

## **Appendix I**

### **RAGS D TABLE 9s AND TABLE 10s**

**Table 9.1 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Adult Residential RME at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Residential Receptor Age: Adult
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Water	Surface Water	210 Tributary	Tetrachloroethene (PCE)	6.8E-08	NA	3.7E-06	3.7E-06	Tetrachloroethene (PCE)	Liver/Body Weight	4E-05	NA	2E-03	2E-03
			Trichloroethene (TCE)	3.5E-09	NA	5.1E-08	5.4E-08	Trichloroethene (TCE)	Liver/Kidney/Fetus (Developmental)	9E-05	NA	1E-03	1E-03
			Vinyl Chloride	2.8E-09	NA	1.3E-08	1.6E-08	Vinyl Chloride	Liver	4E-06	NA	2E-05	2E-05
			(Total)	7.4E-08	NC	3.7E-06	3.9E-06	(Total)	1E-04	NC	3E-03	3E-03	
Sediment	Sediment	210 Tributary	No COPCs Selected					No COPCs Selected					
			(Total)	NC	NC	NC	NC	(Total)	NC	NC	NC	NC	
Total Risk Across Surface Water							3.8E-06	Total Hazard Index Across All Media and All Exposure Routes					3E-03
Total Risk Across Sediment							NC						
Total Adult Risk Across All Media and All Exposure Routes							3.9E-06						
Total Child Risk Across All Media and All Exposure Routes							3.1E-06						
Total Adult and Child Risk Across All Media and All Exposure Routes							6.9E-06						

Notes:  
NA = not available  
NC = not calculated

Total Liver HI =	3E-03
Total Body Weight HI =	2E-03
Total Kidney HI =	1E-03
Total Developmental (Fetus) HI =	1E-03

**Table 9.1 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Child Residential RME at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Residential Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Water	Surface Water	210 Tributary	Tetrachloroethene (PCE)	8.0E-08	NA	2.1E-06	2.2E-06	Tetrachloroethene (PCE)	Liver/Body Weight	2E-04	NA	5E-03	5E-03
			Trichloroethene (TCE)	4.1E-09	NA	2.9E-08	3.3E-08	Trichloroethene (TCE)	Liver/Kidney/Fetus (Developmental)	4E-04	NA	3E-03	3E-03
			Vinyl Chloride (pr + non-pr)	2.7E-07	NA	6.3E-07	8.9E-07	Vinyl Chloride	Liver	2E-05	NA	4E-05	6E-05
			(Total)	3.5E-07	NC	2.7E-06	3.1E-06	(Total)	6E-04	NC	7E-03	8E-03	
Sediment	Sediment	210 Tributary	No COPCs Selected					No COPCs Selected					
			(Total)	NC	NC	NC	NC	(Total)	NC	NC	NC	NC	
Total Risk Across Surface Water							3.1E-06	Total Hazard Index Across All Media and All Exposure Routes					8E-03
Total Risk Across Sediment							NC						
Total Child Risk Across All Media and All Exposure Routes							3.1E-06						

Notes:  
NA = not available  
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes: **3.8E-06**  
Total Adult and Child Risk Across All Media and All Exposure Routes: **6.9E-06**

Total Liver HI = **8E-03**  
Total Body Weight HI = **5E-03**  
Total Kidney HI = **3E-03**  
Total Developmental (Fetus) HI = **3E-03**

**Table 9.1 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Adult Residential CTE at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Residential Receptor Age: Adult
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Water	Surface Water	210 Tributary	Tetrachloroethene (PCE)	9.3E-09	NA	4.8E-07	4.9E-07	Tetrachloroethene (PCE)	Liver/Body Weight	1E-05	NA	7E-04	7E-04
			Trichloroethene (TCE)	5.3E-10	NA	7.8E-09	8.3E-09	Trichloroethene (TCE)	Liver/Kidney/Fetus (Developmental)	3E-05	NA	5E-04	5E-04
			Vinyl Chloride	5.2E-10	NA	2.5E-09	3.0E-09	Vinyl Chloride	Liver	2E-06	NA	9E-06	1E-05
			(Total)	1.0E-08	NC	4.9E-07	5.0E-07	(Total)		5E-05	NC	1E-03	1E-03
Sediment	Sediment	210 Tributary	No COPCs Selected					No COPCs Selected					
			(Total)	NC	NC	NC	NC	(Total)		NC	NC	NC	NC
Total Risk Across Surface Water							5.0E-07	Total Hazard Index Across All Media and All Exposure Routes					1E-03
Total Risk Across Sediment							NC						
Total Adult Risk Across All Media and All Exposure Routes							5.0E-07						

Notes:  
 NA = not available  
 NC = not calculated

Total Child Risk Across All Media and All Exposure Routes	1.7E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	2.2E-06

Total Liver HI =	1E-03
Total Body Weight HI =	7E-04
Total Kidney HI =	5E-04
Total Developmental (Fetus) HI =	5E-04

**Table 9.1 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Child Residential CTE at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Residential Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Water	Surface Water	210 Tributary	Tetrachloroethene (PCE)	2.9E-08	NA	7.4E-07	7.7E-07	Tetrachloroethene (PCE)	Liver/Body Weight	6E-05	NA	2E-03	2E-03
			Trichloroethene (TCE)	1.6E-09	NA	1.2E-08	1.3E-08	Trichloroethene (TCE)	Liver/Kidney/Fetus (Developmental)	2E-04	NA	1E-03	1E-03
			Vinyl Chloride (pr + non-pr)	2.7E-07	NA	6.2E-07	8.9E-07	Vinyl Chloride	Liver	9E-06	NA	2E-05	3E-05
			(Total)	3.0E-07	NC	1.4E-06	1.7E-06	(Total)		2E-04	NC	3E-03	3E-03
Sediment	Sediment	210 Tributary	No COPCs Selected					No COPCs Selected					
			(Total)	NC	NC	NC	NC	(Total)		NC	NC	NC	NC
Total Risk Across Surface Water							1.7E-06	Total Hazard Index Across All Media and All Exposure Routes					3E-03
Total Risk Across Sediment							NC						
Total Child Risk Across All Media and All Exposure Routes							1.7E-06						

Notes:  
NA = not available  
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes: 5.0E-07  
Total Adult and Child Risk Across All Media and All Exposure Routes: 2.2E-06

Total Liver HI = 3E-03  
Total Body Weight HI = 2E-03  
Total Kidney HI = 1E-03  
Total Developmental (Fetus) HI = 1E-03

**Table 9.1 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Industrial Worker RME at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Industrial Worker Receptor Age: Adult
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Water	Surface Water	210 Tributary	Tetrachloroethene (PCE)	3.6E-08	NA	1.1E-06	1.1E-06	Tetrachloroethene (PCE)	Liver/Body Weight	2E-05	NA	6E-04	6E-04
			Trichloroethene (TCE)	1.8E-09	NA	1.5E-08	1.7E-08	Trichloroethene (TCE)	Liver/Kidney/Fetus (Developmental)	4E-05	NA	4E-04	4E-04
			Vinyl Chloride	1.4E-09	NA	4.0E-09	5.4E-09	Vinyl Chloride	Liver	2E-06	NA	5E-06	7E-06
			(Total)	3.9E-08	NC	1.1E-06	1.2E-06	(Total)		6E-05	NC	9E-04	1E-03
Sediment	Sediment	210 Tributary	No COPCs Selected					No COPCs Selected					
			(Total)	NC	NC	NC	NC	(Total)		NC	NC	NC	NC
Total Risk Across Surface Water							1.2E-06	Total Hazard Index Across All Media and All Exposure Routes					1E-03
Total Risk Across Sediment							NC						
Total Risk Across All Media and All Exposure Routes							1.2E-06						

Notes:  
NA = not available  
NC = not calculated

Total Liver HI =	1E-03
Total Body Weight HI =	6E-04
Total Kidney HI =	4E-04
Total Developmental (Fetus) HI =	4E-04

**Table 9.1 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Industrial Worker CTE at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Industrial Worker Receptor Age: Adult
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Water	Surface Water	210 Tributary	Tetrachloroethene (PCE)	6.8E-09	NA	2.1E-07	2.1E-07	Tetrachloroethene (PCE)	Liver/Body Weight	1E-05	NA	4E-04	4E-04
			Trichloroethene (TCE)	3.9E-10	NA	3.3E-09	3.7E-09	Trichloroethene (TCE)	Liver/Kidney/Fetus (Developmental)	3E-05	NA	3E-04	3E-04
			Vinyl Chloride	3.8E-10	NA	1.0E-09	1.4E-09	Vinyl Chloride	Liver	2E-06	NA	5E-06	7E-06
			(Total)	7.6E-09	NC	2.1E-07	2.2E-07	(Total)		5E-05	NC	7E-04	7E-04
Sediment	Sediment	210 Tributary	No COPCs Selected					No COPCs Selected					
			(Total)	NC	NC	NC	NC	(Total)		NC	NC	NC	NC
Total Risk Across Surface Water							2.2E-07	Total Hazard Index Across All Media and All Exposure Routes					7E-04
Total Risk Across Sediment							NC						
Total Risk Across All Media and All Exposure Routes							2.2E-07						

Notes:  
NA = not available  
NC = not calculated

Total Liver HI =	7E-04
Total Body Weight HI =	4E-04
Total Kidney HI =	3E-04
Total Developmental (Fetus) HI =	3E-04

**Table 9.1 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Construction Worker RME at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Water	Surface Water	210 Tributary	Tetrachloroethene (PCE)	4.9E-09	NA	1.5E-07	1.6E-07	Tetrachloroethene (PCE)	Liver	2E-05	NA	6E-04	6E-04
			Trichloroethene (TCE)	2.5E-10	NA	2.1E-09	2.4E-09	Trichloroethene (TCE)	Liver/Kidney/Fetus (Developmental)	5E-04	NA	4E-03	4E-03
			Vinyl Chloride	2.0E-10	NA	5.5E-10	7.5E-10	Vinyl Chloride	Liver	2E-05	NA	5E-05	7E-05
			(Total)	5.4E-09	NC	1.6E-07	1.6E-07	(Total)		5E-04	NC	4E-03	5E-03
Sediment	Sediment	210 Tributary	No COPCs Selected					No COPCs Selected					
			(Total)	NC	NC	NC	NC	(Total)		NC	NC	NC	NC
Total Risk Across Surface Water							1.6E-07	Total Hazard Index Across All Media and All Exposure Routes					5E-03
Total Risk Across Sediment							NC						
Total Risk Across All Media and All Exposure Routes							1.6E-07						

Notes:

NA = not available

NC = not calculated

Total Liver HI = 5E-03

Total Kidney HI = 4E-03

Total Developmental (Fetus) HI = 4E-03

**Table 9.1 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Construction Worker CTE at 210 Tributary  
RIVERFRONT 0U4**

Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Water	Surface Water	210 Tributary	Tetrachloroethene (PCE)	1.2E-09	NA	3.6E-08	3.7E-08	Tetrachloroethene (PCE)	Liver	1E-05	NA	4E-04	4E-04
			Trichloroethene (TCE)	6.8E-11	NA	5.8E-10	6.4E-10	Trichloroethene (TCE)	Liver/Kidney/Fetus (Developmental)	3E-04	NA	3E-03	3E-03
			Vinyl Chloride	6.6E-11	NA	1.8E-10	2.5E-10	Vinyl Chloride	Liver	2E-05	NA	5E-05	7E-05
			(Total)	1.3E-09	NC	3.7E-08	3.8E-08	(Total)		4E-04	NC	3E-03	4E-03
Sediment	Sediment	210 Tributary	No COPCs Selected					No COPCs Selected					
			(Total)	NC	NC	NC	NC	(Total)		NC	NC	NC	NC
Total Risk Across Surface Water							3.8E-08	Total Hazard Index Across All Media and All Exposure Routes					4E-03
Total Risk Across Sediment							NC						
Total Risk Across All Media and All Exposure Routes							3.8E-08						

Notes:

NA = not available

NC = not calculated

Total Liver HI = 4E-03

Total Kidney HI = 3E-03

Total Developmental (Fetus) HI = 3E-03

**Table 9.1 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)  
Adult Residential RME at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Residential Receptor Age: Adult
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Water	Surface Water	210 Tributary	Tetrachloroethene (PCE)	6.8E-08	NA	3.7E-06	3.7E-06	Tetrachloroethene (PCE)	Liver/Body Weight	4E-05	NA	2E-03	2E-03
			Trichloroethene (TCE)	1.1E-10	NA	1.7E-09	1.8E-09	Trichloroethene (TCE)	Liver/Kidney/Fetus (Developmental)	9E-05	NA	1E-03	1E-03
			Vinyl Chloride	2.8E-09	NA	1.3E-08	1.6E-08	Vinyl Chloride	Liver	4E-06	NA	2E-05	2E-05
			(Total)	7.1E-08	NC	3.7E-06	3.7E-06	(Total)	1E-04	NC	3E-03	3E-03	
Sediment	Sediment	210 Tributary	No COPCs Selected					No COPCs Selected					
			(Total)	NC	NC	NC	NC	(Total)	NC	NC	NC	NC	
Total Risk Across Surface Water							3.7E-06	Total Hazard Index Across All Media and All Exposure Routes					3E-03
Total Risk Across Sediment							NC						
Total Adult Risk Across All Media and All Exposure Routes							3.7E-06						
Total Child Risk Across All Media and All Exposure Routes							3.1E-06						
Total Adult and Child Risk Across All Media and All Exposure Routes							6.8E-06						

Notes:  
NA = not available  
NC = not calculated

Total Liver HI =	3E-03
Total Body Weight HI =	2E-03
Total Kidney HI =	1E-03
Total Developmental (Fetus) HI =	1E-03

**Table 9.1 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)  
Child Residential RME at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Residential Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Water	Surface Water	210 Tributary	Tetrachloroethene (PCE)	8.0E-08	NA	2.1E-06	2.2E-06	Tetrachloroethene (PCE)	Liver/Body Weight	2E-04	NA	5E-03	5E-03
			Trichloroethene (TCE)	1.3E-10	NA	9.5E-10	1.1E-09	Trichloroethene (TCE)	Liver/Kidney/Fetus (Developmental)	4E-04	NA	3E-03	3E-03
			Vinyl Chloride (pr + non-pr)	2.7E-07	NA	6.3E-07	8.9E-07	Vinyl Chloride	Liver	2E-05	NA	4E-05	6E-05
			(Total)	3.5E-07	NC	2.7E-06	3.1E-06	(Total)		6E-04	NC	7E-03	8E-03
Sediment	Sediment	210 Tributary	No COPCs Selected					No COPCs Selected					
			(Total)	NC	NC	NC	NC	(Total)		NC	NC	NC	NC
Total Risk Across Surface Water							3.1E-06	Total Hazard Index Across All Media and All Exposure Routes					8E-03
Total Risk Across Sediment							NC						
Total Child Risk Across All Media and All Exposure Routes							3.1E-06						

Notes:  
NA = not available  
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes: 3.7E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes: 6.8E-06

Total Liver HI = 8E-03  
Total Body Weight HI = 5E-03  
Total Kidney HI = 3E-03  
Total Developmental (Fetus) HI = 3E-03

**Table 9.1 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)  
Adult Residential CTE at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Residential Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Water	Surface Water	210 Tributary	Tetrachloroethene (PCE)	9.3E-09	NA	4.8E-07	4.9E-07	Tetrachloroethene (PCE)	Liver/Body Weight	1E-05	NA	7E-04	7E-04
			Trichloroethene (TCE)	1.7E-11	NA	2.5E-10	2.7E-10	Trichloroethene (TCE)	Liver/Kidney/Fetus (Developmental)	3E-05	NA	5E-04	5E-04
			Vinyl Chloride	5.2E-10	NA	2.5E-09	3.0E-09	Vinyl Chloride	Liver	2E-06	NA	9E-06	1E-05
			(Total)	9.8E-09	NC	4.9E-07	5.0E-07	(Total)		5E-05	NC	1E-03	1E-03
Sediment	Sediment	210 Tributary	No COPCs Selected					No COPCs Selected					
			(Total)	NC	NC	NC	NC	(Total)		NC	NC	NC	NC
Total Risk Across Surface Water							5.0E-07	Total Hazard Index Across All Media and All Exposure Routes					1E-03
Total Risk Across Sediment							NC						
Total Adult Risk Across All Media and All Exposure Routes							5.0E-07						
Total Child Risk Across All Media and All Exposure Routes							1.7E-06						
Total Adult and Child Risk Across All Media and All Exposure Routes							2.2E-06						

Notes:  
NA = not available  
NC = not calculated

Total Liver HI =	1E-03
Total Body Weight HI =	7E-04
Total Kidney HI =	5E-04
Total Developmental (Fetus) HI =	5E-04

**Table 9.1 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)  
Child Residential CTE at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Residential Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Water	Surface Water	210 Tributary	Tetrachloroethene (PCE)	2.9E-08	NA	7.4E-07	7.7E-07	Tetrachloroethene (PCE)	Liver/Body Weight	6E-05	NA	2E-03	2E-03
			Trichloroethene (TCE)	5.3E-11	NA	3.9E-10	4.4E-10	Trichloroethene (TCE)	Liver/Kidney/Fetus (Developmental)	2E-04	NA	1E-03	1E-03
			Vinyl Chloride (pr + non-pr)	2.7E-07	NA	6.2E-07	8.9E-07	Vinyl Chloride	Liver	9E-06	NA	2E-05	3E-05
			(Total)	2.9E-07	NC	1.4E-06	1.7E-06	(Total)		2E-04	NC	3E-03	3E-03
Sediment	Sediment	210 Tributary	No COPCs Selected					No COPCs Selected					
			(Total)	NC	NC	NC	NC	(Total)		NC	NC	NC	NC
Total Risk Across Surface Water							1.7E-06	Total Hazard Index Across All Media and All Exposure Routes					3E-03
Total Risk Across Sediment							NC						
Total Child Risk Across All Media and All Exposure Routes							1.7E-06						

Notes:  
NA = not available  
NC = not calculated

Total Adult Risk Across All Media and All Exposure Routes: 5.0E-07  
Total Adult and Child Risk Across All Media and All Exposure Routes: 2.2E-06

Total Liver HI = 3E-03  
Total Body Weight HI = 2E-03  
Total Kidney HI = 1E-03  
Total Developmental (Fetus) HI = 1E-03

**Table 9.1 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)  
Industrial Worker RME at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Industrial Worker Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Water	Surface Water	210 Tributary	Tetrachloroethene (PCE)	3.6E-08	NA	1.1E-06	1.1E-06	Tetrachloroethene (PCE)	Liver/Body Weight	2E-05	NA	6E-04	6E-04
			Trichloroethene (TCE)	6.0E-11	NA	5.0E-10	5.6E-10	Trichloroethene (TCE)	Liver/Kidney/Fetus (Developmental)	4E-05	NA	4E-04	4E-04
			Vinyl Chloride	1.4E-09	NA	4.0E-09	5.4E-09	Vinyl Chloride	Liver	2E-06	NA	5E-06	7E-06
			(Total)	3.7E-08	NC	1.1E-06	1.1E-06	(Total)	6E-05	NC	9E-04	1E-03	
Sediment	Sediment	210 Tributary	No COPCs Selected					No COPCs Selected					
			(Total)	NC	NC	NC	NC	(Total)	NC	NC	NC	NC	
Total Risk Across Surface Water							1.1E-06	Total Hazard Index Across All Media and All Exposure Routes					1E-03
Total Risk Across Sediment							NC						
Total Risk Across All Media and All Exposure Routes							1.1E-06						

Notes:  
NA = not available  
NC = not calculated

Total Liver HI =	1E-03
Total Body Weight HI =	6E-04
Total Kidney HI =	4E-04
Total Developmental (Fetus) HI =	4E-04

**Table 9.1 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)  
Industrial Worker CTE at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Industrial Worker Receptor Age: Adult
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Water	Surface Water	210 Tributary	Tetrachloroethene (PCE)	6.8E-09	NA	2.1E-07	2.1E-07	Tetrachloroethene (PCE)	Liver/Body Weight	1E-05	NA	4E-04	4E-04
			Trichloroethene (TCE)	1.3E-11	NA	1.1E-10	1.2E-10	Trichloroethene (TCE)	Liver/Kidney/Fetus (Developmental)	3E-05	NA	3E-04	3E-04
			Vinyl Chloride	3.8E-10	NA	1.0E-09	1.4E-09	Vinyl Chloride	Liver	2E-06	NA	5E-06	7E-06
			(Total)	7.2E-09	NC	2.1E-07	2.1E-07	(Total)	5E-05	NC	7E-04	7E-04	
Sediment	Sediment	210 Tributary	No COPCs Selected					No COPCs Selected					
			(Total)	NC	NC	NC	NC	(Total)	NC	NC	NC	NC	
Total Risk Across Surface Water							2.1E-07	Total Hazard Index Across All Media and All Exposure Routes					7E-04
Total Risk Across Sediment							NC						
Total Risk Across All Media and All Exposure Routes							2.1E-07						

Notes:  
NA = not available  
NC = not calculated

Total Liver HI =	7E-04
Total Body Weight HI =	4E-04
Total Kidney HI =	3E-04
Total Developmental (Fetus) HI =	3E-04

**Table 9.1 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)  
Construction Worker RME at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Water	Surface Water	210 Tributary	Tetrachloroethene (PCE)	4.9E-09	NA	1.5E-07	1.6E-07	Tetrachloroethene (PCE)	Liver	2E-05	NA	6E-04	6E-04
			Trichloroethene (TCE)	8.2E-12	NA	6.9E-11	7.7E-11	Trichloroethene (TCE)	Liver/Kidney/Fetus (Developmental)	5E-04	NA	4E-03	4E-03
			Vinyl Chloride	2.0E-10	NA	5.5E-10	7.5E-10	Vinyl Chloride	Liver	2E-05	NA	5E-05	7E-05
			(Total)	5.1E-09	NC	1.5E-07	1.6E-07	(Total)		5E-04	NC	4E-03	5E-03
Sediment	Sediment	210 Tributary	No COPCs Selected					No COPCs Selected					
			(Total)	NC	NC	NC	NC	(Total)		NC	NC	NC	NC
Total Risk Across Surface Water							1.6E-07	Total Hazard Index Across All Media and All Exposure Routes					5E-03
Total Risk Across Sediment							NC						
Total Risk Across All Media and All Exposure Routes							1.6E-07						

Notes:

NA = not available

NC = not calculated

Total Liver HI = 5E-03

Total Kidney HI = 4E-03

Total Developmental (Fetus) HI = 4E-03

**Table 9.1 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)  
Construction Worker CTE at 210 Tributary  
RIVERFRONT 0U4**

Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Water	Surface Water	210 Tributary	Tetrachloroethene (PCE)	1.2E-09	NA	3.6E-08	3.7E-08	Tetrachloroethene (PCE)	Liver	1E-05	NA	4E-04	4E-04
			Trichloroethene (TCE)	2.2E-12	NA	1.9E-11	2.1E-11	Trichloroethene (TCE)	Liver/Kidney/Fetus (Developmental)	3E-04	NA	3E-03	3E-03
			Vinyl Chloride	6.6E-11	NA	1.8E-10	2.5E-10	Vinyl Chloride	Liver	2E-05	NA	5E-05	7E-05
			(Total)	1.3E-09	NC	3.6E-08	3.7E-08	(Total)		4E-04	NC	3E-03	4E-03
Sediment	Sediment	210 Tributary	No COPCs Selected					No COPCs Selected					
			(Total)	NC	NC	NC	NC	(Total)		NC	NC	NC	NC
Total Risk Across Surface Water							3.7E-08	Total Hazard Index Across All Media and All Exposure Routes					4E-03
Total Risk Across Sediment							NC						
Total Risk Across All Media and All Exposure Routes							3.7E-08						

Notes:

NA = not available

NC = not calculated

Total Liver HI = 4E-03

Total Kidney HI = 3E-03

Total Developmental (Fetus) HI = 3E-03

Table 9.2 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Adult Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Surface Soil	Surface Soil	On Site	Tetrachloroethene (PCE)	3.8E-07	NA	NA	3.8E-07	Tetrachloroethene (PCE)	Liver/Body Weight	2E-04	NA	NA	2E-04		
			Trichloroethene (TCE)	7.5E-08	NA	NA	7.5E-08	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	2E-03	NA	NA	2E-03		
			Vinyl Chloride	6.1E-08	NA	NA	6.1E-08	Vinyl Chloride	Liver	8E-05	NA	NA	8E-05		
			(Total)	5.2E-07	NC	NC	5.2E-07	(Total)	2E-03	NC	NC	2E-03			
Air	Indoor Vapors	On Site	Chloroform	NA	3.6E-06	NA	3.6E-06	Chloroform	CNS/Liver/Kidney	NA	1E-02	NA	1E-02		
			Tetrachloroethylene (PCE)	NA	3.9E-06	NA	3.9E-06	Tetrachloroethylene (PCE)	Kidney	NA	3E-03	NA	3E-03		
			Trichloroethylene (TCE)	NA	4.4E-05	NA	4.4E-05	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	3E-02	NA	3E-02		
			(Total)	NC	5.1E-05	NC	5.1E-05	(Total)	NC	4E-02	NC	4E-02			
Total Risk Across Soil (Surface Only)							5.2E-07	Total Hazard Index Across Soil (Surface Only)							2E-03
Total Risk Across Air (Indoor Vapors)							5.1E-05	Total Hazard Index Across Air (Indoor Vapors)							4E-02
Total Adult Risk Across All Media and All Exposure Routes							5.2E-05	Total Hazard Index Across All Media and All Exposure Routes							4E-02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 3.3E-05  
Total Adult and Child Risk Across All Media and All Exposure Routes = 8.4E-05

Total Liver HI = 4E-02  
Total Body Weight HI = 2E-04  
Total Kidney HI = 1E-02  
Total Developmental HI = 2E-03  
Total CNS HI = 4E-02  
Total Endocrine System HI = 3E-02

**Table 9.2 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	On Site	Tetrachloroethene (PCE)	8.9E-07	NA	NA	8.9E-07	Tetrachloroethene (PCE) Trichloroethene (TCE) Vinyl Chloride (Total)	Liver/Body Weight	2E-03	NA	NA	2E-03
			Trichloroethene (TCE)	1.8E-07	NA	NA	1.8E-07		Liver/Kidneys/Fetus (Developmental)	2E-02	NA	NA	2E-02
			Vinyl Chloride (pr + non-pr)	1.9E-06	NA	NA	1.9E-06		Liver	8E-04	NA	NA	8E-04
			(Total)	2.9E-06	NC	NC	2.9E-06		(Total)	2E-02	NC	NC	2E-02
Air	Indoor Vapors	On Site	Chloroform	NA	2.1E-06	NA	2.1E-06	Chloroform Tetrachloroethylene (PCE) Trichloroethylene (TCE) (Total)	CNS/Liver/Kidney	NA	2E-02	NA	2E-02
			Tetrachloroethylene (PCE)	NA	2.3E-06	NA	2.3E-06		Kidney	NA	7E-03	NA	7E-03
			Trichloroethylene (TCE)	NA	2.5E-05	NA	2.5E-05		CNS/Liver/Endocrine System	NA	7E-02	NA	7E-02
			(Total)	NC	3.0E-05	NC	3.0E-05		(Total)	NC	1E-01	NC	1E-01
Total Risk Across Soil (Surface Only)							2.9E-06	Total Hazard Index Across Soil (Surface Only)					2E-02
Total Risk Across Air (Indoor Vapors)							3.0E-05	Total Hazard Index Across Air (Indoor Vapors)					1E-01
Total Child Risk Across All Media and All Exposure Routes							3.3E-05	Total Hazard Index Across All Media and All Exposure Routes					1E-01

Notes:

NA = not available  
pr = prorated

Total Adult Risk Across All Media and All Exposure Routes	5.2E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	8.4E-05

Total Liver HI =	1E-01
Total Body Weight HI =	2E-03
Total Kidney HI =	5E-02
Total Developmental HI =	2E-02
Total CNS HI =	9E-02
Total Endocrine System HI =	7E-02

Table 9.2 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Adult Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	On Site	Tetrachloroethene (PCE)	1.1E-08	NA	NA	1.1E-08	Tetrachloroethene (PCE)	Liver/Body Weight	2E-05	NA	NA	2E-05
			Trichloroethene (TCE)	1.2E-09	NA	NA	1.2E-09	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	8E-05	NA	NA	8E-05
			Vinyl Chloride	2.1E-09	NA	NA	2.1E-09	Vinyl Chloride	Liver	8E-06	NA	NA	8E-06
(Total)				1.5E-08	NC	NC	1.5E-08	(Total)		1E-04	NC	NC	1E-04
Air	Indoor Vapors	On Site	Chloroform	NA	5.2E-07	NA	5.2E-07	Chloroform	CNS/Liver/Kidney	NA	4E-03	NA	4E-03
			Tetrachloroethylene (PCE)	NA	5.9E-07	NA	5.9E-07	Tetrachloroethylene (PCE)	Kidney	NA	1E-03	NA	1E-03
			Trichloroethylene (TCE)	NA	6.3E-06	NA	6.3E-06	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	1E-02	NA	1E-02
(Total)				NC	7.4E-06	NC	7.4E-06	(Total)		NC	2E-02	NC	2E-02
Total Risk Across Soil (Surface Only)							1.5E-08	Total Hazard Index Across Soil (Surface Only)					1E-04
Total Risk Across Air (Indoor Vapors)							7.4E-06	Total Hazard Index Across Air (Indoor Vapors)					2E-02
Total Adult Risk Across All Media and All Exposure Routes							7.4E-06	Total Hazard Index Across All Media and All Exposure Routes					2E-02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 1.2E-05  
Total Adult and Child Risk Across All Media and All Exposure Routes = 1.9E-05

Total Liver HI = 1E-02  
Total Body Weight HI = 2E-05  
Total Kidney HI = 5E-03  
Total Developmental HI = 8E-05  
Total CNS HI = 1E-02  
Total Endocrine System HI = 1E-02

**Table 9.2 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Child Resident CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Surface Soil	Surface Soil	On Site	Tetrachloroethene (PCE)	7.0E-08	NA	NA	7.0E-08	Tetrachloroethene (PCE)	Liver/Body Weight	2E-04	NA	NA	2E-04		
			Trichloroethene (TCE)	7.6E-09	NA	NA	7.6E-09	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	7E-04	NA	NA	7E-04		
			Vinyl Chloride (pr + non-pr)	2.6E-07	NA	NA	2.6E-07	Vinyl Chloride	Liver	7E-05	NA	NA	7E-05		
			(Total)	3.3E-07	NC	NC	3.3E-07	(Total)		1E-03	NC	NC	1E-03		
Air	Indoor Vapors	On Site	Chloroform	NA	8.0E-07	NA	8.0E-07	Chloroform	CNS/Liver/Kidney	NA	9E-03	NA	9E-03		
			Tetrachloroethylene (PCE)	NA	9.2E-07	NA	9.2E-07	Tetrachloroethylene (PCE)	Kidney	NA	3E-03	NA	3E-03		
			Trichloroethylene (TCE)	NA	9.7E-06	NA	9.7E-06	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	3E-02	NA	3E-02		
			(Total)	NC	1.1E-05	NC	1.1E-05	(Total)		NC	4E-02	NC	4E-02		
Total Risk Across Soil (Surface Only)							3.3E-07	Total Hazard Index Across Soil (Surface Only)							1E-03
Total Risk Across Air (Indoor Vapors)							1.1E-05	Total Hazard Index Across Air (Indoor Vapors)							4E-02
Total Child Risk Across All Media and All Exposure Routes							1.2E-05	Total Hazard Index Across All Media and All Exposure Routes							4E-02

Notes:  
NA = not available  
pr = prorated

Total Adult Risk Across All Media and All Exposure Routes	7.4E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	1.9E-05

Total Liver HI =	4E-02
Total Body Weight HI =	2E-04
Total Kidney HI =	1E-02
Total Developmental HI =	7E-04
Total CNS HI =	3E-02
Total Endocrine System HI =	3E-02

