changes Made		Comments
previous value:	1.8E+01	µg/L	

value:			
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 V Value	Water, Method B, Non-carcinogen, Standard Formula
	Changes Ma	de	Comments
previous value:	Changes Mar 8.E+00	de µg/L	Comments

Date of Change	Chemical		Parameter
4/13/2011	cadmium in water	Oral Refere	nce Dose (RfDo)
	Changes Ma	ade	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	Chemical		
Date of Change	Chemical	Air Mothod	Parameter
Change	Chemical cadmium in soil	Air, Method	
			Parameter
Change	cadmium in soil		Parameter C, Carcinogen, Standard Formula Value

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Date of Change	Chemical		Parameter
4/13/2011	cadmium in soil	Air, Method	B, Carcinogen, Standard Formula Value
	Changes Mad	e	Comments
orevious 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 Wa Value	ater, Method C, Non-Carcinogen, Standard Formula
	Changes Mad	<b>A</b>	Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	cadmium in soil	Surface Wa	ater, Method B, Non-Carcinogen, Standard Formula
	Changes Mad	e	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		d C, Non-carcinogen, Standard Fomula Value, Direct gestion only), industrial land use
	Changes Mad	e	Comments
orevious value:	3.5E+03	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
		1	
Date of Change	Chemical		Parameter
4/13/2011	cadmium in soil		d B, Non-carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use
	Changes Mad	e	Comments
orevious /alue:	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 Wa	ater, Method C, Non-carcinogen, Standard Formula
	Changes Mad	e	Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated

	Date of	Chemical	Parameter
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Change			
4/13/2011	cadmium in soil	Ground Wat Value	ter, Method B, Non-carcinogen, Standard Formula
	Changes Made		Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	cadmium in soil	Oral Bafara	nce Dose (RfDo)
4/13/2011			
	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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		updated from 0 to 3 on May 11 2011 3:53PM

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, Metho	od B, Non-Carcinogen, Standard Formula Value
	Changes Ma	de	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	Chemical		Parameter
Change			
4/13/2011	butyl benzyl phthalate	Value	Vater, Method C, Non-Carcinogen, Standard Formula

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	Chang	ges 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

	Chang	ges 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, Metho	od B, Carcinogen, Standard Formula Value
	Changes Ma	ade	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, Metho	od B, Non-Carcinogen, Standard Formula Value
	Changes Ma	do	Comments
previous value:	9.1E-01	µg/m3	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	butadiene;1,3-		od C, Carcinogen, Standard Formula Value, Direct ngestion only), industrial land use
	Changes Ma	de	Comments
previous value:	1.2E+03	mg/kg	

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changed 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-		nod C, Non-carcinogen, Standard Fomula Value, Direct ingestion only), industrial land use
	Changes Ma	ade	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-		nod B, Carcinogen, Standard Formula Value, Direct ingestion only), unrestricted land use
	Changes Ma	de	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-		nod B, Non-carcinogen, Standard Formula Value, Direct ingestion only), unrestricted land use
	Changes Ma	de	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	Chemical		Parameter
Change			
4/13/2011	butadiene;1,3-	Ground V	Vater, Method C, Carcinogen, Standard Formula Value
	Changes Ma	ade	Comments
previous	4.E+00	µg/L	
value: changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	butadiene;1,3-	Ground V Value	Vater, Method C, Non-carcinogen, Standard Formula
	Changes Ma	de	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 Ma	ade	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 V Value	Water, Method B, Non-carcinogen, Standard Formula
	Changes Ma	ade	Comments
previous value:	Changes Ma 4.6E+00	ade µg/L	Comments

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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

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_co 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

	Change	es 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 R	eference Dose (RfDi)
	Changes Ma	ade	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
	Chemical bromoethene	Inhalation C	
Change			Parameter
Change	bromoethene		Parameter Cancer Potency Factor (CPFi)

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Date of Change	Chemical		Parameter
4/13/2011	bromate		nod C, Carcinogen, Standard Formula Value, Direct ingestion only), industrial land use
	Ohanasa	NA1-	<b>O</b> a manufacture
previous value:	9.4E+02	mg/kg	Comments
changed to:	1.9E+02	mg/kg	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	bromate		nod C, Non-carcinogen, Standard Fomula Value, Direct ingestion only), industrial land use
		Contact (	
	Changes	Made	Comments
previous value:	7.E+04	mg/kg	
changed to:	1.4E+04	mg/kg	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
		-	
Date of Change	Chemical		Parameter
4/13/2011	bromate		nod B, Carcinogen, Standard Formula Value, Direct 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 update toxicity values (December 2010)
Date of	Chemical		Parameter
Change	Chemioar		r di dificici
4/13/2011	bromate		nod B, Non-carcinogen, Standard Formula Value, Direct 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 update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	boron	Air, Meth	od 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 update toxicity values (December 2010)
Date of	Chemical		Parameter
<b>Change</b> 4/13/2011	boron	Air Math	od B, Non-Carcinogen, Standard Formula Value
4/13/2011	boron		

	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)
	1		
Date of Change	Chemical		Parameter
4/13/2011	boron	Inhalation R	eference 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 Wa Value	ter, Method C, Non-Carcinogen, Standard Formula

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•	Changes Made		Comments
previous value:	1.E+05	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	bis(2-chloroisopropyl) ether	Surface V Value	Vater, Method B, Non-Carcinogen, Standard Formula
	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	Chemical		Parameter
Change			
4/13/2011	bis(2-chloroisopropyl) ether		od C, Non-carcinogen, Standard Fomula Value, Direct ngestion 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 update toxicity values (December 2010)
Data of	Chemical		Deremeter
Date of Change	Chemical		Parameter
4/13/2011	bis(2-chloroisopropyl) ether		od B, Non-carcinogen, Standard Formula Value, Direct ngestion 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 update toxicity values (December 2010)
Date of Change	Chemical		Parameter
Date of Change 4/13/2011	Chemical bis(2-chloroisopropyl) ether	Ground W Value	Parameter /ater, Method C, Non-carcinogen, Standard Formula

	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
Change		

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4/13/2011	bis(2-chloro-1-methyl- ethyl)ether	Oral Refere	nce Dose (RfDo)
	Changes Made	•	Comments
previous	Researched-No Data	-	Commenta
value: 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	biphenyl;1,1-	Inhalation R	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_co updated from 0 to 3 on May 11 2011 3:53PM
Date of	Chemical		Parameter
Change 4/13/2011	benzyl chloride	Air Method	C, Carcinogen, Standard Formula Value
1110/2011	bonzyronnondo		
	Changes Made		Comments
previous value:	5.2E-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	benzyl chloride	Air, Method	C, Non-carcinogen, Standard Formula Value
		,	
	Changes Made		Comments
previous value:	1.E+01	µg/m3	
changed to:	1.E+00	µg/m3	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	benzyl chloride	Air, Method	B, Carcinogen, Standard Formula Value
	Changes Made	<u> </u>	Comments
previous	5.2E+02	μg/m3	
value: changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	benzyl chloride		B, Non-Carcinogen, Standard Formula Value

	Chang	es Made	Comments
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)

Date of Change	Chemical		Parameter
4/13/2011	benzyl chloride		nod C, Non-carcinogen, Standard Fomula Value, Direct ngestion only), industrial land use
	Changes Ma	ade	Comments
previous value:	1.E+04	mg/kg	
value.			
changed to:	7.E+03	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
	7.E+03 Chemical	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010) Parameter
changed to: Date of		Soil, Meth	toxicity values (December 2010)
changed to: Date of Change	Chemical	Soil, Meth Contact (i	toxicity values (December 2010) Parameter nod B, Non-carcinogen, Standard Formula Value, Direct

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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 Wa Value	ter, Method C, Non-carcinogen, Standard Formula
	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	Chemical		Deromotor
Change	Chemical		Parameter
4/13/2011	benzyl chloride	Ground War Value	ter, Method B, Non-carcinogen, Standard Formula
	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	Chemical		Parameter
Change	Gleinicai		Falameter
4/13/2011	benzyl chloride	Oral Refere	nce 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 R	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	Chemical		Parameter
Change	Chonnoul	i arameter	
4/13/2011	benzyl chloride	Inhalation C	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_co updated from 0 to 3 on May 11 2011 3:53PM
Date of	Chemical		Parameter

Date of Change	Chemical		Parameter	
4/13/2011	benzyl alcohol		od C, Non-carcinogen, Standard Fomula Value, Direct ngestion only), industrial land use	
	Changes Ma	ade	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	Chemical		Parameter	
Change 4/13/2011	benzyl alcohol	Soil Meth	od B, Non-carcinogen, Standard Formula Value, Direct	
4/13/2011			(ingestion only), unrestricted land use	
	Okan maa M		<b>O</b> a man a mta	
-	Changes Ma		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	ter, Method C, Non-carcinogen, Standard Formula		
	Changes Made	9	Comments	
previous value:	5.3E+03	µg/L		
changed to:	1.8E+03	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of Change	Chemical		Parameter	
4/13/2011	benzyl alcohol	Ground Wa	ter, Method B, Non-carcinogen, Standard Formula	
	Changes Made		Commente	
previous value:	Changes Made 2.4E+03	μg/L	Comments	
changed to:	8.E+02	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of Change	Chemical		Parameter	
4/13/2011	benzyl alcohol	Oral Reference Dose (RfDo)		
	Changes Made	<u>a</u>	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 Cance	Dral Cancer Potency Factor (CPFo)	
	Changes Made	•	Comments	
previous	7.3E+00	kg-day/mg	Comments	
value: 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 Cance	r Potency Factor (CPFo)	
	Changes Made	9	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	

	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		toxicity values (December 2010) Parameter	
	Chemical benzo[a]pyrene	Inhalation C		
Change			Parameter	

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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]anthracene	Oral Cancer	Potency Factor (CPFo)
	Changes Made		Comments
previous	7.3E+00	kg-day/mg	Comments
value:			
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	Chemical		Parameter
Change	Chemical		i alameter
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
<b>.</b>			toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	benzene	Inhalation R	eference 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		I C, Non-carcinogen, Standard Fomula Value, Direct estion only), industrial land use
	Changes Made		Comments
previous	3.5E+05	mg/kg	
			Changes to CLARC cleanup levels based on updated
value: changed to:	Researched-No Data		toxicity values (December 2010)
	Researched-No Data		toxicity values (December 2010)
changed to: Date of	Researched-No Data Chemical		toxicity values (December 2010) Parameter
changed to: Date of Change			Parameter B, Non-carcinogen, Standard Formula Value, Direct
changed to:	Chemical barium cyanide		Parameter I B, Non-carcinogen, Standard Formula Value, Direct estion only), unrestricted land use
changed to: Date of Change 4/13/2011	Chemical barium cyanide Changes Made	Contact (ing	Parameter B, Non-carcinogen, Standard Formula Value, Direct
changed to: Date of Change	Chemical barium cyanide		Parameter I B, Non-carcinogen, Standard Formula Value, Direct estion only), unrestricted land use

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_co updated from 0 to 3 on May 11 2011 3:53PM	
Date of	Chemical		Parameter	
Change	barium and compounds	Air, Method C, Non-carcinogen, Standard Formula Value		
4/13/2011	barium and compounds			

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abancad to:	Changes Made		Comments		
changed to:	5.E-01	µg/m3	Changes to CLARC cleanup levels based on update toxicity values (December 2010)		
Date of	Chemical		Parameter		
Change					
4/13/2011	barium and compounds	Air, Method	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 update toxicity values (December 2010)		
Date of Change	Chemical		Parameter		
4/13/2011	barium and compounds	Inhalation R	eference 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	Chemical		Parameter		
Change					
4/13/2011	azobenzene	Air, Method	C, Carcinogen, Standard Formula Value		
	Changes Made	1	Comments		
previous value:	8.1E+02	μg/m3			
changed to:	8.1E-01	µg/m3	Changes to CLARC cleanup levels based on update toxicity values (December 2010)		
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			
changed to:	8.1E-02	µg/m3	Changes to CLARC cleanup levels based on update toxicity values (December 2010)		
Date of Change	Chemical		Parameter		
4/13/2011	azobenzene	Inhalation C	ancer Potency Factor (CPFi)		
	Changes Made	•	Comments		
previous value:	1.1E-04	kg-day/mg			
changed to:	1.1E-01	kg-day/mg	Updated CLARC toxicity values from IRIS or NCEA (December 2010)		
Date of	Chemical		Parameter		
Change		Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use			

	Changes Made		Comments	
previous value:	6.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	atrazine		Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
	Changes Ma	ade	Comments	
previous value:	4.5E+00	mg/kg		
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of Change	Chemical		Parameter	
	atrazine		Ground Water, Method C, Carcinogen, Standard Formula Value	

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	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	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 R	eference 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
	Okan na Ma		O a remain to
previous	Changes Ma 3.5E-01	μg/m3	Comments
value: changed to:	3.5E-01	μg/m3	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	aramite	Inhalation C	Cancer Potency Factor (CPFi)
	Changes Ma	Ide	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	Chemical		Parameter
Change	Chemical		
4/13/2011	antimony trioxide		d C, Non-carcinogen, Standard Fomula Value, Direct gestion only), industrial land use
	Changes Ma	de 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)
Dete of	Ohemieel		Denometer
Date of Change	Chemical		Parameter
4/13/2011	antimony trioxide		d B, Non-carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use
	Changes Ma	Ide	Comments
previous value:	3.2E+01	mg/kg	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	antimony trioxide	Ground Wa Value	ter, Method C, Non-carcinogen, Standard Formula
	Changes Ma	Ide	Comments
previous	1.4E+01	µg/L	
value: changed to:	Researched-No Data		Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/12/2011	antimony triovido		ter Method D. Nen earsingson Standard Formula

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)
Change	Chemical		Parameter
4/13/2011	antimony trioxide	Oral Refere	nce Dose (RfDo)
4/13/2011		Oral Refere	
	Changes Made		nce Dose (RfDo) Comments
4/13/2011 previous value:		Oral Referen	

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			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	aniline	Air, Method	B, Non-Carcinogen, Standard Formula Value	
	Changes Ma	do	Comments	
previous	4.6E-01	μg/m3	Comments	
value:				
changed to:	4.6E-01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change 4/13/2011	aniline	Oral Pofora	nce Dose (RfDo)	
4/13/2011		Oldi Relete		
	Changes Ma	de	Comments	
previous	Researched-No Data			
value: 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 (ing	jestion only), industrial land use	
	Changes Ma	de	Comments	
previous	7.E+01	mg/kg		
value: changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated	
ondriged to.	Researched No Data		toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change				
4/13/2011	aminopyridine;4-		d B, Non-carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use	
	Changes Ma	de	Comments	
previous	1.6E+00	mg/kg		
value: changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated	
			toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change	Chonnour			
4/13/2011	aminopyridine;4-	Ground Wat Value	ter, Method C, Non-carcinogen, Standard Formula	
	Changes Ma	de	Comments	
previous	7.E-01	μg/L	Comments	
value:		- 164		
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change	Chemical		r ai ainetei	
4/13/2011	aminopyridine;4-	Ground Wat	ter, 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	Chemical		Parameter	
Change	Chonnoul	Farameter		
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_co updated from 0 to 3 on May 11 2011 3:53PM	