Table 9.2 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Adult Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	On Site	Tetrachloroethene (PCE)	3.8E-07	NA	NA	3.8E-07	Tetrachloroethene (PCE)	Liver/Body Weight	2E-04	NA	NA	2E-04
			Trichloroethene (TCE)	7.5E-08	NA	NA	7.5E-08	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	2E-03	NA	NA	2E-03
			Vinyl Chloride	6.1E-08	NA	NA	6.1E-08	Vinyl Chloride	Liver	8E-05	NA	NA	8E-05
			(Total)	5.2E-07	NC	NC	5.2E-07	(Total)		2E-03	NC	NC	2E-03
Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	3E-08	NA	3E-08
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	NA	NA	NC	NA	0E+00
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Lung	NA	7E-06	NA	7E-06
			Tetrachloroethylene (PCE)	NA	1.5E-03	NA	1.5E-03	Tetrachloroethylene (PCE)	Kidney	NA	1E+00	NA	1E+00
			Trichloroethylene (TCE)	NA	6.8E-05	NA	6.8E-05	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	5E-02	NA	5E-02
			Vinyl Chloride	NC	2.1E-07	NC	2.1E-07	Vinyl Chloride	Liver	NA	1E-03	NA	1E-03
						(Total)	NC	1.6E-03	NC	1.6E-03	(Total)		NC
Total Risk Across Soil (Surface Only)							5.2E-07	Total Hazard Index Across Soil (Surface Only)					2E-03
Total Risk Across Air (Outdoor Vapors)							1.6E-03	Total Risk Across Air (Outdoor Vapors)					1E+00
Total Adult Risk Across All Media and All Exposure Routes							1.6E-03	Total Hazard Index Across All Media and All Exposure Routes					1E+00

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 9.3E-04  
Total Adult and Child Risk Across All Media and All Exposure Routes = 2.5E-03

Total Liver HI = 5E-02  
Total Body Weight HI = 2E-04  
Total Kidney HI = 1E+00  
Total Developmental HI = 2E-03  
Total Lung HI = 7E-06  
Total CNS HI = 5E-02  
Total Endocrine System HI = 5E-02

Table 9.2 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Child Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	On Site	Tetrachloroethene (PCE)	8.9E-07	NA	NA	8.9E-07	Tetrachloroethene (PCE)	Liver/Body Weight	2E-03	NA	NA	2E-03
			Trichloroethene (TCE)	1.8E-07	NA	NA	1.8E-07	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	2E-02	NA	NA	2E-02
			Vinyl Chloride (pr + non-pr)	1.9E-06	NA	NA	1.9E-06	Vinyl Chloride	Liver	8E-04	NA	NA	8E-04
			(Total)	2.9E-06	NC	NC	2.9E-06	(Total)		2E-02	NC	NC	2E-02
Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	6E-08	NA	6E-08
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	NA	NC	NA	0E+00	
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Lung	2E-05	NA	2E-05	
			Tetrachloroethylene (PCE)	NA	8.9E-04	NA	8.9E-04	Tetrachloroethylene (PCE)	Kidney	NA	3E+00	NA	3E+00
			Trichloroethylene (TCE)	NA	4.0E-05	NA	4.0E-05	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	1E-01	NA	1E-01
			Vinyl Chloride (pr + non-pr)	NC	1.6E-06	NC	1.6E-06	Vinyl Chloride	Liver	NA	3E-03	NA	3E-03
			(Total)	NC	9.3E-04	NC	9.3E-04	(Total)		NC	3E+00	NC	3E+00

Total Risk Across Soil (Surface Only) 2.9E-06  
 Total Risk Across Air (Outdoor Vapors) 9.3E-04  
 Total Child Risk Across All Media and All Exposure Routes 9.3E-04

Total Hazard Index Across Soil (Surface Only) 2E-02  
 Total Risk Across Air (Outdoor Vapors) 3E+00  
 Total Hazard Index Across All Media and All Exposure Routes 3E+00

Notes:  
NA = not available  
pr = prorated

Total Adult Risk Across All Media and All Exposure Routes 1.6E-03  
 Total Adult and Child Risk Across All Media and All Exposure Routes 2.5E-03

Total Liver HI = 1E-01  
 Total Body Weight HI = 2E-03  
 Total Kidney HI = 3E+00  
 Total Developmental HI = 2E-02  
 Total Lung HI = 2E-05  
 Total CNS HI = 1E-01  
 Total Endocrine System HI = 1E-01

Table 9.2 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Adult Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	On Site	Tetrachloroethene (PCE)	1.1E-08	NA	NA	1.1E-08	Tetrachloroethene (PCE)	Liver/Body Weight	2E-05	NA	NA	2E-05
			Trichloroethene (TCE)	1.2E-09	NA	NA	1.2E-09	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	8E-05	NA	NA	8E-05
			Vinyl Chloride	2.1E-09	NA	NA	2.1E-09	Vinyl Chloride	Liver	8E-06	NA	NA	8E-06
			(Total)	1.5E-08	NC	NC	1.5E-08	(Total)		1E-04	NC	NC	1E-04
Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	6E-09	NA	6E-09
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	NA	NA	NC	NA	0E+00
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Lung	NA	5E-06	NA	5E-06
			Tetrachloroethylene (PCE)	NA	6.6E-05	NA	6.6E-05	Tetrachloroethylene (PCE)	Kidney	NA	1E-01	NA	1E-01
			Trichloroethylene (TCE)	NA	8.4E-06	NA	8.4E-06	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	1E-02	NA	1E-02
			Vinyl Chloride	NC	5.3E-08	NC	5.3E-08	Vinyl Chloride	Liver	NA	9E-04	NA	9E-04
			(Total)	NC	7.5E-05	NC	7.5E-05	(Total)		NC	2E-01	NC	2E-01
Total Risk Across Soil (Surface Only)							1.5E-08	Total Hazard Index Across Soil (Surface Only)					1E-04
Total Risk Across Air (Outdoor Vapors)							7.5E-05	Total Risk Across Air (Outdoor Vapors)					2E-01
Total Adult Risk Across All Media and All Exposure Routes							7.5E-05	Total Hazard Index Across All Media and All Exposure Routes					2E-01

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 1.2E-04  
Total Adult and Child Risk Across All Media and All Exposure Routes = 1.9E-04

Total Liver HI = 2E-02  
Total Body Weight HI = 2E-05  
Total Kidney HI = 1E-01  
Total Developmental HI = 8E-05  
Total Lung HI = 5E-06  
Total CNS HI = 1E-02  
Total Endocrine System HI = 1E-02

**Table 9.2 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Child Resident CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	On Site	Tetrachloroethene (PCE)	7.0E-08	NA	NA	7.0E-08	Tetrachloroethene (PCE)	Liver/Body Weight	2E-04	NA	NA	2E-04
			Trichloroethene (TCE)	7.6E-09	NA	NA	7.6E-09	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	7E-04	NA	NA	7E-04
			Vinyl Chloride (pr + non-pr)	2.6E-07	NA	NA	2.6E-07	Vinyl Chloride	Liver	7E-05	NA	NA	7E-05
			(Total)	3.3E-07	NC	NC	3.3E-07	(Total)		1E-03	NC	NC	1E-03
Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Kidney	NA	1E-08	NA	1E-08
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	NA	NA	NC	NA	0E+00
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Lung	NA	1E-05	NA	1E-05
			Tetrachloroethylene (PCE)	NA	1.0E-04	NA	1.0E-04	Tetrachloroethylene (PCE)	Kidney	NA	3E-01	NA	3E-01
			Trichloroethylene (TCE)	NA	1.3E-05	NA	1.3E-05	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	3E-02	NA	3E-02
			Vinyl Chloride (pr + non-pr)	NC	1.6E-06	NC	1.6E-06	Vinyl Chloride	Liver	NA	2E-03	NA	2E-03
			(Total)	NC	1.2E-04	NC	1.2E-04	(Total)		NC	4E-01	NC	4E-01
Total Risk Across Soil (Surface Only)							3.3E-07	Total Hazard Index Across Soil (Surface Only)				1E-03	
Total Risk Across Air (Outdoor Vapors)							1.2E-04	Total Risk Across Air (Outdoor Vapors)				4E-01	
Total Child Risk Across All Media and All Exposure Routes							1.2E-04	Total Hazard Index Across All Media and All Exposure Routes				4E-01	

Notes:  
NA = not available  
pr = prorated

Total Adult Risk Across All Media and All Exposure Routes = 7.5E-05  
Total Adult and Child Risk Across All Media and All Exposure Routes = 1.9E-04

Total Liver HI = 4E-02  
Total Body Weight HI = 2E-04  
Total Kidney HI = 3E-01  
Total Developmental HI = 7E-04  
Total Lung HI = 1E-05  
Total CNS HI = 3E-02  
Total Endocrine System HI = 3E-02

Table 9.2 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Adult Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	On Site	Tetrachloroethene (PCE)	3.8E-07	NA	NA	3.8E-07	Tetrachloroethene (PCE)	Liver/Body Weight	2E-04	NA	NA	2E-04
			Trichloroethene (TCE)	2.4E-09	NA	NA	2.4E-09	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	2E-03	NA	NA	2E-03
			Vinyl Chloride	6.1E-08	NA	NA	6.1E-08	Vinyl Chloride	Liver	8E-05	NA	NA	8E-05
			(Total)	4.4E-07	NC	NC	4.4E-07	(Total)		2E-03	NC	NC	2E-03
Air	Indoor Vapors	On Site	Chloroform	NA	3.6E-06	NA	3.6E-06	Chloroform	CNS/Liver/Kidney	NA	1E-02	NA	1E-02
			Tetrachloroethylene (PCE)	NA	3.9E-06	NA	3.9E-06	Tetrachloroethylene (PCE)	Kidney	NA	3E-03	NA	3E-03
			Trichloroethylene (TCE)	NA	7.6E-07	NA	7.6E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	3E-02	NA	3E-02
			(Total)	NC	8.2E-06	NC	8.2E-06	(Total)		NC	4E-02	NC	4E-02
Total Risk Across Soil (Surface Only)							4.4E-07	Total Hazard Index Across Soil (Surface Only)					2E-03
Total Risk Across Air (Indoor Vapors)							8.2E-06	Total Hazard Index Across Air (Indoor Vapors)					4E-02
Total Adult Risk Across All Media and All Exposure Routes							8.6E-06	Total Hazard Index Across All Media and All Exposure Routes					4E-02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 7.5E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes = 1.6E-05

Total Liver HI = 4E-02  
Total Body Weight HI = 2E-04  
Total Kidney HI = 1E-02  
Total Developmental HI = 2E-03  
Total CNS HI = 4E-02  
Total Endocrine System HI = 3E-02

**Table 9.2 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)**

**Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	On Site	Tetrachloroethene (PCE)	8.9E-07	NA	NA	8.9E-07	Tetrachloroethene (PCE)	Liver/Body Weight	2E-03	NA	NA	2E-03
			Trichloroethene (TCE)	5.7E-09	NA	NA	5.7E-09	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	2E-02	NA	NA	2E-02
			Vinyl Chloride (pr + non-pr)	1.9E-06	NA	NA	1.9E-06	Vinyl Chloride	Liver	8E-04	NA	NA	8E-04
			(Total)	2.8E-06	NC	NC	2.8E-06	(Total)		2E-02	NC	NC	2E-02
Air	Indoor Vapors	On Site	Chloroform	NA	2.1E-06	NA	2.1E-06	Chloroform	CNS/Liver/Kidney	NA	2E-02	NA	2E-02
			Tetrachloroethylene (PCE)	NA	2.3E-06	NA	2.3E-06	Tetrachloroethylene (PCE)	Kidney	NA	7E-03	NA	7E-03
			Trichloroethylene (TCE)	NA	4.4E-07	NA	4.4E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	7E-02	NA	7E-02
			(Total)	NC	4.8E-06	NC	4.8E-06	(Total)		NC	1E-01	NC	1E-01
Total Risk Across Soil (Surface Only)								Total Hazard Index Across Soil (Surface Only)					2E-02
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)					1E-01
Total Child Risk Across All Media and All Exposure Routes							7.5E-06	Total Hazard Index Across All Media and All Exposure Routes					1E-01

Notes:

NA = not available  
pr = prorated

Total Adult Risk Across All Media and All Exposure Routes	8.6E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	1.6E-05

Total Liver HI =	1E-01
Total Body Weight HI =	2E-03
Total Kidney HI =	5E-02
Total Developmental HI =	2E-02
Total CNS HI =	9E-02
Total Endocrine System HI =	7E-02

**Table 9.2 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)**

**Adult Resident CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	On Site	Tetrachloroethene (PCE)	1.1E-08	NA	NA	1.1E-08	Tetrachloroethene (PCE)	Liver/Body Weight	2E-05	NA	NA	2E-05
			Trichloroethene (TCE)	4.0E-11	NA	NA	4.0E-11	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	8E-05	NA	NA	8E-05
			Vinyl Chloride	2.1E-09	NA	NA	2.1E-09	Vinyl Chloride	Liver	8E-06	NA	NA	8E-06
(Total)				1.3E-08	NC	NC	1.3E-08	(Total)		1E-04	NC	NC	1E-04
Air	Indoor Vapors	On Site	Chloroform	NA	5.2E-07	NA	5.2E-07	Chloroform	CNS/Liver/Kidney	NA	4E-03	NA	4E-03
			Tetrachloroethylene (PCE)	NA	5.9E-07	NA	5.9E-07	Tetrachloroethylene (PCE)	Kidney	NA	1E-03	NA	1E-03
			Trichloroethylene (TCE)	NA	1.1E-07	NA	1.1E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	1E-02	NA	1E-02
(Total)				NC	1.2E-06	NC	1.2E-06	(Total)		NC	2E-02	NC	2E-02
Total Risk Across Soil (Surface Only)							1.3E-08	Total Hazard Index Across Soil (Surface Only)					1E-04
Total Risk Across Air (Indoor Vapors)							1.2E-06	Total Hazard Index Across Air (Indoor Vapors)					2E-02
Total Adult Risk Across All Media and All Exposure Routes							1.2E-06	Total Hazard Index Across All Media and All Exposure Routes					2E-02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 2.2E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes = 3.4E-06

Total Liver HI = 1E-02  
Total Body Weight HI = 2E-05  
Total Kidney HI = 5E-03  
Total Developmental HI = 8E-05  
Total CNS HI = 1E-02  
Total Endocrine System HI = 1E-02

Table 9.2 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Child Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	On Site	Tetrachloroethene (PCE)	7.0E-08	NA	NA	7.0E-08	Tetrachloroethene (PCE)	Liver/Body Weight	2E-04	NA	NA	2E-04
			Trichloroethene (TCE)	2.5E-10	NA	NA	2.5E-10	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	7E-04	NA	NA	7E-04
			Vinyl Chloride (pr + non-pr)	2.6E-07	NA	NA	2.6E-07	Vinyl Chloride	Liver	7E-05	NA	NA	7E-05
			(Total)	3.3E-07	NC	NC	3.3E-07	(Total)		1E-03	NC	NC	1E-03
Air	Indoor Vapors	On Site	Chloroform	NA	8.0E-07	NA	8.0E-07	Chloroform	CNS/Liver/Kidney	NA	9E-03	NA	9E-03
			Tetrachloroethylene (PCE)	NA	9.2E-07	NA	9.2E-07	Tetrachloroethylene (PCE)	Kidney	NA	3E-03	NA	3E-03
			Trichloroethylene (TCE)	NA	1.7E-07	NA	1.7E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	3E-02	NA	3E-02
			(Total)	NC	1.9E-06	NC	1.9E-06	(Total)		NC	4E-02	NC	4E-02
Total Risk Across Soil (Surface Only)							3.3E-07	Total Hazard Index Across Soil (Surface Only)				1E-03	
Total Risk Across Air (Indoor Vapors)							1.9E-06	Total Hazard Index Across Air (Indoor Vapors)				4E-02	
Total Child Risk Across All Media and All Exposure Routes							2.2E-06	Total Hazard Index Across All Media and All Exposure Routes				4E-02	

Notes:  
NA = not available  
pr = prorated

Total Adult Risk Across All Media and All Exposure Routes = 1.2E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes = 3.4E-06

Total Liver HI = 4E-02  
Total Body Weight HI = 2E-04  
Total Kidney HI = 1E-02  
Total Developmental HI = 7E-04  
Total CNS HI = 3E-02  
Total Endocrine System HI = 3E-02

Table 9.2 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Adult Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	On Site	Tetrachloroethene (PCE)	3.8E-07	NA	NA	3.8E-07	Tetrachloroethene (PCE)	Liver/Body Weight	2E-04	NA	NA	2E-04
			Trichloroethene (TCE)	2.4E-09	NA	NA	2.4E-09	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	2E-03	NA	NA	2E-03
			Vinyl Chloride	6.1E-08	NA	NA	6.1E-08	Vinyl Chloride	Liver	8E-05	NA	NA	8E-05
			(Total)	4.4E-07	NC	NC	4.4E-07	(Total)		2E-03	NC	NC	2E-03
Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	3E-08	NA	3E-08
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	NA	NA	NC	NA	0E+00
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Lung	NA	7E-06	NA	7E-06
			Tetrachloroethylene (PCE)	NA	1.5E-03	NA	1.5E-03	Tetrachloroethylene (PCE)	Kidney	NA	1E+00	NA	1E+00
			Trichloroethylene (TCE)	NA	1.2E-06	NA	1.2E-06	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	5E-02	NA	5E-02
			Vinyl Chloride	NC	2.1E-07	NC	2.1E-07	Vinyl Chloride	Liver	NA	1E-03	NA	1E-03
						(Total)	NC	1.5E-03	NC	1.5E-03	(Total)		NC
Total Risk Across Soil (Surface Only)							4.4E-07	Total Hazard Index Across Soil (Surface Only)					2E-03
Total Risk Across Air (Outdoor Vapors)							1.5E-03	Total Risk Across Air (Outdoor Vapors)					1E+00
Total Adult Risk Across All Media and All Exposure Routes							1.5E-03	Total Hazard Index Across All Media and All Exposure Routes					1E+00

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 8.9E-04  
Total Adult and Child Risk Across All Media and All Exposure Routes = 2.4E-03

Total Liver HI = 5E-02  
Total Body Weight HI = 2E-04  
Total Kidney HI = 1E+00  
Total Developmental HI = 2E-03  
Total Lung HI = 7E-06  
Total CNS HI = 5E-02  
Total Endocrine System HI = 5E-02

**Table 9.2 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)**

**Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current
Receptor Population: Resident
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	On Site	Tetrachloroethene (PCE)	8.9E-07	NA	NA	8.9E-07	Tetrachloroethene (PCE)	Liver/Body Weight	2E-03	NA	NA	2E-03
			Trichloroethene (TCE)	5.7E-09	NA	NA	5.7E-09	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	2E-02	NA	NA	2E-02
			Vinyl Chloride (pr + non-pr)	1.9E-06	NA	NA	1.9E-06	Vinyl Chloride	Liver	8E-04	NA	NA	8E-04
			(Total)	2.8E-06	NC	NC	2.8E-06	(Total)		2E-02	NC	NC	2E-02
Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	6E-08	NA	6E-08
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	NA	NC	NA	0E+00	
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Lung	NA	2E-05	NA	2E-05
			Tetrachloroethylene (PCE)	NA	8.9E-04	NA	8.9E-04	Tetrachloroethylene (PCE)	Kidney	NA	3E+00	NA	3E+00
			Trichloroethylene (TCE)	NA	7.0E-07	NA	7.0E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	1E-01	NA	1E-01
			Vinyl Chloride (pr + non-pr)	NC	1.6E-06	NC	1.6E-06	Vinyl Chloride	Liver	NA	3E-03	NA	3E-03
			(Total)	NC	8.9E-04	NC	8.9E-04	(Total)		NC	3E+00	NC	3E+00

Total Risk Across Soil (Surface Only) = 2.8E-06  
 Total Risk Across Air (Outdoor Vapors) = 8.9E-04  
 Total Child Risk Across All Media and All Exposure Routes = 8.9E-04

Total Hazard Index Across Soil (Surface Only) = 2E-02  
 Total Risk Across Air (Outdoor Vapors) = 3E+00  
 Total Hazard Index Across All Media and All Exposure Routes = 3E+00

Notes:  
 NA = not available  
 pr = prorated

Total Adult Risk Across All Media and All Exposure Routes = 1.5E-03  
 Total Adult and Child Risk Across All Media and All Exposure Routes = 2.4E-03

Total Liver HI = 1E-01  
 Total Body Weight HI = 2E-03  
 Total Kidney HI = 3E+00  
 Total Developmental HI = 2E-02  
 Total Lung HI = 2E-05  
 Total CNS HI = 1E-01  
 Total Endocrine System HI = 1E-01

Table 9.2 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Adult Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Surface Soil	Surface Soil	On Site	Tetrachloroethene (PCE)	1.1E-08	NA	NA	1.1E-08	Tetrachloroethene (PCE)	Liver/Body Weight Liver/Kidneys/Fetus (Developmental) Liver	2E-05	NA	NA	2E-05		
			Trichloroethene (TCE)	4.0E-11	NA	NA	4.0E-11	Trichloroethene (TCE)		8E-05	NA	NA	8E-05		
			Vinyl Chloride	2.1E-09	NA	NA	2.1E-09	Vinyl Chloride		8E-06	NA	NA	8E-06		
			(Total)	1.3E-08	NC	NC	1.3E-08	(Total)		1E-04	NC	NC	1E-04		
Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS) NA Lung Kidney CNS/Liver/Endocrine System Liver	NA	6E-09	NA	6E-09		
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene		NA	NC	NA	0E+00		
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene		NA	5E-06	NA	5E-06		
			Tetrachloroethylene (PCE)	NA	6.6E-05	NA	6.6E-05	Tetrachloroethylene (PCE)		NA	1E-01	NA	1E-01		
			Trichloroethylene (TCE)	NA	1.5E-07	NA	1.5E-07	Trichloroethylene (TCE)		NA	1E-02	NA	1E-02		
			Vinyl Chloride	NC	5.3E-08	NC	5.3E-08	Vinyl Chloride		NA	9E-04	NA	9E-04		
			(Total)	NC	6.6E-05	NC	6.6E-05	(Total)		NC	2E-01	NC	2E-01		
Total Risk Across Soil (Surface Only)							1.3E-08	Total Hazard Index Across Soil (Surface Only)							1E-04
Total Risk Across Air (Outdoor Vapors)							6.6E-05	Total Risk Across Air (Outdoor Vapors)							2E-01
Total Adult Risk Across All Media and All Exposure Routes							6.6E-05	Total Hazard Index Across All Media and All Exposure Routes							2E-01

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 1.1E-04  
Total Adult and Child Risk Across All Media and All Exposure Routes = 1.7E-04

Total Liver HI = 2E-02  
Total Body Weight HI = 2E-05  
Total Kidney HI = 1E-01  
Total Developmental HI = 8E-05  
Total Lung HI = 5E-06  
Total CNS HI = 1E-02  
Total Endocrine System HI = 1E-02

Table 9.2 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Child Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	On Site	Tetrachloroethene (PCE)	7.0E-08	NA	NA	7.0E-08	Tetrachloroethene (PCE)	Liver/Body Weight	2E-04	NA	NA	2E-04
			Trichloroethene (TCE)	2.5E-10	NA	NA	2.5E-10	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	7E-04	NA	NA	7E-04
			Vinyl Chloride (pr + non-pr)	2.6E-07	NA	NA	2.6E-07	Vinyl Chloride	Liver	7E-05	NA	NA	7E-05
			(Total)	3.3E-07	NC	NC	3.3E-07	(Total)		1E-03	NC	NC	1E-03
Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Kidney	NA	1E-08	NA	1E-08
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	NA	NA	NC	NA	0E+00
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Lung	NA	1E-05	NA	1E-05
			Tetrachloroethylene (PCE)	NA	1.0E-04	NA	1.0E-04	Tetrachloroethylene (PCE)	Kidney	NA	3E-01	NA	3E-01
			Trichloroethylene (TCE)	NA	2.3E-07	NA	2.3E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	3E-02	NA	3E-02
			Vinyl Chloride (pr + non-pr)	NC	1.6E-06	NC	1.6E-06	Vinyl Chloride	Liver	NA	2E-03	NA	2E-03
(Total)	NC	1.0E-04	NC	1.0E-04	(Total)		NC	4E-01	NC	4E-01			
Total Risk Across Soil (Surface Only)							3.3E-07	Total Hazard Index Across Soil (Surface Only)				1E-03	
Total Risk Across Air (Outdoor Vapors)							1.0E-04	Total Risk Across Air (Outdoor Vapors)				4E-01	
Total Child Risk Across All Media and All Exposure Routes							1.1E-04	Total Hazard Index Across All Media and All Exposure Routes				4E-01	

Notes:  
NA = not available  
pr = prorated

Total Adult Risk Across All Media and All Exposure Routes = 6.6E-05  
Total Adult and Child Risk Across All Media and All Exposure Routes = 1.7E-04

Total Liver HI = 4E-02  
Total Body Weight HI = 2E-04  
Total Kidney HI = 3E-01  
Total Developmental HI = 7E-04  
Total Lung HI = 1E-05  
Total CNS HI = 3E-02  
Total Endocrine System HI = 3E-02

Table 9.3 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Adult Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Future  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	6.5E-04	NA	NA	6.5E-04	Tetrachloroethene (PCE)	Liver/Body Weight	3E-01	NA	NA	3E-01		
			Trichloroethene (TCE)	1.4E-06	NA	NA	1.4E-06	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	4E-02	NA	NA	4E-02		
			Vinyl Chloride	6.8E-08	NA	NA	6.8E-08	Vinyl Chloride	Liver	9E-05	NA	NA	9E-05		
(Total)				6.5E-04	NC	NC	6.5E-04	(Total)		4E-01	NC	NC	4E-01		
Groundwater	Groundwater/Vapor	On Site	Acetone	NC	NC	NC	0.0E+00	Acetone	Kidney/Neurologic (CNS) <sup>1</sup>	6E-02	3E-02	3E-04	1E-01		
			cis-1,2-Dichloroethene	NC	NC	NC	0.0E+00	cis-1,2-Dichloroethene	Blood	5E+00	NC	4E-01	5E+00		
			trans-1,2-Dichloroethene	NC	NC	NC	0.0E+00	trans-1,2-Dichloroethene	Blood/Lung <sup>2</sup>	2E-02	1E-01	2E-03	1E-01		
			Tetrachloroethene (PCE)	1.6E-01	3.4E-02	1.0E-01	3.0E-01	Tetrachloroethene (PCE)	Liver/Body Weight/Kidney <sup>3</sup>	9E+01	3E+01	6E+01	2E+02		
			Trichloroethene (TCE)	6.8E-03	3.3E-02	1.2E-03	4.1E-02	Trichloroethene (TCE)	Liver/Kidneys/Developmental/CNS/Endocrine <sup>4</sup>	2E+02	2E+01	3E+01	2E+02		
(Total)				1.7E-01	6.7E-02	1.0E-01	3.4E-01	(Total)		3E+02	5E+01	9E+01	4E+02		
Air	Indoor Vapors	On Site	Chloroform	NA	3.6E-06	NA	3.6E-06	Chloroform	CNS/Liver/Kidney	NA	1E-02	NA	1E-02		
			Tetrachloroethylene (PCE)	NA	3.9E-06	NA	3.9E-06	Tetrachloroethylene (PCE)	Kidney	NA	3E-03	NA	3E-03		
			Trichloroethylene (TCE)	NA	4.4E-05	NA	4.4E-05	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	3E-02	NA	3E-02		
(Total)				NC	5.1E-05	NC	5.1E-05	(Total)		NC	4E-02	NC	4E-02		
Total Risk Across Soil (Total Soil)							6.5E-04	Total Hazard Index Across Soil (Total Soil)							4E-01
Total Risk Across Groundwater							3.4E-01	Total Hazard Index Across Groundwater							4E+02
Total Risk Across Air (Indoor Vapors)							5.1E-05	Total Hazard Index Across Air (Indoor Vapors)							4E-02
Total Adult Risk Across All Media and All Exposure Routes							3.4E-01	Total Hazard Index Across All Media and All Exposure Routes							4E+02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 2.0E-01  
Total Adult and Child Risk Across All Media and All Exposure Routes = 5.4E-01

- For Acetone, effects on the Kidney are for oral and dermal routes; effects on the CNS are only for the inhalation route.
- For trans-1,2-Dichloroethene, effects on the Blood are for oral and dermal routes; effects on the Lung are only for the inhalation route.
- For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.
- For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

Total Liver HI = 4E+02  
Total Body Weight HI = 2E+02  
Total Kidney HI = 2E+02  
Total Developmental HI = 2E+02  
Total Blood HI = 5E+00  
Total Lung HI = 1E-01  
Total CNS HI = 2E+01  
Total Endocrine System HI = 2E+01

Table 9.3 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Child Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Future  
Receptor Population: Resident  
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	1.5E-03	NA	NA	1.5E-03	Tetrachloroethene (PCE)	Liver/Body Weight	3E+00	NA	NA	3E+00
			Trichloroethene (TCE)	3.4E-06	NA	NA	3.4E-06	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	3E-01	NA	NA	3E-01
			Vinyl Chloride (pr + non-pr)	2.1E-06	NA	NA	2.1E-06	Vinyl Chloride	Liver	9E-04	NA	NA	9E-04
			(Total)	1.5E-03	NC	NC	1.5E-03	(Total)		4E+00	NC	NC	4E+00
Groundwater	Groundwater	On Site	Acetone	NC	NC	NC	0.0E+00	Acetone	Kidney/Neurologic (CNS) <sup>1</sup>	1E-01	8E-02	8E-04	2E-01
			cis-1,2-Dichloroethene	NC	NC	NC	0.0E+00	cis-1,2-Dichloroethene	Blood	1E+01	NC	1E+00	1E+01
			trans-1,2-Dichloroethene	NC	NC	NC	0.0E+00	trans-1,2-Dichloroethene	Blood/Lung <sup>2</sup>	4E-02	3E-01	4E-03	3E-01
			Tetrachloroethene (PCE)	9.7E-02	2.0E-02	6.1E-02	1.8E-01	Tetrachloroethene (PCE)	Liver/Body Weight/Kidney <sup>3</sup>	2E+02	7E+01	1E+02	4E+02
			Trichloroethene (TCE)	3.9E-03	2.0E-02	6.7E-04	2.4E-02	Trichloroethene (TCE)	Liver/Kidneys/Developmental/CNS/Endocrine <sup>4</sup>	4E+02	5E+01	6E+01	5E+02
			(Total)	1.0E-01	3.9E-02	6.1E-02	2.0E-01	(Total)		6E+02	1E+02	2E+02	9E+02
Air	Indoor Vapors	On Site	Chloroform	NA	2.1E-06	NA	2.1E-06	Chloroform	CNS/Liver/Kidney	NA	2E-02	NA	2E-02
			Tetrachloroethylene (PCE)	NA	2.3E-06	NA	2.3E-06	Tetrachloroethylene (PCE)	Kidney	NA	7E-03	NA	7E-03
			Trichloroethylene (TCE)	NA	2.5E-05	NA	2.5E-05	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	7E-02	NA	7E-02
			(Total)	NC	3.0E-05	NC	3.0E-05	(Total)		NC	1E-01	NC	1E-01
Total Risk Across Soil (Total Soil)							1.5E-03	Total Hazard Index Across Soil (Total Soil)					4E+00
Total Risk Across Groundwater							2.0E-01	Total Hazard Index Across Groundwater					9E+02
Total Risk Across Air (Indoor Vapors)							3.0E-05	Total Hazard Index Across Air (Indoor Vapors)					1E-01
Total Child Risk Across All Media and All Exposure Routes							2.0E-01	Total Hazard Index Across All Media and All Exposure Routes					9E+02

Notes:

NA = not available  
pr = prorated

Total Adult Risk Across All Media and All Exposure Routes = 3.4E-01  
Total Adult and Child Risk Across All Media and All Exposure Routes = 5.4E-01

Total Liver HI = 9E+02  
Total Body Weight HI = 4E+02  
Total Kidney HI = 5E+02  
Total Developmental HI = 4E+02  
Total Blood HI = 1E+01  
Total Lung HI = 3E-01  
Total CNS HI = 5E+01  
Total Endocrine System HI = 5E+01

1 For Acetone, effects on the Kidney are for oral and dermal routes; effects on the CNS are only for the inhalation route.  
2 For trans-1,2-Dichloroethene, effects on the Blood are for oral and dermal routes; effects on the Lung are only for the inhalation route.  
3 For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.  
4 For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

Table 9.3 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Adult Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Future  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	1.4E-05	NA	NA	1.4E-05	Tetrachloroethene (PCE)	Liver/Body Weight	2E-02	NA	NA	2E-02
			Trichloroethene (TCE)	8.8E-08	NA	NA	8.8E-08	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	6E-03	NA	NA	6E-03
			Vinyl Chloride	8.5E-09	NA	NA	8.5E-09	Vinyl Chloride	Liver	3E-05	NA	NA	3E-05
(Total)				1.4E-05	NC	NC	1.4E-05	(Total)		3E-02	NC	NC	3E-02
Groundwater	Groundwater/ Vapor	On Site	Acetone	NC	NC	NC	0.0E+00	Acetone	Kidney/Neurologic (CNS) <sup>1</sup>	1E-02	8E-03	5E-05	2E-02
			cis-1,2-Dichloroethene	NC	NC	NC	0.0E+00	cis-1,2-Dichloroethene	Blood	6E-01	NC	3E-02	6E-01
			trans-1,2-Dichloroethene	NC	NC	NC	0.0E+00	trans-1,2-Dichloroethene	Blood/Lung <sup>2</sup>	1E-02	8E-02	8E-04	9E-02
			Tetrachloroethene (PCE)	4.3E-03	8.3E-04	1.7E-03	6.8E-03	Tetrachloroethene (PCE)	Liver/Body Weight/Kidney <sup>3</sup>	6E+00	2E+00	2E+00	1E+01
			Trichloroethene (TCE)	3.0E-04	1.5E-03	3.5E-05	1.9E-03	Trichloroethene (TCE)	Liver/Kidneys/Developmental/CNS/Endocrine <sup>4</sup>	2E+01	3E+00	2E+00	2E+01
(Total)				4.6E-03	2.3E-03	1.8E-03	8.7E-03	(Total)		3E+01	5E+00	5E+00	4E+01
Air	Indoor Vapors	On Site	Chloroform	NA	5.2E-07	NA	5.2E-07	Chloroform	CNS/Liver/Kidney	NA	4E-03	NA	4E-03
			Tetrachloroethylene (PCE)	NA	5.9E-07	NA	5.9E-07	Tetrachloroethylene (PCE)	Kidney	NA	1E-03	NA	1E-03
			Trichloroethylene (TCE)	NA	6.3E-06	NA	6.3E-06	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	1E-02	NA	1E-02
(Total)				NC	7.4E-06	NC	7.4E-06	(Total)		NC	2E-02	NC	2E-02
Total Risk Across Soil (Total Soil)							1.4E-05	Total Hazard Index Across Soil (Total Soil)					3E-02
Total Risk Across Groundwater							8.7E-03	Total Hazard Index Across Groundwater					4E+01
Total Risk Across Air (Indoor Vapors)							7.4E-06	Total Hazard Index Across Air (Indoor Vapors)					2E-02
Total Adult Risk Across All Media and All Exposure Routes							8.7E-03	Total Hazard Index Across All Media and All Exposure Routes					4E+01

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 1.3E-02  
Total Adult and Child Risk Across All Media and All Exposure Routes = 2.2E-02

Total Liver HI = 3E+01  
Total Body Weight HI = 9E+00  
Total Kidney HI = 2E+01  
Total Developmental HI = 2E+01  
Total Blood HI = 6E-01  
Total Lung HI = 8E-02  
Total CNS HI = 3E+00  
Total Endocrine System HI = 3E+00

- For Acetone, effects on the Kidney are for oral and dermal routes; effects on the CNS are only for the inhalation route.
- For trans-1,2-Dichloroethene, effects on the Blood are for oral and dermal routes; effects on the Lung are only for the inhalation route.
- For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.
- For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

**Table 9.3 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Child Resident CTE  
RIVERFRONT OU4**

Scenario Timeframe: Future Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	8.8E-05	NA	NA	8.8E-05	Tetrachloroethene (PCE)	Liver/Body Weight Liver/Kidneys/Fetus (Developmental) Liver	2E-01	NA	NA	2E-01
			Trichloroethene (TCE)	5.5E-07	NA	NA	5.5E-07	5E-02		NA	NA	5E-02	
			Vinyl Chloride (pr + non-pr)	1.0E-06	NA	NA	1.0E-06	3E-04		NA	NA	3E-04	
			(Total)	8.9E-05	NC	NC	8.9E-05	2E-01		NC	NC	2E-01	
Groundwater	Groundwater	On Site	Acetone	NC	NC	NC	0.0E+00	Acetone	Kidney/Neurologic (CNS) <sup>1</sup> Blood Blood/Lung <sup>2</sup> Liver/Body Weight/Kidney <sup>3</sup> Liver/Kidneys/Developmental/CNS/Endocrine <sup>4</sup>	3E-02	2E-02	9E-05	5E-02
			cis-1,2-Dichloroethene	NC	NC	NC	0.0E+00	1E+00		NC	7E-02	1E+00	
			trans-1,2-Dichloroethene	NC	NC	NC	0.0E+00	3E-02		2E-01	2E-03	2E-01	
			Tetrachloroethene (PCE)	6.6E-03	1.3E-03	2.4E-03	1.0E-02	1E+01		4E+00	5E+00	2E+01	
			Trichloroethene (TCE)	4.7E-04	2.4E-03	4.5E-05	2.9E-03	5E+01		6E+00	4E+00	6E+01	
(Total)	7.1E-03	3.7E-03	2.4E-03	1.3E-02	6E+01	1E+01	1E+01	8E+01					
Air	Indoor Vapors	On Site	Chloroform	NA	8.0E-07	NA	8.0E-07	Chloroform	CNS/Liver/Kidney Kidney CNS/Liver/Endocrine System	NA	9E-03	NA	9E-03
			Tetrachloroethylene (PCE)	NA	9.2E-07	NA	9.2E-07	NA		3E-03	NA	3E-03	
			Trichloroethylene (TCE)	NA	9.7E-06	NA	9.7E-06	NA		3E-02	NA	3E-02	
			(Total)	NC	1.1E-05	NC	1.1E-05	NC		4E-02	NC	4E-02	
Total Risk Across Soil (Total Soil)							Total Hazard Index Across Soil (Total Soil)						
Total Risk Across Groundwater							Total Hazard Index Across Groundwater						
Total Risk Across Air (Indoor Vapors)							Total Hazard Index Across Air (Indoor Vapors)						
Total Child Risk Across All Media and All Exposure Routes							Total Hazard Index Across All Media and All Exposure Routes						

Notes:

NA = not available  
pr = prorated

Total Adult Risk Across All Media and All Exposure Routes = 8.7E-03  
Total Adult and Child Risk Across All Media and All Exposure Routes = 2.2E-02

Total Liver HI = 8E+01  
Total Body Weight HI = 2E+01  
Total Kidney HI = 5E+01  
Total Developmental HI = 5E+01  
Total Blood HI = 1E+00  
Total Lung HI = 2E-01  
Total CNS HI = 6E+00  
Total Endocrine System HI = 6E+00

- For Acetone, effects on the Kidney are for oral and dermal routes; effects on the CNS are only for the inhalation route.
- For trans-1,2-Dichloroethene, effects on the Blood are for oral and dermal routes; effects on the Lung are only for the inhalation route.
- For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.
- For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

**Table 9.3 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Industrial Worker RME  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Industrial Worker Receptor Age: Adult
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	4.8E-04	NA	NA	4.8E-04	Tetrachloroethene (PCE)	Liver/Body Weight	2E-01	NA	NA	2E-01
			Trichloroethene (TCE)	1.1E-06	NA	NA	1.1E-06	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	3E-02	NA	NA	3E-02
			Vinyl Chloride	5.0E-08	NA	NA	5.0E-08	Vinyl Chloride	Liver	7E-05	NA	NA	7E-05
			(Total)	4.8E-04	NC	NC	4.8E-04	(Total)		3E-01	NC	NC	3E-01
Air	Indoor Vapors	On Site	Chloroform	NA	2.7E-06	NA	2.7E-06	Chloroform	CNS/Liver/Kidney	NA	7E-03	NA	7E-03
			Tetrachloroethylene (PCE)	NA	2.9E-06	NA	2.9E-06	Tetrachloroethylene (PCE)	Kidney	NA	2E-03	NA	2E-03
			Trichloroethylene (TCE)	NA	3.2E-05	NA	3.2E-05	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	2E-02	NA	2E-02
			(Total)	NC	3.8E-05	NC	3.8E-05	(Total)		NC	3E-02	NC	3E-02
Total Risk Across Soil (Total Soil)							4.8E-04	Total Hazard Index Across Soil (Total Soil)					3E-01
Total Risk Across Air (Indoor Vapors)							3.8E-05	Total Hazard Index Across Air (Indoor Vapors)					3E-02
Total Adult Risk Across All Media and All Exposure Routes							5.2E-04	Total Hazard Index Across All Media and All Exposure Routes					3E-01

Notes:  
NA = not available

Total Liver HI =	3E-01
Total Body Weight HI =	2E-01
Total Kidney HI =	3E-02
Total Developmental HI =	3E-02
Total CNS HI =	3E-02
Total Endocrine System HI =	2E-02

**Table 9.3 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Industrial Worker CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	1.9E-05	NA	NA	1.9E-05	Tetrachloroethene (PCE)	Liver/Body Weight	4E-02	NA	NA	4E-02
			Trichloroethene (TCE)	1.2E-07	NA	NA	1.2E-07	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	1E-02	NA	NA	1E-02
			Vinyl Chloride	1.2E-08	NA	NA	1.2E-08	Vinyl Chloride	Liver	6E-05	NA	NA	6E-05
			(Total)	2.0E-05	NC	NC	2.0E-05	(Total)		5E-02	NC	NC	5E-02
Air	Indoor Vapors	On Site	Chloroform	NA	3.5E-07	NA	3.5E-07	Chloroform	CNS/Liver/Kidney	NA	4E-03	NA	4E-03
			Tetrachloroethylene (PCE)	NA	4.0E-07	NA	4.0E-07	Tetrachloroethylene (PCE)	Kidney	NA	1E-03	NA	1E-03
			Trichloroethylene (TCE)	NA	4.3E-06	NA	4.3E-06	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	1E-02	NA	1E-02
			(Total)	NC	5.1E-06	NC	5.1E-06	(Total)		NC	2E-02	NC	2E-02
Total Risk Across Soil (Total Soil)							2.0E-05	Total Hazard Index Across Soil (Total Soil)					5E-02
Total Risk Across Air (Indoor Vapors)							5.1E-06	Total Hazard Index Across Air (Indoor Vapors)					2E-02
Total Adult Risk Across All Media and All Exposure Routes							2.5E-05	Total Hazard Index Across All Media and All Exposure Routes					6E-02

Notes:  
NA = not available

Total Liver HI =	6E-02
Total Body Weight HI =	4E-02
Total Kidney HI =	2E-02
Total Developmental HI =	1E-02
Total CNS HI =	1E-02
Total Endocrine System HI =	1E-02

Table 9.3 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Adult Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Future  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	6.5E-04	NA	NA	6.5E-04	Tetrachloroethene (PCE)	Liver/Body Weight	3E-01	NA	NA	3E-01
			Trichloroethene (TCE)	1.4E-06	NA	NA	1.4E-06	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	4E-02	NA	NA	4E-02
			Vinyl Chloride	6.8E-08	NA	NA	6.8E-08	Vinyl Chloride	Liver	9E-05	NA	NA	9E-05
(Total)				6.5E-04	NC	NC	6.5E-04	(Total)		4E-01	NC	NC	4E-01
Groundwater	Groundwater/Vapor	On Site	Acetone	NC	NC	NC	0.0E+00	Acetone	Kidney/Neurologic (CNS) <sup>1</sup>	6E-02	3E-02	3E-04	1E-01
			cis-1,2-Dichloroethene	NC	NC	NC	0.0E+00	cis-1,2-Dichloroethene	Blood	5E+00	NC	4E-01	5E+00
			trans-1,2-Dichloroethene	NC	NC	NC	0.0E+00	trans-1,2-Dichloroethene	Blood/Lung <sup>2</sup>	2E-02	1E-01	2E-03	1E-01
			Tetrachloroethene (PCE)	1.6E-01	3.4E-02	1.0E-01	3.0E-01	Tetrachloroethene (PCE)	Liver/Body Weight/Kidney <sup>3</sup>	9E+01	3E+01	6E+01	2E+02
			Trichloroethene (TCE)	6.8E-03	3.3E-02	1.2E-03	4.1E-02	Trichloroethene (TCE)	Liver/Kidneys/Developmental/CNS/Endocrine <sup>4</sup>	2E+02	2E+01	3E+01	2E+02
(Total)				1.7E-01	6.7E-02	1.0E-01	3.4E-01	(Total)		3E+02	5E+01	9E+01	4E+02
Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	3E-08	NA	3E-08
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	NA	NA	NC	NA	NC
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Lung	NA	7E-06	NA	7E-06
			Tetrachloroethylene (PCE)	NA	1.5E-03	NA	1.5E-03	Tetrachloroethylene (PCE)	Kidney	NA	1E+00	NA	1E+00
			Trichloroethylene (TCE)	NA	6.8E-05	NA	6.8E-05	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	5E-02	NA	5E-02
(Total)				NA	2.1E-07	NA	2.1E-07	(Total)		NA	1E-03	NA	1E-03
(Total)				NC	1.6E-03	NC	1.6E-03	(Total)		NC	1E+00	NC	1E+00
Total Risk Across Soil (Total Soil)							6.5E-04	Total Hazard Index Across Soil (Total Soil)					4E-01
Total Risk Across Groundwater							3.4E-01	Total Hazard Index Across Groundwater					4E+02
Total Risk Across Air (Outdoor Vapors)							1.6E-03	Total Hazard Index Across Air (Outdoor Vapors)					1E+00
Total Adult Risk Across All Media and All Exposure Routes							3.4E-01	Total Hazard Index Across All Media and All Exposure Routes					4E+02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 2.0E-01  
Total Adult and Child Risk Across All Media and All Exposure Routes = 5.5E-01

- For Acetone, effects on the Kidney are for oral and dermal routes; effects on the CNS are only for the inhalation route.
- For trans-1,2-Dichloroethene, effects on the Blood are for oral and dermal routes; effects on the Lung are only for the inhalation route.
- For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.
- For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

Total Liver HI = 4E+02  
Total Body Weight HI = 2E+02  
Total Kidney HI = 2E+02  
Total Developmental HI = 2E+02  
Total Blood HI = 5E+00  
Total Lung HI = 1E-01  
Total CNS HI = 2E+01  
Total Endocrine System HI = 2E+01

Table 9.3 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Child Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Future  
Receptor Population: Resident  
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	1.5E-03	NA	NA	1.5E-03	Tetrachloroethene (PCE)	Liver/Body Weight	3E+00	NA	NA	3E+00
			Trichloroethene (TCE)	3.4E-06	NA	NA	3.4E-06	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	3E-01	NA	NA	3E-01
			Vinyl Chloride (pr + non-pr)	2.1E-06	NA	NA	2.1E-06	Vinyl Chloride	Liver	9E-04	NA	NA	9E-04
			(Total)	1.5E-03	NC	NC	1.5E-03	(Total)		4E+00	NC	NC	4E+00
Groundwater	Groundwater	On Site	Acetone	NC	NC	NC	0.0E+00	Acetone	Kidney/Neurologic (CNS) <sup>1</sup>	1E-01	8E-02	8E-04	2E-01
			cis-1,2-Dichloroethene	NC	NC	NC	0.0E+00	cis-1,2-Dichloroethene	Blood	1E+01	NC	1E+00	1E+01
			trans-1,2-Dichloroethene	NC	NC	NC	0.0E+00	trans-1,2-Dichloroethene	Blood/Lung <sup>2</sup>	4E-02	3E-01	4E-03	3E-01
			Tetrachloroethene (PCE)	9.7E-02	2.0E-02	6.1E-02	1.8E-01	Tetrachloroethene (PCE)	Liver/Body Weight/Kidney <sup>3</sup>	2E+02	7E+01	1E+02	4E+02
			Trichloroethene (TCE)	3.9E-03	2.0E-02	6.7E-04	2.4E-02	Trichloroethene (TCE)	Liver/Kidneys/Developmental/CNS/Endocrine <sup>4</sup>	4E+02	5E+01	6E+01	5E+02
			(Total)	1.0E-01	3.9E-02	6.1E-02	2.0E-01	(Total)		6E+02	1E+02	2E+02	9E+02
Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	6E-08	NA	6E-08
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	NA	NA	NC	NA	NC
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Lung	NA	2E-05	NA	2E-05
			Tetrachloroethylene (PCE)	NA	8.9E-04	NA	8.9E-04	Tetrachloroethylene (PCE)	Kidney	NA	3E+00	NA	3E+00
			Trichloroethylene (TCE)	NA	4.0E-05	NA	4.0E-05	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	1E-01	NA	1E-01
			Vinyl Chloride (pr + non-pr)	NA	1.2E-07	NA	1.2E-07	Vinyl Chloride	Liver	NA	3E-03	NA	3E-03
			(Total)	NC	9.3E-04	NC	9.3E-04	(Total)		NC	3E+00	NC	3E+00
Total Risk Across Soil (Total Soil)							1.5E-03	Total Hazard Index Across Soil (Total Soil)					4E+00
Total Risk Across Groundwater							2.0E-01	Total Hazard Index Across Groundwater					9E+02
Total Risk Across Air (Outdoor Vapors)							9.3E-04	Total Hazard Index Across Air (Outdoor Vapors)					3E+00
Total Child Risk Across All Media and All Exposure Routes							2.0E-01	Total Hazard Index Across All Media and All Exposure Routes					9E+02

Notes:

NA = not available

pr = prorated

Total Adult Risk Across All Media and All Exposure Routes = 3.4E-01  
Total Adult and Child Risk Across All Media and All Exposure Routes = 5.5E-01

Total Liver HI = 9E+02  
Total Body Weight HI = 4E+02  
Total Kidney HI = 5E+02  
Total Developmental HI = 4E+02  
Total Blood HI = 1E+01  
Total Lung HI = 3E-01  
Total CNS HI = 5E+01  
Total Endocrine System HI = 5E+01

1 For Acetone, effects on the Kidney are for oral and dermal routes; effects on the CNS are only for the inhalation route.

2 For trans-1,2-Dichloroethene, effects on the Blood are for oral and dermal routes; effects on the Lung are only for the inhalation route.

3 For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.

4 For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

Table 9.3 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Adult Resident CTE  
RIVERFRONT OU4

Scenario timeframe: Future  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	1.4E-05	NA	NA	1.4E-05	Tetrachloroethene (PCE)	Liver/Body Weight	2E-02	NA	NA	2E-02
			Trichloroethene (TCE)	8.8E-08	NA	NA	8.8E-08	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	6E-03	NA	NA	6E-03
			Vinyl Chloride	8.5E-09	NA	NA	8.5E-09	Vinyl Chloride	Liver	3E-05	NA	NA	3E-05
			(Total)	1.4E-05	NC	NC	1.4E-05	(Total)		3E-02	NC	NC	3E-02
Groundwater	Groundwater/Vapor	On Site	Acetone	NC	NC	NC	0.0E+00	Acetone	Kidney/Neurologic (CNS) <sup>1</sup>	1E-02	8E-03	5E-05	2E-02
			cis-1,2-Dichloroethene	NC	NC	NC	0.0E+00	cis-1,2-Dichloroethene	Blood	6E-01	NC	3E-02	6E-01
			trans-1,2-Dichloroethene	NC	NC	NC	0.0E+00	trans-1,2-Dichloroethene	Blood/Lung <sup>2</sup>	1E-02	8E-02	8E-04	9E-02
			Tetrachloroethene (PCE)	4.3E-03	8.3E-04	1.7E-03	6.8E-03	Tetrachloroethene (PCE)	Liver/Body Weight/Kidney <sup>3</sup>	6E+00	2E+00	2E+00	1E+01
			Trichloroethene (TCE)	3.0E-04	1.5E-03	3.5E-05	1.9E-03	Trichloroethene (TCE)	Liver/Kidneys/Developmental/CNS/Endocrine <sup>4</sup>	2E+01	3E+00	2E+00	2E+01
(Total)	4.6E-03	2.3E-03	1.8E-03	8.7E-03	(Total)		3E+01	5E+00	5E+00	4E+01			
Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	6E-09	NA	6E-09
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	NA	NA	NC	NA	0E+00
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Lung	NA	5E-06	NA	5E-06
			Tetrachloroethylene (PCE)	NA	6.6E-05	NA	6.6E-05	Tetrachloroethylene (PCE)	Kidney	NA	1E-01	NA	1E-01
			Trichloroethylene (TCE)	NA	8.4E-06	NA	8.4E-06	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	1E-02	NA	1E-02
			Vinyl Chloride	NA	5.3E-08	NA	5.3E-08	Vinyl Chloride	Liver	NA	9E-04	NA	9E-04
(Total)	NC	7.5E-05	NC	7.5E-05	(Total)		NC	2E-01	NC	2E-01			
Total Risk Across Soil (Total Soil)							1.4E-05	Total Hazard Index Across Soil (Total Soil)					3E-02
Total Risk Across Groundwater							8.7E-03	Total Hazard Index Across Groundwater					4E+01
Total Risk Across Air (Outdoor Vapors)							7.5E-05	Total Hazard Index Across Air (Outdoor Vapors)					2E-01
Total Adult Risk Across All Media and All Exposure Routes							8.8E-03	Total Hazard Index Across All Media and All Exposure Routes					4E+01

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 1.3E-02  
Total Adult and Child Risk Across All Media and All Exposure Routes = 2.2E-02

Total Liver HI = 3E+01  
Total Body Weight HI = 9E+00  
Total Kidney HI = 2E+01  
Total Developmental HI = 2E+01  
Total Blood HI = 6E-01  
Total Lung HI = 8E-02  
Total CNS HI = 3E+00  
Total Endocrine System HI = 3E+00

- For Acetone, effects on the Kidney are for oral and dermal routes; effects on the CNS are only for the inhalation route.
- For trans-1,2-Dichloroethene, effects on the Blood are for oral and dermal routes; effects on the Lung are only for the inhalation route.
- For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.
- For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

**Table 9.3 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Child Resident CTE  
RIVERFRONT OU4**

Scenario Timeframe: Future Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	8.8E-05	NA	NA	8.8E-05	Tetrachloroethene (PCE)	Liver/Body Weight	2E-01	NA	NA	2E-01		
			Trichloroethene (TCE)	5.5E-07	NA	NA	5.5E-07	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	5E-02	NA	NA	5E-02		
			Vinyl Chloride (pr + non-pr)	1.0E-06	NA	NA	1.0E-06	Vinyl Chloride	Liver	3E-04	NA	NA	3E-04		
			(Total)	8.9E-05	NC	NC	8.9E-05	(Total)		2E-01	NC	NC	2E-01		
Groundwater	Groundwater	On Site	Acetone	NC	NC	NC	0.0E+00	Acetone	Kidney/Neurologic (CNS) <sup>1</sup>	3E-02	2E-02	9E-05	5E-02		
			cis-1,2-Dichloroethene	NC	NC	NC	0.0E+00	cis-1,2-Dichloroethene	Blood	1E+00	NC	7E-02	1E+00		
			trans-1,2-Dichloroethene	NC	NC	NC	0.0E+00	trans-1,2-Dichloroethene	Blood/Lung <sup>2</sup>	3E-02	2E-01	2E-03	2E-01		
			Tetrachloroethene (PCE)	6.6E-03	1.3E-03	2.4E-03	1.0E-02	Tetrachloroethene (PCE)	Liver/Body Weight/Kidney <sup>3</sup>	1E+01	4E+00	5E+00	2E+01		
			Trichloroethene (TCE)	4.7E-04	2.4E-03	4.5E-05	2.9E-03	Trichloroethene (TCE)	Liver/Kidneys/Developmental/CNS/Endocrine <sup>4</sup>	5E+01	6E+00	4E+00	6E+01		
			(Total)	7.1E-03	3.7E-03	2.4E-03	1.3E-02	(Total)		6E+01	1E+01	1E+01	8E+01		
Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	1E-08	NA	1E-08		
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	NA	NA	NC	NA	0E+00		
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Lung	NA	1E-05	NA	1E-05		
			Tetrachloroethylene (PCE)	NA	1.0E-04	NA	1.0E-04	Tetrachloroethylene (PCE)	Kidney	NA	3E-01	NA	3E-01		
			Trichloroethylene (TCE)	NA	1.3E-05	NA	1.3E-05	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	3E-02	NA	3E-02		
			Vinyl Chloride (pr + non-pr)	NA	8.2E-08	NA	8.2E-08	Vinyl Chloride	Liver	NA	2E-03	NA	2E-03		
			(Total)	NC	1.2E-04	NC	1.2E-04	(Total)		NC	4E-01	NC	4E-01		
Total Risk Across Soil (Total Soil)				8.9E-05				Total Hazard Index Across Soil (Total Soil)				2E-01			
Total Risk Across Groundwater				1.3E-02				Total Hazard Index Across Groundwater				8E+01			
Total Risk Across Air (Outdoor Vapors)				1.2E-04				Total Hazard Index Across Air (Outdoor Vapors)				4E-01			
Total Child Risk Across All Media and All Exposure Routes				1.3E-02				Total Hazard Index Across All Media and All Exposure Routes				8E+01			

Notes:

NA = not available  
pr = prorated

Total Adult Risk Across All Media and All Exposure Routes = 8.8E-03  
Total Adult and Child Risk Across All Media and All Exposure Routes = 2.2E-02

Total Liver HI = 8E+01  
Total Body Weight HI = 2E+01  
Total Kidney HI = 6E+01  
Total Developmental HI = 5E+01  
Total Blood HI = 1E+00  
Total Lung HI = 2E-01  
Total CNS HI = 6E+00  
Total Endocrine System HI = 6E+00

- For Acetone, effects on the Kidney are for oral and dermal routes; effects on the CNS are only for the inhalation route.
- For trans-1,2-Dichloroethene, effects on the Blood are for oral and dermal routes; effects on the Lung are only for the inhalation route.
- For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.
- For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

**Table 9.3 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Industrial Worker RME  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Industrial Worker Receptor Age: Adult
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	4.8E-04	NA	NA	4.8E-04	Tetrachloroethene (PCE)	Liver/Body Weight	2E-01	NA	NA	2E-01
			Trichloroethene (TCE)	1.1E-06	NA	NA	1.1E-06	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	3E-02	NA	NA	3E-02
			Vinyl Chloride	5.0E-08	NA	NA	5.0E-08	Vinyl Chloride	Liver	7E-05	NA	NA	7E-05
			(Total)	4.8E-04	NC	NC	4.8E-04	(Total)		3E-01	NC	NC	3E-01
Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	2E-08	NA	2E-08
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	NA	NA	NC	NA	NC
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Lung	NA	5E-06	NA	5E-06
			Tetrachloroethylene (PCE)	NA	1.1E-03	NA	1.1E-03	Tetrachloroethylene (PCE)	Kidney	NA	9E-01	NA	9E-01
			Trichloroethylene (TCE)	NA	5.0E-05	NA	5.0E-05	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	3E-02	NA	3E-02
			Vinyl Chloride	NA	1.5E-07	NA	1.5E-07	Vinyl Chloride	Liver	NA	1E-03	NA	1E-03
			(Total)	NC	1.2E-03	NC	1.2E-03	(Total)		NC	9E-01	NC	9E-01
			(Total)	NC	1.2E-03	NC	1.2E-03	(Total)		NC	9E-01	NC	9E-01
Total Risk Across Soil (Total Soil)							4.8E-04	Total Hazard Index Across Soil (Total Soil)					3E-01
Total Risk Across Air (Outdoor Vapors)							1.2E-03	Total Hazard Index Across Air (Outdoor Vapors)					9E-01
Total Adult Risk Across All Media and All Exposure Routes							1.7E-03	Total Hazard Index Across All Media and All Exposure Routes					1E+00

Notes:  
NA = not available

Total Liver HI =	3E-01
Total Body Weight HI =	2E-01
Total Kidney HI =	9E-01
Total Developmental HI =	3E-02
Total Lung HI =	5E-06
Total CNS HI =	3E-02
Total Endocrine System HI =	3E-02

**Table 9.3 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Industrial Worker CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	1.9E-05	NA	NA	1.9E-05	Tetrachloroethene (PCE)	Liver/Body Weight	4E-02	NA	NA	4E-02
			Trichloroethene (TCE)	1.2E-07	NA	NA	1.2E-07	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	1E-02	NA	NA	1E-02
			Vinyl Chloride	1.2E-08	NA	NA	1.2E-08	Vinyl Chloride	Liver	6E-05	NA	NA	6E-05
			(Total)	2.0E-05	NC	NC	2.0E-05	(Total)		5E-02	NC	NC	5E-02
Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	6E-09	NA	6E-09
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	NA	NA	NC	NA	0E+00
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Lung	NA	4E-06	NA	4E-06
			Tetrachloroethylene (PCE)	NA	4.5E-05	NA	4.5E-05	Tetrachloroethylene (PCE)	Kidney	NA	1E-01	NA	1E-01
			Trichloroethylene (TCE)	NA	5.7E-06	NA	5.7E-06	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	1E-02	NA	1E-02
			Vinyl Chloride	NA	3.6E-08	NA	3.6E-08	Vinyl Chloride	Liver	NA	9E-04	NA	9E-04
			(Total)	NC	5.1E-05	NC	5.1E-05	(Total)		NC	1E-01	NC	1E-01
			(Total)					(Total)					
Total Risk Across Soil (Total Soil)							2.0E-05	Total Hazard Index Across Soil (Total Soil)					5E-02
Total Risk Across Air (Outdoor Vapors)							5.1E-05	Total Hazard Index Across Air (Outdoor Vapors)					1E-01
Total Adult Risk Across All Media and All Exposure Routes							7.0E-05	Total Hazard Index Across All Media and All Exposure Routes					2E-01

Notes:  
NA = not available

Total Liver HI =	6E-02
Total Body Weight HI =	4E-02
Total Kidney HI =	1E-01
Total Developmetal HI =	1E-02
Total Lung HI =	4E-06
Total CNS HI =	1E-02
Total Endocrine System HI =	1E-02

**Table 9.3 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Construction Worker RME  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	2.3E-05	NA	NA	2.3E-05	Tetrachloroethene (PCE)	Liver	9E-02	NA	NA	9E-02
			Trichloroethene (TCE)	5.1E-08	NA	NA	5.1E-08	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	9E-02	NA	NA	9E-02
			Vinyl Chloride	2.4E-09	NA	NA	2.4E-09	Vinyl Chloride	Liver	2E-04	NA	NA	2E-04
			(Total)	2.3E-05	NC	NC	2.3E-05	(Total)		2E-01	NC	NC	2E-01
Sewer Water	Sewer Water	On Site	Bromomethane	NC	NA	NC	0.0E+00	Bromomethane	GI Tract	5E-05	NA	2E-04	3E-04
			Chloroform	NC	NA	NC	0.0E+00	Chloroform	Liver	6E-05	NA	8E-04	9E-04
			Tetrachloroethene (PCE)	8.2E-10	NA	6.8E-08	6.9E-08	Tetrachloroethene (PCE)	Liver	3E-06	NA	3E-04	3E-04
			(Total)	8.2E-10	NC	6.8E-08	6.9E-08	(Total)		1E-04	NC	1E-03	1E-03
Air	Sewer Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	4E-06	NA	4E-06
			Bromomethane	NA	NC	NA	0.0E+00	Bromomethane	Respiratory	NA	1E-01	NA	1E-01
			Chloroform	NA	3.7E-06	NA	3.7E-06	Chloroform	Liver	NA	1E-01	NA	1E-01
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	NA	NA	NC	NA	NC
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Liver	NA	1E-04	NA	1E-04
			Tetrachloroethene	NA	1.5E-05	NA	1.5E-05	Tetrachloroethene	Kidney	NA	9E-01	NA	9E-01
			Trichloroethene	NA	9.1E-06	NA	9.1E-06	Trichloroethene	Neurologic (CNS)	NA	3E-02	NA	3E-02
			(Total)	NC	2.8E-05	NC	2.8E-05	(Total)		NC	1E+00	NC	1E+00
Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	2E-08	NA	2E-08
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	NA	NA	NC	NA	NC
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Liver	NA	4E-07	NA	4E-07
			Tetrachloroethylene (PCE)	NA	1.6E-04	NA	1.6E-04	Tetrachloroethylene (PCE)	Kidney	NA	1E+01	NA	1E+01
			Trichloroethylene (TCE)	NA	7.4E-06	NA	7.4E-06	Trichloroethylene (TCE)	Neurologic (CNS)	NA	3E-02	NA	3E-02
			Vinyl Chloride	NA	2.3E-08	NA	2.3E-08	Vinyl Chloride	Liver	NA	2E-02	NA	2E-02
			(Total)	NC	1.7E-04	NC	1.7E-04	(Total)		NC	1E+01	NC	1E+01
			Total Risk Across Soil (Total Soil)				2.4E-09				Total Hazard Index Across Soil (Total Soil)		
Total Risk Across Sewer Water				6.9E-08				Total Hazard Index Across Sewer Water					1E-03
Total Risk Across Air (Sewer Vapors)				2.8E-05				Total Hazard Index Across Soil Gas (Sewer Vapors)					1E+00
Total Risk Across Air (Outdoor Vapors)				1.7E-04				Total Hazard Index Across Air (Outdoor Vapors)					1E+01
Total Adult Risk Across All Media and All Exposure Routes				2.0E-04				Total Hazard Index Across All Media and All Exposure Routes					1E+01