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Date of Change	Chemical		Parameter	
4/13/2011	aminophenol;m-	Soil, Method C, Non-carcinogen, Standard Fomula Value, D 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 update toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change 4/13/2011	aminophenol;m-		d B, Non-carcinogen, Standard Formula Value, Direct jestion only), unrestricted land use	
	Okan waa Mada	· · · ·		
previous value:	Changes Made 5.6E+03	mg/kg	Comments	
changed to:	6.4E+03	mg/kg	Changes to CLARC cleanup levels based on update toxicity values (December 2010)	
Date of Change	Chemical		Parameter	
4/13/2011	aminophenol;m-	Oral Refere	nce 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	4.6E-01	µg/m3	Comments	
value: changed to:	4.6E-01	µg/m3	Changes to CLARC cleanup levels based on update	
			toxicity values (December 2010)	
_				
Date of Change	Chemical		Parameter	
4/13/2011	allyl chloride		d C, Non-carcinogen, Standard Fomula Value, Direct jestion 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 update toxicity values (December 2010)	
Date of Change	Chemical		Parameter	
4/13/2011	allyl chloride	Soil, Method B, Non-carcinogen, Standard Formula Value, Direct		

	Changes Ma	ade	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 W Value	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Ma	ade	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 War Value	ter, Method B, Non-carcinogen, Standard Formula
	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	Chemical		Parameter
Change			
4/13/2011	allyl chloride	Oral Refere	nce 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_co updated from 0 to 3 on May 11 2011 3:53PM
Date of Change	Chemical		Parameter
4/13/2011	allyl alcohol	Inhalation R	Reference Dose (RfDi)
		•	
previous	Changes Made Researched-No Data		Comments
value:	Researched-No Data		
changed to:	2.9E-05	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)
		1	5
Date of Change	Chemical		Parameter
4/13/2011	alachlor		d C, Carcinogen, Standard Formula Value, Direct gestion 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	Chemical		Parameter
Change 4/13/2011	alachlor		d B, Carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use
	Charges Made		Comments
previous value:	Changes Made 1.2E+01	mg/kg	Comments
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
		1	
Date of Change	Chemical		Parameter
	alaahlar		

	Changes Ma	ade	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 V	Water, Method B, Carcinogen, Standard Formula Value
	÷		
	Changes Ma	ade	Comments
previous value:	Changes Ma 1.1E+00	ade µg/L	Comments
•			Comments Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
value:	1.1E+00 Researched-No Data		Changes to CLARC cleanup levels based on updated
value:	1.1E+00		Changes to CLARC cleanup levels based on updated

Ground Water, Method C, Carcinogen, Standard Formula Value

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alachlor

	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_co updated from 0 to 3 on May 11 2011 3:53PM
Date of	Chemical		Parameter
Change			
4/13/2011	acrylonitrile	Surface Wa Value	ter, Method C, Non-Carcinogen, Standard Formula
	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	Chemical		Parameter
Change	Uncinical		r dramotor
4/13/2011	acrylonitrile	Surface Wa Value	ter, Method B, Non-Carcinogen, Standard Formula
	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)
Dete of	Chemical		Deremeter
Date of Change			Parameter
4/13/2011	acrylonitrile		d C, Non-carcinogen, Standard Fomula Value, Direct gestion 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)
Dete of	Oberniegi	1	Demonstra
Date of Change	Chemical		Parameter
4/13/2011	acrylonitrile		d B, Non-carcinogen, Standard Formula Value, Direct gestion 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)
	Chemical		Parameter
Date of			- diamotor

	Changes Made		Comments
previous value:	1.8E+01	µg/L	
changed to:	Researched-No Data		Changes to CLARC cleanup levels based on updated

J	J
	toxicity values (December 2010)

Date of Change	Chemical		Parameter
4/13/2011	acrylonitrile	Ground V Value	Vater, Method B, Non-carcinogen, Standard Formula
	Changes Ma	ade	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)

Oral Reference Dose (RfDo)

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**Change** 4/13/2011

acrylonitrile

	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	Chemical		Parameter
Change	a secolar secolar		
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:	Changes Made 1.9E-02	µg/m3	Comments
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	1.9E-03	µg/m3	Comments
value: 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		d C, Carcinogen, Standard Formula Value, Direct gestion 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	Chemical		Parameter
Change			
4/13/2011	acrylamide		d C, Non-carcinogen, Standard Fomula Value, Direct gestion 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		od B, Carcinogen, Standard Formula Value, Direct ngestion only), unrestricted land use		
	Changes Ma	de	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		od B, Non-carcinogen, Standard Formula Value, Direct ngestion only), unrestricted land use		
	Okan was Ma	-1-			
	Changes Ma	ae	Comments		
	1.6E+01	mg/kg			

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changed to:	1.6E+02	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	
Date of	Chemical		Parameter	
Change 4/13/2011	acrylamide	Ground Wa	ter, Method C, Carcinogen, Standard Formula Value	
4/13/2011		Glound Wa	ter, Method C, Carchogen, Standard Formula Value	
	Changes Mad		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 Chemical Change			Parameter	
4/13/2011	acrylamide	Ground Wa Value	ter, Method C, Non-carcinogen, Standard Formula	
	Changes Mad	le	Comments	
previous	3.5E+00	μg/L		
value: changed to:	3.5E+01	µg/L	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)	
Dete of	Chaming		Devenueden	
Date of Change	Chemical		Parameter	
4/13/2011	acrylamide	Ground Wa	ter, Method B, Carcinogen, Standard Formula Value	
	Changes Mad	le	Comments	
previous	9.7E-03	µg/L		
value: 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 Wa Value	ter, Method B, Non-carcinogen, Standard Formula	
	Changes Mad	le	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	Chemical		Parameter	
Change	Chonnoul			
4/13/2011	acrylamide	Oral Refere	nce Dose (RfDo)	
	Changes Mac	le	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	Chemical		Parameter	
Change				
4/13/2011	acrylamide	Inhalation R	Reference Dose (RfDi)	
previous	Changes Mac Researched-No Data	le	Comments	
value: changed to:	1.7E-03	mg/kg-day	Updated CLARC toxicity values from IRIS or NCEA (December 2010)	
Date of	Chemical		Doromotor	
Date of Change	Chemical		Parameter	
4/13/2011	acrylamide	Oral Cance	r Potency Factor (CPFo)	
	Changes Mad		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)	

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Date of Change	Chemical	Parameter	
4/13/2011	acrylamide	Inhalation C	Cancer Potency Factor (CPFi)
previous	Changes Made 4.6E+00	kg-day/mg	Comments
value:	4.66+00	Kg-uay/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		d C, Non-carcinogen, Standard Fomula Value, Direct gestion only), industrial land use
	Changes Made		Comments
previous	7.E+04	mg/kg	Comments
value:		ציי וצייי	
changed to:	1.8E+03	mg/kg	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change			
4/13/2011	acrolein	Soil, Method B, Non-carcinogen, Standard Formula Value, Di 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 update toxicity values (December 2010)
Date of Change	Chemical		Parameter
4/13/2011	acrolein	Ground Wa Value	ater, Method C, Non-carcinogen, Standard Formula
	Changes Made		Comments
previous value:	3.5E+02	µg/L	
changed to:	8.8E+00	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
Date of	Chemical		Parameter
Change 4/13/2011	acrolein	Ground Wa	ter, Method B, Non-carcinogen, Standard Formula
		Value	
previous value:	Changes Made 1.6E+02	µg/L	Comments
changed to:	4.E+00	µg/L	Changes to CLARC cleanup levels based on update toxicity values (December 2010)
	Obersidel		Devenuetor
Date of Change	Chemical		Parameter
4/13/2011	acrolein	Oral Refere	ence Dose (RfDo)
	Changes Made		Comments
•			

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		d C, Non-carcinogen, Standard Fomula Value, Direct gestion only), industrial land use	
	Changes Ma	ade	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, Direc Contact (ingestion only), unrestricted land use		

mg/kg-day

previous

value:

2.E-02

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	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 Mad	e	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	Chemical	Parameter

Change			
4/13/2011	acetophenone	Inhalation Reference Dose (RfDi)	
	Objerning Made		<b>O</b> ommente
	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_co updated from 0 to 3 on May 11 2011 3:53PM
Date of	Chemical		Parameter
Change	Chemical		Falameter
4/13/2011	acetone cyanohydrin	Air, Method	C, Non-carcinogen, Standard Formula Value
	Changes Made		Comments
		µg/m3	

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cha	anged to:	6.E+01	µg/m3	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
		1	1	

Date of Change	Chemical		Parameter
4/13/2011	acetone cyanohydrin	Air, Metho	od B, Non-Carcinogen, Standard Formula Value
	Changes M	ade	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

	Change	s 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 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 \ Value	Ground Water, Method B, Non-carcinogen, Standard Formula Value	
	Changes Ma	ade	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	Chemical		Parameter	
Change	Chomodi			
4/13/2011	acetone cyanohydrin	Oral Ref	erence Dose (RfDo)	

		•		
	Changes Ma	Ide	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 R	Inhalation Reference Dose (RfDi)	
	Changes Ma	Ide	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		d C, Non-carcinogen, Standard Fomula Value, Direct gestion only), industrial land use
	Changes M	ade	Comments
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)
	1		
Date of Change	Chemical		Parameter
4/13/2011	acetone		d B, Non-carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use
	Changes M	ada	Comments
previous value:	8.E+03	mg/kg	Comments
changed to:	7.2E+04	mg/kg	Changes to CLARC cleanup levels based on updated toxicity values (December 2010)
Date of	Chemical		Parameter
Change	Chemical		Falameter
4/13/2011	acetone	Ground Wat Value	ter, Method C, Non-carcinogen, Standard Formula
	Changes M	ade	Comments
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)
Date of Change	Chemical		Parameter
4/13/2011	acetone	Ground Wat Value	ter, Method B, Non-carcinogen, Standard Formula
	Changes M	ada	Comments
previous	8.E+02	μg/L	Comments
value: 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	acetone	Oral Refere	nce Dose (RfDo)
	Changes M	ade	Comments
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)
Date of Change	Chemical		Parameter
4/13/2011	2-chloro-1,3-butadiene	Air, Method	C, Non-carcinogen, Standard Formula Value

	Changes Ma	de	Comments
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)
Date of Change	Chemical		Parameter
4/13/2011	2-chloro-1,3-butadiene	Air, Metho	d B, Non-Carcinogen, Standard Formula Value
	Changes Ma		Commonto
	Changes Ma		Comments
previous value:	3.2E+00	µg/m3	
	9.1E+00	µg/m3	Changes to CLARC cleanup levels based on updated
changed to:			toxicity values (December 2010)
changed to:			toxicity values (December 2010)
Date of Change	Chemical		Parameter

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	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 (CPFi)

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

Da	ate of	Chemical	Parameter
		ononnoar	i ulullotoi
	hango		

Change			
4/22/2010	trichloroethane;1,1,1-	hloroethane;1,1,1- Ground Water, Method C, Non-carc Value	
	Changes Ma	ade	Comments
previous value:	1.6E+04	µg/L	IRIS update
changed to:	3.5E+04	µg/L	IRIS update
Date of	Chemical		Parameter
Date of Change	Chemical		
	Chemical trichloroethane;1,1,1-	Ground V Value	Parameter Water, Method B, Non-carcinogen, Standard Formula
Change	trichloroethane;1,1,1-	Value	Water, Method B, Non-carcinogen, Standard Formula
Change		Value	
Change	trichloroethane;1,1,1-	Value	Water, Method B, Non-carcinogen, Standard Formula

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Date of Change	Chemical		Parameter
4/22/2010	trichloroethane;1,1,1-	Oral Referen	nce Dose (RfDo)
previous	Changes Made 9.E-01	mg/kg-day	Comments
value: changed to:	2.E+00	mg/kg-day	IRIS update
Date of Change	Chemical		Parameter
4/22/2010	lindane	Surface Wa	ter, Method C, Carcinogen, Standard Formula Value
	Changes Made		Comments
previous	9.6E-01	µg/L	
value: changed to:	Researched-No Data		IRIS deleted cancer potency value.
		1	
Date of	Chemical		Parameter
Change 4/22/2010	lindane	Surface Wa	ter, Method B, Carcinogen, Standard Formula Value
4/22/2010			ter, Method B, Carcinogen, Standard Formula Valde
	Changes Made		Comments
previous value:	3.8E-02	µg/L	
changed to:	Researched-No Data		IRIS deleted cancer potency value.
		1	
Date of Change	Chemical		Parameter
4/22/2010	lindane		C, Carcinogen, Standard Formula Value, Direct
		Contact (ing	estion 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	Chemical		Parameter
Change 4/22/2010	lindane	Soil, Method	B, Carcinogen, Standard Formula Value, Direct
			estion only), unrestricted land use
	Changes Made		Comments
previous	7.7E-01	mg/kg	
value: changed to:	Researched-No Data		IRIS deleted cancer potency value.
		1	
Date of	Chemical		Parameter
Change	lindono	Cround Mod	har Method C. Coreinescen, Standard Formula Value
4/22/2010	lindane	Ground wat	ter, 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	Chemical		Parameter
Date of Change	Unemical		Faranieter
4/22/2010	lindane	Ground Wat	er, Method B, Carcinogen, Standard Formula Value
	Changes Made		Comments
previous	6.7E-02	µg/L	
value: changed to:	Researched-No Data		IRIS deleted cancer potency value.
<u> </u>		,	
Date of	Chemical		Parameter
Change 4/22/2010	lindane	Oral Cancer	Potency Factor (CPFo)
			· · · · · · · · · · · · · · · · · · ·
nrevieus	Changes Made	ka davina -	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