Notes:  
NA = not available

Total Liver HI =	3E-01
Total Kidney HI =	1E+01
Total Developmental HI =	9E-02
Total Respiratory HI =	1E-01
Total CNS HI =	6E-02
Total GI Tract HI =	3E-04

**Table 9.3 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Construction Worker CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Construction Worker Receptor Age: Adult
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	1.3E-06	NA	NA	1.3E-06	Tetrachloroethene (PCE)	Liver	1E-02	NA	NA	1E-02		
			Trichloroethene (TCE)	8.3E-09	NA	NA	8.3E-09	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	4E-02	NA	NA	4E-02		
			Vinyl Chloride	8.0E-10	NA	NA	8.0E-10	Vinyl Chloride	Liver	2E-04	NA	NA	2E-04		
			(Total)	1.3E-06	NC	NC	1.3E-06	(Total)	Liver	6E-02	NC	NC	6E-02		
Sewer Water	Sewer Water	On Site	Bromomethane	NC	NA	NC	0.0E+00	Bromomethane	GI Tract	3E-05	NA	2E-04	2E-04		
			Chloroform	NC	NA	NC	0.0E+00	Chloroform	Liver	2E-05	NA	3E-04	3E-04		
			Tetrachloroethene (PCE)	1.8E-10	NA	1.5E-08	1.5E-08	Tetrachloroethene (PCE)	Liver	2E-06	NA	2E-04	2E-04		
			(Total)	1.8E-10	NC	1.5E-08	1.5E-08	(Total)	Liver	6E-05	NC	6E-04	6E-04		
Air	Sewer Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	1E-06	NA	1E-06		
			Bromomethane	NA	NC	NA	0.0E+00	Bromomethane	Respiratory	NA	1E-01	NA	1E-01		
			Chloroform	NA	4.3E-07	NA	4.3E-07	Chloroform	Liver	NA	5E-02	NA	5E-02		
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	Liver	NA	NC	NA	0E+00		
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Liver	NA	1E-04	NA	1E-04		
			Tetrachloroethene	NA	4.8E-07	NA	4.8E-07	Tetrachloroethene	Kidney	NA	8E-02	NA	8E-02		
			Trichloroethene	NA	5.4E-07	NA	5.4E-07	Trichloroethene	Neurologic (CNS)	NA	6E-03	NA	6E-03		
			(Total)	NC	1.5E-06	NC	1.5E-06	(Total)	Neurologic (CNS)	NC	2E-01	NC	2E-01		
Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	7E-09	NA	7E-09		
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	Liver	NA	NC	NA	0E+00		
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Liver	NA	4E-07	NA	4E-07		
			Tetrachloroethylene (PCE)	NA	9.6E-06	NA	9.6E-06	Tetrachloroethylene (PCE)	Kidney	NA	2E+00	NA	2E+00		
			Trichloroethylene (TCE)	NA	1.2E-06	NA	1.2E-06	Trichloroethylene (TCE)	Neurologic (CNS)	NA	1E-02	NA	1E-02		
			Vinyl Chloride	NA	7.5E-09	NA	7.5E-09	Vinyl Chloride	Liver	NA	2E-02	NA	2E-02		
			(Total)	NC	1.1E-05	NC	1.1E-05	(Total)	Liver	NC	2E+00	NC	2E+00		
Total Risk Across Soil (Total Soil)				8.0E-10				Total Hazard Index Across Soil (Total Soil)				6E-02			
Total Risk Across Sewer Water				1.5E-08				Total Hazard Index Across Sewer Water				6E-04			
Total Risk Across Air (Sewer Vapors)				1.5E-06				Total Hazard Index Across Soil Gas (Sewer Vapors)				2E-01			
Total Risk Across Air (Outdoor Vapors)				1.1E-05				Total Hazard Index Across Air (Outdoor Vapors)				2E+00			
Total Adult Risk Across All Media and All Exposure Routes				1.2E-05				Total Hazard Index Across All Media and All Exposure Routes				2E+00			

Notes:  
NA = not available

Total Liver HI =	1E-01
Total Kidney HI =	2E+00
Total Developmental HI =	4E-02
Total Respiratory HI =	1E-01
Total CNS HI =	2E-02
Total GI Tract HI =	2E-04

Table 9.3 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Adult Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Future  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	6.5E-04	NA	NA	6.5E-04	Tetrachloroethene (PCE)	Liver/Body Weight	3E-01	NA	NA	3E-01		
			Trichloroethene (TCE)	4.7E-08	NA	NA	4.7E-08	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	4E-02	NA	NA	4E-02		
			Vinyl Chloride	6.8E-08	NA	NA	6.8E-08	Vinyl Chloride	Liver	9E-05	NA	NA	9E-05		
(Total)				6.5E-04	NC	NC	6.5E-04	(Total)		4E-01	NC	NC	4E-01		
Groundwater	Groundwater/Vapor	On Site	Acetone	NC	NC	NC	0.0E+00	Acetone	Kidney/Neurologic (CNS) <sup>1</sup>	6E-02	3E-02	3E-04	1E-01		
			cis-1,2-Dichloroethene	NC	NC	NC	0.0E+00	cis-1,2-Dichloroethene	Blood	5E+00	NC	4E-01	5E+00		
			trans-1,2-Dichloroethene	NC	NC	NC	0.0E+00	trans-1,2-Dichloroethene	Blood/Lung <sup>2</sup>	2E-02	1E-01	2E-03	1E-01		
			Tetrachloroethene (PCE)	1.6E-01	3.4E-02	1.0E-01	3.0E-01	Tetrachloroethene (PCE)	Liver/Body Weight/Kidney <sup>3</sup>	9E+01	3E+01	6E+01	2E+02		
			Trichloroethene (TCE)	2.2E-04	5.9E-04	3.8E-05	8.5E-04	Trichloroethene (TCE)	Liver/Kidneys/Developmental/CNS/Endocrine <sup>4</sup>	2E+02	2E+01	3E+01	2E+02		
(Total)				1.6E-01	3.4E-02	1.0E-01	3.0E-01	(Total)		3E+02	5E+01	9E+01	4E+02		
Air	Indoor Vapors	On Site	Chloroform	NA	3.6E-06	NA	3.6E-06	Chloroform	CNS/Liver/Kidney	NA	1E-02	NA	1E-02		
			Tetrachloroethylene (PCE)	NA	3.9E-06	NA	3.9E-06	Tetrachloroethylene (PCE)	Kidney	NA	3E-03	NA	3E-03		
			Trichloroethylene (TCE)	NA	7.6E-07	NA	7.6E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	3E-02	NA	3E-02		
			(Total)	NC	8.2E-06	NC	8.2E-06	(Total)		NC	4E-02	NC	4E-02		
Total Risk Across Soil (Total Soil)							6.5E-04	Total Hazard Index Across Soil (Total Soil)							4E-01
Total Risk Across Groundwater							3.0E-01	Total Hazard Index Across Groundwater							4E+02
Total Risk Across Air (Indoor Vapors)							8.2E-06	Total Hazard Index Across Air (Indoor Vapors)							4E-02
Total Adult Risk Across All Media and All Exposure Routes							3.0E-01	Total Hazard Index Across All Media and All Exposure Routes							4E+02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes: 1.8E-01  
Total Adult and Child Risk Across All Media and All Exposure Routes: 4.8E-01

- For Acetone, effects on the Kidney are for oral and dermal routes; effects on the CNS are only for the inhalation route.
- For trans-1,2-Dichloroethene, effects on the Blood are for oral and dermal routes; effects on the Lung are only for the inhalation route.
- For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.
- For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

Total Liver HI = 4E+02  
Total Body Weight HI = 2E+02  
Total Kidney HI = 2E+02  
Total Developmental HI = 2E+02  
Total Blood HI = 5E+00  
Total Lung HI = 1E-01  
Total CNS HI = 2E+01  
Total Endocrine System HI = 2E+01

Table 9.3 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Child Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Future  
Receptor Population: Resident  
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	1.5E-03	NA	NA	1.5E-03	Tetrachloroethene (PCE)	Liver/Body Weight	3E+00	NA	NA	3E+00		
			Trichloroethene (TCE)	1.1E-07	NA	NA	1.1E-07	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	3E-01	NA	NA	3E-01		
			Vinyl Chloride (pr + non-pr)	2.1E-06	NA	NA	2.1E-06	Vinyl Chloride	Liver	9E-04	NA	NA	9E-04		
			(Total)	1.5E-03	NC	NC	1.5E-03	(Total)		4E+00	NC	NC	4E+00		
Groundwater	Groundwater	On Site	Acetone	NC	NC	NC	0.0E+00	Acetone	Kidney/Neurologic (CNS) <sup>1</sup>	1E-01	8E-02	8E-04	2E-01		
			cis-1,2-Dichloroethene	NC	NC	NC	0.0E+00	cis-1,2-Dichloroethene	Blood	1E+01	NC	1E+00	1E+01		
			trans-1,2-Dichloroethene	NC	NC	NC	0.0E+00	trans-1,2-Dichloroethene	Blood/Lung <sup>2</sup>	4E-02	3E-01	4E-03	3E-01		
			Tetrachloroethene (PCE)	9.7E-02	2.0E-02	6.1E-02	1.8E-01	Tetrachloroethene (PCE)	Liver/Body Weight/Kidney <sup>3</sup>	2E+02	7E+01	1E+02	4E+02		
			Trichloroethene (TCE)	1.3E-04	3.5E-04	2.2E-05	5.0E-04	Trichloroethene (TCE)	Liver/Kidneys/Developmental/CNS/Endocrine <sup>4</sup>	4E+02	5E+01	6E+01	5E+02		
(Total)	9.7E-02	2.0E-02	6.1E-02	1.8E-01	(Total)		6E+02	1E+02	2E+02	9E+02					
Air	Indoor Vapors	On Site	Chloroform	NA	2.1E-06	NA	2.1E-06	Chloroform	CNS/Liver/Kidney	NA	2E-02	NA	2E-02		
			Tetrachloroethylene (PCE)	NA	2.3E-06	NA	2.3E-06	Tetrachloroethylene (PCE)	Kidney	NA	7E-03	NA	7E-03		
			Trichloroethylene (TCE)	NA	4.4E-07	NA	4.4E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	7E-02	NA	7E-02		
			(Total)	NC	4.8E-06	NC	4.8E-06	(Total)		NC	1E-01	NC	1E-01		
Total Risk Across Soil (Total Soil)							1.5E-03	Total Hazard Index Across Soil (Total Soil)							4E+00
Total Risk Across Groundwater							1.8E-01	Total Hazard Index Across Groundwater							9E+02
Total Risk Across Air (Indoor Vapors)							4.8E-06	Total Hazard Index Across Air (Indoor Vapors)							1E-01
Total Child Risk Across All Media and All Exposure Routes							1.8E-01	Total Hazard Index Across All Media and All Exposure Routes							9E+02

Notes:

NA = not available  
pr = prorated

Total Adult Risk Across All Media and All Exposure Routes = 3.0E-01  
Total Adult and Child Risk Across All Media and All Exposure Routes = 4.8E-01

Total Liver HI = 9E+02  
Total Body Weight HI = 4E+02  
Total Kidney HI = 5E+02  
Total Developmental HI = 4E+02  
Total Blood HI = 1E+01  
Total Lung HI = 3E-01  
Total CNS HI = 5E+01  
Total Endocrine System HI = 5E+01

<sup>1</sup> For Acetone, effects on the Kidney are for oral and dermal routes; effects on the CNS are only for the inhalation route.  
<sup>2</sup> For trans-1,2-Dichloroethene, effects on the Blood are for oral and dermal routes; effects on the Lung are only for the inhalation route.  
<sup>3</sup> For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.  
<sup>4</sup> For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

**Table 9.3 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)**

**Adult Resident CTE  
RIVERFRONT OU4**

Scenario Timeframe: Future  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	1.4E-05	NA	NA	1.4E-05	Tetrachloroethene (PCE)	Liver/Body Weight	2E-02	NA	NA	2E-02
			Trichloroethene (TCE)	2.9E-09	NA	NA	2.9E-09	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	6E-03	NA	NA	6E-03
			Vinyl Chloride	8.5E-09	NA	NA	8.5E-09	Vinyl Chloride	Liver	3E-05	NA	NA	3E-05
			(Total)	1.4E-05	NC	NC	1.4E-05	(Total)		3E-02	NC	NC	3E-02
Groundwater	Groundwater/ Vapor	On Site	Acetone	NC	NC	NC	0.0E+00	Acetone	Kidney/Neurologic (CNS) <sup>1</sup>	1E-02	8E-03	5E-05	2E-02
			cis-1,2-Dichloroethene	NC	NC	NC	0.0E+00	cis-1,2-Dichloroethene	Blood	6E-01	NC	3E-02	6E-01
			trans-1,2-Dichloroethene	NC	NC	NC	0.0E+00	trans-1,2-Dichloroethene	Blood/Lung <sup>2</sup>	1E-02	8E-02	8E-04	9E-02
			Tetrachloroethene (PCE)	4.3E-03	8.3E-04	1.7E-03	6.8E-03	Tetrachloroethene (PCE)	Liver/Body Weight/Kidney <sup>3</sup>	6E+00	2E+00	2E+00	1E+01
			Trichloroethene (TCE)	9.9E-06	2.7E-05	1.1E-06	3.8E-05	Trichloroethene (TCE)	Liver/Kidneys/Developmental/CNS/Endocrine <sup>4</sup>	2E+01	3E+00	2E+00	2E+01
(Total)	4.3E-03	8.6E-04	1.7E-03	6.8E-03	(Total)		3E+01	5E+00	5E+00	4E+01			
Air	Indoor Vapors	On Site	Chloroform	NA	5.2E-07	NA	5.2E-07	Chloroform	CNS/Liver/Kidney	NA	4E-03	NA	4E-03
			Tetrachloroethylene (PCE)	NA	5.9E-07	NA	5.9E-07	Tetrachloroethylene (PCE)	Kidney	NA	1E-03	NA	1E-03
			Trichloroethylene (TCE)	NA	1.1E-07	NA	1.1E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	1E-02	NA	1E-02
			(Total)	NC	1.2E-06	NC	1.2E-06	(Total)		NC	2E-02	NC	2E-02
Total Risk Across Soil (Total Soil)							1.4E-05	Total Hazard Index Across Soil (Total Soil)					3E-02
Total Risk Across Groundwater							6.8E-03	Total Hazard Index Across Groundwater					4E+01
Total Risk Across Air (Indoor Vapors)							1.2E-06	Total Hazard Index Across Air (Indoor Vapors)					2E-02
Total Adult Risk Across All Media and All Exposure Routes							6.9E-03	Total Hazard Index Across All Media and All Exposure Routes					4E+01

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 1.0E-02  
Total Adult and Child Risk Across All Media and All Exposure Routes = 1.7E-02

Total Liver HI = 3E+01  
Total Body Weight HI = 9E+00  
Total Kidney HI = 2E+01  
Total Developmental HI = 2E+01  
Total Blood HI = 6E-01  
Total Lung HI = 8E-02  
Total CNS HI = 3E+00  
Total Endocrine System HI = 3E+00

- For Acetone, effects on the Kidney are for oral and dermal routes; effects on the CNS are only for the inhalation route.
- For trans-1,2-Dichloroethene, effects on the Blood are for oral and dermal routes; effects on the Lung are only for the inhalation route.
- For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.
- For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

Table 9.3 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Child Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Future  
Receptor Population: Resident  
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	8.8E-05	NA	NA	8.8E-05	Tetrachloroethene (PCE)	Liver/Body Weight	2E-01	NA	NA	2E-01
			Trichloroethene (TCE)	1.8E-08	NA	NA	1.8E-08	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	5E-02	NA	NA	5E-02
			Vinyl Chloride (pr + non-pr)	1.0E-06	NA	NA	1.0E-06	Vinyl Chloride	Liver	3E-04	NA	NA	3E-04
			(Total)	8.9E-05	NC	NC	8.9E-05	(Total)		2E-01	NC	NC	2E-01
Groundwater	Groundwater	On Site	Acetone	NC	NC	NC	0.0E+00	Acetone	Kidney/Neurologic (CNS) <sup>1</sup>	3E-02	2E-02	9E-05	5E-02
			cis-1,2-Dichloroethene	NC	NC	NC	0.0E+00	cis-1,2-Dichloroethene	Blood	1E+00	NC	7E-02	1E+00
			trans-1,2-Dichloroethene	NC	NC	NC	0.0E+00	trans-1,2-Dichloroethene	Blood/Lung <sup>2</sup>	3E-02	2E-01	2E-03	2E-01
			Tetrachloroethene (PCE)	6.6E-03	1.3E-03	2.4E-03	1.0E-02	Tetrachloroethene (PCE)	Liver/Body Weight/Kidney <sup>3</sup>	1E+01	4E+00	5E+00	2E+01
			Trichloroethene (TCE)	1.5E-05	4.1E-05	1.5E-06	5.8E-05	Trichloroethene (TCE)	Liver/Kidneys/Developmental/CNS/Endocrine <sup>4</sup>	5E+01	6E+00	4E+00	6E+01
(Total)	6.6E-03	1.3E-03	2.4E-03	1.0E-02	(Total)		6E+01	1E+01	1E+01	8E+01			
Air	Indoor Vapors	On Site	Chloroform	NA	8.0E-07	NA	8.0E-07	Chloroform	CNS/Liver/Kidney	NA	9E-03	NA	9E-03
			Tetrachloroethylene (PCE)	NA	9.2E-07	NA	9.2E-07	Tetrachloroethylene (PCE)	Kidney	NA	3E-03	NA	3E-03
			Trichloroethylene (TCE)	NA	1.7E-07	NA	1.7E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	3E-02	NA	3E-02
			(Total)	NC	1.9E-06	NC	1.9E-06	(Total)		NC	4E-02	NC	4E-02
Total Risk Across Soil (Total Soil)							8.9E-05	Total Hazard Index Across Soil (Total Soil)				2E-01	
Total Risk Across Groundwater							1.0E-02	Total Hazard Index Across Groundwater				8E+01	
Total Risk Across Air (Indoor Vapors)							1.9E-06	Total Hazard Index Across Air (Indoor Vapors)				4E-02	
Total Child Risk Across All Media and All Exposure Routes							1.0E-02	Total Hazard Index Across All Media and All Exposure Routes				8E+01	

Notes:

NA = not available  
pr = prorated

Total Adult Risk Across All Media and All Exposure Routes = 6.9E-03  
Total Adult and Child Risk Across All Media and All Exposure Routes = 1.7E-02

Total Liver HI = 8E+01  
Total Body Weight HI = 2E+01  
Total Kidney HI = 5E+01  
Total Developmental HI = 5E+01  
Total Blood HI = 1E+00  
Total Lung HI = 2E-01  
Total CNS HI = 6E+00  
Total Endocrine System HI = 6E+00

- For Acetone, effects on the Kidney are for oral and dermal routes; effects on the CNS are only for the inhalation route.
- For trans-1,2-Dichloroethene, effects on the Blood are for oral and dermal routes; effects on the Lung are only for the inhalation route.
- For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.
- For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

**Table 9.3 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)  
Industrial Worker RME  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Industrial Worker Receptor Age: Adult
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	4.8E-04	NA	NA	4.8E-04	Tetrachloroethene (PCE)	Liver/Body Weight	2E-01	NA	NA	2E-01
			Trichloroethene (TCE)	3.5E-08	NA	NA	3.5E-08	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	3E-02	NA	NA	3E-02
			Vinyl Chloride	5.0E-08	NA	NA	5.0E-08	Vinyl Chloride	Liver	7E-05	NA	NA	7E-05
			(Total)	4.8E-04	NC	NC	4.8E-04	(Total)		3E-01	NC	NC	3E-01
Air	Indoor Vapors	On Site	Chloroform	NA	2.7E-06	NA	2.7E-06	Chloroform	CNS/Liver/Kidney	NA	7E-03	NA	7E-03
			Tetrachloroethylene (PCE)	NA	2.9E-06	NA	2.9E-06	Tetrachloroethylene (PCE)	Kidney	NA	2E-03	NA	2E-03
			Trichloroethylene (TCE)	NA	5.7E-07	NA	5.7E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	2E-02	NA	2E-02
			(Total)	NC	6.1E-06	NC	6.1E-06	(Total)		NC	3E-02	NC	3E-02
Total Risk Across Soil (Total Soil)							4.8E-04	Total Hazard Index Across Soil (Total Soil)					3E-01
Total Risk Across Air (Indoor Vapors)							6.1E-06	Total Hazard Index Across Air (Indoor Vapors)					3E-02
Total Adult Risk Across All Media and All Exposure Routes							4.9E-04	Total Hazard Index Across All Media and All Exposure Routes					3E-01

Notes:  
NA = not available

Total Liver HI =	3E-01
Total Body Weight HI =	2E-01
Total Kidney HI =	3E-02
Total Developmental HI =	3E-02
Total CNS HI =	3E-02
Total Endocrine System HI =	2E-02

**Table 9.3 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)  
Industrial Worker CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	1.9E-05	NA	NA	1.9E-05	Tetrachloroethene (PCE)	Liver/Body Weight	4E-02	NA	NA	4E-02
			Trichloroethene (TCE)	3.9E-09	NA	NA	3.9E-09	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	1E-02	NA	NA	1E-02
			Vinyl Chloride	1.2E-08	NA	NA	1.2E-08	Vinyl Chloride	Liver	6E-05	NA	NA	6E-05
			(Total)	1.9E-05	NC	NC	1.9E-05	(Total)		5E-02	NC	NC	5E-02
Air	Indoor Vapors	On Site	Chloroform	NA	3.5E-07	NA	3.5E-07	Chloroform	CNS/Liver/Kidney	NA	4E-03	NA	4E-03
			Tetrachloroethylene (PCE)	NA	4.0E-07	NA	4.0E-07	Tetrachloroethylene (PCE)	Kidney	NA	1E-03	NA	1E-03
			Trichloroethylene (TCE)	NA	7.5E-08	NA	7.5E-08	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	1E-02	NA	1E-02
			(Total)	NC	8.3E-07	NC	8.3E-07	(Total)		NC	2E-02	NC	2E-02
Total Risk Across Soil (Total Soil)							1.9E-05	Total Hazard Index Across Soil (Total Soil)					5E-02
Total Risk Across Air (Indoor Vapors)							8.3E-07	Total Hazard Index Across Air (Indoor Vapors)					2E-02
Total Adult Risk Across All Media and All Exposure Routes							2.0E-05	Total Hazard Index Across All Media and All Exposure Routes					6E-02

Notes:  
NA = not available

Total Liver HI =	6E-02
Total Body Weight HI =	4E-02
Total Kidney HI =	2E-02
Total Developmental HI =	1E-02
Total CNS HI =	1E-02
Total Endocrine System HI =	1E-02

Table 9.3 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Adult Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Future  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE) Trichloroethene (TCE) Vinyl Chloride (Total)	6.5E-04 4.7E-08 6.8E-08 6.5E-04	NA NA NA NC	NA NA NA NC	6.5E-04 4.7E-08 6.8E-08 6.5E-04	Tetrachloroethene (PCE) Trichloroethene (TCE) Vinyl Chloride (Total)	Liver/Body Weight Liver/Kidneys/Fetus (Developmental) Liver (Total)	3E-01 4E-02 9E-05 4E-01	NA NA NA NC	NA NA NA NC	3E-01 4E-02 9E-05 4E-01		
Groundwater	Groundwater/ Vapor	On Site	Acetone cis-1,2-Dichloroethene trans-1,2-Dichloroethene Tetrachloroethene (PCE) Trichloroethene (TCE) (Total)	NC NC NC 1.6E-01 2.2E-04 1.6E-01	NC NC NC 3.4E-02 5.9E-04 3.4E-02	NC NC NC 1.0E-01 3.8E-05 1.0E-01	0.0E+00 0.0E+00 0.0E+00 3.0E-01 8.5E-04 3.0E-01	Acetone cis-1,2-Dichloroethene trans-1,2-Dichloroethene Tetrachloroethene (PCE) Trichloroethene (TCE) (Total)	Kidney/Neurologic (CNS) <sup>1</sup> Blood Blood/Lung <sup>2</sup> Liver/Body Weight/Kidney <sup>3</sup> Liver/Kidneys/Developmental/CNS/Endocrine <sup>4</sup> (Total)	6E-02 5E+00 2E-02 9E+01 2E+02 3E+02	3E-02 NC 1E-01 3E+01 2E+01 5E+01	3E-04 4E-01 2E-03 6E+01 3E+01 9E+01	1E-01 5E+00 1E-01 2E+02 2E+02 4E+02		
Air	Outdoor Vapors	On Site	Acetone cis-1,2-Dichloroethene trans-1,2-Dichloroethene Tetrachloroethylene (PCE) Trichloroethylene (TCE) Vinyl Chloride (Total)	NA NA NA NA NA NC	NC NC NC 1.5E-03 1.2E-06 1.5E-03	NA NA NA NA NA NC	0.0E+00 0.0E+00 0.0E+00 1.5E-03 1.2E-06 1.5E-03	Acetone cis-1,2-Dichloroethene trans-1,2-Dichloroethene Tetrachloroethylene (PCE) Trichloroethylene (TCE) Vinyl Chloride (Total)	Neurologic (CNS) NA Lung Kidney CNS/Liver/Endocrine System Liver (Total)	NA NA NA NA NA NC	3E-08 NC 7E-06 1E+00 5E-02 1E-03 1E+00	NA NA NA NA NA NC	3E-08 NC 7E-06 1E+00 5E-02 1E-03 1E+00		
Total Risk Across Soil (Total Soil)				6.5E-04				Total Hazard Index Across Soil (Total Soil)				4E-01			
Total Risk Across Groundwater				3.0E-01				Total Hazard Index Across Groundwater				4E+02			
Total Risk Across Air (Outdoor Vapors)				1.5E-03				Total Hazard Index Across Air (Outdoor Vapors)				1E+00			
Total Adult Risk Across All Media and All Exposure Routes				3.0E-01				Total Hazard Index Across All Media and All Exposure Routes				4E+02			

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 1.8E-01  
Total Adult and Child Risk Across All Media and All Exposure Routes = 4.8E-01

- For Acetone, effects on the Kidney are for oral and dermal routes; effects on the CNS are only for the inhalation route.
- For trans-1,2-Dichloroethene, effects on the Blood are for oral and dermal routes; effects on the Lung are only for the inhalation route.
- For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.
- For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

Total Liver HI = 4E+02  
Total Body Weight HI = 2E+02  
Total Kidney HI = 2E+02  
Total Developmental HI = 2E+02  
Total Blood HI = 5E+00  
Total Lung HI = 1E-01  
Total CNS HI = 2E+01  
Total Endocrine System HI = 2E+01

**Table 9.3 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)**

**Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	1.5E-03	NA	NA	1.5E-03	Tetrachloroethene (PCE)	Liver/Body Weight	3E+00	NA	NA	3E+00
			Trichloroethene (TCE)	1.1E-07	NA	NA	1.1E-07	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	3E-01	NA	NA	3E-01
			Vinyl Chloride (pr + non-pr)	2.1E-06	NA	NA	2.1E-06	Vinyl Chloride	Liver	9E-04	NA	NA	9E-04
			(Total)	1.5E-03	NC	NC	1.5E-03	(Total)		4E+00	NC	NC	4E+00
Groundwater	Groundwater	On Site	Acetone	NC	NC	NC	0.0E+00	Acetone	Kidney/Neurologic (CNS) <sup>1</sup>	1E-01	8E-02	8E-04	2E-01
			cis-1,2-Dichloroethene	NC	NC	NC	0.0E+00	cis-1,2-Dichloroethene	Blood	1E+01	NC	1E+00	1E+01
			trans-1,2-Dichloroethene	NC	NC	NC	0.0E+00	trans-1,2-Dichloroethene	Blood/Lung <sup>2</sup>	4E-02	3E-01	4E-03	3E-01
			Tetrachloroethene (PCE)	9.7E-02	2.0E-02	6.1E-02	1.8E-01	Tetrachloroethene (PCE)	Liver/Body Weight/Kidney <sup>3</sup>	2E+02	7E+01	1E+02	4E+02
			Trichloroethene (TCE)	1.3E-04	3.5E-04	2.2E-05	5.0E-04	Trichloroethene (TCE)	Liver/Kidneys/Developmental/CNS/Endocrine <sup>4</sup>	4E+02	5E+01	6E+01	5E+02
(Total)	9.7E-02	2.0E-02	6.1E-02	1.8E-01	(Total)		6E+02	1E+02	2E+02	9E+02			
Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	6E-08	NA	6E-08
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	NA	NA	NC	NA	NC
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Lung	NA	2E-05	NA	2E-05
			Tetrachloroethylene (PCE)	NA	8.9E-04	NA	8.9E-04	Tetrachloroethylene (PCE)	Kidney	NA	3E+00	NA	3E+00
			Trichloroethylene (TCE)	NA	7.0E-07	NA	7.0E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	1E-01	NA	1E-01
			Vinyl Chloride (pr + non-pr)	NA	1.2E-07	NA	1.2E-07	Vinyl Chloride	Liver	NA	3E-03	NA	3E-03
(Total)	NC	8.9E-04	NC	8.9E-04	(Total)		NC	3E+00	NC	3E+00			
Total Risk Across Soil (Total Soil)							1.5E-03	Total Hazard Index Across Soil (Total Soil)					4E+00
Total Risk Across Groundwater							1.8E-01	Total Hazard Index Across Groundwater					9E+02
Total Risk Across Air (Outdoor Vapors)							8.9E-04	Total Hazard Index Across Air (Outdoor Vapors)					3E+00
Total Child Risk Across All Media and All Exposure Routes							1.8E-01	Total Hazard Index Across All Media and All Exposure Routes					9E+02

Notes:

NA = not available

pr = prorated

Total Adult Risk Across All Media and All Exposure Routes	3.0E-01
Total Adult and Child Risk Across All Media and All Exposure Routes	4.8E-01

Total Liver HI =	9E+02
Total Body Weight HI =	4E+02
Total Kidney HI =	5E+02
Total Developmental HI =	4E+02
Total Blood HI =	1E+01
Total Lung HI =	3E-01
Total CNS HI =	5E+01
Total Endocrine System HI =	5E+01

1 For Acetone, effects on the Kidney are for oral and dermal routes; effects on the CNS are only for the inhalation route.

2 For trans-1,2-Dichloroethene, effects on the Blood are for oral and dermal routes; effects on the Lung are only for the inhalation route.