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			11 2011 3:54PM
Date of Change	Chemical	Parameter           Soil, Method C, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), industrial land use	
4/22/2010	ethylene dibromide (EDB)		
	Changes Made		Comments
previous value:	1.5E+00	mg/kg	
changed to:	6.6E+01	mg/kg	Changed due to change in current IRIS value
Date of Change	Chemical		Parameter
4/22/2010	ethylene dibromide (EDB)		B, Carcinogen, Standard Formula Value, Direct estion only), unrestricted land use
	Changes Made		Comments
previous value:	1.2E-02	mg/kg	
changed to:	5.E-01	mg/kg	Changed due to change in current IRIS value
Date of	Chemical		Parameter
<b>Change</b> 4/22/2010	ethylene dibromide (EDB)	Ground Wat	er, Method C, Carcinogen, Standard Formula Value
provioue	Changes Made 5.1E-03		Comments
previous value:		µg/L	
changed to:	2.2E-01	µg/L	Changed due to change in current IRIS value
Date of Change	Chemical		Parameter
4/22/2010	ethylene dibromide (EDB)	Ground Wat	er, Method B, Carcinogen, Standard Formula Value
	Changes Made		Comments
previous value:	5.1E-04	µg/L	
changed to:	2.2E-02	µg/L	Changed due to change in current IRIS value
Date of Change	Chemical		Parameter
4/22/2010	ethylene dibromide (EDB)	Oral Cancer	Potency Factor (CPFo)
	Changes Marts		Commente
previous	Changes Made 8.5E+01	kg-day/mg	Comments
value: changed to:	2.E+00	kg-day/mg	Changed to current IRIS value
Date of Change	Chemical		Parameter
4/22/2010	ethylene dibromide (EDB)	Oral Refere	nce Dose (RfDo)

	Changes Made	•	Comments
previous value:	Researched-No Data		
changed to:	9.E-03	mg/kg-day	Changed to current IRIS value
Data at			Descenter
Date of	Chemical	Parameter	
Change			
12/22/2008	octabromodiphenyl ethers	Ground Wat	er, Method C, Carcinogen, Standard Formula Value
	octabromodiphenyl ethers	Ground Wat	er, Method C, Carcinogen, Standard Formula Value
	octabromodiphenyl ethers Changes Made		er, Method C, Carcinogen, Standard Formula Value Comments

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Date of Change	Chemical		Parameter
12/22/2008	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'	Ground Wa	ater, Method C, Carcinogen, Standard Formula Value
	Changes Made		Comments
orevious	Researched-No Data		
value: changed to:	1.3E+03	µg/L	
Date of	Chemical		Parameter
Change			
12/22/2008	octabromodiphenyl ethers	Ground Water, Method C, Non-carcinogen, Standard Formula Value	
	Changes Made		Comments
previous	Researched-No Data		
value: changed to:	1.1E+02	µg/L	
		I	
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 Form Value	
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	2.5E+02	µg/L	
Date of	Chemical		Parameter
Change	onemical		rarameter
12/22/2008	octabromodiphenyl ethers	Ground Wa	ater, Method B, Carcinogen, Standard Formula Value
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	Researched-No Data		Oral cancer potencey 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 Wa	ater, Method B, Carcinogen, Standard Formula Value
	Changes Made		Comments
previous value:	Researched-No Data		
changed to:	1.3E+02	µg/L	
	Chemical		Peromotor
Date of Change			Parameter
12/22/2008	octabromodiphenyl ethers	Ground Water, Method B, Non-carcinogen, Standard Formula	

Cha Mad

	Changes Made		Comments	
previous value:	Researched-No Data			
changed to:	4.8E+01	µg/L		
Date of	Chemical		Parameter	
Change				
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			

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12/22/2008			od C, Non-carcinogen, Standard Fomula Value, Direct gestion only), industrial land use	
	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, D Contact (ingestion only), industrial land use		
	Changes Made	5	Comments	
previous value:	3.5E+04	mg/kg		
changed to:	2.5E+04	mg/kg		
Date of	Chemical		Parameter	
Change 12/22/2008	octabromodiphenyl ethers		od B, Non-carcinogen, Standard Formula Value, Direct	
		Contact (ir	ngestion only), unrestricted land use	
	Changes Made	•	Comments	
previous value:	2.4E+02	mg/kg		
changed to:	2.4E+02	mg/kg		
Date of	Chemical		Parameter	
Change				
12/22/2008	decabromodiphenyl ether;2,2',3,3',4,4',5,5',6,6'		od B, Non-carcinogen, Standard Formula Value, Direct ngestion only), unrestricted land use	
	Changes Made	9	Comments	
previous value:	8.E+02	mg/kg		
changed to:	5.6E+02	mg/kg		
Date of	Chemical		Parameter	
Change				
12/22/2008	octabromodiphenyl ethers	Inhalation	Correction Factor (INH)	
	Changes Made	9	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	Researched-No Data		

Date of Change	Chemical	Parameter

kg-day/mg

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value:

changed to:

7.E-04

12/22/2008	decabromodiphenyl ether;2,2',3,3',4,4',5,5',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	

	Changes wave		Comments
changed to:	1.7E+02	µg/L	Changed consistent with EPA Region 10

Date of Change	Chemical	Parameter	
11/3/2008	11/3/2008 trichloroethylene Surface Water, Method B, Carcino		/ater, 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, C Contact (ingestion only), industrial land use	
	Changes Made		Comments
		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	
Data of	Ohemieel	1	Deservator	
Date of Change	Chemical	Parameter		
11/3/2008	trichloroethylene	Ground W	Vater, Method B, Carcinogen, Standard Formula Value	
	Changes Made		Comments	

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changed to:	4.9E-01	µg/L	Changed consistent with EPA Region 10	
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	Chemical		Parameter	
Change 11/3/2008	trichloroethylene	Air Mothod	Air, Method B, Carcinogen, Standard Formula Value	
11/3/2008	· · · ·			
	Changes Made	4.0	Comments	
changed to:	1.E-01	µg/m3	Changed consistent with EPA Region 10	
Date of	Chemical		Parameter	
Change 11/3/2008	trichloroethylene	Inhalation C	ancer Potency Factor (CPFi)	
	· · · ·		· · · ·	
changed to:	Changes Made 8.9E-02	ka dav/ma	Comments Changed consistent with EPA Region 10	
changed to:	8.9E-02	kg-day/mg	Changed consistent with EPA Region 10	
Date of	Chemical		Parameter	
Change				
11/3/2008	trichloroethylene Oral Cancer Potency Factor (CPFo)		Potency Factor (CPFo)	
	Changes Made		Comments	
changed to:	8.9E-02	kg-day/mg	Changed consistent with EPA Region 10	
Date of	Chemical		Parameter	
Change				
9/19/2008	xylene;o-	Oral Refere	nce Dose (RfDo)	
	Changes Made		Comments	
orevious 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	
		1		
Date of Change	Chemical		Parameter	
9/19/2008	xylene;m-	Oral Refere	nce 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) fo cleanup information.	
Date of Change	Chemical		Parameter	

previous 3.E-04 rouges Made		Comments	
		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_cc updated from 0 to 3 on May 11 2011 3:54PM
Date of Change	Chemical		Parameter
	Chemical rdx	Ground Wat	Parameter ter, Method C, Non-carcinogen, Standard Formula
Change	rdx		
Change			
Change	rdx		ter, Method C, Non-carcinogen, Standard Formula

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Date of Change	Chemical		Parameter
8/14/2008	rdx	Ground W Value	ater, Method B, Non-carcinogen, Standard Formula
	Changes Made	Value	Commente
orevious value:	Changes Made Researched-No Data		Comments
changed to:	4.8E+01	µg/L	Revised INH Factor based on HSDB database
Date of	Chemical		Parameter
Change			
3/14/2008	rdx	Ground W	ater, Method B, Carcinogen, Standard Formula Value
previous	Changes Made Researched-No Data		Comments
value: changed to:	8.E-01	µg/L	Revised INH Factor based on HSDB database
Date of	Chemical		Parameter
Change	Unennical		
8/14/2008	rdx	Ground W	ater, Method C, Carcinogen, Standard Formula Value
previous	Changes Made Researched-No Data		Comments
value: changed to:	8.E+00	µg/L	Revised INH Factor based on HSDB database
Date of	Chemical		Parameter
Change 8/14/2008	rdy	Inhalation	Correction Eactor (INH)
8/14/2008	rdx		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 Val Contact (ingestion only), industrial land use	
	Changes Made		Comments
previous	1.8E+03	mg/kg	
value: changed to:	0.E+00	mg/kg	See cadmium in soil
-			
Date of	Chemical		Parameter
Change 8/14/2008	cadmium in water		od B, Non-carcinogen, Standard Formula Value, Direct
			ngestion 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 W Value	/ater, Method C, Non-Carcinogen, Standard Formula
	· ·		
previous	Changes Made	µg/L	Comments
value:			
changed to:	0.E+00	µg/L	See cadmium in water
Date of	Chemical		Parameter
Date of			
Change		Surface Water, Method B, Non-Carcinogen, Standard Form	
	cadmium in soil	Surface W	
Change	cadmium in soil Changes Made		Comments

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Date of Change	Chemical		Parameter
8/14/2008	cadmium in soil	Ground Wa Value	ter, Method B, Non-carcinogen, Standard Formula
	Changes Mad	e	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 Wa Value	ter, Method C, Non-carcinogen, Standard Formula
	Changes Mad	·	Comments
previous value:	3.5E+01	µg/L	
changed to:	0.E+00	µg/L	See cadmium in water
Date of	Chemical		Parameter
Change 8/14/2008	dichloroethylene;1,2-,cis	Inhalation R	Reference Dose (RfDi)
previous	Changes Mad Researched-No Data	e	Comments
value:			
changed to:	1.E-02	mg/kg-day	
Date of Change	Chemical		Parameter
8/14/2008	dichloroethane;1,1-	Ground Wa Value	ter, Method C, Non-carcinogen, Standard Formula
	Changes Mad	e	Comments
previous value:	1.8E+03	µg/L	
changed to:	3.5E+03	µg/L	
Date of	Chemical		Parameter
Change 8/14/2008	dichloroethane;1,1-	Ground Wa Value	ter, Method B, Non-carcinogen, Standard Formula
	Changes Mad		Comments
previous value:	8.E+02	μg/L	
changed to:	1.6E+03	µg/L	
Date of	Chemical		Parameter
Change 8/14/2008	dichloroethane;1,1-	Soil Metho	d C, Non-carcinogen, Standard Fomula Value, Direct
0,17,2000			gestion only), industrial land use
	Changes Mad		Comments
previous value:	3.5E+05	mg/kg	

Date of Change	Chemical		Parameter
8/14/2008	dichloroethane;1,1-		on-carcinogen, Standard Formula Value, Direct only), unrestricted land use
	Changes Ma	Ide	Comments
previous value:	8.E+03	mg/kg	
changed to:	1.6E+04	mg/kg	
Date of Change	Chemical		Parameter

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value:

previous value:	1.02-01	kg duy/mg	
	1.8E-01	kg-day/mg	
	Changes Made		Comments
4/28/2008	dichloroethylene;1,1-	Inhalation C	ancer Potency Factor (CPFi)
Date of Change	Chemical		Parameter
changed to:	No Data. What are my options?		Updated to correspond to IRIS for toxicity values comments_ds extended: Guidance is provided wher toxicity values are unavailable from MTCA informatic hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM
previous value:	6.E-01	kg-day/mg	
	Changes Made		Comments
4/28/2008	dichloroethylene;1,1-	Oral Cancer	Potency Factor (CPFo)
Date of Change	Chemical		Parameter
changed to:	2.E-01	mg/kg-day	
previous value:	1.E-01	mg/kg-day	
	Changes Made		Comments
8/14/2008	dichloroethane;1,1-	Inhalation R	eference Dose (RfDi)
Date of Change	Chemical		Parameter
changed to:	2.E-01	mg/kg-day	
previous value:	1.E-01	mg/kg-day	
	Changes Made		Comments
8/14/2008	dichloroethane;1,1-	Oral Refere	nce Dose (RfDo)
Date of Change	Chemical		Parameter
changed to:	3.2E+02	µg/m3	
previous value:	1.6E+02	µg/m3	
	Changes Made		Comments
8/14/2008	dichloroethane;1,1-	Air, Method	B, Non-Carcinogen, Standard Formula Value
Date of Change	Chemical		Parameter
changed to:	7.E+02	µg/m3	
value:		µg/m3	

toxicity values are unavailable from MTCA information	value:		5 // 5	
hierarchy (April 2011) and note_cd updated from 0 to 3 on May 11 2011 3:53PM	changed to:	No Data. What are my options?		comments_ds extended: Guidance is provided when toxicity values are unavailable from MTCA information hierarchy (April 2011) and note_cd updated from 0 to

Date of Change	Chemical		Parameter	
4/2/2008	tcdd;2,3,7,8-	Air, Metho	d 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	
evaluations.		uivalency factors	when congener-specific analysis is conducted for site-specific	
evaluations.	o review CLARC Guidance for toxicity eq Chemical	uivalency factors	when congener-specific analysis is conducted for site-specific Parameter	
evaluations. Date of Change	Chemical tcdd;2,3,7,8-	Air, Metho	Parameter d B, Carcinogen, Standard Formula Value	
evaluations. Date of Change	Chemical	Air, Metho	Parameter	
evaluations. Date of Change	Chemical tcdd;2,3,7,8-	Air, Metho	Parameter d B, Carcinogen, Standard Formula Value	

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Date of	Chemical		Parameter				
Change							
4/2/2008	tcdd;2,3,7,8-	Surface Wa	ter, Method C, Carcinogen, Standard Formula Value				
	Changes Made		Comments				
previous	2.2E-07	µg/L	Comments				
value:	2.22 07	P9/ L					
changed to:	see additional information		Updated to reflect MTCA rule amendments				
Note: Click here t	o review CLARC Guidance for toxicity equiv	alency factors wh	nen congener-specific analysis is conducted for site-specific				
evaluations.							
Date of	Chemical		Paramatar				
Change	Chemical	Parameter					
4/2/2008	tcdd;2,3,7,8-	Surface Wa	ter, Method B, Carcinogen, Standard Formula Value				
		1					
	Changes Made		Comments				
previous value:	8.6E-09	µg/L					
changed to:	see additional information		Updated to reflect MTCA rule amendments				
_							
Note: Click here t evaluations.	Note: Click here to review CLARC Guidance for toxicity equivalency factors when congener-specific analysis is conducted for site-specific						
evaluations.							
Date of	Chemical		Parameter				
Change							
4/2/2008 tcdd;2,3,7,8- Ground Wat			ater, Method C, Carcinogen, Standard Formula Value				
Changes Made Comments							
previous	Changes Made 5.8E-06	µg/L	Comments				
value:	3.0L 00	P9/L					
changed to:	see additional information		Updated to reflect MTCA rule amendments				
Note: Click here t	to review CLARC Guidance for toxicity equiv	alency factors wh	nen congener-specific analysis is conducted for site-specific				
evaluations.							
Date of	Chamical		Paramatar				
Change	Chemical		Parameter				
4/2/2008	tcdd;2,3,7,8-	Ground Wat	ter, 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 t evaluations.	to review CLARC Guidance for toxicity equiv	alency factors wh	nen congener-specific analysis is conducted for site-specific				
Date of	Chemical		Parameter				
Change	hoppofelogthere are	0	ton Mathed C. Consistence Official States				
4/2/2008	benzo[a]anthracene	Surface Wa	ter, Method C, Carcinogen, Standard Formula Value				
	Changes Made		Comments				
previous	7.4E-01	µg/L					
value:							
changed to:	see additional information		Updated to reflect MTCA rule amendments				
Note: Click here t	o review CLARC Guidance for toxicity equiv	alency factors wh	nen congener-specific analysis is conducted for site-specific				
evaluations.	2 - 11-	-					
Date of	Chemical		Parameter				
Change	Glenical						
4/2/2008	benzo[a]anthracene	Surface Wa	ter, Method B, Carcinogen, Standard Formula Value				
L							
	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 evaluations.	o review CLARC Guidance for toxicity eq	uivalency factor	s when congener-specific analysis is conducted for site-specific		
Date of Change	Chemical		Parameter		
4/2/2008	benzo[a]anthracene	Ground Water, Method C, Carcinogen, Standard Formula Valu			
	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 evaluations.	p review CLARC Guidance for toxicity eq	uivalency factor	s when congener-specific analysis is conducted for site-specific		
Date of Change	Chemical		Parameter		

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4/2/2008	benzo[a]anthracene	Ground Wat	ter, 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 evaluations.	review CLARC Guidance for toxicity equiv	alency factors wh	nen congener-specific analysis is conducted for site-specific			
Date of Change	Chemical		Parameter			
4/2/2008	benzo[b]fluoranthene	Surface Wa	ter, Method C, Carcinogen, Standard Formula Value			
	Changes Made Comments					
previous	7.4E-01	µg/L	Comments			
value: changed to:	see additional information		Updated to reflect MTCA rule amendments			
-		alency factors wh	nen congener-specific analysis is conducted for site-specific			
 evaluations.						
Date of	Chemical		Parameter			
Change 4/2/2008	benzo[b]fluoranthene	Surface Water, Method B, Carcinogen, Standard Formula Va				
4/2/2000			ier, 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 evaluations.	review CLARC Guidance for toxicity equiv	alency factors wh	nen congener-specific analysis is conducted for site-specific			
	1					
Date of Change	Chemical		Parameter			
4/2/2008	benzo[b]fluoranthene	Ground Water, Method C, Carcinogen, Standard Formula Value Comments				
	Changes Made					
previous	1.2E-01	µg/L				
value: changed to:	see additional information		Updated to reflect MTCA rule amendments			
Note: Click here to	review CLARC Guidance for toxicity equiv	alency factors wh	nen congener-specific analysis is conducted for site-specific			
 evaluations.	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·			
Date of	Chemical					
	Chemical		Parameter			
Change						
Change 4/2/2008	benzo[b]fluoranthene	Ground Wat	Parameter ter, Method B, Carcinogen, Standard Formula Value			
-		Ground Wat				
4/2/2008 previous	benzo[b]fluoranthene	Ground Wat	ter, Method B, Carcinogen, Standard Formula Value			
4/2/2008	benzo[b]fluoranthene Changes Made	1	ter, Method B, Carcinogen, Standard Formula Value			
4/2/2008 previous value: changed to: Note: Click here to	benzo[b]fluoranthene Changes Made 1.2E-02 see additional information	µg/L	ter, Method B, Carcinogen, Standard Formula Value Comments			
4/2/2008 previous value: changed to:	benzo[b]fluoranthene Changes Made 1.2E-02 see additional information	µg/L	ter, Method B, Carcinogen, Standard Formula Value Comments Updated to reflect MTCA rule amendments			
4/2/2008 previous value: changed to: Note: Click here to	benzo[b]fluoranthene Changes Made 1.2E-02 see additional information	µg/L	ter, Method B, Carcinogen, Standard Formula Value Comments Updated to reflect MTCA rule amendments			
4/2/2008 previous value: changed to: Note: Click here to evaluations.	benzo[b]fluoranthene Changes Made 1.2E-02 see additional information review CLARC Guidance for toxicity equiv	µg/L alency factors wh	ter, Method B, Carcinogen, Standard Formula Value Comments Updated to reflect MTCA rule amendments nen congener-specific analysis is conducted for site-specific			
4/2/2008 previous value: changed to: Note: Click here to evaluations. Date of Change	benzo[b]fluoranthene Changes Made 1.2E-02 see additional information review CLARC Guidance for toxicity equiv Chemical benzo[k]fluoranthene	µg/L alency factors wh	ter, Method B, Carcinogen, Standard Formula Value Comments Updated to reflect MTCA rule amendments nen congener-specific analysis is conducted for site-specific Parameter ter, Method C, Carcinogen, Standard Formula Value			
4/2/2008 previous value: changed to: Note: Click here to evaluations. Date of Change	benzo[b]fluoranthene Changes Made 1.2E-02 see additional information review CLARC Guidance for toxicity equiv Chemical	µg/L alency factors wh	ter, Method B, Carcinogen, Standard Formula Value Comments Updated to reflect MTCA rule amendments nen congener-specific analysis is conducted for site-specific Parameter			

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

Updated to reflect MTCA rule amendments

Date of Change	Chemical		Parameter		
4/2/2008	benzo[k]fluoranthene	Surface \	Nater, 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 evaluations.	p review CLARC Guidance for toxicity eq	uivalency factors	s when congener-specific analysis is conducted for site-specific		
Date of Change	Chemical		Parameter		
		- · · ·			
4/2/2008	benzo[k]fluoranthene	Ground V	Vater, Method C, Carcinogen, Standard Formula Value		

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changed to:

see additional information

previous value:	1.2E-01	µg/L	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to evaluations.	o review CLARC Guidance for toxicity equ	uivalency factors v	when congener-specific analysis is conducted for site-specific
Date of Change	Chemical		Parameter
4/2/2008	benzo[k]fluoranthene	Ground W	ater, 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 evaluations.	o review CLARC Guidance for toxicity equ	uivalency factors v	when congener-specific analysis is conducted for site-specific
Date of Change	Chemical		Parameter
4/2/2008	chrysene	Surface W	ater, Method C, Carcinogen, Standard Formula Value
previous	Changes Made 7.4E-01	µg/L	Comments
value:		P9/ -	Lindated to reflect MTCA rule emendments
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to evaluations.	o review CLARC Guidance for toxicity equ	uivalency factors v	when congener-specific analysis is conducted for site-specific
Date of Change	Chemical		Parameter
4/2/2008	chrysene	Surface W	ater, Method B, Carcinogen, Standard Formula Value
	Changes Made		Commente
previous	Changes Made 3.E-02	µg/L	Comments
value: changed to:	see additional information		Updated to reflect MTCA rule amendments
-			
Note: Click here to evaluations.	o review CLARC Guidance for toxicity equ	uivalency factors v	when congener-specific analysis is conducted for site-specific
Date of	Chemical		Parameter
Change	onemical		i arameter
4/2/2008	chrysene	Ground W	ater, 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 evaluations.	o review CLARC Guidance for toxicity equ	uivalency factors v	when congener-specific analysis is conducted for site-specific
	<b>~</b> • •		_
Date of Change	Chemical		Parameter
4/2/2008	chrysene	Ground W	ater, Method B, Carcinogen, Standard Formula Value
	Changes Made		Commonto
previous value:	Changes Made	µg/L	Comments
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to evaluations.	o review CLARC Guidance for toxicity equ	uivalency factors v	when congener-specific analysis is conducted for site-specific

Date of Change	Chemical		Parameter	
4/2/2008	dibenzo[a,h]anthracene	Surface V	Surface Water, Method C, Carcinogen, Standard Formula Value	
	Changes Made	9	Comments	
previous value:	7.4E-01	µg/L		
	and additional information		Lindate dite methods MTCA mula and an descripto	
changed to: Note: Click here to evaluations.	see additional information	uivalency factors	Updated to reflect MTCA rule amendments s when congener-specific analysis is conducted for site-specific	
Note: Click here to evaluations.		uivalency factors	·	
Note: Click here to evaluations. Date of Change	o review CLARC Guidance for toxicity eq		s when congener-specific analysis is conducted for site-specific Parameter	
Note: Click here to	o review CLARC Guidance for toxicity eq		s when congener-specific analysis is conducted for site-specific	
Note: Click here to evaluations. Date of Change	o review CLARC Guidance for toxicity eq	Surface V	s when congener-specific analysis is conducted for site-specific Parameter	

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value:	7		
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to evaluations.	review CLARC Guidance for toxicity equi	valency factors w	hen congener-specific analysis is conducted for site-specific
Date of Change	Chemical		Parameter
4/2/2008	dibenzo[a,h]anthracene	Ground Wa	ter, 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 evaluations.	review CLARC Guidance for toxicity equi	valency factors w	hen congener-specific analysis is conducted for site-specific
Date of Change	Chemical	Parameter	
4/2/2008	dibenzo[a,h]anthracene	Ground Wa	ter, 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 evaluations.	review CLARC Guidance for toxicity equi	valency factors w	hen congener-specific analysis is conducted for site-specific
Date of Change	Chemical		Parameter
4/2/2008	Hexachlorodibenzo-p-dioxin, Mixture	Air, Methoc	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 evaluations.	review CLARC Guidance for toxicity equi	valency factors w	hen congener-specific analysis is conducted for site-specific
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
		1	
Note: Click here to evaluations.	preview CLARC Guidance for toxicity equi	valency factors w	hen congener-specific analysis is conducted for site-specific
	preview CLARC Guidance for toxicity equi	valency factors w	hen congener-specific analysis is conducted for site-specific Parameter

	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

Date of Chemical Parameter Change	
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	4/2/2008	indeno[1,2,3-cd]pyrene	Surface Wa	ter, Method B, Carcinogen, Standard Formula Value
			•	-
	previous	Changes Made 3.E-02	µg/L	Comments
-	value: changed to:	see additional information		Updated to reflect MTCA rule amendments
	Note: Click here to evaluations.	review CLARC Guidance for toxicity equiva	alency factors wh	nen congener-specific analysis is conducted for site-specific
Г	Data of	Ohamiaal		Demonster
	Date of Change	Chemical		Parameter
	4/2/2008	indeno[1,2,3-cd]pyrene	Surface Wa	ter, 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 evaluations.	review CLARC Guidance for toxicity equiva	alency factors wh	nen congener-specific analysis is conducted for site-specific
	evalualions.			
	Date of Change	Chemical		Parameter
	4/2/2008	gross alpha particle activity	Ground Wa	ter, Method A, Table Value
Γ	previous	Changes Made 1.5E+01	pCi/L	Comments
	value:	1.5L+01	pci/L	
	changed to:	1.5E+01		Radionuclides with different Unit of Measure than parameter
	Gross alpha particle	e activity and radium 226 and 228 values a	are in pCi/L	
Г	Date of	Chemical		Parameter
	Change			
	4/2/2008	gross beta particle activity	Ground Wa	ter, Method A, Table Value
		Changes Made		Comments
[	previous	4.E+00	mrem/year	Gomments
-	value: changed to:	4.E+00		Radionuclides with different Unit of Measure than
	Gross beta particle	activity values are in mrem/year		parameter
		,		
	Date of Change	Chemical		Parameter
	4/2/2008	pah	Ground Wa	ter, Method A, Table Value
		Changes Made		Comments
	previous value:	Changes Made Researched-No Data		see benzo(a)pyrene
-	changed to:	Researched-No Data		
Las				
ſ	Date of	Chemical		Parameter
-	Change 4/2/2008	radium 226	Ground Wa	ter, Method A, Table Value
L				, ,

	Changes Made	e	Comments
previous value:	3.E+00	pCi/L	
changed to:	3.E+00		Radionuclides with different Unit of Measure than parameter
Gross alpha partic	cle activity and radium 226 and 228 valu	es are in pCi/L	
Date of Change	Chemical		Parameter
4/2/2008	radium 226 and 228	Ground V	Vater, Method A, Table Value
			_
	Changes Made	e	Comments
previous value:	5.E+00	pCi/L	
changed to:	5.E+00		Radionuclides with different Unit of Measure than parameter
Gross alpha partic	cle activity and radium 226 and 228 value	es are in pCi/L	
Date of Change	Chemical		Parameter
4/2/2008	gross alpha particle activity	Ground V Level (MC	Vater ARAR - Federal Primary Maximum Contaminant CL)