3 For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.

4 For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

Table 9.3 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Adult Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Future  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	1.4E-05	NA	NA	1.4E-05	Tetrachloroethene (PCE)	Liver/Body Weight Liver/Kidneys/Fetus (Developmental) Liver	2E-02	NA	NA	2E-02
			Trichloroethene (TCE)	2.9E-09	NA	NA	2.9E-09	Trichloroethene (TCE)		6E-03	NA	NA	6E-03
			Vinyl Chloride	8.5E-09	NA	NA	8.5E-09	Vinyl Chloride		3E-05	NA	NA	3E-05
			(Total)	1.4E-05	NC	NC	1.4E-05	(Total)		3E-02	NC	NC	3E-02
Groundwater	Groundwater/ Vapor	On Site	Acetone	NC	NC	NC	0.0E+00	Acetone	Kidney/Neurologic (CNS) <sup>1</sup> Blood Blood/Lung <sup>2</sup> Liver/Body Weight/Kidney <sup>3</sup> Liver/Kidneys/Developmental/CNS/Endocrine <sup>4</sup>	1E-02	8E-03	5E-05	2E-02
			cis-1,2-Dichloroethene	NC	NC	NC	0.0E+00	cis-1,2-Dichloroethene		6E-01	NC	3E-02	6E-01
			trans-1,2-Dichloroethene	NC	NC	NC	0.0E+00	trans-1,2-Dichloroethene		1E-02	8E-02	8E-04	9E-02
			Tetrachloroethene (PCE)	4.3E-03	8.3E-04	1.7E-03	6.8E-03	Tetrachloroethene (PCE)		6E+00	2E+00	2E+00	1E+01
			Trichloroethene (TCE)	9.9E-06	2.7E-05	1.1E-06	3.8E-05	Trichloroethene (TCE)		2E+01	3E+00	2E+00	2E+01
(Total)	4.3E-03	8.6E-04	1.7E-03	6.8E-03	(Total)	3E+01	5E+00	5E+00	4E+01				
Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS) NA Lung Kidney CNS/Liver/Endocrine System Liver	NA	6E-09	NA	6E-09
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene		NA	NC	NA	0E+00
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene		NA	5E-06	NA	5E-06
			Tetrachloroethylene (PCE)	NA	6.6E-05	NA	6.6E-05	Tetrachloroethylene (PCE)		NA	1E-01	NA	1E-01
			Trichloroethylene (TCE)	NA	1.5E-07	NA	1.5E-07	Trichloroethylene (TCE)		NA	1E-02	NA	1E-02
			Vinyl Chloride	NA	5.3E-08	NA	5.3E-08	Vinyl Chloride		NA	9E-04	NA	9E-04
(Total)	NC	6.6E-05	NC	6.6E-05	(Total)	NC	2E-01	NC	2E-01				
Total Risk Across Soil (Total Soil)							1.4E-05	Total Hazard Index Across Soil (Total Soil)					3E-02
Total Risk Across Groundwater							6.8E-03	Total Hazard Index Across Groundwater					4E+01
Total Risk Across Air (Outdoor Vapors)							6.6E-05	Total Hazard Index Across Air (Outdoor Vapors)					2E-01
Total Adult Risk Across All Media and All Exposure Routes							6.9E-03	Total Hazard Index Across All Media and All Exposure Routes					4E+01

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 1.1E-02  
Total Adult and Child Risk Across All Media and All Exposure Routes = 1.7E-02

Total Liver HI = 3E+01  
Total Body Weight HI = 9E+00  
Total Kidney HI = 2E+01  
Total Developmental HI = 2E+01  
Total Blood HI = 6E-01  
Total Lung HI = 8E-02  
Total CNS HI = 3E+00  
Total Endocrine System HI = 3E+00

- For Acetone, effects on the Kidney are for oral and dermal routes; effects on the CNS are only for the inhalation route.
- For trans-1,2-Dichloroethene, effects on the Blood are for oral and dermal routes; effects on the Lung are only for the inhalation route.
- For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.
- For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

Table 9.3 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Child Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Future  
Receptor Population: Resident  
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	8.8E-05	NA	NA	8.8E-05	Tetrachloroethene (PCE)	Liver/Body Weight	2E-01	NA	NA	2E-01		
			Trichloroethene (TCE)	1.8E-08	NA	NA	1.8E-08	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	5E-02	NA	NA	5E-02		
			Vinyl Chloride (pr + non-pr)	1.0E-06	NA	NA	1.0E-06	Vinyl Chloride	Liver	3E-04	NA	NA	3E-04		
			(Total)	8.9E-05	NC	NC	8.9E-05	(Total)		2E-01	NC	NC	2E-01		
Groundwater	Groundwater	On Site	Acetone	NC	NC	NC	0.0E+00	Acetone	Kidney/Neurologic (CNS) <sup>1</sup>	3E-02	2E-02	9E-05	5E-02		
			cis-1,2-Dichloroethene	NC	NC	NC	0.0E+00	cis-1,2-Dichloroethene	Blood	1E+00	NC	7E-02	1E+00		
			trans-1,2-Dichloroethene	NC	NC	NC	0.0E+00	trans-1,2-Dichloroethene	Blood/Lung <sup>2</sup>	3E-02	2E-01	2E-03	2E-01		
			Tetrachloroethene (PCE)	6.6E-03	1.3E-03	2.4E-03	1.0E-02	Tetrachloroethene (PCE)	Liver/Body Weight/Kidney <sup>3</sup>	1E+01	4E+00	5E+00	2E+01		
			Trichloroethene (TCE)	1.5E-05	4.1E-05	1.5E-06	5.8E-05	Trichloroethene (TCE)	Liver/Kidneys/Developmental/CNS/Endocrine <sup>4</sup>	5E+01	6E+00	4E+00	6E+01		
			(Total)	6.6E-03	1.3E-03	2.4E-03	1.0E-02	(Total)		6E+01	1E+01	1E+01	8E+01		
Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	1E-08	NA	1E-08		
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	NA	NA	NC	NA	0E+00		
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Lung	NA	1E-05	NA	1E-05		
			Tetrachloroethylene (PCE)	NA	1.0E-04	NA	1.0E-04	Tetrachloroethylene (PCE)	Kidney	NA	3E-01	NA	3E-01		
			Trichloroethylene (TCE)	NA	2.3E-07	NA	2.3E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	3E-02	NA	3E-02		
			Vinyl Chloride (pr + non-pr)	NA	8.2E-08	NA	8.2E-08	Vinyl Chloride	Liver	NA	2E-03	NA	2E-03		
			(Total)	NC	1.0E-04	NC	1.0E-04	(Total)		NC	4E-01	NC	4E-01		
Total Risk Across Soil (Total Soil)				8.9E-05				Total Hazard Index Across Soil (Total Soil)				2E-01			
Total Risk Across Groundwater				1.0E-02				Total Hazard Index Across Groundwater				8E+01			
Total Risk Across Air (Outdoor Vapors)				1.0E-04				Total Hazard Index Across Air (Outdoor Vapors)				4E-01			
Total Child Risk Across All Media and All Exposure Routes				1.1E-02				Total Hazard Index Across All Media and All Exposure Routes				8E+01			

Notes:

NA = not available  
pr = prorated

Total Adult Risk Across All Media and All Exposure Routes = 6.9E-03  
Total Adult and Child Risk Across All Media and All Exposure Routes = 1.7E-02

Total Liver HI = 8E+01  
Total Body Weight HI = 2E+01  
Total Kidney HI = 6E+01  
Total Developmental HI = 5E+01  
Total Blood HI = 1E+00  
Total Lung HI = 2E-01  
Total CNS HI = 6E+00  
Total Endocrine System HI = 6E+00

- For Acetone, effects on the Kidney are for oral and dermal routes; effects on the CNS are only for the inhalation route.
- For trans-1,2-Dichloroethene, effects on the Blood are for oral and dermal routes; effects on the Lung are only for the inhalation route.
- For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.
- For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

**Table 9.3 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)  
Industrial Worker RME  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	4.8E-04	NA	NA	4.8E-04	Tetrachloroethene (PCE)	Liver/Body Weight	2E-01	NA	NA	2E-01
			Trichloroethene (TCE)	3.5E-08	NA	NA	3.5E-08	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	3E-02	NA	NA	3E-02
			Vinyl Chloride	5.0E-08	NA	NA	5.0E-08	Vinyl Chloride	Liver	7E-05	NA	NA	7E-05
			(Total)	4.8E-04	NC	NC	4.8E-04	(Total)		3E-01	NC	NC	3E-01
Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	2E-08	NA	2E-08
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	NA	NA	NC	NA	NC
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Lung	NA	5E-06	NA	5E-06
			Tetrachloroethylene (PCE)	NA	1.1E-03	NA	1.1E-03	Tetrachloroethylene (PCE)	Kidney	NA	9E-01	NA	9E-01
			Trichloroethylene (TCE)	NA	8.8E-07	NA	8.8E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	3E-02	NA	3E-02
			Vinyl Chloride	NA	1.5E-07	NA	1.5E-07	Vinyl Chloride	Liver	NA	1E-03	NA	1E-03
			(Total)	NC	1.1E-03	NC	1.1E-03	(Total)		NC	9E-01	NC	9E-01
Total Risk Across Soil (Total Soil)							4.8E-04	Total Hazard Index Across Soil (Total Soil)					3E-01
Total Risk Across Air (Outdoor Vapors)							1.1E-03	Total Hazard Index Across Air (Outdoor Vapors)					9E-01
Total Adult Risk Across All Media and All Exposure Routes							1.6E-03	Total Hazard Index Across All Media and All Exposure Routes					1E+00

Notes:  
NA = not available

Total Liver HI =	3E-01
Total Body Weight HI =	2E-01
Total Kidney HI =	9E-01
Total Developmental HI =	3E-02
Total Lung HI =	5E-06
Total CNS HI =	3E-02
Total Endocrine System HI =	3E-02

**Table 9.3 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)  
Industrial Worker CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	1.9E-05	NA	NA	1.9E-05	Tetrachloroethene (PCE)	Liver/Body Weight	4E-02	NA	NA	4E-02
			Trichloroethene (TCE)	3.9E-09	NA	NA	3.9E-09	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	1E-02	NA	NA	1E-02
			Vinyl Chloride	1.2E-08	NA	NA	1.2E-08	Vinyl Chloride	Liver	6E-05	NA	NA	6E-05
			(Total)	1.9E-05	NC	NC	1.9E-05	(Total)		5E-02	NC	NC	5E-02
Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	6E-09	NA	6E-09
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	NA	NA	NC	NA	0E+00
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Lung	NA	4E-06	NA	4E-06
			Tetrachloroethylene (PCE)	NA	4.5E-05	NA	4.5E-05	Tetrachloroethylene (PCE)	Kidney	NA	1E-01	NA	1E-01
			Trichloroethylene (TCE)	NA	9.9E-08	NA	9.9E-08	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	1E-02	NA	1E-02
			Vinyl Chloride	NA	3.6E-08	NA	3.6E-08	Vinyl Chloride	Liver	NA	9E-04	NA	9E-04
			(Total)	NC	4.5E-05	NC	4.5E-05	(Total)		NC	1E-01	NC	1E-01
			(Total)					(Total)					
Total Risk Across Soil (Total Soil)							1.9E-05	Total Hazard Index Across Soil (Total Soil)					5E-02
Total Risk Across Air (Outdoor Vapors)							4.5E-05	Total Hazard Index Across Air (Outdoor Vapors)					1E-01
Total Adult Risk Across All Media and All Exposure Routes							6.5E-05	Total Hazard Index Across All Media and All Exposure Routes					2E-01

Notes:  
NA = not available

Total Liver HI =	6E-02
Total Body Weight HI =	4E-02
Total Kidney HI =	1E-01
Total Developmetal HI =	1E-02
Total Lung HI =	4E-06
Total CNS HI =	1E-02
Total Endocrine System HI =	1E-02

**Table 9.3 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)  
Construction Worker RME  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Construction Worker Receptor Age: Adult
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	2.3E-05	NA	NA	2.3E-05	Tetrachloroethene (PCE)	Liver	9E-02	NA	NA	9E-02
			Trichloroethene (TCE)	1.7E-09	NA	NA	1.7E-09	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	9E-02	NA	NA	9E-02
			Vinyl Chloride	2.4E-09	NA	NA	2.4E-09	Vinyl Chloride	Liver	2E-04	NA	NA	2E-04
			(Total)	2.3E-05	NC	NC	2.3E-05	(Total)		2E-01	NC	NC	2E-01
Sewer Water	Sewer Water	On Site	Bromomethane	NC	NA	NC	0.0E+00	Bromomethane	GI Tract	5E-05	NA	2E-04	3E-04
			Chloroform	NC	NA	NC	0.0E+00	Chloroform	Liver	6E-05	NA	8E-04	9E-04
			Tetrachloroethene (PCE)	8.2E-10	NA	6.8E-08	6.9E-08	Tetrachloroethene (PCE)	Liver	3E-06	NA	3E-04	3E-04
			(Total)	8.2E-10	NC	6.8E-08	6.9E-08	(Total)		1E-04	NC	1E-03	1E-03
Air	Sewer Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	4E-06	NA	4E-06
			Bromomethane	NA	NC	NA	0.0E+00	Bromomethane	Respiratory	NA	1E-01	NA	1E-01
			Chloroform	NA	3.7E-06	NA	3.7E-06	Chloroform	Liver	NA	1E-01	NA	1E-01
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	NA	NA	NC	NA	NC
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Liver	NA	1E-04	NA	1E-04
			Tetrachloroethene	NA	1.5E-05	NA	1.5E-05	Tetrachloroethene	Kidney	NA	9E-01	NA	9E-01
			Trichloroethene	NA	1.6E-07	NA	1.6E-07	Trichloroethene	Neurologic (CNS)	NA	3E-02	NA	3E-02
			(Total)	NC	1.9E-05	NC	1.9E-05	(Total)		NC	1E+00	NC	1E+00
Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	2E-08	NA	2E-08
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	NA	NA	NC	NA	NC
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Liver	NA	4E-07	NA	4E-07
			Tetrachloroethylene (PCE)	NA	1.6E-04	NA	1.6E-04	Tetrachloroethylene (PCE)	Kidney	NA	1E+01	NA	1E+01
			Trichloroethylene (TCE)	NA	1.3E-07	NA	1.3E-07	Trichloroethylene (TCE)	Neurologic (CNS)	NA	3E-02	NA	3E-02
			Vinyl Chloride	NA	2.3E-08	NA	2.3E-08	Vinyl Chloride	Liver	NA	2E-02	NA	2E-02
			(Total)	NC	1.7E-04	NC	1.7E-04	(Total)		NC	1E+01	NC	1E+01
			Total Risk Across Soil (Total Soil)				2.4E-09				Total Hazard Index Across Soil (Total Soil)		
Total Risk Across Sewer Water				6.9E-08				Total Hazard Index Across Sewer Water					1E-03
Total Risk Across Air (Sewer Vapors)				1.9E-05				Total Hazard Index Across Soil Gas (Sewer Vapors)					1E+00
Total Risk Across Air (Outdoor Vapors)				1.7E-04				Total Hazard Index Across Air (Outdoor Vapors)					1E+01
Total Adult Risk Across All Media and All Exposure Routes				1.8E-04				Total Hazard Index Across All Media and All Exposure Routes					1E+01

Notes:  
NA = not available

Total Liver HI =	3E-01
Total Kidney HI =	1E+01
Total Developmental HI =	9E-02
Total Respiratory HI =	1E-01
Total CNS HI =	6E-02
Total GI Tract HI =	3E-04

**Table 9.3 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)  
Construction Worker CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Construction Worker Receptor Age: Adult
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	1.3E-06	NA	NA	1.3E-06	Tetrachloroethene (PCE)	Liver	1E-02	NA	NA	1E-02		
			Trichloroethene (TCE)	2.7E-10	NA	NA	2.7E-10	Trichloroethene (TCE)	Liver/Kidneys/Fetus (Developmental)	4E-02	NA	NA	4E-02		
			Vinyl Chloride	8.0E-10	NA	NA	8.0E-10	Vinyl Chloride	Liver	2E-04	NA	NA	2E-04		
			(Total)	1.3E-06	NC	NC	1.3E-06	(Total)		6E-02	NC	NC	6E-02		
Sewer Water	Sewer Water	On Site	Bromomethane	NC	NA	NC	0.0E+00	Bromomethane	GI Tract	3E-05	NA	2E-04	2E-04		
			Chloroform	NC	NA	NC	0.0E+00	Chloroform	Liver	2E-05	NA	3E-04	3E-04		
			Tetrachloroethene (PCE)	1.8E-10	NA	1.5E-08	1.5E-08	Tetrachloroethene (PCE)	Liver	2E-06	NA	2E-04	2E-04		
			(Total)	1.8E-10	NC	1.5E-08	1.5E-08	(Total)		6E-05	NC	6E-04	6E-04		
Air	Sewer Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	1E-06	NA	1E-06		
			Bromomethane	NA	NC	NA	0.0E+00	Bromomethane	Respiratory	NA	1E-01	NA	1E-01		
			Chloroform	NA	4.3E-07	NA	4.3E-07	Chloroform	Liver	NA	5E-02	NA	5E-02		
			cis-1,2-Dichloroethene	NA	NC	NA	0.0E+00	cis-1,2-Dichloroethene	Liver	NA	NC	NA	0E+00		
			trans-1,2-Dichloroethene	NA	NC	NA	0.0E+00	trans-1,2-Dichloroethene	Liver	NA	1E-04	NA	1E-04		
			Tetrachloroethene	NA	4.8E-07	NA	4.8E-07	Tetrachloroethene	Kidney	NA	8E-02	NA	8E-02		
			Trichloroethene	NA	9.5E-09	NA	9.5E-09	Trichloroethene	Neurologic (CNS)	NA	6E-03	NA	6E-03		
			(Total)	NC	9.2E-07	NC	9.2E-07	(Total)		NC	2E-01	NC	2E-01		
			Air	Outdoor Vapors	On Site	Acetone	NA	NC	NA	0.0E+00	Acetone	Neurologic (CNS)	NA	7E-09	NA
cis-1,2-Dichloroethene	NA	NC				NA	0.0E+00	cis-1,2-Dichloroethene	Liver	NA	NC	NA	0E+00		
trans-1,2-Dichloroethene	NA	NC				NA	0.0E+00	trans-1,2-Dichloroethene	Liver	NA	4E-07	NA	4E-07		
Tetrachloroethylene (PCE)	NA	9.6E-06				NA	9.6E-06	Tetrachloroethylene (PCE)	Kidney	NA	2E+00	NA	2E+00		
Trichloroethylene (TCE)	NA	2.1E-08				NA	2.1E-08	Trichloroethylene (TCE)	Neurologic (CNS)	NA	1E-02	NA	1E-02		
Vinyl Chloride	NA	7.5E-09				NA	7.5E-09	Vinyl Chloride	Liver	NA	2E-02	NA	2E-02		
(Total)	NC	9.6E-06				NC	9.6E-06	(Total)		NC	2E+00	NC	2E+00		
Total Risk Across Soil (Total Soil)						8.0E-10				Total Hazard Index Across Soil (Total Soil)				6E-02	
Total Risk Across Sewer Water				1.5E-08				Total Hazard Index Across Sewer Water				6E-04			
Total Risk Across Air (Sewer Vapors)				9.2E-07				Total Hazard Index Across Soil Gas (Sewer Vapors)				2E-01			
Total Risk Across Air (Outdoor Vapors)				9.6E-06				Total Hazard Index Across Air (Outdoor Vapors)				2E+00			
Total Adult Risk Across All Media and All Exposure Routes				1.1E-05				Total Hazard Index Across All Media and All Exposure Routes				2E+00			

Notes:  
NA = not available

Total Liver HI =	1E-01
Total Kidney HI =	2E+00
Total Developmental HI =	4E-02
Total Respiratory HI =	1E-01
Total CNS HI =	2E-02
Total GI Tract HI =	2E-04

Table 9.4 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Adult Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit B	Chloroform	NA	3.6E-06	NA	3.6E-06	Chloroform Tetrachloroethylene (PCE) Trichloroethylene (TCE) (Total)	CNS/Liver/Kidney Kidney CNS/Liver/Endocrine System (Total)	NA	1E-02	NA	1E-02
			Tetrachloroethylene (PCE)	NA	3.9E-06	NA	3.9E-06			NA	3E-03	NA	3E-03
			Trichloroethylene (TCE)	NA	4.4E-05	NA	4.4E-05			NA	3E-02	NA	3E-02
			(Total)	NC	5.1E-05	NC	5.1E-05			NC	4E-02	NC	4E-02
Total Risk Across Air (Indoor Vapors)							5.1E-05	Total Hazard Index Across Air (Indoor Vapors)					4E-02
Total Adult Risk Across All Media and All Exposure Routes							5.1E-05	Total Hazard Index Across All Media and All Exposure Routes					4E-02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 3.0E-05  
Total Adult and Child Risk Across All Media and All Exposure Routes = 8.1E-05

Total Liver HI = 4E-02  
Total Kidney HI = 1E-02  
Total CNS HI = 4E-02  
Total Endocrine System HI = 3E-02

Table 9.4 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Child Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit B	Chloroform	NA	2.1E-06	NA	2.1E-06	Chloroform	CNS/Liver/Kidney	NA	2E-02	NA	2E-02
			Tetrachloroethylene (PCE)	NA	2.3E-06	NA	2.3E-06	Tetrachloroethylene (PCE)	Kidney	NA	7E-03	NA	7E-03
			Trichloroethylene (TCE)	NA	2.5E-05	NA	2.5E-05	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	7E-02	NA	7E-02
			(Total)	NC	3.0E-05	NC	3.0E-05	(Total)		NC	1E-01	NC	1E-01
Total Risk Across Air (Indoor Vapors)							3.0E-05	Total Hazard Index Across Air (Indoor Vapors)					1E-01
Total Child Risk Across All Media and All Exposure Routes							3.0E-05	Total Hazard Index Across All Media and All Exposure Routes					1E-01

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes = 5.1E-05  
Total Adult and Child Risk Across All Media and All Exposure Routes = 8.1E-05

Total Liver HI = 9E-02  
Total Kidney HI = 3E-02  
Total CNS HI = 9E-02  
Total Endocrine System HI = 7E-02

Table 9.4 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Adult Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit B	Chloroform	NA	5.2E-07	NA	5.2E-07	Chloroform Tetrachloroethylene (PCE) Trichloroethylene (TCE) (Total)	CNS/Liver/Kidney Kidney CNS/Liver/Endocrine System (Total)	NA	4E-03	NA	4E-03
			Tetrachloroethylene (PCE)	NA	5.9E-07	NA	5.9E-07			NA	1E-03	NA	1E-03
			Trichloroethylene (TCE)	NA	6.3E-06	NA	6.3E-06			NA	1E-02	NA	1E-02
			(Total)	NC	7.4E-06	NC	7.4E-06			NC	2E-02	NC	2E-02
Total Risk Across Air (Indoor Vapors)							7.4E-06	Total Hazard Index Across Air (Indoor Vapors)					2E-02
Total Adult Risk Across All Media and All Exposure Routes							7.4E-06	Total Hazard Index Across All Media and All Exposure Routes					2E-02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 1.1E-05  
Total Adult and Child Risk Across All Media and All Exposure Routes = 1.9E-05

Total Liver HI = 1E-02  
Total Kidney HI = 5E-03  
Total CNS HI = 1E-02  
Total Endocrine System HI = 1E-02

**Table 9.4 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Child Resident CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit B	Chloroform	NA	8.0E-07	NA	8.0E-07	Chloroform	CNS/Liver/Kidney	NA	9E-03	NA	9E-03		
			Tetrachloroethylene (PCE)	NA	9.2E-07	NA	9.2E-07	Tetrachloroethylene (PCE)	Kidney	NA	3E-03	NA	3E-03		
			Trichloroethylene (TCE)	NA	9.7E-06	NA	9.7E-06	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	3E-02	NA	3E-02		
			(Total)	NC	1.1E-05	NC	1.1E-05	(Total)		NC	4E-02	NC	4E-02		
Total Risk Across Air (Indoor Vapors)							1.1E-05	Total Hazard Index Across Air (Indoor Vapors)							4E-02
Total Child Risk Across All Media and All Exposure Routes							1.1E-05	Total Hazard Index Across All Media and All Exposure Routes							4E-02

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes = 7.4E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes = 1.9E-05

Total Liver HI = 3E-02  
Total Kidney HI = 1E-02  
Total CNS HI = 3E-02  
Total Endocrine System HI = 3E-02

Table 9.4 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Adult Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit B	Chloroform	NA	3.6E-06	NA	3.6E-06	Chloroform Tetrachloroethylene (PCE) Trichloroethylene (TCE) (Total)	CNS/Liver/Kidney Kidney CNS/Liver/Endocrine System (Total)	NA	1E-02	NA	1E-02
			Tetrachloroethylene (PCE)	NA	3.9E-06	NA	3.9E-06			NA	3E-03	NA	3E-03
			Trichloroethylene (TCE)	NA	7.6E-07	NA	7.6E-07			NA	3E-02	NA	3E-02
			(Total)	NC	8.2E-06	NC	8.2E-06			NC	4E-02	NC	4E-02
Total Risk Across Air (Indoor Vapors)							8.2E-06	Total Hazard Index Across Air (Indoor Vapors)					4E-02
Total Adult Risk Across All Media and All Exposure Routes							8.2E-06	Total Hazard Index Across All Media and All Exposure Routes					4E-02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 4.8E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes = 1.3E-05

Total Liver HI = 4E-02  
Total Kidney HI = 1E-02  
Total CNS HI = 4E-02  
Total Endocrine System HI = 3E-02

**Table 9.4 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)**

**Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit B	Chloroform	NA	2.1E-06	NA	2.1E-06	Chloroform	CNS/Liver/Kidney	NA	2E-02	NA	2E-02
			Tetrachloroethylene (PCE)	NA	2.3E-06	NA	2.3E-06	Tetrachloroethylene (PCE)	Kidney	NA	7E-03	NA	7E-03
			Trichloroethylene (TCE)	NA	4.4E-07	NA	4.4E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	7E-02	NA	7E-02
			(Total)	NC	4.8E-06	NC	4.8E-06	(Total)		NC	1E-01	NC	1E-01
Total Risk Across Air (Indoor Vapors)							4.8E-06	Total Hazard Index Across Air (Indoor Vapors)					1E-01
Total Child Risk Across All Media and All Exposure Routes							4.8E-06	Total Hazard Index Across All Media and All Exposure Routes					1E-01

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes	8.2E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	1.3E-05

Total Liver HI =	9E-02
Total Kidney HI =	3E-02
Total CNS HI =	9E-02
Total Endocrine System HI =	7E-02

Table 9.4 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Adult Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit B	Chloroform	NA	5.2E-07	NA	5.2E-07	Chloroform Tetrachloroethylene (PCE) Trichloroethylene (TCE) (Total)	CNS/Liver/Kidney Kidney CNS/Liver/Endocrine System (Total)	NA	4E-03	NA	4E-03
			Tetrachloroethylene (PCE)	NA	5.9E-07	NA	5.9E-07			NA	1E-03	NA	1E-03
			Trichloroethylene (TCE)	NA	1.1E-07	NA	1.1E-07			NA	1E-02	NA	1E-02
			(Total)	NC	1.2E-06	NC	1.2E-06			NC	2E-02	NC	2E-02
Total Risk Across Air (Indoor Vapors)							1.2E-06	Total Hazard Index Across Air (Indoor Vapors)					2E-02
Total Adult Risk Across All Media and All Exposure Routes							1.2E-06	Total Hazard Index Across All Media and All Exposure Routes					2E-02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 1.9E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes = 3.1E-06

Total Liver HI = 1E-02  
Total Kidney HI = 5E-03  
Total CNS HI = 1E-02  
Total Endocrine System HI = 1E-02



Table 9.5 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Adult Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit A	Chloroform	NA	2.4E-06	NA	2.4E-06	Chloroform Tetrachloroethylene (PCE) Trichloroethylene (TCE) (Total)	CNS/Liver/Kidney Kidney CNS/Liver/Endocrine System (Total)	NA	9E-03	NA	9E-03		
			Tetrachloroethylene (PCE)	NA	1.2E-05	NA	1.2E-05			NA	3E-03	NA	3E-03		
			Trichloroethylene (TCE)	NA	2.0E-05	NA	2.0E-05			NA	2E-01	NA	2E-01		
			(Total)	NC	3.5E-05	NC	3.5E-05			NC	2E-01	NC	2E-01		
Total Risk Across Air (Indoor Vapors)							3.5E-05	Total Hazard Index Across Air (Indoor Vapors)							2E-01
Total Adult Risk Across All Media and All Exposure Routes							3.5E-05	Total Hazard Index Across All Media and All Exposure Routes							2E-01

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 2.0E-05  
Total Adult and Child Risk Across All Media and All Exposure Routes = 5.5E-05

Total Liver HI = 2E-01  
Total Kidney HI = 1E-02  
Total CNS HI = 2E-01  
Total Endocrine System HI = 2E-01

**Table 9.5 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit A	Chloroform	NA	1.4E-06	NA	1.4E-06	Chloroform	CNS/Liver/Kidney	NA	2E-02	NA	2E-02
			Tetrachloroethylene (PCE)	NA	7.1E-06	NA	7.1E-06	Tetrachloroethylene (PCE)	Kidney	NA	6E-03	NA	6E-03
			Trichloroethylene (TCE)	NA	1.2E-05	NA	1.2E-05	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	4E-01	NA	4E-01
			(Total)	NC	2.0E-05	NC	2.0E-05	(Total)		NC	5E-01	NC	5E-01
Total Risk Across Air (Indoor Vapors)							2.0E-05	Total Hazard Index Across Air (Indoor Vapors)					5E-01
Total Child Risk Across All Media and All Exposure Routes							2.0E-05	Total Hazard Index Across All Media and All Exposure Routes					5E-01

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes = 3.5E-05  
Total Adult and Child Risk Across All Media and All Exposure Routes = 5.5E-05

Total Liver HI = 5E-01  
Total Kidney HI = 3E-02  
Total CNS HI = 5E-01  
Total Endocrine System HI = 4E-01

Table 9.5 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Adult Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit A	Chloroform	NA	3.1E-07	NA	3.1E-07	Chloroform Tetrachloroethylene (PCE) Trichloroethylene (TCE) (Total)	CNS/Liver/Kidney Kidney CNS/Liver/Endocrine System (Total)	NA	3E-03	NA	3E-03
			Tetrachloroethylene (PCE)	NA	1.7E-06	NA	1.7E-06			NA	1E-03	NA	1E-03
			Trichloroethylene (TCE)	NA	3.8E-06	NA	3.8E-06			NA	4E-02	NA	4E-02
			(Total)	NC	5.8E-06	NC	5.8E-06			NC	4E-02	NC	4E-02
Total Risk Across Air (Indoor Vapors)							5.8E-06	Total Hazard Index Across Air (Indoor Vapors)					4E-02
Total Adult Risk Across All Media and All Exposure Routes							5.8E-06	Total Hazard Index Across All Media and All Exposure Routes					4E-02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 9.0E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes = 1.5E-05

Total Liver HI = 4E-02  
Total Kidney HI = 5E-03  
Total CNS HI = 4E-02  
Total Endocrine System HI = 4E-02

**Table 9.5 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Child Resident CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit A	Chloroform	NA	4.9E-07	NA	4.9E-07	Chloroform	CNS/Liver/Kidney	NA	8E-03	NA	8E-03		
			Tetrachloroethylene (PCE)	NA	2.6E-06	NA	2.6E-06	Tetrachloroethylene (PCE)	Kidney	NA	3E-03	NA	3E-03		
			Trichloroethylene (TCE)	NA	5.9E-06	NA	5.9E-06	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	9E-02	NA	9E-02		
			(Total)	NC	9.0E-06	NC	9.0E-06	(Total)		NC	1E-01	NC	1E-01		
Total Risk Across Air (Indoor Vapors)							9.0E-06	Total Hazard Index Across Air (Indoor Vapors)							1E-01
Total Child Risk Across All Media and All Exposure Routes							9.0E-06	Total Hazard Index Across All Media and All Exposure Routes							1E-01

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes	5.8E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	1.5E-05

Total Liver HI =	1E-01
Total Kidney HI =	1E-02
Total CNS HI =	1E-01
Total Endocrine System HI =	9E-02

Table 9.5 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Adult Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit A	Chloroform	NA	2.4E-06	NA	2.4E-06	Chloroform Tetrachloroethylene (PCE) Trichloroethylene (TCE) (Total)	CNS/Liver/Kidney Kidney CNS/Liver/Endocrine System (Total)	NA	9E-03	NA	9E-03		
			Tetrachloroethylene (PCE)	NA	1.2E-05	NA	1.2E-05			NA	3E-03	NA	3E-03		
			Trichloroethylene (TCE)	NA	3.6E-07	NA	3.6E-07			NA	2E-01	NA	2E-01		
			(Total)	NC	1.5E-05	NC	1.5E-05			NC	2E-01	NC	2E-01		
Total Risk Across Air (Indoor Vapors)							1.5E-05	Total Hazard Index Across Air (Indoor Vapors)							2E-01
Total Adult Risk Across All Media and All Exposure Routes							1.5E-05	Total Hazard Index Across All Media and All Exposure Routes							2E-01

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 8.7E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes = 2.4E-05