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	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 partio	cle activity and radium 226 and 228 values	are in pCi/L	
Date of Change	Chemical		Parameter
4/2/2008	gross beta particle activity	Ground Wa Level (MCL	ter ARAR - Federal Primary Maximum Contaminant )
	Changes Made		Comments
previous value:	4.E+00	mrem/year	
changed to:	4.E+00		Radionuclides with different Unit of Measure than
Gross beta particl	e activity values are in mrem/year		parameter
Date of Change	Chemical		Parameter
4/2/2008	radium 226 and 228	Ground Wa	ter ARAR - Federal Primary Maximum Contaminant )
	Changes Made		Comments
previous value:	5.E+00	pCi/L	Comments
changed to:	5.E+00		Radionuclides with different Unit of Measure than parameter
Gross alpha partio	cle activity and radium 226 and 228 values	s are in pCi/L	
Date of	Chemical	-	<b></b>
			Paramotor
Change			Parameter
Change	dichloroethylene;1,1-	Air, Method	C, Non-carcinogen, Standard Formula Value
Change 4/1/2008	dichloroethylene;1,1- Changes Made	Air, Method	
Change 4/1/2008 previous value:	dichloroethylene;1,1- Changes Made Researched-No Data		C, Non-carcinogen, Standard Formula Value Comments
Change 4/1/2008 previous value:	dichloroethylene;1,1- Changes Made	Air, Method	C, Non-carcinogen, Standard Formula Value
Change 4/1/2008 previous value: changed to:	dichloroethylene;1,1- Changes Made Researched-No Data 2.E+02		C, Non-carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values
Change 4/1/2008 previous value: changed to: Date of	dichloroethylene;1,1- Changes Made Researched-No Data		C, Non-carcinogen, Standard Formula Value Comments
Change 4/1/2008 previous value: changed to: Date of Change	dichloroethylene;1,1- Changes Made Researched-No Data 2.E+02	μg/m3	C, Non-carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values
Change 4/1/2008 previous value: changed to: Date of Change	dichloroethylene;1,1- Changes Made Researched-No Data 2.E+02 Chemical dichloroethylene;1,1-	μg/m3	C, Non-carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values Parameter B, Non-Carcinogen, Standard Formula Value
Change 4/1/2008 previous value: changed to: Date of Change 4/1/2008	dichloroethylene;1,1- Changes Made Researched-No Data 2.E+02 Chemical	μg/m3	C, Non-carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values Parameter
Change 4/1/2008 previous value: changed to: Date of Change 4/1/2008 previous value:	dichloroethylene;1,1- Changes Made Researched-No Data 2.E+02 Chemical dichloroethylene;1,1- Changes Made	μg/m3	C, Non-carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values Parameter B, Non-Carcinogen, Standard Formula Value
Change 4/1/2008 previous value: changed to: Date of Change 4/1/2008 previous value:	dichloroethylene;1,1- Changes Made Researched-No Data 2.E+02 Chemical dichloroethylene;1,1- Changes Made Researched-No Data	μg/m3 Air, Method	C, Non-carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values Parameter B, Non-Carcinogen, Standard Formula Value Comments
Change 4/1/2008 previous value: changed to: Date of Change 4/1/2008 previous value: changed to: Date of	dichloroethylene;1,1- Changes Made Researched-No Data 2.E+02 Chemical dichloroethylene;1,1- Changes Made Researched-No Data	μg/m3 Air, Method	C, Non-carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values Parameter B, Non-Carcinogen, Standard Formula Value Comments
Change 4/1/2008 previous value: changed to: Date of Change 4/1/2008 previous value: changed to: Date of Change	dichloroethylene;1,1-  Changes Made Researched-No Data 2.E+02  Chemical dichloroethylene;1,1-  Changes Made Researched-No Data 9.1E+01	μg/m3 Air, Method μg/m3	C, Non-carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values Parameter B, Non-Carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values
Change 4/1/2008 previous value: changed to: Date of Change 4/1/2008 previous value: changed to: Date of Change	dichloroethylene;1,1-  Changes Made Researched-No Data 2.E+02  Chemical dichloroethylene;1,1-  Changes Made Researched-No Data 9.1E+01  Chemical	μg/m3 Air, Method μg/m3	C, Non-carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values Parameter B, Non-Carcinogen, Standard Formula Value B, Non-Carcinogen to IRIS for toxicity values Updated to correspond to IRIS for toxicity values Parameter Parameter
Change 4/1/2008 previous value: changed to: Date of Change 4/1/2008 previous value: changed to: Date of Change 4/1/2008	dichloroethylene;1,1- Changes Made Researched-No Data 2.E+02 Chemical dichloroethylene;1,1- Changes Made Researched-No Data 9.1E+01 Chemical dichloroethylene;1,1-	μg/m3 Air, Method μg/m3	C, Non-carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values Parameter B, Non-Carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values Parameter C, Carcinogen, Standard Formula Value
Date of         4/1/2008         previous         value:         changed         to:         Date of         Change         4/1/2008         previous         value:         changed         4/1/2008         Date of         Change         4/1/2008         previous         value:         changed         to:         Date of         Change         4/1/2008         previous         value:         changed         to:	dichloroethylene;1,1-  Changes Made Researched-No Data 2.E+02  Chemical dichloroethylene;1,1-  Changes Made Researched-No Data 9.1E+01  Chemical dichloroethylene;1,1-  Changes Made	μg/m3 Air, Method μg/m3 Air, Method	C, Non-carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values Parameter B, Non-Carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values Parameter C, Carcinogen, Standard Formula Value
Change 4/1/2008 previous value: changed to: Date of Change 4/1/2008 previous value: changed to: Date of Change 4/1/2008	dichloroethylene;1,1- Changes Made Researched-No Data 2.E+02 Chemical dichloroethylene;1,1- Changes Made Researched-No Data 9.1E+01 Chemical dichloroethylene;1,1-	μg/m3 Air, Method μg/m3 Air, Method	C, Non-carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values Parameter B, Non-Carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values Parameter C, Carcinogen, Standard Formula Value Comments Comments

	Changes Ma	ade	Comments	
previous value:	5.E-02	µg/m3		
changed to:	Researched-No Data		Updated to correspond to IRIS for toxicity values	
			5	
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 Ma	ade	Comments	
previous value:	2.2E+02	mg/kg		
changed to:	Researched-No Data		Updated to correspond to IRIS for toxicity values	
			Parameter	

Air, Method B, Carcinogen, Standard Formula Value

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4/1/2008

dichloroethylene;1,1-

	dichloroethylene;1,1-		B, Carcinogen, Standard Formula Value, Direct estion 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	Chemical		Parameter
Change 4/1/2008	dichloroethylene;1,1-	Surface Wa	ter, Method C, Carcinogen, Standard Formula Value
	Changes Made		Comments
previous value:	Changes Made 4.8E+01	µg/L	Comments
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 Wa	ter, Method B, Carcinogen, Standard Formula Value
	Changes Made		Comments
previous	1.9E+00	µg/L	
value: changed to:	Researched-No Data		Updated to correspond to IRIS for toxicity values
changed to.	Researched-NO Data		opulated to correspond to INIS for toxicity values
Date of	Chemical		Parameter
Change 4/1/2008	dichloroethylene;1,1-	Ground Wat	er, Method C, Carcinogen, Standard Formula Value
	-		-
	Changes Made 7.3E-01	ua/I	Comments
provious	7.3E-01	µg/L	
previous value:			
•	Researched-No Data		Updated to correspond to IRIS for toxicity values
value: changed to:	Researched-No Data		
value: changed to: Date of			Updated to correspond to IRIS for toxicity values Parameter
value:	Researched-No Data	Ground Wat	
value: changed to: Date of Change	Researched-No Data Chemical	Ground Wat	Parameter
value: changed to: Date of Change 4/1/2008	Researched-No Data Chemical dichloroethylene;1,1- Changes Made 7.3E-02	Ground Wat	Parameter er, Method B, Carcinogen, Standard Formula Value Comments
value: changed to: Date of Change 4/1/2008	Researched-No Data Chemical dichloroethylene;1,1- Changes Made		Parameter er, Method B, Carcinogen, Standard Formula Value
value: changed to: Date of Change 4/1/2008 previous value: changed to:	Researched-No Data          Chemical         dichloroethylene;1,1-         Changes Made         7.3E-02         Researched-No Data		Parameter eer, Method B, Carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values
value: changed to: Date of Change 4/1/2008 previous value: changed to: Date of Change	Researched-No Data  Chemical  dichloroethylene;1,1-  Changes Made 7.3E-02 Researched-No Data  Chemical		Parameter er, Method B, Carcinogen, Standard Formula Value Comments
value: changed to: Date of Change 4/1/2008 previous value: changed to: Date of	Researched-No Data          Chemical         dichloroethylene;1,1-         Changes Made         7.3E-02         Researched-No Data	µg/L	Parameter eer, Method B, Carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values
value: changed to: Date of Change 4/1/2008 previous value: changed to: Date of Change	Researched-No Data  Chemical  dichloroethylene;1,1-  Changes Made 7.3E-02 Researched-No Data  Chemical	µg/L	Parameter eer, Method B, Carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values Parameter
value: changed to: Date of Change 4/1/2008 previous value: changed to: Date of Change 4/1/2008	Researched-No Data          Chemical         dichloroethylene;1,1-         Changes Made         7.3E-02         Researched-No Data         Chemical         dichloroethylene;1,1-	µg/L	Parameter eer, Method B, Carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values Parameter eference Dose (RfDi)
value: changed to: Date of Change 4/1/2008 previous value: changed to: Date of Change 4/1/2008	Researched-No Data  Chemical  dichloroethylene;1,1-  Changes Made 7.3E-02  Researched-No Data  dichloroethylene;1,1-  Chemical dichloroethylene;1,1-	µg/L	Parameter Ter, Method B, Carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values Parameter eference Dose (RfDi) Comments
value: changed to: Date of Change 4/1/2008 previous value: changed to: Date of Change 4/1/2008	Researched-No Data  Chemical  dichloroethylene;1,1-  Changes Made 7.3E-02  Researched-No Data  Chemical  dichloroethylene;1,1-  Changes Made	µg/L	Parameter eer, Method B, Carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values Parameter eference Dose (RfDi)
value: changed to: Date of Change 4/1/2008 previous value: changed to: Date of Change 4/1/2008	Researched-No Data  Chemical  dichloroethylene;1,1-  Changes Made 7.3E-02  Researched-No Data  dichloroethylene;1,1-  Chemical dichloroethylene;1,1-	µg/L	Parameter Ter, Method B, Carcinogen, Standard Formula Value Comments Updated to correspond to IRIS for toxicity values Parameter eference Dose (RfDi) Comments

	Changes Made	•	Comments	
previous value:	6.8E-01	kg-day/mg		
changed to:	6.8E-01	kg-day/mg		
Date of	Chemical		Parameter	
Change	Chemical		Falameter	
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		
	see additional information		Updated to reflect MTCA rule amendments	

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Date of Change	Chemical		Parameter
11/6/2007	Hexachlorodibenzo-p-dioxin, Mixture		od B, Carcinogen, Standard Formula Value, Direct gestion 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 evaluations.	o review CLARC Guidance for toxicity equi	valency factors v	when congener-specific analysis is conducted for site-specific
Date of Change	Chemical	Parameter	
11/6/2007 tcdd;2,3,7,8-			od C, Carcinogen, Standard Formula Value, Direct gestion only), industrial land use
	Changes Made		Comments
previous value:	8.8E-04	mg/kg	
changed to: Note: Soil Method	<b>1.5E-03</b> Is B & C, Carcinogen, Standard Formula V ,7,8-) based on Gastrointestinal absorption	mg/kg alue, Direct Con	Updated to reflect MTCA rule amendments tact (ingestion only) soil cleanup levels for 2,3,7,8 - tetrachlorodiben
Date of Change	Chemical		Parameter
11/6/2007	tcdd;2,3,7,8-		od B, Carcinogen, Standard Formula Value, Direct gestion only), unrestricted land use
	Changes Made		Comments
previous value:	6.7E-06	mg/kg	
	1.1E-05 ds B & C, Carcinogen, Standard Formula V 7,8-) based on Gastrointestinal absorption		Updated to reflect MTCA rule amendments tact (ingestion only) soil cleanup levels for 2,3,7,8 - tetrachlorodiben: f 0.6, unitless.
Date of Change	Chemical	Parameter	
11/6/2007	indeno[1,2,3-cd]pyrene		od C, Carcinogen, Standard Formula Value, Direct gestion only), industrial land use
	Changes Made		Comments
previous value:	1.8E+01	//	
	1.02 / 01	mg/kg	
changed to:	see additional information	mg/kg	Updated to reflect MTCA rule amendments
Note: Click here to	see additional information		Updated to reflect MTCA rule amendments when congener-specific analysis is conducted for site-specific
Note: Click here to evaluations.	see additional information		
Note: Click here to evaluations. Date of Change	see additional information o review CLARC Guidance for toxicity equi	valency factors v	when congener-specific analysis is conducted for site-specific
Note: Click here to evaluations. Date of Change	see additional information o review CLARC Guidance for toxicity equi Chemical indeno[1,2,3-cd]pyrene	valency factors v	when congener-specific analysis is conducted for site-specific Parameter Dd B, Carcinogen, Standard Formula Value, Direct
Note: Click here to evaluations. Date of Change 11/6/2007 previous	see additional information o review CLARC Guidance for toxicity equi	valency factors v	when congener-specific analysis is conducted for site-specific Parameter od B, Carcinogen, Standard Formula Value, Direct igestion only), unrestricted land use
Note: Click here to evaluations. Date of Change 11/6/2007 previous value:	see additional information o review CLARC Guidance for toxicity equi Chemical indeno[1,2,3-cd]pyrene Changes Made	valency factors v Soil, Metho Contact (in	when congener-specific analysis is conducted for site-specific Parameter od B, Carcinogen, Standard Formula Value, Direct igestion only), unrestricted land use
Note: Click here to evaluations. Date of Change 11/6/2007 previous value: changed to: Note: Click here to	see additional information o review CLARC Guidance for toxicity equi Chemical indeno[1,2,3-cd]pyrene Changes Made 1.4E-01 see additional information	valency factors v Soil, Metho Contact (in mg/kg	when congener-specific analysis is conducted for site-specific Parameter od B, Carcinogen, Standard Formula Value, Direct agestion only), unrestricted land use Comments
evaluations. Date of Change 11/6/2007 previous value: changed to:	see additional information o review CLARC Guidance for toxicity equi Chemical indeno[1,2,3-cd]pyrene Changes Made 1.4E-01 see additional information	valency factors v Soil, Metho Contact (in mg/kg	when congener-specific analysis is conducted for site-specific  Parameter  Dd B, Carcinogen, Standard Formula Value, Direct Dgestion only), unrestricted land use  Comments  Updated to reflect MTCA rule amendments

	Changes Mad	е	Comments
orevious value:	1.8E+01	mg/kg	
hanged to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here t evaluations.	o review CLARC Guidance for toxicity e	quivalency factors	when congener-specific analysis is conducted for site-specific
Date of	Chemical		Parameter
Change			
1/6/2007			od B, Carcinogen, Standard Formula Value, Direct ngestion only), unrestricted land use
			<b>C 3</b> //
		,	
	Changes Mad	,	Comments
previous /alue:	Changes Mad	,	

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Date of Change	Chemical		Parameter
11/6/2007	chrysene		od C, Carcinogen, Standard Formula Value, Direct ngestion 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 evaluations.	o review CLARC Guidance for toxicity equi	valency factors	when congener-specific analysis is conducted for site-specific
Date of Change	Chemical	Parameter	
11/6/2007	chrysene		od B, Carcinogen, Standard Formula Value, Direct
	Changes Made	· · ·	Comments
previous	1.4E-01	mg/kg	
value: changed to:	see additional information		Updated to reflect MTCA rule amendments
-		valency factors	when congener-specific analysis is conducted for site-specific
Date of	Chemical		Parameter
Change 11/6/2007	benzo[k]fluoranthene	Soil Moth	od C. Carcinogen, Standard Formula Value, Direct
11/0/2007			od C, Carcinogen, Standard Formula Value, Direct ngestion only), industrial land use
nrevieus	Changes Made	malles	Comments
previous value:	1.8E+01	mg/kg	
changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to evaluations.	o review CLARC Guidance for toxicity equi	valency factors	when congener-specific analysis is conducted for site-specific
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 evaluations.	o review CLARC Guidance for toxicity equi	valency factors	when congener-specific analysis is conducted for site-specific
Date of	Chemical	Parameter	
Change 11/6/2007	benzo[b]fluoranthene		od C, Carcinogen, Standard Formula Value, Direct
	Changes Made		Comments
previous	1.8E+01	mg/kg	
value: changed to:	see additional information		Updated to reflect MTCA rule amendments
Note: Click here to evaluations.	p review CLARC Guidance for toxicity equi	valency factors	when congener-specific analysis is conducted for site-specific
Date of	Chemical		Parameter
Change 11/6/2007	benzo[b]fluoranthene	Soil Moth	od B. Carcinogen, Standard Formula Value, Direct
11/0/2007			od B, Carcinogen, Standard Formula Value, Direct ngestion 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 evaluations.	o review CLARC Guidance for toxicity equi	valency factors	when congener-specific analysis is conducted for site-specific
Date of	Chemical		Parameter
Change 11/6/2007	benzo[a]anthracene	Soil Meth	od C, Carcinogen, Standard Formula Value, Direct
2001			ngestion only), industrial land use
previous	Changes Made	ma/ka	Comments
previous	1.8E+01	mg/kg	