Total Liver HI = 2E-01  
Total Kidney HI = 1E-02  
Total CNS HI = 2E-01  
Total Endocrine System HI = 2E-01

**Table 9.5 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)**

**Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit A	Chloroform	NA	1.4E-06	NA	1.4E-06	Chloroform	CNS/Liver/Kidney	NA	2E-02	NA	2E-02
			Tetrachloroethylene (PCE)	NA	7.1E-06	NA	7.1E-06	Tetrachloroethylene (PCE)	Kidney	NA	6E-03	NA	6E-03
			Trichloroethylene (TCE)	NA	2.1E-07	NA	2.1E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	4E-01	NA	4E-01
			(Total)	NC	8.7E-06	NC	8.7E-06	(Total)		NC	5E-01	NC	5E-01
Total Risk Across Air (Indoor Vapors)							8.7E-06	Total Hazard Index Across Air (Indoor Vapors)					5E-01
Total Child Risk Across All Media and All Exposure Routes							8.7E-06	Total Hazard Index Across All Media and All Exposure Routes					5E-01

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes = 1.5E-05  
 Total Adult and Child Risk Across All Media and All Exposure Routes = 2.4E-05

Total Liver HI = 5E-01  
 Total Kidney HI = 3E-02  
 Total CNS HI = 5E-01  
 Total Endocrine System HI = 4E-01

Table 9.5 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Adult Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit A	Chloroform	NA	3.1E-07	NA	3.1E-07	Chloroform	CNS/Liver/Kidney	NA	3E-03	NA	3E-03
			Tetrachloroethylene (PCE)	NA	1.7E-06	NA	1.7E-06	Tetrachloroethylene (PCE)	Kidney	NA	1E-03	NA	1E-03
			Trichloroethylene (TCE)	NA	6.6E-08	NA	6.6E-08	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	4E-02	NA	4E-02
			(Total)	NC	2.1E-06	NC	2.1E-06	(Total)	NC	4E-02	NC	4E-02	
Total Risk Across Air (Indoor Vapors)							2.1E-06	Total Hazard Index Across Air (Indoor Vapors)					4E-02
Total Adult Risk Across All Media and All Exposure Routes							2.1E-06	Total Hazard Index Across All Media and All Exposure Routes					4E-02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 3.2E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes = 5.3E-06

Total Liver HI = 4E-02  
Total Kidney HI = 5E-03  
Total CNS HI = 4E-02  
Total Endocrine System HI = 4E-02

Table 9.5 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Child Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit A	Chloroform	NA	4.9E-07	NA	4.9E-07	Chloroform	CNS/Liver/Kidney	NA	8E-03	NA	8E-03		
			Tetrachloroethylene (PCE)	NA	2.6E-06	NA	2.6E-06	Tetrachloroethylene (PCE)	Kidney	NA	3E-03	NA	3E-03		
			Trichloroethylene (TCE)	NA	1.0E-07	NA	1.0E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	9E-02	NA	9E-02		
			(Total)	NC	3.2E-06	NC	3.2E-06	(Total)		NC	1E-01	NC	1E-01		
Total Risk Across Air (Indoor Vapors)									Total Hazard Index Across Air (Indoor Vapors)				1E-01		
Total Child Risk Across All Media and All Exposure Routes							3.2E-06	Total Hazard Index Across All Media and All Exposure Routes							1E-01

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes = 2.1E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes = 5.3E-06

Total Liver HI = 1E-01  
Total Kidney HI = 1E-02  
Total CNS HI = 1E-01  
Total Endocrine System HI = 9E-02

Table 9.6 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Adult Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit C	Chloroform	NA	9.1E-06	NA	9.1E-06	Chloroform Tetrachloroethylene (PCE) Trichloroethylene (TCE) (Total)	CNS/Liver/Kidney Kidney CNS/Liver/Endocrine System (Total)	NA	3E-02	NA	3E-02		
			Tetrachloroethylene (PCE)	NA	3.4E-07	NA	3.4E-07			NA	3E-04	NA	3E-04		
			Trichloroethylene (TCE)	NA	1.1E-05	NA	1.1E-05			NA	7E-03	NA	7E-03		
			(Total)	NC	2.0E-05	NC	2.0E-05			NC	3E-02	NC	3E-02		
Total Risk Across Air (Indoor Vapors)							2.0E-05	Total Hazard Index Across Air (Indoor Vapors)							3E-02
Total Adult Risk Across All Media and All Exposure Routes							2.0E-05	Total Hazard Index Across All Media and All Exposure Routes							3E-02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 1.2E-05  
Total Adult and Child Risk Across All Media and All Exposure Routes = 3.2E-05

Total Liver HI = 3E-02  
Total Kidney HI = 3E-02  
Total CNS HI = 3E-02  
Total Endocrine System HI = 7E-03

Table 9.6 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Child Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit C	Chloroform	NA	5.3E-06	NA	5.3E-06	Chloroform	CNS/Liver/Kidney	NA	6E-02	NA	6E-02
			Tetrachloroethylene (PCE)	NA	2.0E-07	NA	2.0E-07	Tetrachloroethylene (PCE)	Kidney	NA	6E-04	NA	6E-04
			Trichloroethylene (TCE)	NA	6.4E-06	NA	6.4E-06	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	2E-02	NA	2E-02
			(Total)	NC	1.2E-05	NC	1.2E-05	(Total)		NC	8E-02	NC	8E-02
Total Risk Across Air (Indoor Vapors)							1.2E-05	Total Hazard Index Across Air (Indoor Vapors)					8E-02
Total Child Risk Across All Media and All Exposure Routes							1.2E-05	Total Hazard Index Across All Media and All Exposure Routes					8E-02

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes = 2.0E-05  
Total Adult and Child Risk Across All Media and All Exposure Routes = 3.2E-05

Total Liver HI = 8E-02  
Total Kidney HI = 6E-02  
Total CNS HI = 8E-02  
Total Endocrine System HI = 2E-02

Table 9.6 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Adult Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit C	Chloroform	NA	1.3E-06	NA	1.3E-06	Chloroform	CNS/Liver/Kidney	NA	1E-02	NA	1E-02
			Tetrachloroethylene (PCE)	NA	6.2E-08	NA	6.2E-08	Tetrachloroethylene (PCE)	Kidney	NA	1E-04	NA	1E-04
			Trichloroethylene (TCE)	NA	1.8E-06	NA	1.8E-06	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	3E-03	NA	3E-03
			(Total)	NC	3.2E-06	NC	3.2E-06	(Total)	NC	1E-02	NC	1E-02	
Total Risk Across Air (Indoor Vapors)							3.2E-06	Total Hazard Index Across Air (Indoor Vapors)					1E-02
Total Adult Risk Across All Media and All Exposure Routes							3.2E-06	Total Hazard Index Across All Media and All Exposure Routes					1E-02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 4.9E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes = 8.1E-06

Total Liver HI = 1E-02  
Total Kidney HI = 1E-02  
Total CNS HI = 1E-02  
Total Endocrine System HI = 3E-03

**Table 9.6 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Child Resident CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit C	Chloroform	NA	2.1E-06	NA	2.1E-06	Chloroform	CNS/Liver/Kidney	NA	2E-02	NA	2E-02		
			Tetrachloroethylene (PCE)	NA	9.6E-08	NA	9.6E-08	Tetrachloroethylene (PCE)	Kidney	NA	3E-04	NA	3E-04		
			Trichloroethylene (TCE)	NA	2.7E-06	NA	2.7E-06	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	7E-03	NA	7E-03		
			(Total)	NC	4.9E-06	NC	4.9E-06	(Total)		NC	3E-02	NC	3E-02		
Total Risk Across Air (Indoor Vapors)							4.9E-06	Total Hazard Index Across Air (Indoor Vapors)							3E-02
Total Child Risk Across All Media and All Exposure Routes							4.9E-06	Total Hazard Index Across All Media and All Exposure Routes							3E-02

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes = 3.2E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes = 8.1E-06

Total Liver HI = 3E-02  
Total Kidney HI = 2E-02  
Total CNS HI = 3E-02  
Total Endocrine System HI = 7E-03

Table 9.6 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Adult Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit C	Chloroform	NA	9.1E-06	NA	9.1E-06	Chloroform Tetrachloroethylene (PCE) Trichloroethylene (TCE) (Total)	CNS/Liver/Kidney Kidney CNS/Liver/Endocrine System (Total)	NA	3E-02	NA	3E-02		
			Tetrachloroethylene (PCE)	NA	3.4E-07	NA	3.4E-07			NA	3E-04	NA	3E-04		
			Trichloroethylene (TCE)	NA	1.9E-07	NA	1.9E-07			NA	7E-03	NA	7E-03		
			(Total)	NC	9.7E-06	NC	9.7E-06			NC	3E-02	NC	3E-02		
Total Risk Across Air (Indoor Vapors)							9.7E-06	Total Hazard Index Across Air (Indoor Vapors)							3E-02
Total Adult Risk Across All Media and All Exposure Routes							9.7E-06	Total Hazard Index Across All Media and All Exposure Routes							3E-02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 5.6E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes = 1.5E-05

Total Liver HI = 3E-02  
Total Kidney HI = 3E-02  
Total CNS HI = 3E-02  
Total Endocrine System HI = 7E-03

**Table 9.6 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)**

**Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit C	Chloroform	NA	5.3E-06	NA	5.3E-06	Chloroform	CNS/Liver/Kidney	NA	6E-02	NA	6E-02
			Tetrachloroethylene (PCE)	NA	2.0E-07	NA	2.0E-07	Tetrachloroethylene (PCE)	Kidney	NA	6E-04	NA	6E-04
			Trichloroethylene (TCE)	NA	1.1E-07	NA	1.1E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	2E-02	NA	2E-02
			(Total)	NC	5.6E-06	NC	5.6E-06	(Total)		NC	8E-02	NC	8E-02
Total Risk Across Air (Indoor Vapors)							5.6E-06	Total Hazard Index Across Air (Indoor Vapors)					8E-02
Total Child Risk Across All Media and All Exposure Routes							5.6E-06	Total Hazard Index Across All Media and All Exposure Routes					8E-02

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes	9.7E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	1.5E-05

Total Liver HI =	8E-02
Total Kidney HI =	6E-02
Total CNS HI =	8E-02
Total Endocrine System HI =	2E-02

Table 9.6 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Adult Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit C	Chloroform	NA	1.3E-06	NA	1.3E-06	Chloroform	CNS/Liver/Kidney	NA	1E-02	NA	1E-02
			Tetrachloroethylene (PCE)	NA	6.2E-08	NA	6.2E-08	Tetrachloroethylene (PCE)	Kidney	NA	1E-04	NA	1E-04
			Trichloroethylene (TCE)	NA	3.1E-08	NA	3.1E-08	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	3E-03	NA	3E-03
			(Total)	NC	1.4E-06	NC	1.4E-06	(Total)	NC	1E-02	NC	1E-02	
Total Risk Across Air (Indoor Vapors)							1.4E-06	Total Hazard Index Across Air (Indoor Vapors)					1E-02
Total Adult Risk Across All Media and All Exposure Routes							1.4E-06	Total Hazard Index Across All Media and All Exposure Routes					1E-02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 2.2E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes = 3.6E-06

Total Liver HI = 1E-02  
Total Kidney HI = 1E-02  
Total CNS HI = 1E-02  
Total Endocrine System HI = 3E-03



Table 9.7 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Adult Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit D	Chloroform	NA	NC	NA	0.0E+00	Chloroform Tetrachloroethylene (PCE) Trichloroethylene (TCE) (Total)	CNS/Liver/Kidney Kidney CNS/Liver/Endocrine System (Total)	NA	NC	NA	0E+00		
			Tetrachloroethylene (PCE)	NA	3.0E-07	NA	3.0E-07			NA	2E-04	NA	2E-04		
			Trichloroethylene (TCE)	NA	6.8E-05	NA	6.8E-05			NA	4E-02	NA	4E-02		
			(Total)	NC	6.8E-05	NC	6.8E-05			NC	5E-02	NC	5E-02		
Total Risk Across Air (Indoor Vapors)							6.8E-05	Total Hazard Index Across Air (Indoor Vapors)							5E-02
Total Adult Risk Across All Media and All Exposure Routes							6.8E-05	Total Hazard Index Across All Media and All Exposure Routes							5E-02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes 4.0E-05  
Total Adult and Child Risk Across All Media and All Exposure Routes 1.1E-04

Total Liver HI = 4E-02  
Total Kidney HI = 2E-04  
Total CNS HI = 4E-02  
Total Endocrine System HI = 4E-02

Table 9.7 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Child Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit D	Chloroform	NA	NC	NA	0.0E+00	Chloroform	CNS/Liver/Kidney	NA	NC	NA	0E+00		
			Tetrachloroethylene (PCE)	NA	1.7E-07	NA	1.7E-07	Tetrachloroethylene (PCE)	Kidney	NA	6E-04	NA	6E-04		
			Trichloroethylene (TCE)	NA	3.9E-05	NA	3.9E-05	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	1E-01	NA	1E-01		
			(Total)	NC	4.0E-05	NC	4.0E-05	(Total)	NC	1E-01	NC	1E-01			
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)					1E-01		
Total Child Risk Across All Media and All Exposure Routes							4.0E-05	Total Hazard Index Across All Media and All Exposure Routes							1E-01

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes = 6.8E-05  
Total Adult and Child Risk Across All Media and All Exposure Routes = 1.1E-04

Total Liver HI = 1E-01  
Total Kidney HI = 6E-04  
Total CNS HI = 1E-01  
Total Endocrine System HI = 1E-01

Table 9.7 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Adult Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit D	Chloroform	NA	NC	NA	0.0E+00	Chloroform	CNS/Liver/Kidney	NA	NC	NA	0E+00
			Tetrachloroethylene (PCE)	NA	5.5E-08	NA	5.5E-08	Tetrachloroethylene (PCE)	Kidney	NA	1E-04	NA	1E-04
			Trichloroethylene (TCE)	NA	5.0E-06	NA	5.0E-06	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	9E-03	NA	9E-03
			(Total)	NC	5.0E-06	NC	5.0E-06	(Total)	NC	9E-03	NC	9E-03	
Total Risk Across Air (Indoor Vapors)							5.0E-06	Total Hazard Index Across Air (Indoor Vapors)					9E-03
Total Adult Risk Across All Media and All Exposure Routes							5.0E-06	Total Hazard Index Across All Media and All Exposure Routes					9E-03

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 7.8E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes = 1.3E-05

Total Liver HI = 9E-03  
Total Kidney HI = 1E-04  
Total CNS HI = 9E-03  
Total Endocrine System HI = 9E-03

**Table 9.7 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Child Resident CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit D	Chloroform	NA	NC	NA	0.0E+00	Chloroform	CNS/Liver/Kidney	NA	NC	NA	0E+00		
			Tetrachloroethylene (PCE)	NA	8.6E-08	NA	8.6E-08	Tetrachloroethylene (PCE)	Kidney	NA	3E-04	NA	3E-04		
			Trichloroethylene (TCE)	NA	7.7E-06	NA	7.7E-06	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	2E-02	NA	2E-02		
			(Total)	NC	7.8E-06	NC	7.8E-06	(Total)	NC	2E-02	NC	2E-02			
Total Risk Across Air (Indoor Vapors)							7.8E-06	Total Hazard Index Across Air (Indoor Vapors)							2E-02
Total Child Risk Across All Media and All Exposure Routes							7.8E-06	Total Hazard Index Across All Media and All Exposure Routes							2E-02

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes = 5.0E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes = 1.3E-05

Total Liver HI = 2E-02  
Total Kidney HI = 3E-04  
Total CNS HI = 2E-02  
Total Endocrine System HI = 2E-02

Table 9.7 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Adult Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit D	Chloroform	NA	NC	NA	0.0E+00	Chloroform Tetrachloroethylene (PCE) Trichloroethylene (TCE) (Total)	CNS/Liver/Kidney Kidney CNS/Liver/Endocrine System (Total)	NA	NC	NA	0E+00		
			Tetrachloroethylene (PCE)	NA	3.0E-07	NA	3.0E-07			NA	2E-04	NA	2E-04		
			Trichloroethylene (TCE)	NA	1.2E-06	NA	1.2E-06			NA	4E-02	NA	4E-02		
			(Total)	NC	1.5E-06	NC	1.5E-06			NC	5E-02	NC	5E-02		
Total Risk Across Air (Indoor Vapors)							1.5E-06	Total Hazard Index Across Air (Indoor Vapors)							5E-02
Total Adult Risk Across All Media and All Exposure Routes							1.5E-06	Total Hazard Index Across All Media and All Exposure Routes							5E-02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 8.6E-07  
Total Adult and Child Risk Across All Media and All Exposure Routes = 2.3E-06

Total Liver HI = 4E-02  
Total Kidney HI = 2E-04  
Total CNS HI = 4E-02  
Total Endocrine System HI = 4E-02

**Table 9.7 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)**

**Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit D	Chloroform	NA	NC	NA	0.0E+00	Chloroform	CNS/Liver/Kidney	NA	NC	NA	0E+00
			Tetrachloroethylene (PCE)	NA	1.7E-07	NA	1.7E-07	Tetrachloroethylene (PCE)	Kidney	NA	6E-04	NA	6E-04
			Trichloroethylene (TCE)	NA	6.9E-07	NA	6.9E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	1E-01	NA	1E-01
			(Total)	NC	8.6E-07	NC	8.6E-07	(Total)		NC	1E-01	NC	1E-01
Total Risk Across Air (Indoor Vapors)							8.6E-07	Total Hazard Index Across Air (Indoor Vapors)					1E-01
Total Child Risk Across All Media and All Exposure Routes							8.6E-07	Total Hazard Index Across All Media and All Exposure Routes					1E-01

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes = 1.5E-06  
 Total Adult and Child Risk Across All Media and All Exposure Routes = 2.3E-06

Total Liver HI = 1E-01  
 Total Kidney HI = 6E-04  
 Total CNS HI = 1E-01  
 Total Endocrine System HI = 1E-01

Table 9.7 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Adult Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit D	Chloroform	NA	NC	NA	0.0E+00	Chloroform	CNS/Liver/Kidney	NA	NC	NA	0E+00
			Tetrachloroethylene (PCE)	NA	5.5E-08	NA	5.5E-08	Tetrachloroethylene (PCE)	Kidney	NA	1E-04	NA	1E-04
			Trichloroethylene (TCE)	NA	8.7E-08	NA	8.7E-08	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	9E-03	NA	9E-03
			(Total)	NC	1.4E-07	NC	1.4E-07	(Total)	NC	9E-03	NC	9E-03	
Total Risk Across Air (Indoor Vapors)							1.4E-07	Total Hazard Index Across Air (Indoor Vapors)					9E-03
Total Adult Risk Across All Media and All Exposure Routes							1.4E-07	Total Hazard Index Across All Media and All Exposure Routes					9E-03

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 2.2E-07  
Total Adult and Child Risk Across All Media and All Exposure Routes = 3.6E-07

Total Liver HI = 9E-03  
Total Kidney HI = 1E-04  
Total CNS HI = 9E-03  
Total Endocrine System HI = 9E-03

Table 9.7 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Child Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit D	Chloroform	NA	NC	NA	0.0E+00	Chloroform	CNS/Liver/Kidney	NA	NC	NA	0E+00
			Tetrachloroethylene (PCE)	NA	8.6E-08	NA	8.6E-08	Tetrachloroethylene (PCE)	Kidney	NA	3E-04	NA	3E-04
			Trichloroethylene (TCE)	NA	1.4E-07	NA	1.4E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	2E-02	NA	2E-02
			(Total)	NC	2.2E-07	NC	2.2E-07	(Total)	NC	2E-02	NC	2E-02	
Total Risk Across Air (Indoor Vapors)									Total Hazard Index Across Air (Indoor Vapors)				
							2.2E-07						
Total Child Risk Across All Media and All Exposure Routes							2.2E-07		Total Hazard Index Across All Media and All Exposure Routes				
									2E-02				

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes = 1.4E-07  
Total Adult and Child Risk Across All Media and All Exposure Routes = 3.6E-07

Total Liver HI = 2E-02  
Total Kidney HI = 3E-04  
Total CNS HI = 2E-02  
Total Endocrine System HI = 2E-02

Table 9.8 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Adult Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit F	Chloroform	NA	2.9E-07	NA	2.9E-07	Chloroform Tetrachloroethylene (PCE) Trichloroethylene (TCE) (Total)	CNS/Liver/Kidney Kidney CNS/Liver/Endocrine System (Total)	NA	8E-04	NA	8E-04
			Tetrachloroethylene (PCE)	NA	2.2E-05	NA	2.2E-05			NA	2E-02	NA	2E-02
			Trichloroethylene (TCE)	NA	2.9E-05	NA	2.9E-05			NA	2E-02	NA	2E-02
			(Total)	NC	5.1E-05	NC	5.1E-05			NC	4E-02	NC	4E-02
Total Risk Across Air (Indoor Vapors)							5.1E-05	Total Hazard Index Across Air (Indoor Vapors)					4E-02
Total Adult Risk Across All Media and All Exposure Routes							5.1E-05	Total Hazard Index Across All Media and All Exposure Routes					4E-02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 3.0E-05  
Total Adult and Child Risk Across All Media and All Exposure Routes = 8.0E-05

Total Liver HI = 2E-02  
Total Kidney HI = 2E-02  
Total CNS HI = 2E-02  
Total Endocrine System HI = 2E-02

Table 9.8 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Child Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit F	Chloroform	NA	1.7E-07	NA	1.7E-07	Chloroform	CNS/Liver/Kidney	NA	2E-03	NA	2E-03
			Tetrachloroethylene (PCE)	NA	1.3E-05	NA	1.3E-05	Tetrachloroethylene (PCE)	Kidney	NA	4E-02	NA	4E-02
			Trichloroethylene (TCE)	NA	1.7E-05	NA	1.7E-05	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	4E-02	NA	4E-02
			(Total)	NC	3.0E-05	NC	3.0E-05	(Total)	NC	9E-02	NC	9E-02	
Total Risk Across Air (Indoor Vapors)							3.0E-05	Total Hazard Index Across Air (Indoor Vapors)					9E-02
Total Child Risk Across All Media and All Exposure Routes							3.0E-05	Total Hazard Index Across All Media and All Exposure Routes					9E-02

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes = 5.1E-05  
Total Adult and Child Risk Across All Media and All Exposure Routes = 8.0E-05

Total Liver HI = 5E-02  
Total Kidney HI = 4E-02  
Total CNS HI = 5E-02  
Total Endocrine System HI = 4E-02

Table 9.8 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)

Adult Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit F	Chloroform	NA	7.2E-08	NA	7.2E-08	Chloroform	CNS/Liver/Kidney	NA	5E-04	NA	5E-04
			Tetrachloroethylene (PCE)	NA	1.7E-06	NA	1.7E-06	Tetrachloroethylene (PCE)	Kidney	NA	4E-03	NA	4E-03
			Trichloroethylene (TCE)	NA	3.0E-06	NA	3.0E-06	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	5E-03	NA	5E-03
			(Total)	NC	4.8E-06	NC	4.8E-06	(Total)	NC	1E-02	NC	1E-02	
Total Risk Across Air (Indoor Vapors)							4.8E-06	Total Hazard Index Across Air (Indoor Vapors)					1E-02
Total Adult Risk Across All Media and All Exposure Routes							4.8E-06	Total Hazard Index Across All Media and All Exposure Routes					1E-02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 7.5E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes = 1.2E-05

Total Liver HI = 6E-03  
Total Kidney HI = 4E-03  
Total CNS HI = 6E-03  
Total Endocrine System HI = 5E-03

**Table 9.8 Summary of Receptor Risks and Hazards for COPCs (NCEA Slope Factor for TCE)  
Child Resident CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit F	Chloroform	NA	1.1E-07	NA	1.1E-07	Chloroform	CNS/Liver/Kidney	NA	1E-03	NA	1E-03		
			Tetrachloroethylene (PCE)	NA	2.7E-06	NA	2.7E-06	Tetrachloroethylene (PCE)	Kidney	NA	9E-03	NA	9E-03		
			Trichloroethylene (TCE)	NA	4.7E-06	NA	4.7E-06	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	1E-02	NA	1E-02		
			(Total)	NC	7.5E-06	NC	7.5E-06	(Total)		NC	2E-02	NC	2E-02		
Total Risk Across Air (Indoor Vapors)							7.5E-06	Total Hazard Index Across Air (Indoor Vapors)							2E-02
Total Child Risk Across All Media and All Exposure Routes							7.5E-06	Total Hazard Index Across All Media and All Exposure Routes							2E-02

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes	4.8E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	1.2E-05

Total Liver HI =	1E-02
Total Kidney HI =	1E-02
Total CNS HI =	1E-02
Total Endocrine System HI =	1E-02

Table 9.8 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Adult Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit F	Chloroform	NA	2.9E-07	NA	2.9E-07	Chloroform	CNS/Liver/Kidney	NA	8E-04	NA	8E-04		
			Tetrachloroethylene (PCE)	NA	2.2E-05	NA	2.2E-05	Tetrachloroethylene (PCE)	Kidney	NA	2E-02	NA	2E-02		
			Trichloroethylene (TCE)	NA	5.0E-07	NA	5.0E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	2E-02	NA	2E-02		
			(Total)	NC	2.2E-05	NC	2.2E-05	(Total)	NC	4E-02	NC	4E-02			
Total Risk Across Air (Indoor Vapors)							2.2E-05	Total Hazard Index Across Air (Indoor Vapors)							4E-02
Total Adult Risk Across All Media and All Exposure Routes							2.2E-05	Total Hazard Index Across All Media and All Exposure Routes							4E-02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 1.3E-05  
Total Adult and Child Risk Across All Media and All Exposure Routes = 3.6E-05

Total Liver HI = 2E-02  
Total Kidney HI = 2E-02  
Total CNS HI = 2E-02  
Total Endocrine System HI = 2E-02

**Table 9.8 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)**

**Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit F	Chloroform	NA	1.7E-07	NA	1.7E-07	Chloroform	CNS/Liver/Kidney	NA	2E-03	NA	2E-03
			Tetrachloroethylene (PCE)	NA	1.3E-05	NA	1.3E-05	Tetrachloroethylene (PCE)	Kidney	NA	4E-02	NA	4E-02
			Trichloroethylene (TCE)	NA	2.9E-07	NA	2.9E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	4E-02	NA	4E-02
			(Total)	NC	1.3E-05	NC	1.3E-05	(Total)		NC	9E-02	NC	9E-02
Total Risk Across Air (Indoor Vapors)							1.3E-05	Total Hazard Index Across Air (Indoor Vapors)					9E-02
Total Child Risk Across All Media and All Exposure Routes							1.3E-05	Total Hazard Index Across All Media and All Exposure Routes					9E-02

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes = 2.2E-05  
Total Adult and Child Risk Across All Media and All Exposure Routes = 3.6E-05

Total Liver HI = 5E-02  
Total Kidney HI = 4E-02  
Total CNS HI = 5E-02  
Total Endocrine System HI = 4E-02

Table 9.8 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Adult Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit F	Chloroform	NA	7.2E-08	NA	7.2E-08	Chloroform	CNS/Liver/Kidney	NA	5E-04	NA	5E-04
			Tetrachloroethylene (PCE)	NA	1.7E-06	NA	1.7E-06	Tetrachloroethylene (PCE)	Kidney	NA	4E-03	NA	4E-03
			Trichloroethylene (TCE)	NA	5.2E-08	NA	5.2E-08	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	5E-03	NA	5E-03
			(Total)	NC	1.9E-06	NC	1.9E-06	(Total)	NC	1E-02	NC	1E-02	
Total Risk Across Air (Indoor Vapors)							1.9E-06	Total Hazard Index Across Air (Indoor Vapors)					1E-02
Total Adult Risk Across All Media and All Exposure Routes							1.9E-06	Total Hazard Index Across All Media and All Exposure Routes					1E-02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 2.9E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes = 4.8E-06

Total Liver HI = 6E-03  
Total Kidney HI = 4E-03  
Total CNS HI = 6E-03  
Total Endocrine System HI = 5E-03

Table 9.8 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Child Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit F	Chloroform	NA	1.1E-07	NA	1.1E-07	Chloroform	CNS/Liver/Kidney	NA	1E-03	NA	1E-03		
			Tetrachloroethylene (PCE)	NA	2.7E-06	NA	2.7E-06	Tetrachloroethylene (PCE)	Kidney	NA	9E-03	NA	9E-03		
			Trichloroethylene (TCE)	NA	8.2E-08	NA	8.2E-08	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	1E-02	NA	1E-02		
			(Total)	NC	2.9E-06	NC	2.9E-06	(Total)		NC	2E-02	NC	2E-02		
Total Risk Across Air (Indoor Vapors)									Total Hazard Index Across Air (Indoor Vapors)			2E-02			
Total Child Risk Across All Media and All Exposure Routes							2.9E-06	Total Hazard Index Across All Media and All Exposure Routes							2E-02

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes = 1.9E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes = 4.8E-06

Total Liver HI = 1E-02  
Total Kidney HI = 1E-02  
Total CNS HI = 1E-02  
Total Endocrine System HI = 1E-02

Table 9.9 Summary of Receptor Risks and Hazards for COPCs (NCEA Sope Factor for TCE)

Adult Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit E	Chloroform	NA	4.2E-06	NA	4.2E-06	Chloroform Tetrachloroethylene (PCE) Trichloroethylene (TCE) (Total)	CNS/Liver/Kidney Kidney CNS/Liver/Endocrine System (Total)	NA	1E-02	NA	1E-02		
			Tetrachloroethylene (PCE)	NA	9.5E-07	NA	9.5E-07			NA	8E-04	NA	8E-04		
			Trichloroethylene (TCE)	NA	1.7E-05	NA	1.7E-05			NA	1E-02	NA	1E-02		
			(Total)	NC	2.2E-05	NC	2.2E-05			NC	2E-02	NC	2E-02		
Total Risk Across Air (Indoor Vapors)							2.2E-05	Total Hazard Index Across Air (Indoor Vapors)							2E-02
Total Adult Risk Across All Media and All Exposure Routes							2.2E-05	Total Hazard Index Across All Media and All Exposure Routes							2E-02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 1.3E-05  
Total Adult and Child Risk Across All Media and All Exposure Routes = 3.5E-05

Total Liver HI = 2E-02  
Total Kidney HI = 1E-02  
Total CNS HI = 2E-02  
Total Endocrine System HI = 1E-02

**Table 9.9 Summary of Receptor Risks and Hazards for COPCs (NCEA Sope Factor for TCE)**

**Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit E	Chloroform	NA	2.4E-06	NA	2.4E-06	Chloroform	CNS/Liver/Kidney	NA	3E-02	NA	3E-02
			Tetrachloroethylene (PCE)	NA	5.5E-07	NA	5.5E-07	Tetrachloroethylene (PCE)	Kidney	NA	2E-03	NA	2E-03
			Trichloroethylene (TCE)	NA	9.9E-06	NA	9.9E-06	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	3E-02	NA	3E-02
			(Total)	NC	1.3E-05	NC	1.3E-05	(Total)	NC	6E-02	NC	6E-02	
Total Risk Across Air (Indoor Vapors)							1.3E-05	Total Hazard Index Across Air (Indoor Vapors)					6E-02
Total Child Risk Across All Media and All Exposure Routes							1.3E-05	Total Hazard Index Across All Media and All Exposure Routes					6E-02

Notes:

NA = not available

Total Adult Risk Across All Media and All Exposure Routes	2.2E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	3.5E-05

Total Liver HI =	5E-02
Total Kidney HI =	3E-02
Total CNS HI =	5E-02
Total Endocrine System HI =	3E-02

Table 9.9 Summary of Receptor Risks and Hazards for COPCs (NCEA Sope Factor for TCE)

Adult Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit E	Chloroform	NA	4.3E-07	NA	4.3E-07	Chloroform	CNS/Liver/Kidney	NA	3E-03	NA	3E-03
			Tetrachloroethylene (PCE)	NA	1.8E-07	NA	1.8E-07	Tetrachloroethylene (PCE)	Kidney	NA	4E-04	NA	4E-04
			Trichloroethylene (TCE)	NA	3.0E-06	NA	3.0E-06	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	5E-03	NA	5E-03
			(Total)	NC	3.6E-06	NC	3.6E-06	(Total)	NC	9E-03	NC	9E-03	
Total Risk Across Air (Indoor Vapors)							3.6E-06	Total Hazard Index Across Air (Indoor Vapors)					9E-03
Total Adult Risk Across All Media and All Exposure Routes							3.6E-06	Total Hazard Index Across All Media and All Exposure Routes					9E-03

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 5.6E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes = 9.1E-06

Total Liver HI = 8E-03  
Total Kidney HI = 4E-03  
Total CNS HI = 8E-03  
Total Endocrine System HI = 5E-03

**Table 9.9 Summary of Receptor Risks and Hazards for COPCs (NCEA Sope Factor for TCE)**  
**Child Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit E	Chloroform	NA	6.7E-07	NA	6.7E-07	Chloroform	CNS/Liver/Kidney	NA	7E-03	NA	7E-03		
			Tetrachloroethylene (PCE)	NA	2.7E-07	NA	2.7E-07	Tetrachloroethylene (PCE)	Kidney	NA	9E-04	NA	9E-04		
			Trichloroethylene (TCE)	NA	4.6E-06	NA	4.6E-06	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	1E-02	NA	1E-02		
			(Total)	NC	5.6E-06	NC	5.6E-06	(Total)		NC	2E-02	NC	2E-02		
Total Risk Across Air (Indoor Vapors)							5.6E-06	Total Hazard Index Across Air (Indoor Vapors)							2E-02
Total Child Risk Across All Media and All Exposure Routes							5.6E-06	Total Hazard Index Across All Media and All Exposure Routes							2E-02

Notes:  
 NA = not available

Total Adult Risk Across All Media and All Exposure Routes = 3.6E-06  
 Total Adult and Child Risk Across All Media and All Exposure Routes = 9.1E-06

Total Liver HI = 2E-02  
 Total Kidney HI = 8E-03  
 Total CNS HI = 2E-02  
 Total Endocrine System HI = 1E-02

Table 9.9 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Adult Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit E	Chloroform	NA	4.2E-06	NA	4.2E-06	Chloroform Tetrachloroethylene (PCE) Trichloroethylene (TCE) (Total)	CNS/Liver/Kidney Kidney CNS/Liver/Endocrine System (Total)	NA	1E-02	NA	1E-02		
			Tetrachloroethylene (PCE)	NA	9.5E-07	NA	9.5E-07			NA	8E-04	NA	8E-04		
			Trichloroethylene (TCE)	NA	3.0E-07	NA	3.0E-07			NA	1E-02	NA	1E-02		
			(Total)	NC	5.4E-06	NC	5.4E-06			NC	2E-02	NC	2E-02		
Total Risk Across Air (Indoor Vapors)							5.4E-06	Total Hazard Index Across Air (Indoor Vapors)							2E-02
Total Adult Risk Across All Media and All Exposure Routes							5.4E-06	Total Hazard Index Across All Media and All Exposure Routes							2E-02

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 3.2E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes = 8.6E-06

Total Liver HI = 2E-02  
Total Kidney HI = 1E-02  
Total CNS HI = 2E-02  
Total Endocrine System HI = 1E-02

**Table 9.9 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)**

**Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit E	Chloroform	NA	2.4E-06	NA	2.4E-06	Chloroform	CNS/Liver/Kidney	NA	3E-02	NA	3E-02
			Tetrachloroethylene (PCE)	NA	5.5E-07	NA	5.5E-07	Tetrachloroethylene (PCE)	Kidney	NA	2E-03	NA	2E-03
			Trichloroethylene (TCE)	NA	1.7E-07	NA	1.7E-07	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	3E-02	NA	3E-02
			(Total)	NC	3.2E-06	NC	3.2E-06	(Total)		NC	6E-02	NC	6E-02
Total Risk Across Air (Indoor Vapors)							3.2E-06	Total Hazard Index Across Air (Indoor Vapors)					6E-02
Total Child Risk Across All Media and All Exposure Routes							3.2E-06	Total Hazard Index Across All Media and All Exposure Routes					6E-02

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes	5.4E-06
Total Adult and Child Risk Across All Media and All Exposure Routes	8.6E-06

Total Liver HI =	5E-02
Total Kidney HI =	3E-02
Total CNS HI =	5E-02
Total Endocrine System HI =	3E-02

Table 9.9 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Adult Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit E	Chloroform	NA	4.3E-07	NA	4.3E-07	Chloroform Tetrachloroethylene (PCE) Trichloroethylene (TCE) (Total)	CNS/Liver/Kidney Kidney CNS/Liver/Endocrine System (Total)	NA	3E-03	NA	3E-03
			Tetrachloroethylene (PCE)	NA	1.8E-07	NA	1.8E-07			NA	4E-04	NA	4E-04
			Trichloroethylene (TCE)	NA	5.2E-08	NA	5.2E-08			NA	5E-03	NA	5E-03
			(Total)	NC	6.6E-07	NC	6.6E-07			NC	9E-03	NC	9E-03
Total Risk Across Air (Indoor Vapors)							6.6E-07	Total Hazard Index Across Air (Indoor Vapors)					9E-03
Total Adult Risk Across All Media and All Exposure Routes							6.6E-07	Total Hazard Index Across All Media and All Exposure Routes					9E-03

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes = 1.0E-06  
Total Adult and Child Risk Across All Media and All Exposure Routes = 1.7E-06

Total Liver HI = 8E-03  
Total Kidney HI = 4E-03  
Total CNS HI = 8E-03  
Total Endocrine System HI = 5E-03

Table 9.9 Summary of Receptor Risks and Hazards for COPCs (CalEPA Slope Factor for TCE)

Child Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Current  
Receptor Population: Resident  
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit E	Chloroform	NA	6.7E-07	NA	6.7E-07	Chloroform	CNS/Liver/Kidney	NA	7E-03	NA	7E-03		
			Tetrachloroethylene (PCE)	NA	2.7E-07	NA	2.7E-07	Tetrachloroethylene (PCE)	Kidney	NA	9E-04	NA	9E-04		
			Trichloroethylene (TCE)	NA	8.1E-08	NA	8.1E-08	Trichloroethylene (TCE)	CNS/Liver/Endocrine System	NA	1E-02	NA	1E-02		
			(Total)	NC	1.0E-06	NC	1.0E-06	(Total)		NC	2E-02	NC	2E-02		
Total Risk Across Air (Indoor Vapors)							1.0E-06	Total Hazard Index Across Air (Indoor Vapors)							2E-02
Total Child Risk Across All Media and All Exposure Routes							1.0E-06	Total Hazard Index Across All Media and All Exposure Routes							2E-02

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes = 6.6E-07  
Total Adult and Child Risk Across All Media and All Exposure Routes = 1.7E-06

Total Liver HI = 2E-02  
Total Kidney HI = 8E-03  
Total CNS HI = 2E-02  
Total Endocrine System HI = 1E-02

**Table 10.1 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Adult Residential RME at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Residential Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Surface Water	Surface Water	210 Tributary	None					None							
			(Total)					(Total)							
Sediment	Sediment	210 Tributary	None					None							
			(Total)					(Total)							
				Total Risk Across Surface Water					Total Hazard Index Across All Media and All Exposure Routes						
				Total Risk Across Sediment											
				Total Adult Risk Across All Media and All Exposure Routes											
				Total Child Risk Across All Media and All Exposure Routes											
				Total Adult and Child Risk Across All Media and All Exposure Routes											

**Table 10.1 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Child Residential RME at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Residential Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Water	Surface Water	210 Tributary	None					None						
			(Total)					(Total)						
Sediment	Sediment	210 Tributary	None					None						
			(Total)					(Total)						
				Total Risk Across Surface Water					Total Hazard Index Across All Media and All Exposure Routes					
				Total Risk Across Sediment										
				Total Child Risk Across All Media and All Exposure Routes										
				Total Adult Risk Across All Media and All Exposure Routes										
				Total Adult and Child Risk Across All Media and All Exposure Routes										

**Table 10.1 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Adult Residential CTE at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Residential Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Surface Water	Surface Water	210 Tributary	None					None							
			(Total)					(Total)							
Sediment	Sediment	210 Tributary	None					None							
			(Total)					(Total)							
				Total Risk Across Surface Water					Total Hazard Index Across All Media and All Exposure Routes						
				Total Risk Across Sediment											
				Total Adult Risk Across All Media and All Exposure Routes											
				Total Child Risk Across All Media and All Exposure Routes											
				Total Adult and Child Risk Across All Media and All Exposure Routes											

**Table 10.1 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Child Residential CTE at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Residential Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Water	Surface Water	210 Tributary	None					None						
			(Total)					(Total)						
Sediment	Sediment	210 Tributary	None					None						
			(Total)					(Total)						
				Total Risk Across Surface Water					Total Hazard Index Across All Media and All Exposure Routes					
				Total Risk Across Sediment										
				Total Child Risk Across All Media and All Exposure Routes										
				Total Adult Risk Across All Media and All Exposure Routes										
				Total Adult and Child Risk Across All Media and All Exposure Routes										

**Table 10.1 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Industrial Worker RME at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Industrial Worker Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Water	Surface Water	210 Tributary	None					None						
			(Total)					(Total)						
Sediment	Sediment	210 Tributary	None					None						
			(Total)					(Total)						
				Total Risk Across Surface Water					Total Hazard Index Across All Media and All Exposure Routes					
				Total Risk Across Sediment										
				Total Risk Across All Media and All Exposure Routes										

**Table 10.1 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Industrial Worker CTE at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Industrial Worker Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Water	Surface Water	210 Tributary	None					None						
			(Total)					(Total)						
Sediment	Sediment	210 Tributary	None					None						
			(Total)					(Total)						
				Total Risk Across Surface Water					Total Hazard Index Across All Media and All Exposure Routes					
				Total Risk Across Sediment										
				Total Risk Across All Media and All Exposure Routes										

**Table 10.1 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Construction Worker RME at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Surface Water	Surface Water	210 Tributary	None					None							
			(Total)					(Total)							
Sediment	Sediment	210 Tributary	None					None							
			(Total)					(Total)							
				Total Risk Across Surface Water					Total Hazard Index Across All Media and All Exposure Routes						
				Total Risk Across Sediment											
				Total Risk Across All Media and All Exposure Routes											

**Table 10.1 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Construction Worker CTE at 210 Tributary  
RIVERFRONT 0U4**

Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Surface Water	Surface Water	210 Tributary	None					None							
			(Total)					(Total)							
Sediment	Sediment	210 Tributary	None					None							
			(Total)					(Total)							
				Total Risk Across Surface Water					Total Hazard Index Across All Media and All Exposure Routes						
				Total Risk Across Sediment											
				Total Risk Across All Media and All Exposure Routes											

**Table 10.1 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Adult Residential RME at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Residential Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Water	Surface Water	210 Tributary	None					None						
			(Total)					(Total)						
Sediment	Sediment	210 Tributary	None					None						
			(Total)					(Total)						
				Total Risk Across Surface Water					Total Hazard Index Across All Media and All Exposure Routes					
				Total Risk Across Sediment										
				Total Adult Risk Across All Media and All Exposure Routes										
				Total Child Risk Across All Media and All Exposure Routes										
				Total Adult and Child Risk Across All Media and All Exposure Routes										

**Table 10.1 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Child Residential RME at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Residential Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Water	Surface Water	210 Tributary	None					None						
			(Total)					(Total)						
Sediment	Sediment	210 Tributary	None					None						
			(Total)					(Total)						
				Total Risk Across Surface Water					Total Hazard Index Across All Media and All Exposure Routes					
				Total Risk Across Sediment										
				Total Child Risk Across All Media and All Exposure Routes										
				Total Adult Risk Across All Media and All Exposure Routes										
				Total Adult and Child Risk Across All Media and All Exposure Routes										

**Table 10.1 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Adult Residential CTE at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Residential Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Surface Water	Surface Water	210 Tributary	None					None							
			(Total)					(Total)							
Sediment	Sediment	210 Tributary	None					None							
			(Total)					(Total)							
				Total Risk Across Surface Water					Total Hazard Index Across All Media and All Exposure Routes						
				Total Risk Across Sediment											
				Total Adult Risk Across All Media and All Exposure Routes											
				Total Child Risk Across All Media and All Exposure Routes											
				Total Adult and Child Risk Across All Media and All Exposure Routes											

**Table 10.1 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Child Residential CTE at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Residential Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Water	Surface Water	210 Tributary	None					None						
			(Total)					(Total)						
Sediment	Sediment	210 Tributary	None					None						
			(Total)					(Total)						
				Total Risk Across Surface Water					Total Hazard Index Across All Media and All Exposure Routes					
				Total Risk Across Sediment										
				Total Child Risk Across All Media and All Exposure Routes										
				Total Adult Risk Across All Media and All Exposure Routes										
				Total Adult and Child Risk Across All Media and All Exposure Routes										

**Table 10.1 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Industrial Worker RME at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Industrial Worker Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Water	Surface Water	210 Tributary	None					None						
			(Total)					(Total)						
Sediment	Sediment	210 Tributary	None					None						
			(Total)					(Total)						
				Total Risk Across Surface Water					Total Hazard Index Across All Media and All Exposure Routes					
				Total Risk Across Sediment										
				Total Risk Across All Media and All Exposure Routes										

**Table 10.1 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Industrial Worker CTE at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Industrial Worker Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Water	Surface Water	210 Tributary	None					None						
			(Total)					(Total)						
Sediment	Sediment	210 Tributary	None					None						
			(Total)					(Total)						
				Total Risk Across Surface Water					Total Hazard Index Across All Media and All Exposure Routes					
				Total Risk Across Sediment										
				Total Risk Across All Media and All Exposure Routes										

**Table 10.1 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Construction Worker RME at 210 Tributary  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Surface Water	Surface Water	210 Tributary	None					None							
			(Total)					(Total)							
Sediment	Sediment	210 Tributary	None					None							
			(Total)					(Total)							
				Total Risk Across Surface Water					Total Hazard Index Across All Media and All Exposure Routes						
				Total Risk Across Sediment											
				Total Risk Across All Media and All Exposure Routes											

**Table 10.1 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Construction Worker CTE at 210 Tributary  
RIVERFRONT 0U4**

Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Surface Water	Surface Water	210 Tributary	None					None							
			(Total)					(Total)							
Sediment	Sediment	210 Tributary	None					None							
			(Total)					(Total)							
				Total Risk Across Surface Water					Total Hazard Index Across All Media and All Exposure Routes						
				Total Risk Across Sediment											
				Total Risk Across All Media and All Exposure Routes											

**Table 10.2 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Adult Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Soil	Surface Soil	On Site	None					None						
			(Total)					(Total)						
Air	Indoor Vapors	On Site	None					None						
			(Total)					(Total)						

Total Risk Across Soil (Surface Only)

Total Risk Across Air (Indoor Vapors)

Total Adult Risk Across All Media and All Exposure Routes

Total Hazard Index Across Soil (Surface Only)

Total Hazard Index Across Air (Indoor Vapors)

Total Hazard Index Across All Media and All Exposure Routes

Total Child Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.2 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Surface Soil	Surface Soil	On Site	None					None							
			(Total)					(Total)							
Air	Indoor Vapors	On Site	None					None							
			(Total)					(Total)							
				Total Risk Across Soil (Surface Only)					Total Hazard Index Across Soil (Surface Only)						
				Total Risk Across Air (Indoor Vapors)					Total Hazard Index Across Air (Indoor Vapors)						
				Total Child Risk Across All Media and All Exposure Routes					Total Hazard Index Across All Media and All Exposure Routes						
				Total Adult Risk Across All Media and All Exposure Routes											
				Total Adult and Child Risk Across All Media and All Exposure Routes											

**Table 10.2 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE**  
**Adult Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Soil	Surface Soil	On Site	None					None						
			(Total)					(Total)						
Air	Indoor Vapors	On Site	None					None						
			(Total)					(Total)						

Total Risk Across Soil (Surface Only)	
Total Risk Across Air (Indoor Vapors)	
Total Adult Risk Across All Media and All Exposure Routes	

Total Hazard Index Across Soil (Surface Only)	
Total Hazard Index Across Air (Indoor Vapors)	
Total Hazard Index Across All Media and All Exposure Routes	

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

**Table 10.2 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE**  
**Child Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Soil	Surface Soil	On Site	None					None						
			(Total)					(Total)						
Air	Indoor Vapors	On Site	None					None						
			(Total)					(Total)						
Total Risk Across Soil (Surface Only)								Total Hazard Index Across Soil (Surface Only)						
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)						
Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes						

Total Adult Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.2 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Adult Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Soil	Surface Soil	On Site	None					None						
			(Total)					(Total)						
Air	Outdoor Vapors	On Site	Tetrachloroethylene (PCE) Trichloroethylene (TCE)	NA NA	1.5E-03 6.8E-05	NA NA	1.5E-03 6.8E-05	None						
			(Total)	NC	1.6E-03	NC	1.6E-03	(Total)						
			Total Risk Across Soil (Surface Only)											Total Hazard Index Across Soil (Surface Only)
			Total Risk Across Air (Outdoor Vapors)											Total Risk Across Air (Outdoor Vapors)
			Total Adult Risk Across All Media and All Exposure Routes											Total Hazard Index Across All Media and All Exposure Routes

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes	9.3E-04
Total Adult and Child Risk Across All Media and All Exposure Routes	2.5E-03

**Table 10.2 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	On Site	None					None					
			(Total)					(Total)					
Air	Outdoor Vapors	On Site	Tetrachloroethylene (PCE) Trichloroethylene (TCE)	NA NA	8.9E-04 4.0E-05	NA NA	8.9E-04 4.0E-05	Tetrachloroethylene (PCE)	Kidney	NA	3E+00	NA	3E+00
			(Total)	NC	9.3E-04	NC	9.3E-04	(Total)		NC	3E+00	NC	3E+00
				Total Risk Across Soil (Surface Only)					Total Hazard Index Across Soil (Surface Only)				
				0.0E+00					0E+00				
				Total Risk Across Air (Outdoor Vapors)					Total Risk Across Air (Outdoor Vapors)				
				9.3E-04					3E+00				
				Total Child Risk Across All Media and All Exposure Routes					Total Hazard Index Across All Media and All Exposure Routes				
				9.3E-04					3E+00				

Notes:

NA = not available  
pr = prorated

Total Adult Risk Across All Media and All Exposure Routes	1.6E-03
Total Adult and Child Risk Across All Media and All Exposure Routes	2.5E-03

**Table 10.2 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE**  
**Adult Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Soil	Surface Soil	On Site	None					None						
			(Total)	0.0E+00	NC	NC	0.0E+00	(Total)						
Air	Outdoor Vapors	On Site	Tetrachloroethylene (PCE)	NA	6.6E-05	NA	6.6E-05	None						
			(Total)	NC	6.6E-05	NC	6.6E-05	(Total)						
				Total Risk Across Soil (Surface Only)	0.0E+00				Total Hazard Index Across Soil (Surface Only)					
				Total Risk Across Air (Outdoor Vapors)	6.6E-05				Total Risk Across Air (Outdoor Vapors)					
				Total Adult Risk Across All Media and All Exposure Routes	6.6E-05				Total Hazard Index Across All Media and All Exposure Routes					

Notes:  
 NA = not available

Total Child Risk Across All Media and All Exposure Routes	1.0E-04
Total Adult and Child Risk Across All Media and All Exposure Routes	1.7E-04

**Table 10.2 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Child Resident CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	On Site	None					None					
			(Total)					(Total)					
Air	Outdoor Vapors	On Site	Tetrachloroethylene (PCE)	NA	1.0E-04	NA	1.0E-04	None					
			(Total)	NC	1.0E-04	NC	1.0E-04	(Total)					
Total Risk Across Soil (Surface Only)				0.0E+00				Total Hazard Index Across Soil (Surface Only)					
Total Risk Across Air (Outdoor Vapors)				1.0E-04				Total Risk Across Air (Outdoor Vapors)					
Total Child Risk Across All Media and All Exposure Routes				1.0E-04				Total Hazard Index Across All Media and All Exposure Routes					

Notes:  
NA = not available  
pr = prorated

Total Adult Risk Across All Media and All Exposure Routes	6.6E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	1.7E-04

**Table 10.2 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Adult Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Soil	Surface Soil	On Site	None					None						
			(Total)					(Total)						
Air	Indoor Vapors	On Site	None					None						
			(Total)					(Total)						
Total Risk Across Soil (Surface Only)								Total Hazard Index Across Soil (Surface Only)						
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)						
Total Adult Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes						

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

**Table 10.2 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Soil	Surface Soil	On Site	None					None						
			(Total)					(Total)						
Air	Indoor Vapors	On Site	None					None						
			(Total)					(Total)						
				Total Risk Across Soil (Surface Only)					Total Hazard Index Across Soil (Surface Only)					
				Total Risk Across Air (Indoor Vapors)					Total Hazard Index Across Air (Indoor Vapors)					
				Total Child Risk Across All Media and All Exposure Routes					Total Hazard Index Across All Media and All Exposure Routes					
				Total Adult Risk Across All Media and All Exposure Routes										
				Total Adult and Child Risk Across All Media and All Exposure Routes										

**Table 10.2 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE**  
**Adult Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Soil	Surface Soil	On Site	None					None						
			(Total)					(Total)						
Air	Indoor Vapors	On Site	None					None						
			(Total)					(Total)						
Total Risk Across Soil (Surface Only)								Total Hazard Index Across Soil (Surface Only)						
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)						
Total Adult Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes						
Total Child Risk Across All Media and All Exposure Routes														
Total Adult and Child Risk Across All Media and All Exposure Routes														

**Table 10.2 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Child Resident CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	On Site	None					None					
			(Total)					(Total)					
Air	Indoor Vapors	On Site	None					None					
			(Total)					(Total)					
Total Risk Across Soil (Surface Only)								Total Hazard Index Across Soil (Surface Only)					
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)					
Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes					

Total Adult Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

**Table 10.2 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Adult Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Soil	Surface Soil	On Site	None					None						
			(Total)					(Total)						
Air	Outdoor Vapors	On Site	Tetrachloroethylene (PCE)	NA	1.5E-03	NA	1.5E-03	None						
			(Total)	NC	1.5E-03	NC	1.5E-03	(Total)						
				Total Risk Across Soil (Surface Only)					Total Hazard Index Across Soil (Surface Only)					
				Total Risk Across Air (Outdoor Vapors)					Total Risk Across Air (Outdoor Vapors)					
				Total Adult Risk Across All Media and All Exposure Routes					Total Hazard Index Across All Media and All Exposure Routes					

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes	8.9E-04
Total Adult and Child Risk Across All Media and All Exposure Routes	2.4E-03

**Table 10.2 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Soil	Surface Soil	On Site	None					None						
			(Total)					(Total)						
Air	Outdoor Vapors	On Site	Tetrachloroethylene (PCE)	NA	8.9E-04	NA	8.9E-04	Tetrachloroethylene (PCE)	Kidney	NA	3E+00	NA	3E+00	
			(Total)	NC	8.9E-04	NC	8.9E-04	(Total)		NC	3E+00	NC	3E+00	
				Total Risk Across Soil (Surface Only)					Total Hazard Index Across Soil (Surface Only)					
				Total Risk Across Air (Outdoor Vapors)					Total Risk Across Air (Outdoor Vapors)					
				Total Child Risk Across All Media and All Exposure Routes					Total Hazard Index Across All Media and All Exposure Routes					

Notes:  
NA = not available  
pr = prorated

Total Adult Risk Across All Media and All Exposure Routes	1.5E-03
Total Adult and Child Risk Across All Media and All Exposure Routes	2.4E-03

**Table 10.2 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE**  
**Adult Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Soil	Surface Soil	On Site	None					None						
			(Total)	0.0E+00	NC	NC	0.0E+00	(Total)						
Air	Outdoor Vapors	On Site	Tetrachloroethylene (PCE)	NA	6.6E-05	NA	6.6E-05	None						
			(Total)	NC	6.6E-05	NC	6.6E-05	(Total)						
				Total Risk Across Soil (Surface Only)					Total Hazard Index Across Soil (Surface Only)					
				Total Risk Across Air (Outdoor Vapors)					Total Risk Across Air (Outdoor Vapors)					
				Total Adult Risk Across All Media and All Exposure Routes					Total Hazard Index Across All Media and All Exposure Routes					

Notes:  
 NA = not available

Total Child Risk Across All Media and All Exposure Routes	1.0E-04
Total Adult and Child Risk Across All Media and All Exposure Routes	1.7E-04

**Table 10.2 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Child Resident CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	On Site	None					None					
			(Total)					(Total)					
Air	Outdoor Vapors	On Site	Tetrachloroethylene (PCE)	NA	1.0E-04	NA	1.0E-04	None					
			(Total)	NC	1.0E-04	NC	1.0E-04	(Total)					
				Total Risk Across Soil (Surface Only)					Total Hazard Index Across Soil (Surface Only)				
				Total Risk Across Air (Outdoor Vapors)					Total Risk Across Air (Outdoor Vapors)				
				Total Child Risk Across All Media and All Exposure Routes					Total Hazard Index Across All Media and All Exposure Routes				

Notes:  
NA = not available  
pr = prorated

Total Adult Risk Across All Media and All Exposure Routes	6.6E-05
Total Adult and Child Risk Across All Media and All Exposure Routes	1.7E-04

Table 10.3 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE

Adult Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Future  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	6.5E-04	NA	NA	6.5E-04	None					
			(Total)	6.5E-04	NC	NC	6.5E-04	(Total)					
Groundwater	Groundwater/Vapor	On Site	Tetrachloroethene (PCE) Trichloroethene (TCE)	1.6E-01 6.8E-03	3.4E-02 3.3E-02	1.0E-01 1.2E-03	3.0E-01 4.1E-02	cis-1,2-Dichloroethene Tetrachloroethene (PCE) Trichloroethene (TCE)	Blood Liver/Body Weight/Kidney <sup>1</sup> Liver/Kidneys/Developmental/CNS/Endocrine <sup>2</sup>	5E+00 9E+01 2E+02	NC 3E+01 2E+01	4E+01 6E+01 3E+01	5E+00 2E+02 2E+02
			(Total)	1.7E-01	6.7E-02	1.0E-01	3.4E-01	(Total)		3E+02	5E+01	9E+01	4E+02
Air	Indoor Vapors	On Site	None					None					
			(Total)					(Total)					
Total Risk Across Soil (Total Soil)				6.5E-04				Total Hazard Index Across Soil (Total Soil)				0E+00	
Total Risk Across Groundwater				3.4E-01				Total Hazard Index Across Groundwater				4E+02	
Total Risk Across Air (Indoor Vapors)				0.0E+00				Total Hazard Index Across Air (Indoor Vapors)				0E+00	
Total Adult Risk Across All Media and All Exposure Routes				3.4E-01				Total Hazard Index Across All Media and All Exposure Routes				4E+02	

Notes:

NA = not available

Total Child Risk Across All Media and All Exposure Routes: 2.0E-01  
Total Adult and Child Risk Across All Media and All Exposure Routes: 5.4E-01

1 For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.

2 For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Future Receptor Population: Resident Receptor Age: Child
--

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	1.5E-03	NA	NA	1.5E-03	Tetrachloroethene (PCE)	Liver/Body Weight	3E+00	NA	NA	3E+00
			(Total)	1.5E-03	NC	NC	1.5E-03	(Total)		3E+00	NC	NC	3E+00
Groundwater	Groundwater	On Site	Tetrachloroethene (PCE)	9.7E-02	2.0E-02	6.1E-02	1.8E-01	cis-1,2-Dichloroethene	Blood	1E+01	NC	1E+00	1E+01
			Trichloroethene (TCE)	3.9E-03	2.0E-02	6.7E-04	2.4E-02	Tetrachloroethene (PCE)	Liver/Body Weight/Kidney <sup>1</sup>	2E+02	7E+01	1E+02	4E+02
			(Total)	1.0E-01	3.9E-02	6.1E-02	2.0E-01	Trichloroethene (TCE)	Liver/Kidneys/Developmental/CNS/Endocrine <sup>2</sup>	4E+02	5E+01	6E+01	5E+02
			(Total)					(Total)		6E+02	1E+02	2E+02	9E+02
Air	Indoor Vapors	On Site	None					None					
			(Total)					(Total)					
Total Risk Across Soil (Total Soil)				1.5E-03				Total Hazard Index Across Soil (Total Soil)					3E+00
Total Risk Across Groundwater				2.0E-01				Total Hazard Index Across Groundwater					9E+02
Total Risk Across Air (Indoor Vapors)				0.0E+00				Total Hazard Index Across Air (Indoor Vapors)					0E+00
Total Child Risk Across All Media and All Exposure Routes				2.0E-01				Total Hazard Index Across All Media and All Exposure Routes					9E+02

Notes:

NA = not available

pr = prorated

Total Adult Risk Across All Media and All Exposure Routes

3.4E-01

Total Adult and Child Risk Across All Media and All Exposure Routes

5.4E-01

1 For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.

2 For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

Table 10.3 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE

Adult Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Future  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	None					None					
			(Total)					(Total)					
Groundwater	Groundwater/ Vapor	On Site	Tetrachloroethene (PCE) Trichloroethene (TCE)	4.3E-03 3.0E-04	8.3E-04 1.5E-03	1.7E-03 3.5E-05	6.8E-03 1.9E-03	Tetrachloroethene (PCE) Trichloroethene (TCE)	Liver/Body Weight/Kidney <sup>1</sup> Liver/Kidneys/Developmental/CNS/Endocrine <sup>2</sup>	6E+00 2E+01	2E+00 3E+00	2E+00 2E+00	1E+01 2E+01
			(Total)	4.6E-03	2.3E-03	1.8E-03	8.7E-03	(Total)		3E+01	4E+00	5E+00	4E+01
Air	Indoor Vapors	On Site	None					None					
			(Total)					(Total)					
Total Risk Across Soil (Total Soil)				0.0E+00				Total Hazard Index Across Soil (Total Soil)				0E+00	
Total Risk Across Groundwater				8.7E-03				Total Hazard Index Across Groundwater				4E+01	
Total Risk Across Air (Indoor Vapors)				0.0E+00				Total Hazard Index Across Air (Indoor Vapors)				0E+00	
Total Adult Risk Across All Media and All Exposure Routes				8.7E-03				Total Hazard Index Across All Media and All Exposure Routes				4E+01	

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes: 1.3E-02  
Total Adult and Child Risk Across All Media and All Exposure Routes: 2.2E-02

1 For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.  
2 For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE**  
**Child Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Future Receptor Population: Resident Receptor Age: Child
--

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Total Soil	Total Soil	On Site	None  (Total)					None  (Total)							
Groundwater	Groundwater	On Site	Tetrachloroethene (PCE) Trichloroethene (TCE)  (Total)	6.6E-03 4.7E-04 7.1E-03	1.3E-03 2.4E-03 3.7E-03	2.4E-03 4.5E-05 2.4E-03	1.0E-02 2.9E-03 1.3E-02	Tetrachloroethene (PCE) Trichloroethene (TCE)  (Total)	Liver/Body Weight/Kidney <sup>1</sup> Liver/Kidneys/Developmental/CNS/Endocrine <sup>2</sup>	1E+01 5E+01 6E+01	4E+00 6E+00 1E+01	5E+00 4E+00 9E+00	2E+01 6E+01 8E+01		
Air	Indoor Vapors	On Site	None  (Total)					None  (Total)							
Total Risk Across Soil (Total Soil)				0.0E+00				Total Hazard Index Across Soil (Total Soil)				0E+00			
Total Risk Across Groundwater				1.3E-02				Total Hazard Index Across Groundwater				8E+01			
Total Risk Across Air (Indoor Vapors)				0.0E+00				Total Hazard Index Across Air (Indoor Vapors)				0E+00			
Total Child Risk Across All Media and All Exposure Routes				1.3E-02				Total Hazard Index Across All Media and All Exposure Routes				8E+01			

Notes:  
 NA = not available  
 pr = prorated

Total Adult Risk Across All Media and All Exposure Routes	8.7E-03
Total Adult and Child Risk Across All Media and All Exposure Routes	2.2E-02

1 For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.  
 2 For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Industrial Worker RME  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Industrial Worker Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	4.8E-04	NA	NA	4.8E-04	None					
			(Total)	4.8E-04	NC	NC	4.8E-04	(Total)					
Air	Indoor Vapors	On Site	None					None					
			(Total)	NC	0.0E+00	NC	0.0E+00	(Total)					
Total Risk Across Soil (Total Soil)							4.8E-04	Total Hazard Index Across Soil (Total Soil)					
Total Risk Across Air (Indoor Vapors)							0.0E+00	Total Hazard Index Across Air (Indoor Vapors)					
Total Adult Risk Across All Media and All Exposure Routes							4.8E-04	Total Hazard Index Across All Media and All Exposure Routes					