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changed to:	see additional information		Updated to reflect MTCA rule amendments	
Note: Click here to evaluations.	o review CLARC Guidance for toxicity eq	uivalency factors v	when congener-specific analysis is conducted for site-specific	
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	<u> </u>	Comments	
previous	1.4E-01	mg/kg		
value: changed to:	see additional information	3, 3	Updated to reflect MTCA rule amendments	
_				
Note: Click here to evaluations.	o review CLARC Guidance for toxicity eq	uivalency factors v	when congener-specific analysis is conducted for site-specific	
Date of	Chemical		Parameter	
Change	Gheinicai		rarameter	
8/9/2007	ethylbenzene	Air, Metho	d B, Non-Carcinogen, Standard Formula Value	
	Changes Made	)	Comments	
previous	4.6E+03	µg/m3		
value: changed to:	4.6E+02	µg/m3		
	T.UL T UZ	μg/ms		
Date of	Chemical		Parameter	
Change				
8/9/2007	ethylbenzene	Air, Metho	d C, Non-carcinogen, Standard Formula Value	
	Changes Made	;	Comments	
previous	1.E+04	µg/m3		
value: changed to:	1.E+03	µg/m3		
Date of Change	Chemical		Parameter	
11/22/2006	arsenic, inorganic	Ground Wa	Ground Water ARAR - State Primary Maximum Contaminant Level	
previous	Changes Made 5.E-02	e mg/L	Comments	
value:		iiig/ L		
changed to:	1.E-02	mg/L		
			_	
Date of Change	Chemical		Parameter	
5/22/2006	dichloroethylene;1,1-	Ground Wa	ater, Method B, Non-carcinogen, Standard Formula	
	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 Cance	er Potency Factor (CPFo)	
	Changes Made	;	Comments	

previous value:	Researched-No Data		
changed to:	1.1E-01	kg-day/mg	
Date of	Chemical		Parameter
Change			
1/17/2006	toluene	Surface Water, Me	ethod C, Non-Carcinogen, Standard Formula
		Value	
	Changes Ma	ade	Comments
	-		
previous value:	1.2E+05	µg/L	
changed to:	4.7E+04	µg/L	
Date of	Chemical		Parameter
Change			
1/17/2006	toluene	Surface Water, Me	ethod B, Non-Carcinogen, Standard Formula
		Value	,

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previous value:	Chan	ges Made	Comments
	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

	Chang	es 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)

	Change	s 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 Mac	le	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 Mac	le	Comments
previous value:	Researched-No Data		
changed to:	5.7E-04	mg/kg-day	
Date of	Chemical		Parameter
Change	Chemical		Farameter

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	Chang	ges 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

	Chang	ges 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

	Changes wave		Comments
previous value:	2.E+02	µg/m3	
changed to:	7.E+02	µg/m3	

Change		
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	Chemical	Parameter
Change		
12/19/2005	xylene;o-	Air, Method C, Non-carcinogen, Standard Formula Value

	Changes Made		Comments
previous value:	7.E+02	µg/m3	
alson and the s	4 5 . 00	1 0	

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	

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value:	1 5 . 02		
changed to:	1.E+02	µg/m3	
Date of Change	Chemical		Parameter
12/19/2005	xylene;m-	Air, Method B	8, Non-Carcinogen, Standard Formula Value
	Changes M	ade	Comments
previous value:	3.2E+02	μg/m3	Comments
changed to:	4.6E+01	µg/m3	
Date of	Chemical		Parameter
Change			
12/19/2005	xylenes	Ground Wate Value	r, Method C, Non-carcinogen, Standard Formula
	Changes M	ade	Comments
previous value:	3.5E+04	µg/L	
changed to:	3.5E+03	µg/L	
Date of	Chemical		Parameter
Change		Cround Miste	r Mothod D. Non porsingran Standard Formula
12/19/2005	xylenes	Value	r, Method B, Non-carcinogen, Standard Formula
	Changes M	ade	Comments
previous value:	1.6E+04	µg/L	
changed to:	1.6E+03	µg/L	
Date of	Chemical		Parameter
Change 12/19/2005	xylenes		C, Non-carcinogen, Standard Fomula Value, Direct
		Contact (inge	stion only), industrial land use
	Changes M		Comments
previous value:	7.E+06	mg/kg	
changed to:	7.E+05	mg/kg	
Date of	Chemical		Parameter
Change 12/19/2005	xylenes		B, Non-carcinogen, Standard Formula Value, Direct
		· · · ·	stion only), unrestricted land use
previous	Changes M 1.6E+05	ade mg/kg	Comments
value: changed to:	1.6E+05	mg/kg	
unangeu lu.	1.02707	iliy/ky	
Date of	Chemical		Parameter
Change 12/19/2005	benzene	Surface Wate	er, Method C, Non-Carcinogen, Standard Formula
	Oberres M		Commente
provious	Changes M	ade	Comments

	enangee me		
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, Stan Value		ter, Method B, Non-Carcinogen, Standard Formula
	Changes Ma	Ide	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 Wat Value	er, Method C, Non-carcinogen, Standard Formula

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	Chang	ges 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

µg/m3

Date of Change	Chemical	Parameter	
12/19/2005	benzene	Air, Method B, Non-Carcinogen, Standard Formula Valu	
	Changes Ma	ade	Comments
previous value:	2.7E+00	µg/m3	
changed to:	1.4E+01	µg/m3	
			5
Date of Change	Chemical		Parameter
12/19/2005	butadiene;1,3-	Inhalation Cancer F	Potency Factor (CPFi)
	Changes Ma	de	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	ce Dose (RfDi)
	Changes Ma	de	Comments
previous value:	2.E-01	mg/kg-day	
changed to:	2.9E-02	mg/kg-day	
Date of	Chemical		Parameter
Change	Cnemical		
12/19/2005	xylene;m-	Inhalation Reference Dose (RfDi)	

changed to:

3.E+01

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	Changes Mac	le	Comments
previous value:	2.E-01	mg/kg-day	
changed to:	2.9E-02	mg/kg-day	
Date of	Chemical		Parameter
Change 12/19/2005	benzene	Inhalation Ret	ference Dose (RfDi)
12/10/2000	Benzene		
	Changes Mac		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 Ca	ncer Potency Factor (CPFi)
	<b>••</b>		
previous	Changes Mac 4.6E-02	le kg-day/mg	Comments
value:	T.UL-UZ	ky-udy/IIIy	
changed to:	4.6E-02	kg-day/mg	
Date of	Chemical		Parameter
Change			
10/4/2005	formaldehyde	Oral Reference	ce Dose (RfDo)
	Changes Made		Comments
previous value:	2.E-01	mg/kg-day	commente
changed to:	1.5E-01	mg/kg-day	
Date of Change	Chemical		Parameter
10/3/2005	toluenediamine;2,6-	Inhalation Ret	ference Dose (RfDi)
	Changes Mac		Comments
previous value:	Researched-No Data		comments
changed to:	2.E-01	mg/kg-day	
Date of Change	Chemical		Parameter
10/3/2005	methyl tert-butyl ether	Oral Cancer F	Potency Factor (CPFo)
	Changes Mac	le	Comments
previous value:	Researched-No Data		
changed to:	1.8E-03	kg-day/mg	
		I	
Date of Change	Chemical		Parameter
10/3/2005	ethyl chloride	Inhalation Ca	ncer Potency Factor (CPFi)
	Changes Mac	le	Comments
provious	Bosoarshod No Data		

value:			
changed to:	2.9E-03	kg-day/mg	
Date of Change	Chemical		Parameter
10/3/2005	ethyl chloride	Oral Cancer Poten	cy Factor (CPFo)
	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	ce Dose (RfDi)
	Changes Made		Comments
	Changes Made		Comments

Changes made Comments	Changes Made	Comments
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previous

Researched-No Data

previous	Researched-No Data		
value: changed to:	2.E-02	mg/kg-day	
		3, 3, 7	
Date of	Chemical		Parameter
Change	Chemical		Falameter
10/3/2005	dichloroethane;1,2-	Inhalation Referer	nce Dose (RfDi)
	Changes Ma	de	Comments
previous value:	Researched-No Data		
changed to:	1.4E-03	mg/kg-day	
Date of	Chemical		Parameter
Change			
10/3/2005	dichloroethane;1,2-	Oral Reference Do	ose (RfDo)
	Changes Ma	de	Comments
previous	Researched-No Data		
value:			
changed to:	2.E-02	mg/kg-day	
Date of	Chemical		Parameter
Change	dihanzafuran		
10/3/2005	dibenzofuran	Oral Reference Do	ose (RIDO)
	Changes Ma	de	Comments
previous	Researched-No Data		
value: changed to:	2.E-03	mg/kg-day	
	2.12 00	ing/ikg day	
Dete of	Ohamiaal		Devenue (on
Date of Change	Chemical		Parameter
10/3/2005	ddd	Inhalation Cancer	Potency Factor (CPFi)
	Changes Ma	de	Comments
previous value:	Researched-No Data		
changed to:	2.4E-01	kg-day/mg	
Date of	Chemical		Parameter
Change			
10/3/2005	chloroaniline;p-	Inhalation Referen	nce Dose (RfDi)
	Changes Ma	de	Comments
previous	Researched-No Data		
value:			
changed to:	4.E-03	mg/kg-day	
Date of Change	Chemical		Parameter
10/3/2005	butyl benzyl phthalate	Inhalation Referer	nce Dose (RfDi)
	Changes Ma	de	Comments
previous	Researched-No Data		

Date of Change	Chemical		Parameter
10/3/2005	benzyl chloride	Oral Referenc	e Dose (RfDo)
	Changes Ma	de	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 Car	cer Potency Factor (CPFi)
	Changes Ma	de	Comments
previous	Researched-No Data		

mg/kg-day

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value: changed to:

2.E-01

changed to:	1.7E-01	kg-day/mg	
Date of Change	Chemical		Parameter
10/3/2005	benzyl chloride	Inhalation R	eference Dose (RfDi)
		ł	
previous	Changes Made Researched-No Data	•	Comments
value:	Researcheu-ino Dala		
changed to:	2.9E-03	mg/kg-day	
Date of	Chemical		Parameter
Change	Cnemical		Parameter
9/28/2005	polychlorinated biphenyls	Ground Wat	ter, Method A, Table Value
	Changes Made	<b>j</b>	Comments
previous	Researched-No Data		see PCB Mixtures
value: changed to:	1.E-01		
changed to.	1.E-01	µg/L	
Date of	Chemical		Parameter
Change	Chonnoul		
9/21/2005	cyanide	Surface Wa 201A WAC	ter ARAR - Aquatic Life - Marine/Chronic - Ch. 173-
	Changes Made	•	Comments
previous	Researched-No Data	•	Comments
value:			
changed to:	1.E+00	µg/L	
Date of	Chemical		Parameter
<b>Change</b> 9/21/2005	ammonia	Surface M/a	ter ARAR - Aquatic Life - Marine/Chronic - Ch. 173-
9/21/2003	ammonia	201A WAC	tel ANAR - Aqualic Lile - Manne/Chilonic - Ch. 173-
	Changes Made	}	Comments
previous	3.5E-02	µg/L	
value: changed to:	3.5E+01	µg/L	
3		F Si	
Date of Change	Chemical		Parameter
9/21/2005	ammonia	Surface Wa	ter ARAR - Aquatic Life - Marine/Acute - Ch. 173-201A
	Changes Made		Comments
previous	2.3E-01	μg/L	
value: changed to:	2.3E+02	µg/L	
Date of Change	Chemical		Parameter
9/21/2005	dinitrotoluene;2,6-	Inhalation R	eference Dose (RfDi)
	Changes Med		Comments
previous	Changes Made Researched-No Data	;	Comments
value:			

all and a start of the			
changed to:	1.E-03	mg/kg-day	
Date of	Chemical		Parameter
Change			
9/21/2005	dinitrotoluene;2,4-	Inhalation Refer	ence Dose (RfDi)
	Changes Mac	de	Comments
previous value:	Researched-No Data		
changed to:	2.E-03	mg/kg-day	
Date of Change	Chemical		Parameter
	Chemical	Surface Water A	
Change		Surface Water A Toxics Rule, 40	ARAR - Aquatic Life - Marine/Chronic - National
Change			ARAR - Aquatic Life - Marine/Chronic - National
Change		Toxics Rule, 40	ARAR - Aquatic Life - Marine/Chronic - National

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value:			
changed to:	8.1E+01	µg/L	
Date of	Chemical		Parameter
Change			
9/20/2005	zinc		ter ARAR - Aquatic Life - Marine/Acute - National , 40 CFR 131
	Changes Made		Comments
previous value:	9.5E+01	µg/L	
changed to:	9.E+01	µg/L	
Date of	Chemical		Parameter
Change	Chemical		Farameter
9/20/2005	zinc		ter ARAR - Aquatic Life - Fresh/Chronic - National , 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 T Rule - 40 CFR 131	
	Changes Made		Comments
previous	Changes Made	µg/L	Comments
value:			
changed to:	1.1E+02	µg/L	
Date of	Chemical		Parameter
Change	Gheinicai		rarameter
9/20/2005	silver		ter ARAR - Aquatic Life - Marine/Acute - National , 40 CFR 131
	Changes Made		Comments
previous	2.3E+00	µg/L	
value:			
changed to:	1.9E+00	µg/L	
Date of	Chemical		Parameter
Change			
9/20/2005	silver	Surface Wa Rule - 40 Cl	ter ARAR - Aquatic Life - Fresh/Acute - National Toxics FR 131
	Changes Made		Comments
previous value:	4.1E+00	µg/L	
changed to:	3.4E+00	µg/L	
Date of	Chemical		Doromoior
Date of Change	Cnemical		Parameter
9/20/2005	selenium and compounds		ter ARAR - Aquatic Life - Marine/Acute - National , 40 CFR 131
	Changes Made	•	Comments
provious		ug/I	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 - Nationa Toxics Rule, 40 CFR 131	
	Changes M	ade	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 A	ARAR - Aquatic Life - Marine/Acute - National	

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		Toxics Rule, 40	CFR 131
	Changes Ma	ade	Comments
previous	7.5E+01	µg/L	
value:			
changed to:	7.4E+01	µg/L	
Date of	Chemical		Parameter
Change			
9/20/2005	mercury	Surface Water A Rule - 40 CFR	ARAR - Aquatic Life - Fresh/Acute - National Toxics
	Changes Ma		Comments
orevious	2.4E+00	μg/L	Comments
value: changed to:	2.1E+00	µg/L	
		P 37	
Date of Change	Chemical		Parameter
9/20/2005	lead	Surface Water A Toxics Rule, 40	ARAR - Aquatic Life - Marine/Chronic - National CFR 131
	Changes Ma	ade	Comments
previous	8.5E+00	µg/L	
value: changed to:	8.1E+00	µg/L	
Date of Change	Chemical		Parameter
9/20/2005	lead	Surface Water / Toxics Rule, 40	ARAR - Aquatic Life - Marine/Acute - National CFR 131
	Changes Ma	ade	Comments
previous value:	2.2E+02	µg/L	
changed to:	2.1E+02	µg/L	
	1		
Date of Change	Chemical		Parameter
9/20/2005	lead	Surface Water A Toxics Rule, 40	ARAR - Aquatic Life - Fresh/Chronic - National CFR 131
	Changes Ma	ade	Comments
orevious value:	3.2E+00	µg/L	
changed to:	2.5E+00	µg/L	
Date of Change	Chemical		Parameter
9/20/2005	lead	Surface Water / Rule - 40 CFR	ARAR - Aquatic Life - Fresh/Acute - National Toxics 131
	Changes Ma		Comments
previous value:	8.2E+01	µg/L	
changed to:	6.5E+01	µg/L	
Date of Change	Chemical		Parameter
0/20/2005	aannar	Ourfeas Materia	ADAD Aquatia Life Marine/Chronic National

9/20/2005	copper	Surface Water AF Toxics Rule, 40 C	RAR - Aquatic Life - Marine/Chronic - National FR 131
	Changes Ma	ade	Comments
previous value:	2.9E+00	µg/L	
changed to:	2.4E+00	µg/L	
Date of Change			
Change			
	copper	Surface Water AF Toxics Rule, 40 C	RAR - Aquatic Life - Marine/Acute - National FR 131
Change		Toxics Rule, 40 C	•
Change	Changes Ma 2.9E+00	Toxics Rule, 40 C	FR 131

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Date of Change	Chemical		Parameter
9/20/2005	copper	Surface Water Toxics Rule, 4	r ARAR - Aquatic Life - Fresh/Chronic - National 0 CFR 131
	Changes Ma	de	Comments
previous value:	1.2E+01	μg/L	
changed to:	1.1E+01	µg/L	
Date of	Chemical		Parameter
<b>Change</b> 9/20/2005	copper	Surface Water	r ARAR - Aquatic Life - Fresh/Acute - National Toxic
5/20/2005		Rule - 40 CFR	
	Changes Ma	de	Comments
previous value:	1.8E+01	µg/L	
changed to:	1.7E+01	µg/L	
Deteri			Department
Date of Change	Chemical		Parameter
9/20/2005	chromium(VI)	Surface Water Toxics Rule, 4	r ARAR - Aquatic Life - Fresh/Chronic - National 0 CFR 131
	Changes Ma	de	Comments
previous value:	1.1E+01	μg/L	
changed to:	1.E+01	µg/L	
Date of	Chemical		Parameter
Change			
9/20/2005	chromium(VI)	Rule - 40 CFR	r ARAR - Aquatic Life - Fresh/Acute - National Toxic 131
	Changes Ma	de	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 Toxics Rule, 4	r ARAR - Aquatic Life - Fresh/Chronic - National 0 CFR 131
	Changes Ma	de	Comments
previous value:	2.1E+02	µg/L	
changed to:	1.8E+02	µg/L	
Date of	Chemical		Parameter
Change	Chemical		r ai allielei
9/20/2005	chromium(III)	Surface Water	r ARAR - Aquatic Life - Fresh/Acute - National Toxic

	Chang	ges Made	Comments
previous value:	1.7E+03	µg/L	
changed to:	5.5E+02	µg/L	

Rule - 40 CFR 131

Date of Change	Chemical		Parameter
9/20/2005	cadmium in water	Surface Wate Toxics Rule, 4	r ARAR - Aquatic Life - Marine/Acute - National 40 CFR 131
	Changes Ma	ade	Comments
previous value:	4.3E+01	µg/L	
changed to:	4.2E+01	µg/L	
Date of Change	Chemical		Parameter
Change	Chemical cadmium in water		r ARAR - Aquatic Life - Fresh/Chronic - National
		Surface Wate Toxics Rule, 4	r ARAR - Aquatic Life - Fresh/Chronic - National

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changed to:	1.E+00	μg/L	
Date of Change	Chemical		Parameter
9/20/2005	cadmium in water	Surface Wate Rule - 40 CF	er ARAR - Aquatic Life - Fresh/Acute - National Toxics R 131
	Changes Ma	de	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 Wate Act §304	er ARAR - Aquatic Life - Marine/Chronic - Clean Wate
	Changes Ma	do	Comments
previous value:	Changes Ma 2.E-03	µg/L	Comments
changed to:	1.9E-03	µg/L	
Date of Change	Chemical		Parameter
9/19/2005	5 dieldrin Surface Water ARAR Act §304		er ARAR - Aquatic Life - Marine/Acute - Clean Water
previous	Changes Ma 7.E-01		Comments
value:		µg/L	
changed to:	7.1E-01	µg/L	
Detect	Ol and a l		Descustor
Date of Change	Chemical		Parameter
9/14/2005	naphthalene	Ground Wate	er, Method A, Table Value
	Oh an maa Ma		0 ammanta
previous	Changes Ma	μg/L	Comments
value:			
changed to:	1.6E+02	µg/L	
Date of	Chemical		Parameter
Change			
9/12/2005	cyanide	Surface Wate Water Act §3	er ARAR - Human Health – Fresh Water – Clean 04
	Changes Ma	Ide	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 Wate Water Act §3	er ARAR - Human Health – Fresh Water – Clean 04
	Changes Ma	de	Comments
previous value:	7.E+02	µg/L	

Date of Change	Chemical		Parameter	
8/25/2005	nickel soluble salts	Ground Water ARAR - Federal Primary Maximum Contaminant Level (MCL)		
	Changes Mad	de	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		

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	Changes Ma	Ide	Comments
previous value:	1.E+04	µg/L	
changed to:	5.8E+04	µg/L	
Date of	Chemical		Parameter
Change	Onennear		rarameter
8/25/2005	dichloroethylene;1,1-		er, Method B, Non-Carcinogen, Standard Formula
		Value	
	Changes Ma	Ide	Comments
previous	4.2E+03	µg/L	
value: changed to:	2.3E+04		
changeu to.	2.3E+04	µg/L	
Date of Change	Chemical		Parameter
8/25/2005			er, Method C, Non-carcinogen, Standard Formula
		Value	
	Changes Ma	de	Comments
previous	1.6E+02	µg/L	
value:			
changed to:	8.8E+02	µg/L	
Date of	Chemical		Parameter
Change		0-1 M (1 - 1	C Non coming on the devide French Mills Direct
8/25/2005	dichloroethylene;1,1-		C, Non-carcinogen, Standard Fomula Value, Direct estion only), industrial land use
		· · -	
	Changes Ma		Comments
previous value:	3.2E+04	mg/kg	
changed to:	1.8E+05	mg/kg	
	Chemical		Parameter
Date of			Falailletei
	Cnemical		
Change	dichloroethylene;1,1-		B, Non-carcinogen, Standard Formula Value, Direct
Change			B, Non-carcinogen, Standard Formula Value, Direct estion only), unrestricted land use
Change	dichloroethylene;1,1-	Contact (inge	
Change 8/25/2005 previous		Contact (inge	estion only), unrestricted land use
Change 8/25/2005 previous value:	dichloroethylene;1,1- Changes Ma 7.2E+02	Contact (ingo ide mg/kg	estion only), unrestricted land use
Change 8/25/2005 previous value:	dichloroethylene;1,1-	Contact (inge	estion only), unrestricted land use
Date of Change 8/25/2005 previous value: changed to:	dichloroethylene;1,1- Changes Ma 7.2E+02	Contact (ingo ide mg/kg	estion only), unrestricted land use
Change 8/25/2005 previous value: changed to: Date of	dichloroethylene;1,1- Changes Ma 7.2E+02	Contact (ingo ide mg/kg	estion only), unrestricted land use
Change 8/25/2005 previous value: changed to: Date of Change	dichloroethylene;1,1- Changes Ma 7.2E+02 4.E+03 Chemical	Contact (ingenerated and a contact (ingenerated a contact (ingenerat	estion only), unrestricted land use Comments Parameter
Change 8/25/2005 previous value: changed to: Date of Change	dichloroethylene;1,1- Changes Ma 7.2E+02 4.E+03	Contact (ingenerated and a contact (ingenerated a contact (ingenerat	estion only), unrestricted land use Comments
Change 8/25/2005 previous value: changed to: Date of Change	dichloroethylene;1,1- Changes Ma 7.2E+02 4.E+03 Chemical	Contact (ingenerated and a contact (ingenerated	estion only), unrestricted land use Comments Parameter
Change 8/25/2005 previous value: changed to: Date of Change 8/25/2005 previous	dichloroethylene;1,1- Changes Ma 7.2E+02 4.E+03 Chemical dichloroethylene;1,1-	Contact (ingenerated and a contact (ingenerated	estion only), unrestricted land use Comments Parameter nce Dose (RfDo)
Change 8/25/2005 previous value: changed to: Date of Change 8/25/2005 previous value:	dichloroethylene;1,1- Changes Ma 7.2E+02 4.E+03 Chemical dichloroethylene;1,1- Changes Ma 9.E-03	Contact (ingeneration of the second s	estion only), unrestricted land use Comments Parameter nce Dose (RfDo)
Change 8/25/2005 previous value: changed to: Date of Change 8/25/2005 previous value:	dichloroethylene;1,1- Changes Ma 7.2E+02 4.E+03 Chemical dichloroethylene;1,1- Changes Ma	Contact (ingeneration of the second s	estion only), unrestricted land use Comments Parameter nce Dose (RfDo)
Change 8/25/2005 previous value: changed to: Date of Change 8/25/2005 previous value:	dichloroethylene;1,1- Changes Ma 7.2E+02 4.E+03 Chemical dichloroethylene;1,1- Changes Ma 9.E-03	Contact (ingeneration of the second s	estion only), unrestricted land use Comments Parameter nce Dose (RfDo)
Change 8/25/2005 previous value: changed to: Date of Change 8/25/2005 previous value: changed to: Date of	dichloroethylene;1,1- Changes Ma 7.2E+02 4.E+03 Chemical dichloroethylene;1,1- Changes Ma 9.E-03	Contact (ingeneration of the second s	estion only), unrestricted land use Comments Parameter nce Dose (RfDo)
Change 8/25/2005 previous value:	dichloroethylene;1,1- Changes Ma 7.2E+02 4.E+03 Chemical dichloroethylene;1,1- Changes Ma 9.E-03 5.E-02	Contact (ingenerated in the image is a contact of the image is a conta	estion only), unrestricted land use Comments Parameter nce Dose (RfDo) Comments

	Changes Ma	ade	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 Ma	ade	Comments	
previous value:	0.E+00	mg/L		
changed to:	8.E-02	mg/L		

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8/22/2005	fluoride	Ground Water, N Value	Aethod C, Non-carcinogen, Standard Formula	
	Changes M	ade	Comments	
previous value:	Researched-No Data			
changed to:	2.1E+03	µg/L		
Date of	Chemical		Parameter	
Change	<b>a</b>			
8/22/2005	fluoride	Ground Water, N Value	Aethod B, Non-carcinogen, Standard Formula	
	Changes M	ade	Comments	
previous value:	Researched-No Data			
changed to:	9.6E+02	µg/L		
Date of Change	Chemical		Parameter	
8/22/2005	fluoride	Inhalation Correc	ction Factor (INH)	
	Changes M	ade	Comments	
previous value:	Researched-No Data			
changed to:	1.E+00	unitless		
Date of Change	Chemical		Parameter	
8/18/2005	boron	Inhalation Refere	Inhalation Reference Dose (RfDi)	
	Changes M	ade	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, N Value	Aethod C, Non-carcinogen, Standard Formula	
	Changes M	ade	Comments	
previous value:	3.2E+03	µg/L		
changed to:	7.E+03	µg/L		
Date of	Chemical		Parameter	
Change				
8/18/2005	boron		Non-carcinogen, Standard Fomula Value, Direct on only), industrial land use	
	Changes M	lade	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, Direc Contact (ingestion only), unrestricted land use	
	Changes Ma	ade	Comments
previous value:	7.2E+03	mg/kg	
changed to:	1.6E+04	mg/kg	
	Chemical		Parameter
Date of Change 8/18/2005	Chemical boron		Parameter lethod B, Non-carcinogen, Standard Formula
Change		Ground Water, N Value	
Change		Value	
Change	boron	Value	lethod B, Non-carcinogen, Standard Formula

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Date of Change	Chemical	Parameter	
8/18/2005	barium and compounds	Air, Method C, Non-carcinogen, Standard Formula Value	
	Changes Mad	le	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 Mad	le	Comments
previous value:	1.6E-01	µg/m3	
changed to:	3.2E+02	µg/m3	
Date of	Chemical		Parameter
Change 8/18/2005	barium and compounds	Soil, Method C, Non-carcinogen, Standard Fomula Value, Direct	
		Contact (ingestion only), industrial land use	
	Changes Mad		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 I Contact (inge	B, Non-carcinogen, Standard Formula Value, Direct stion only), unrestricted land use
	Changes Mad		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 Wate Value	r, Method C, Non-carcinogen, Standard Formula
	Changes Mad	e	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 Wate Value	r, Method B, Non-carcinogen, Standard Formula
	Changes Mad	e	Comments
nrevious	1 1F±03		

Date of Change	Chemical	Parameter	
8/18/2005	barium and compounds	Inhalation Reference	Dose (RfDi)
	Changes Mac	le	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 Mac		Comments

µg/L

µg/L

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previous

value: changed to: 1.1E+03

3.2E+03

previous	7.E-02	mg/kg-day	
value: changed to:	2.E-01	mg/kg-day	
-			
Date of	Chemical		Parameter
Change			
8/17/2005	boron	Oral Reference	Dose (RfDo)
	Changes Made	2	Comments
previous	9.E-02	mg/kg-day	
value: changed to:	2.E-01	mg/kg-day	
Date of Change	Chemical		Parameter
8/16/2005	vinyl chloride	Oral Cancer Pote	ency Factor (CPFo)
	Changes Made		Comments
previous	Changes Made 7.5E-01	ekg-day/mg	Comments
value:			
changed to:	1.5E+00	kg-day/mg	
Date of	Chemical		Parameter
Change			
7/12/2005	polychlorinated biphenyls	Inhalation Cance	er Potency Factor (CPFi)
	Changes Made	)	Comments
previous value:	Researched-No Data		
changed to:	2.E+00	kg-day/mg	
	1		
Date of Change	Chemical		Parameter
7/12/2005	polychlorinated biphenyls	Oral Cancer Pote	ency Factor (CPFo)
	Changes Made		Comments
previous	Researched-No Data		
value: changed to:	2.E+00	kg-day/mg	
Date of Change	Chemical		Parameter
7/6/2005	methyl tert-butyl ether	Oral Reference I	Dose (RfDo)
	Changes Made	)	Comments
previous	Researched-No Data		
value: changed to:	8.6E-01	mg/kg-day	
Date of Change	Chemical		Parameter
6/22/2005	trichloroethylene	Air, Method C, C	arcinogen, Standard Formula Value
	Changes Made		Commente
provious	Changes Made	; ua/m2	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 Ma	ade	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	

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	Changes Ma	ae	Comments
		Contact (inge	estion only), industrial land use
Change 6/22/2005	tetrachloroethylene	Soil Method	C, Carcinogen, Standard Formula Value, Direct
Date of	Chemical		Devenuetor
changed to:	1.1E+01	L/kg	
previous value:	1.1E+01	L/kg	
	Changes Ma		Comments
0/22/2003	trichloroethylene	Bioconcentra	ation Factor (BCF)
Date of Change 6/22/2005	Chemical	Pioceneerter	Parameter
Dete of			Demonster
changed to:	1.5E+00	µg/L	
previous value:	5.6E+01	µg/L	
	Changes Ma	ide	Comments
6/22/2005	trichloroethylene	Surface Wat	er, Method B, Carcinogen, Standard Formula Value
Date of Change	Chemical		Parameter
changed to:	1.1E-01	µg/L	
previous value:	4.E+00	µg/L	
	Changes Ma		Comments
6/22/2005	trichloroethylene	Ground Wate	er, Method B, Carcinogen, Standard Formula Value
Date of Change	Chemical		Parameter
		- NA/ -	
value: changed to:	1.1E+00	μg/L	
previous	Changes Ma	ade µg/L	Comments
012212000			
Date of Change 6/22/2005	Chemical trichloroethylene	Ground Mat	Parameter er, Method C, Carcinogen, Standard Formula Value
changed to:	2.5E+00	mg/kg	
previous value:	9.1E+01	mg/kg	
proviewe	Changes Ma		Comments
6/22/2005	trichloroethylene		B, Carcinogen, Standard Formula Value, Direct estion only), unrestricted land use
Date of Change	Chemical		Parameter
value: changed to:	3.3E+02	mg/kg	
previous	1.2E+04	mg/kg	

Chemical tetrachloroethylene	Ground Water,	Method C, Carcinogen, Standard Formula Value
	Parameter	
1.9E+00	mg/kg	
2.E+01	mg/kg	
Changes Made		Comments
tetrachloroethylene	Soil, Method B, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), unrestricted land use	
Chemical	Parameter	
	tetrachloroethylene Changes Made 2.E+01	tetrachloroethylene Soil, Method B, Contact (ingesti Changes Made 2.E+01 mg/kg

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previous	8.6E+00	ua/I	
value:	0.00+00	µg/L	
changed to:	8.1E-01	µg/L	
Date of Change	Chemical		Parameter
6/22/2005	tetrachloroethylene	Ground Wat	ter, Method B, Carcinogen, Standard Formula Value
	Changes Ma	Ide	Comments
previous value:	8.6E-01	µg/L	
changed to:	8.1E-02	µg/L	
Date of Change	Chemical		Parameter
6/22/2005	tetrachloroethylene		ter, Method C, Non-Carcinogen, Standard Formula
		Value	
previous	Changes Ma	i <b>de</b> μg/L	Comments
value:			
changed to:	2.1E+03	µg/L	
Date of	Chemical		Parameter
Change			
6/22/2005	tetrachloroethylene	Surface Wa	ter, Method C, Carcinogen, Standard Formula Value
	Changes Ma	de	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 Wa	ter, Method B, Carcinogen, Standard Formula Value
	Changes Ma	de	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 Wa	ter, Method B, Non-Carcinogen, Standard Formula
previous	Changes Ma 8.5E+02	i <b>de</b> μg/L	Comments
value: changed to:	8.4E+02	µg/L	
onangeu lu.		ру/L	
Date of	Chemical		Parameter
Change 6/22/2005	tetrachloroothylono	Picconcert	ation Eactor (BCE)
0/22/2005	tetrachloroethylene	Bioconcentr	ation Factor (BCF)
	Changes Ma		Comments
previous value:	3.1E+01	L/kg	

value:	5.11+01	L/ Kg		
changed to:	3.1E+01	L/kg		
Date of Change	Chemical		Parameter	
6/22/2005	trichloroethylene	Surface Wat	Surface Water, Method C, Carcinogen, Standard Formula Va	
	Changes Ma	ade	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 Ma	ade	Comments	
previous value:	1.1E-02	kg-day/mg		

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changed to:	4.E-01	kg-day/mg	
		1	
Date of Change	Chemical		Parameter
6/15/2005	trichloroethylene	Inhalation C	ancer Potency Factor (CPFi)
	Changes Made		Comments
previous	1.7E-02	kg-day/mg	
value: changed to:	4.E-01	kg-day/mg	
onangea te.	1.2 01	kg ddy/mg	
Date of	Chemical		Deveneder
Change	Cnemical		Parameter
5/18/2005	methyl naphthalene;2-	Vapor Press	sure (VP)
	Changes Made		Comments
previous	6.8E-02	mmHg	Comments
value:			
changed to:	5.5E-02	mmHg	
Date of Change	Chemical		Parameter
5/18/2005	naphthalene	Vapor Press	sure (VP)
	Changes Made		Comments
previous	7.5E-02	mmHg	converted 0.01 kPA (as listed in HSDB) to mm Hg
value: changed to:	8.5E-02	mmHg	1/3/2003
onunged to.	0.52 02	mining	
Data of	Chemical		Deveneter
Date of Change	Chemical		Parameter
Date of Change 3/2/2005	Chemical tetrachloroethylene	Inhalation C	Parameter ancer Potency Factor (CPFi)
Change	tetrachloroethylene	Inhalation C	ancer Potency Factor (CPFi)
Change		Inhalation C	
Change 3/2/2005 previous value:	tetrachloroethylene Changes Made Researched-No Data		ancer Potency Factor (CPFi)
Change 3/2/2005 previous	tetrachloroethylene Changes Made	Inhalation C	ancer Potency Factor (CPFi)
Change 3/2/2005 previous value: changed to:	tetrachloroethylene         Changes Made         Researched-No Data         2.1E-02		ancer Potency Factor (CPFi) Comments
Change 3/2/2005 previous value: changed to: Date of	tetrachloroethylene Changes Made Researched-No Data		ancer Potency Factor (CPFi)
Change 3/2/2005 previous value: changed to:	tetrachloroethylene         Changes Made         Researched-No Data         2.1E-02	kg-day/mg	ancer Potency Factor (CPFi) Comments
Change 3/2/2005 previous value: changed to: Date of Change	tetrachloroethylene Changes Made Researched-No Data 2.1E-02 Chemical tetrachloroethylene	kg-day/mg	ancer Potency Factor (CPFi) Comments Parameter Potency Factor (CPFo)
Change 3/2/2005 previous value: changed to: Date of Change 3/2/2005	tetrachloroethylene Changes Made Researched-No Data 2.1E-02 Chemical tetrachloroethylene Changes Made	kg-day/mg	ancer Potency Factor (CPFi) Comments Parameter
Change 3/2/2005 previous value: changed to: Date of Change 3/2/2005 previous value:	tetrachloroethylene Changes Made Researched-No Data 2.1E-02 Chemical tetrachloroethylene Changes Made 5.1E-02	kg-day/mg Oral Cancer	ancer Potency Factor (CPFi) Comments Parameter Potency Factor (CPFo)
Change 3/2/2005 previous value: changed to: Date of Change 3/2/2005 previous	tetrachloroethylene Changes Made Researched-No Data 2.1E-02 Chemical tetrachloroethylene Changes Made	kg-day/mg	ancer Potency Factor (CPFi) Comments Parameter Potency Factor (CPFo)
Change 3/2/2005 previous value: changed to: Date of Change 3/2/2005 previous value: changed to:	tetrachloroethylene         Changes Made         Researched-No Data         2.1E-02         Chemical         tetrachloroethylene         5.1E-02         5.4E-01	kg-day/mg Oral Cancer	ancer Potency Factor (CPFi) Comments Parameter Potency Factor (CPFo) Comments
Change 3/2/2005 previous value: changed to: Date of Change 3/2/2005 previous value: changed to: Date of Change to:	tetrachloroethylene Changes Made Researched-No Data 2.1E-02 Chemical tetrachloroethylene 5.1E-02 5.4E-01 Chemical	kg-day/mg Oral Cance kg-day/mg kg-day/mg	ancer Potency Factor (CPFi) Comments Parameter Potency Factor (CPFo) Comments Parameter Parameter
Change 3/2/2005 previous value: changed to: Date of Change 3/2/2005 previous value: changed to: Date of Change to:	tetrachloroethylene         Changes Made         Researched-No Data         2.1E-02         Chemical         tetrachloroethylene         5.1E-02         5.4E-01	kg-day/mg Oral Cancer kg-day/mg kg-day/mg	ancer Potency Factor (CPFi) Comments Parameter Potency Factor (CPFo) Comments
Change 3/2/2005 previous value: changed to: Date of Change 3/2/2005 previous value: changed to: Date of Change to:	tetrachloroethylene         Changes Made         Researched-No Data         2.1E-02         Chemical         tetrachloroethylene         Changes Made         5.1E-02         5.4E-01         Chemical         nitrite	kg-day/mg Oral Cancer kg-day/mg kg-day/mg	ancer Potency Factor (CPFi)  Comments  Parameter  Potency Factor (CPFo)  Comments  Barameter Bar
Change 3/2/2005 previous value: changed to: Date of Change 3/2/2005 previous value: changed to: Date of Change to:	tetrachloroethylene Changes Made Researched-No Data 2.1E-02 Chemical tetrachloroethylene 5.1E-02 5.4E-01 Chemical	kg-day/mg Oral Cancer kg-day/mg kg-day/mg	ancer Potency Factor (CPFi) Comments Parameter Potency Factor (CPFo) Comments Parameter B B, Non-carcinogen, Standard Formula Value, Direct
Change 3/2/2005 previous value: changed to: Date of Change 3/2/2005 previous value: changed to: Date of Change 2/9/2005	tetrachloroethylene Changes Made Researched-No Data 2.1E-02 Chemical tetrachloroethylene tetrachloroethylene 5.1E-02 5.4E-01 Chemical nitrite Changes Made	kg-day/mg Oral Cance kg-day/mg kg-day/mg Soil, Method Contact (ing	ancer Potency Factor (CPFi)  Comments  Parameter  Potency Factor (CPFo)  Comments  Barameter Bar

Date of Change	Chemical		Parameter
2/9/2005	trichloroethylene	Inhalation Reference	e Dose (RfDi)
	Changes Ma	ade	Comments
previous value:	Researched-No Data		
abanged to:	1.E-02	mg/kg-day	
			Demonster
Date of Change	Chemical		Parameter
Date of Change		Oral Reference Dose	
Date of Change	Chemical	Oral Reference Dose	
changed to: Date of Change 2/9/2005 previous value:	Chemical trichloroethylene	Oral Reference Dose	e (RfDo)

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Date of Change	Chemical		Parameter
2/9/2005	xylenes	Inhalation Referen	ice Dose (RfDi)
	Changes Mad		Commonto
previous	Changes Mad Researched-No Data		Comments
value:			
changed to:	2.9E-02	mg/kg-day	
Date of	Chemical		Parameter
Change 2/9/2005	vulance	Oral Deference De	
2/9/2005	xylenes	Oral Reference Do	JSE (RIDO)
	Changes Mad	e	Comments
previous	2.E+00	mg/kg-day	
value: changed to:	2.E-01	mg/kg-day	
Date of Change	Chemical		Parameter
2/9/2005	benzene	Oral Reference Do	ose (RfDo)
	Changes Mad	e	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 Referen	ice Dose (RfDi)
	Changes Mad	Δ	Comments
previous value:	Researched-No Data		Comments
changed to:	5.E-02	mg/kg-day	
Date of Change	Chemical		Parameter
12/21/2004	ethylbenzene	Inhalation Referen	ice Dose (RfDi)
previous	Changes Mad	e mg/kg-day	Comments
value:			
changed to:	2.9E-01	mg/kg-day	
Date of	Chaminal		Daramaiar
Date of Change	Chemical		Parameter
12/10/2004	nitrate	Oral Reference Do	ose (RfDo)
	Changes Mad	e	Comments
previous	1.E-01	mg/kg-day	ooninging
value: changed to:	1.6E+00	mg/kg-day	
Date of	Chemical		Parameter
Change			
12/1/2004	trichlorobonzono:1.2.4	Cumfo on Martin A.D.	AP Human Health Fresh Water Clean

	Changes Ma	de	Comments
previous value:	2.6E+02	µg/L	
changed to:	3.5E+01	µg/L	
	thellium eeluble eelte	Surface Mictor AF	AD Human Haalth Freeh Water Class
12/1/2004	thallium, soluble salts	Surface Water AF Water Act §304	RAR - Human Health – Fresh Water – Clean
		Water Act §304	
	thallium, soluble salts Changes Ma	Water Act §304	RAR - Human Health – Fresh Water – Clean Comments
Change 12/1/2004 previous value:		Water Act §304	

Surface Water ARAR - Human Health – Fresh Water – Clean

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trichlorobenzene;1,2,4-

12/1/2004

Date of Change	Chemical		Parameter
8/6/2004	acetone cyanohydrin		od B, Non-carcinogen, Standard Formula Value, Direct ngestion only), unrestricted land use
	Changes Made		Comments
previous value:	6.4E+01	mg/kg	
changed to:	6.4E+01	mg/kg	
Date of	Chemical		Parameter
Change	Chemical	Farameter	
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	propulana dugal manaathul	Inhalation Correction Factor (INH)	
// //2004	propylene glycol monoethyl ether	Inhalation	Correction Factor (INH)
7772004	ether		
previous			Comments
previous value: changed to:	ether Changes Made		Comments Based on chemical similiarities with other propylene
previous value:	Changes Made	unitless	Comments Based on chemical similiarities with other propylene glycols. Based on chemical similiarities with other propylene
previous value: changed to: Date of	Changes Made	unitless	Comments Based on chemical similiarities with other propylene glycols. Based on chemical similiarities with other propylene
previous value: changed to: Date of Change	ether     Changes Made       2.E+00     2.E+00	unitless	Comments Based on chemical similiarities with other propylene glycols. Based on chemical similiarities with other propylene glycols.
previous value: changed to:	ether       Changes Made       2.E+00       2.E+00       Chemical       thallic oxide	unitless unitless Inhalation	Comments Based on chemical similiarities with other propylene glycols. Based on chemical similiarities with other propylene glycols. Parameter Correction Factor (INH)
previous value: changed to: Date of Change	ether     Changes Made       2.E+00     2.E+00       Chemical	unitless unitless Inhalation	Comments Based on chemical similiarities with other propylene glycols. Based on chemical similiarities with other propylene glycols. Parameter

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