Notes:  
NA = not available

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Industrial Worker CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Total Soil	Total Soil	On Site	None					None						
			(Total)					(Total)						
Air	Indoor Vapors	On Site	None					None						
			(Total)					(Total)						
				Total Risk Across Soil (Total Soil)					Total Hazard Index Across Soil (Total Soil)					
				Total Risk Across Air (Indoor Vapors)					Total Hazard Index Across Air (Indoor Vapors)					
				Total Adult Risk Across All Media and All Exposure Routes					Total Hazard Index Across All Media and All Exposure Routes					

Notes:  
NA = not available

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Adult Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	6.5E-04	NA	NA	6.5E-04	None					
			(Total)	6.5E-04	NC	NC	6.5E-04	(Total)					
Groundwater	Groundwater/Vapor	On Site	Tetrachloroethene (PCE)	1.6E-01	3.4E-02	1.0E-01	3.0E-01	cis-1,2-Dichloroethene Tetrachloroethene (PCE) Trichloroethene (TCE)	Blood Liver/Body Weight/Kidney <sup>1</sup> Liver/Kidneys/Developmental/CNS/Endocrine <sup>2</sup>	5E+00	NC	4E-01	5E+00
			Trichloroethene (TCE)	6.8E-03	3.3E-02	1.2E-03	4.1E-02			9E+01	3E+01	6E+01	2E+02
			(Total)	1.7E-01	6.7E-02	1.0E-01	3.4E-01	(Total)		3E+02	5E+01	9E+01	4E+02
Air	Outdoor Vapors	On Site	Tetrachloroethylene (PCE)	NA	1.5E-03	NA	1.5E-03	Tetrachloroethylene (PCE)	Kidney	NA	1E+00	NA	1E+00
			(Total)	NC	1.5E-03	NC	1.5E-03	(Total)	NC	1E+00	NC	1E+00	
Total Risk Across Soil (Total Soil)				6.5E-04				Total Hazard Index Across Soil (Total Soil)				0E+00	
Total Risk Across Groundwater				3.4E-01				Total Hazard Index Across Groundwater				4E+02	
Total Risk Across Air (Outdoor Vapors)				1.5E-03				Total Hazard Index Across Air (Outdoor Vapors)				1E+00	
Total Adult Risk Across All Media and All Exposure Routes				3.4E-01				Total Hazard Index Across All Media and All Exposure Routes				4E+02	

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes	2.0E-01
Total Adult and Child Risk Across All Media and All Exposure Routes	5.5E-01

1 For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.  
2 For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Future Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	1.5E-03	NA	NA	1.5E-03	Tetrachloroethene (PCE)	Liver/Body Weight	3E+00	NA	NA	3E+00	
			(Total)	1.5E-03	NC	NC	1.5E-03	(Total)		3E+00	NC	NC	3E+00	
Groundwater	Groundwater	On Site	Tetrachloroethene (PCE) Trichloroethene (TCE)	9.7E-02 3.9E-03	2.0E-02 2.0E-02	6.1E-02 6.7E-04	1.8E-01 2.4E-02	cis-1,2-Dichloroethene Tetrachloroethene (PCE) Trichloroethene (TCE)	Blood Liver/Body Weight/Kidney <sup>1</sup> Liver/Kidneys/Developmental/CNS/Endocrine <sup>2</sup>	1E+01 2E+02 4E+02	NC 7E+01 5E+01	1E+00 1E+02 6E+01	1E+01 4E+02 5E+02	
			(Total)	1.0E-01	3.9E-02	6.1E-02	2.0E-01	(Total)		6E+02	1E+02	2E+02	9E+02	
Air	Outdoor Vapors	On Site	Tetrachloroethylene (PCE)	NA	8.9E-04	NA	8.9E-04	Tetrachloroethylene (PCE)	Kidney	NA	3E+00	NA	3E+00	
			(Total)	NC	8.9E-04	NC	8.9E-04	(Total)		NC	3E+00	NC	3E+00	
Total Risk Across Soil (Total Soil)				1.5E-03				Total Hazard Index Across Soil (Total Soil)						3E+00
Total Risk Across Groundwater				2.0E-01				Total Hazard Index Across Groundwater						9E+02
Total Risk Across Air (Outdoor Vapors)				8.9E-04				Total Hazard Index Across Air (Outdoor Vapors)						3E+00
Total Child Risk Across All Media and All Exposure Routes				2.0E-01				Total Hazard Index Across All Media and All Exposure Routes						9E+02

Notes:

NA = not available

Total Adult Risk Across All Media and All Exposure Routes	3.4E-01
Total Adult and Child Risk Across All Media and All Exposure Routes	5.5E-01

1 For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.

2 For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

Table 10.3 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE

Adult Resident CTE  
RIVERFRONT OU4

Scenario Timeframe: Future  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Total Soil	Total Soil	On Site	None					None							
			(Total)					(Total)		0E+00	NC	NC	0E+00		
Groundwater	Groundwater/Vapor	On Site	Tetrachloroethene (PCE)	4.3E-03	8.3E-04	1.7E-03	6.8E-03	Tetrachloroethene (PCE)	Liver/Body Weight/Kidney <sup>1</sup>	6E+00	2E+00	2E+00	1E+01		
			Trichloroethene (TCE)	3.0E-04	1.5E-03	3.5E-05	1.9E-03	Trichloroethene (TCE)	Liver/Kidneys/Developmental/CNS/Endocrine <sup>2</sup>	2E+01	3E+00	2E+00	2E+01		
			(Total)	4.6E-03	2.3E-03	1.8E-03	8.7E-03	(Total)		3E+01	4E+00	5E+00	4E+01		
Air	Outdoor Vapors	On Site	None					None							
			(Total)	NC	0.0E+00	NC	0.0E+00	(Total)		NC	0E+00	NC	0E+00		
Total Risk Across Soil (Total Soil)				0.0E+00				Total Hazard Index Across Soil (Total Soil)				0E+00			
Total Risk Across Groundwater				8.7E-03				Total Hazard Index Across Groundwater				4E+01			
Total Risk Across Air (Outdoor Vapors)				0.0E+00				Total Hazard Index Across Air (Outdoor Vapors)				0E+00			
Total Adult Risk Across All Media and All Exposure Routes				8.7E-03				Total Hazard Index Across All Media and All Exposure Routes				4E+01			

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes: 1.3E-02  
Total Adult and Child Risk Across All Media and All Exposure Routes: 2.2E-02

1 For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.  
2 For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Child Resident CTE  
RIVERFRONT OU4**

Scenario Timeframe: Future Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	None  (Total)					None  (Total)					
Groundwater	Groundwater	On Site	Tetrachloroethene (PCE) Trichloroethene (TCE)  (Total)	6.6E-03 4.7E-04 7.1E-03	1.3E-03 2.4E-03 3.7E-03	2.4E-03 4.5E-05 2.4E-03	1.0E-02 2.9E-03 1.3E-02	Tetrachloroethene (PCE) Trichloroethene (TCE)  (Total)	Liver/Body Weight/Kidney <sup>1</sup> Liver/Kidneys/Developmental/CNS/Endocrine <sup>2</sup>	1E+01 5E+01 6E+01	4E+00 6E+00 1E+01	5E+00 4E+00 9E+00	2E+01 6E+01 8E+01
Air	Outdoor Vapors	On Site	Tetrachloroethylene (PCE)  (Total)	NA NC	1.0E-04 1.0E-04	NA NC	1.0E-04 1.0E-04	None  (Total)					
Total Risk Across Soil (Total Soil)				0.0E+00				Total Hazard Index Across Soil (Total Soil)				0E+00	
Total Risk Across Groundwater				1.3E-02				Total Hazard Index Across Groundwater				8E+01	
Total Risk Across Air (Outdoor Vapors)				1.0E-04				Total Hazard Index Across Air (Outdoor Vapors)				0E+00	
Total Child Risk Across All Media and All Exposure Routes				1.3E-02				Total Hazard Index Across All Media and All Exposure Routes				8E+01	

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes	8.7E-03
Total Adult and Child Risk Across All Media and All Exposure Routes	2.2E-02

1 For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.  
2 For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Industrial Worker RME  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Industrial Worker Receptor Age: Adult
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	4.8E-04	NA	NA	4.8E-04	None					
			(Total)	4.8E-04	NC	NC	4.8E-04	(Total)					
Air	Outdoor Vapors	On Site	Tetrachloroethylene (PCE)	NA	1.1E-03	NA	1.1E-03	None					
			(Total)	NC	1.1E-03	NC	1.1E-03	(Total)					
Total Risk Across Soil (Total Soil)							4.8E-04	Total Hazard Index Across Soil (Total Soil)					
Total Risk Across Air (Outdoor Vapors)							1.1E-03	Total Hazard Index Across Air (Outdoor Vapors)					
Total Adult Risk Across All Media and All Exposure Routes							1.6E-03	Total Hazard Index Across All Media and All Exposure Routes					

Notes:  
NA = not available

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Industrial Worker CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Total Soil	Total Soil	On Site	None					None						
			(Total)					(Total)						
Air	Outdoor Vapors	On Site	None					None						
			(Total)					(Total)						
				Total Risk Across Soil (Total Soil)					Total Hazard Index Across Soil (Total Soil)					
				Total Risk Across Air (Outdoor Vapors)					Total Hazard Index Across Air (Outdoor Vapors)					
				Total Adult Risk Across All Media and All Exposure Routes					Total Hazard Index Across All Media and All Exposure Routes					

Notes:  
NA = not available

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Construction Worker RME  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Construction Worker Receptor Age: Adult
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Total Soil	Total Soil	On Site	None					None							
			(Total)					(Total)							
Sewer Water	Sewer Water	On Site	None					None							
			(Total)					(Total)							
Air	Sewer Vapors	On Site	None					Tetrachloroethene	Kidney	NA	9E-01	NA	9E-01		
			(Total)					(Total)		NC	9E-01	NC	9E-01		
Air	Outdoor Vapors	On Site	Tetrachloroethylene (PCE)	NA	1.6E-04	NA	1.6E-04	Tetrachloroethylene (PCE)	Kidney	NA	1E+01	NA	1E+01		
			(Total)	NC	1.6E-04	NC	1.6E-04	(Total)		NC	1E+01	NC	1E+01		
				Total Risk Across Soil (Total Soil)								Total Hazard Index Across Soil (Total Soil)			
				0.0E+00								0E+00			
				Total Risk Across Sewer Water								Total Hazard Index Across Sewer Water			
				0.0E+00								0E+00			
				Total Risk Across Air (Sewer Vapors)								Total Hazard Index Across Soil Gas (Sewer Vapors)			
				0.0E+00								9E-01			
				Total Risk Across Air (Outdoor Vapors)								Total Hazard Index Across Air (Outdoor Vapors)			
				1.6E-04								1E+01			
				Total Adult Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes			
				1.6E-04								1E+01			

Notes:  
NA = not available

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Construction Worker CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Construction Worker Receptor Age: Adult
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Total Soil	Total Soil	On Site	None					None							
			(Total)					(Total)							
Sewer Water	Sewer Water	On Site	None					None							
			(Total)					(Total)							
Air	Sewer Vapors	On Site	None					None							
			(Total)					(Total)							
Air	Outdoor Vapors	On Site	None					Tetrachloroethylene (PCE)	Kidney	NA	2E+00	NA	2E+00		
			(Total)					(Total)		NC	2E+00	NC	2E+00		
				Total Risk Across Soil (Total Soil)								Total Hazard Index Across Soil (Total Soil)			
												0E+00			
				Total Risk Across Sewer Water								Total Hazard Index Across Sewer Water			
												0E+00			
				Total Risk Across Air (Sewer Vapors)								Total Hazard Index Across Soil Gas (Sewer Vapors)			
												0E+00			
				Total Risk Across Air (Outdoor Vapors)								Total Hazard Index Across Air (Outdoor Vapors)			
												2E+00			
				Total Adult Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes			
												2E+00			

Notes:  
NA = not available

Table 10.3 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE

Adult Resident RME  
RIVERFRONT OU4

Scenario Timeframe: Future  
Receptor Population: Resident  
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	6.5E-04	NA	NA	6.5E-04	None					
			(Total)	6.5E-04	NC	NC	6.5E-04	(Total)					
Groundwater	Groundwater/Vapor	On Site	Tetrachloroethene (PCE)	1.6E-01	3.4E-02	1.0E-01	3.0E-01	cis-1,2-Dichloroethene	Blood	5E+00	NC	4E+01	5E+00
			Trichloroethene (TCE)	2.2E-04	5.9E-04	3.8E-05	8.5E-04	Tetrachloroethene (PCE)	Liver/Body Weight/Kidney <sup>1</sup>	9E+01	3E+01	6E+01	2E+02
			(Total)	1.6E-01	3.4E-02	1.0E-01	3.0E-01	Trichloroethene (TCE)	Liver/Kidneys/Developmental/CNS/Endocrine <sup>2</sup>	2E+02	2E+01	3E+01	2E+02
			(Total)	1.6E-01	3.4E-02	1.0E-01	3.0E-01	(Total)	(Total)	3E+02	5E+01	9E+01	4E+02
Air	Indoor Vapors	On Site	None					None					
			(Total)					(Total)					
Total Risk Across Soil (Total Soil)				6.5E-04				Total Hazard Index Across Soil (Total Soil)				0E+00	
Total Risk Across Groundwater				3.0E-01				Total Hazard Index Across Groundwater				4E+02	
Total Risk Across Air (Indoor Vapors)				0.0E+00				Total Hazard Index Across Air (Indoor Vapors)				0E+00	
Total Adult Risk Across All Media and All Exposure Routes				3.0E-01				Total Hazard Index Across All Media and All Exposure Routes				4E+02	

Notes:

NA = not available

Total Child Risk Across All Media and All Exposure Routes: 1.8E-01  
Total Adult and Child Risk Across All Media and All Exposure Routes: 4.8E-01

1 For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.

2 For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Future Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	1.5E-03	NA	NA	1.5E-03	Tetrachloroethene (PCE)	Liver/Body Weight	3E+00	NA	NA	3E+00
			(Total)	1.5E-03	NC	NC	1.5E-03	(Total)		3E+00	NC	NC	3E+00
Groundwater	Groundwater	On Site	Tetrachloroethene (PCE)	9.7E-02	2.0E-02	6.1E-02	1.8E-01	cis-1,2-Dichloroethene Tetrachloroethene (PCE) Trichloroethene (TCE)	Blood Liver/Body Weight/Kidney <sup>1</sup> Liver/Kidneys/Developmental/CNS/Endocrine <sup>2</sup>	1E+01	NC	1E+00	1E+01
			Trichloroethene (TCE)	1.3E-04	3.5E-04	2.2E-05	5.0E-04			2E+02	7E+01	1E+02	4E+02
			(Total)	9.7E-02	2.0E-02	6.1E-02	1.8E-01			4E+02	5E+01	6E+01	5E+02
Air	Indoor Vapors	On Site	None					(Total)		6E+02	1E+02	2E+02	9E+02
			(Total)					(Total)					
Total Risk Across Soil (Total Soil)				1.5E-03				Total Hazard Index Across Soil (Total Soil)				3E+00	
Total Risk Across Groundwater				1.8E-01				Total Hazard Index Across Groundwater				9E+02	
Total Risk Across Air (Indoor Vapors)				0.0E+00				Total Hazard Index Across Air (Indoor Vapors)				0E+00	
Total Child Risk Across All Media and All Exposure Routes				1.8E-01				Total Hazard Index Across All Media and All Exposure Routes				9E+02	

Notes:

NA = not available

pr = prorated

Total Adult Risk Across All Media and All Exposure Routes	3.0E-01
Total Adult and Child Risk Across All Media and All Exposure Routes	4.8E-01

1 For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.

2 For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE**

**Adult Resident CTE  
RIVERFRONT OU4**

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	None					None					
			(Total)					(Total)					
Groundwater	Groundwater/Vapor	On Site	Tetrachloroethene (PCE)	4.3E-03	8.3E-04	1.7E-03	6.8E-03	Tetrachloroethene (PCE)	Liver/Body Weight/Kidney <sup>1</sup>	6E+00	2E+00	2E+00	1E+01
			(Total)	4.3E-03	8.3E-04	1.7E-03	6.8E-03	Trichloroethene (TCE)	Liver/Kidneys/Developmental/CNS/Endocrine <sup>2</sup>	2E+01	3E+00	2E+00	2E+01
								(Total)		3E+01	4E+00	5E+00	4E+01
Air	Indoor Vapors	On Site	None					None					
			(Total)					(Total)					
Total Risk Across Soil (Total Soil)				0.0E+00				Total Hazard Index Across Soil (Total Soil)				0E+00	
Total Risk Across Groundwater				6.8E-03				Total Hazard Index Across Groundwater				4E+01	
Total Risk Across Air (Indoor Vapors)				0.0E+00				Total Hazard Index Across Air (Indoor Vapors)				0E+00	
Total Adult Risk Across All Media and All Exposure Routes				6.8E-03				Total Hazard Index Across All Media and All Exposure Routes				4E+01	

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes	1.0E-02
Total Adult and Child Risk Across All Media and All Exposure Routes	1.7E-02

1 For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.  
2 For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE**  
**Child Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Future Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Total Soil	Total Soil	On Site	None					None							
			(Total)					(Total)							
Groundwater	Groundwater	On Site	Tetrachloroethene (PCE)	6.6E-03	1.3E-03	2.4E-03	1.0E-02	Tetrachloroethene (PCE) Trichloroethene (TCE)	Liver/Body Weight/Kidney <sup>1</sup> Liver/Kidneys/Developmental/CNS/Endocrine <sup>2</sup>	1E+01 5E+01	4E+00 6E+00	5E+00 4E+00	2E+01 6E+01		
			(Total)	6.6E-03	1.3E-03	2.4E-03	1.0E-02	(Total)		6E+01	1E+01	9E+00	8E+01		
Air	Indoor Vapors	On Site	None					None							
			(Total)					(Total)							
Total Risk Across Soil (Total Soil)				0.0E+00				Total Hazard Index Across Soil (Total Soil)				0E+00			
Total Risk Across Groundwater				1.0E-02				Total Hazard Index Across Groundwater				8E+01			
Total Risk Across Air (Indoor Vapors)				0.0E+00				Total Hazard Index Across Air (Indoor Vapors)				0E+00			
Total Child Risk Across All Media and All Exposure Routes				1.0E-02				Total Hazard Index Across All Media and All Exposure Routes				8E+01			

Notes:  
 NA = not available  
 pr = prorated

Total Adult Risk Across All Media and All Exposure Routes	6.8E-03
Total Adult and Child Risk Across All Media and All Exposure Routes	1.7E-02

1 For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.  
 2 For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Industrial Worker RME  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Industrial Worker Receptor Age: Adult
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	4.8E-04	NA	NA	4.8E-04	None					
			(Total)	4.8E-04	NC	NC	4.8E-04	(Total)					
Air	Indoor Vapors	On Site	None					None					
			(Total)	NC	0.0E+00	NC	0.0E+00	(Total)					
Total Risk Across Soil (Total Soil)							4.8E-04	Total Hazard Index Across Soil (Total Soil)					
Total Risk Across Air (Indoor Vapors)							0.0E+00	Total Hazard Index Across Air (Indoor Vapors)					
Total Adult Risk Across All Media and All Exposure Routes							4.8E-04	Total Hazard Index Across All Media and All Exposure Routes					

Notes:  
NA = not available

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Industrial Worker CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Total Soil	Total Soil	On Site	None					None						
			(Total)					(Total)						
Air	Indoor Vapors	On Site	None					None						
			(Total)					(Total)						
				Total Risk Across Soil (Total Soil)					Total Hazard Index Across Soil (Total Soil)					
				Total Risk Across Air (Indoor Vapors)					Total Hazard Index Across Air (Indoor Vapors)					
				Total Adult Risk Across All Media and All Exposure Routes					Total Hazard Index Across All Media and All Exposure Routes					

Notes:  
NA = not available

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Adult Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	6.5E-04	NA	NA	6.5E-04	None					
			(Total)	6.5E-04	NC	NC	6.5E-04	(Total)					
Groundwater	Groundwater/Vapor	On Site	Tetrachloroethene (PCE)	1.6E-01	3.4E-02	1.0E-01	3.0E-01	cis-1,2-Dichloroethene Tetrachloroethene (PCE) Trichloroethene (TCE)	Blood Liver/Body Weight/Kidney <sup>1</sup> Liver/Kidneys/Developmental/CNS/Endocrine <sup>2</sup>	5E+00	NC	4E-01	5E+00
			Trichloroethene (TCE)	6.8E-03	3.3E-02	1.2E-03	4.1E-02			9E+01	3E+01	6E+01	2E+02
			(Total)	1.7E-01	6.7E-02	1.0E-01	3.4E-01	(Total)		3E+02	5E+01	9E+01	4E+02
Air	Outdoor Vapors	On Site	Tetrachloroethylene (PCE)	NA	1.5E-03	NA	1.5E-03	Tetrachloroethylene (PCE)	Kidney	NA	1E+00	NA	1E+00
			(Total)	NC	1.5E-03	NC	1.5E-03	(Total)	NC	1E+00	NC	1E+00	
Total Risk Across Soil (Total Soil)				6.5E-04				Total Hazard Index Across Soil (Total Soil)				0E+00	
Total Risk Across Groundwater				3.4E-01				Total Hazard Index Across Groundwater				4E+02	
Total Risk Across Air (Outdoor Vapors)				1.5E-03				Total Hazard Index Across Air (Outdoor Vapors)				1E+00	
Total Adult Risk Across All Media and All Exposure Routes				3.4E-01				Total Hazard Index Across All Media and All Exposure Routes				4E+02	

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes	1.8E-01
Total Adult and Child Risk Across All Media and All Exposure Routes	5.2E-01

1 For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.  
2 For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Future Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	1.5E-03	NA	NA	1.5E-03	Tetrachloroethene (PCE)	Liver/Body Weight	3E+00	NA	NA	3E+00
			(Total)	1.5E-03	NC	NC	1.5E-03	(Total)		3E+00	NC	NC	3E+00
Groundwater	Groundwater	On Site	Tetrachloroethene (PCE)	9.7E-02	2.0E-02	6.1E-02	1.8E-01	cis-1,2-Dichloroethene	Blood	1E+01	NC	1E+00	1E+01
			Trichloroethene (TCE)	1.3E-04	3.5E-04	2.2E-05	5.0E-04	Tetrachloroethene (PCE)	Liver/Body Weight/Kidney <sup>1</sup>	2E+02	7E+01	1E+02	4E+02
			(Total)	9.7E-02	2.0E-02	6.1E-02	1.8E-01	Trichloroethene (TCE)	Liver/Kidneys/Developmental/CNS/Endocrine <sup>2</sup>	4E+02	5E+01	6E+01	5E+02
			(Total)	9.7E-02	2.0E-02	6.1E-02	1.8E-01	(Total)		6E+02	1E+02	2E+02	9E+02
Air	Outdoor Vapors	On Site	Tetrachloroethylene (PCE)	NA	8.9E-04	NA	8.9E-04	Tetrachloroethylene (PCE)	Kidney	NA	3E+00	NA	3E+00
			(Total)	NC	8.9E-04	NC	8.9E-04	(Total)		NC	3E+00	NC	3E+00
Total Risk Across Soil (Total Soil)				1.5E-03				Total Hazard Index Across Soil (Total Soil)				3E+00	
Total Risk Across Groundwater				1.8E-01				Total Hazard Index Across Groundwater				9E+02	
Total Risk Across Air (Outdoor Vapors)				8.9E-04				Total Hazard Index Across Air (Outdoor Vapors)				3E+00	
Total Child Risk Across All Media and All Exposure Routes				1.8E-01				Total Hazard Index Across All Media and All Exposure Routes				9E+02	

Notes:

NA = not available

Total Adult Risk Across All Media and All Exposure Routes	3.4E-01
Total Adult and Child Risk Across All Media and All Exposure Routes	5.2E-01

<sup>1</sup> For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.

<sup>2</sup> For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE**

**Adult Resident CTE  
RIVERFRONT OU4**

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Total Soil	Total Soil	On Site	None					None							
			(Total)					(Total)							
Groundwater	Groundwater/ Vapor	On Site	Tetrachloroethene (PCE)	4.3E-03	8.3E-04	1.7E-03	6.8E-03	Tetrachloroethene (PCE)	Liver/Body Weight/Kidney <sup>1</sup>	6E+00	2E+00	2E+00	1E+01		
			(Total)	4.3E-03	8.3E-04	1.7E-03	6.8E-03	Trichloroethene (TCE)	Liver/Kidneys/Developmental/CNS/Endocrine <sup>2</sup>	2E+01	3E+00	2E+00	2E+01		
								(Total)		3E+01	4E+00	5E+00	4E+01		
Air	Outdoor Vapors	On Site	None					None							
			(Total)	NC	0.0E+00	NC	0.0E+00	(Total)		NC	0E+00	NC	0E+00		
Total Risk Across Soil (Total Soil)				0.0E+00				Total Hazard Index Across Soil (Total Soil)				0E+00			
Total Risk Across Groundwater				6.8E-03				Total Hazard Index Across Groundwater				4E+01			
Total Risk Across Air (Outdoor Vapors)				0.0E+00				Total Hazard Index Across Air (Outdoor Vapors)				0E+00			
Total Adult Risk Across All Media and All Exposure Routes				6.8E-03				Total Hazard Index Across All Media and All Exposure Routes				4E+01			

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes	1.0E-02
Total Adult and Child Risk Across All Media and All Exposure Routes	1.7E-02

1 For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.  
2 For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Child Resident CTE  
RIVERFRONT OU4**

Scenario Timeframe: Future Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	None  (Total)					None  (Total)					
Groundwater	Groundwater	On Site	Tetrachloroethene (PCE)  (Total)	6.6E-03	1.3E-03	2.4E-03	1.0E-02	Tetrachloroethene (PCE) Trichloroethene (TCE)  (Total)	Liver/Body Weight/Kidney <sup>1</sup> Liver/Kidneys/Developmental/CNS/Endocrine <sup>2</sup>	1E+01 5E+01	4E+00 6E+00	5E+00 4E+00	2E+01 6E+01
Air	Outdoor Vapors	On Site	Tetrachloroethylene (PCE)  (Total)	NA NC	1.0E-04 1.0E-04	NA NC	1.0E-04 1.0E-04	None  (Total)					
Total Risk Across Soil (Total Soil)				0.0E+00				Total Hazard Index Across Soil (Total Soil)				0E+00	
Total Risk Across Groundwater				1.0E-02				Total Hazard Index Across Groundwater				8E+01	
Total Risk Across Air (Outdoor Vapors)				1.0E-04				Total Hazard Index Across Air (Outdoor Vapors)				0E+00	
Total Child Risk Across All Media and All Exposure Routes				1.0E-02				Total Hazard Index Across All Media and All Exposure Routes				8E+01	

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes	6.8E-03
Total Adult and Child Risk Across All Media and All Exposure Routes	1.7E-02

1 For Tetrachloroethene (PCE), effects on the Liver and Body Weight are for oral and dermal routes; effects on the Kidney are only for the inhalation route.  
2 For Trichloroethene (TCE), effects on the Kidney and Development are for oral and dermal routes; effects on the CNS and Endocrine System are only for the inhalation route; effects on the Liver are for all exposure routes.

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Industrial Worker RME  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Industrial Worker Receptor Age: Adult
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Total Soil	Total Soil	On Site	Tetrachloroethene (PCE)	4.8E-04	NA	NA	4.8E-04	None					
			(Total)	4.8E-04	NC	NC	4.8E-04	(Total)					
Air	Outdoor Vapors	On Site	Tetrachloroethylene (PCE)	NA	1.1E-03	NA	1.1E-03	None					
			(Total)	NC	1.1E-03	NC	1.1E-03	(Total)					
Total Risk Across Soil (Total Soil)							4.8E-04	Total Hazard Index Across Soil (Total Soil)					
Total Risk Across Air (Outdoor Vapors)							1.1E-03	Total Hazard Index Across Air (Outdoor Vapors)					
Total Adult Risk Across All Media and All Exposure Routes							1.6E-03	Total Hazard Index Across All Media and All Exposure Routes					

Notes:  
NA = not available

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Industrial Worker CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Total Soil	Total Soil	On Site	None					None						
			(Total)					(Total)						
Air	Outdoor Vapors	On Site	None					None						
			(Total)					(Total)						
				Total Risk Across Soil (Total Soil)					Total Hazard Index Across Soil (Total Soil)					
				Total Risk Across Air (Outdoor Vapors)					Total Hazard Index Across Air (Outdoor Vapors)					
				Total Adult Risk Across All Media and All Exposure Routes					Total Hazard Index Across All Media and All Exposure Routes					

Notes:  
NA = not available

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Construction Worker RME  
RIVERFRONT OU4**

Scenario Timeframe: Current/Future Receptor Population: Construction Worker Receptor Age: Adult
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Total Soil	Total Soil	On Site	None					None							
			(Total)					(Total)							
Sewer Water	Sewer Water	On Site	None					None							
			(Total)					(Total)							
Air	Sewer Vapors	On Site	None					Tetrachloroethene	Kidney	NA	9E-01	NA	9E-01		
			(Total)					(Total)		NC	9E-01	NC	9E-01		
Air	Outdoor Vapors	On Site	Tetrachloroethylene (PCE)	NA	1.6E-04	NA	1.6E-04	Tetrachloroethylene (PCE)	Kidney	NA	1E+01	NA	1E+01		
			(Total)	NC	1.6E-04	NC	1.6E-04	(Total)		NC	1E+01	NC	1E+01		
				Total Risk Across Soil (Total Soil)								Total Hazard Index Across Soil (Total Soil)			
				0.0E+00								0E+00			
				Total Risk Across Sewer Water								Total Hazard Index Across Sewer Water			
				0.0E+00								0E+00			
				Total Risk Across Air (Sewer Vapors)								Total Hazard Index Across Soil Gas (Sewer Vapors)			
				0.0E+00								9E-01			
				Total Risk Across Air (Outdoor Vapors)								Total Hazard Index Across Air (Outdoor Vapors)			
				1.6E-04								1E+01			
				Total Adult Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes			
				1.6E-04								1E+01			

Notes:  
NA = not available

**Table 10.3 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE**  
**Construction Worker CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Total Soil	Total Soil	On Site	None					None							
			(Total)					(Total)							
Sewer Water	Sewer Water	On Site	None					None							
			(Total)					(Total)							
Air	Sewer Vapors	On Site	None					None							
			(Total)					(Total)							
Air	Outdoor Vapors	On Site	None					Tetrachloroethylene (PCE)	Kidney	NA	2E+00	NA	2E+00		
			(Total)					(Total)		NC	2E+00	NC	2E+00		
				Total Risk Across Soil (Total Soil)								Total Hazard Index Across Soil (Total Soil)			
												0E+00			
				Total Risk Across Sewer Water								Total Hazard Index Across Sewer Water			
												0E+00			
				Total Risk Across Air (Sewer Vapors)								Total Hazard Index Across Soil Gas (Sewer Vapors)			
												0E+00			
				Total Risk Across Air (Outdoor Vapors)								Total Hazard Index Across Air (Outdoor Vapors)			
												2E+00			
				Total Adult Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes			
												2E+00			

Notes:  
NA = not available

**Table 10.4 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Adult Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit B	None					None						
			(Total)					(Total)						

Total Risk Across Air (Indoor Vapors)

Total Adult Risk Across All Media and All Exposure Routes

Total Hazard Index Across Air (Indoor Vapors)

Total Hazard Index Across All Media and All Exposure Routes

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.4 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient							
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total			
Air	Indoor Vapors	Exposure Unit B	None					None								
(Total)								(Total)								
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)								
Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes								

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.4 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE**  
**Adult Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit B	None					None						
(Total)								(Total)						
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)						
Total Adult Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes						

Notes:  
 NA = not available

Total Child Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.4 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE**  
**Child Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit B	None					None							
			(Total)					(Total)							
				Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)			
				Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes			

Notes:  
 NA = not available

Total Adult Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

**Table 10.4 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Adult Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit B	None					None						
(Total)								(Total)						

Total Risk Across Air (Indoor Vapors)

Total Adult Risk Across All Media and All Exposure Routes

Total Hazard Index Across Air (Indoor Vapors)

Total Hazard Index Across All Media and All Exposure Routes

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.4 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit B	None					None						
(Total)								(Total)						
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)						
Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes						

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.4 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE**

**Adult Resident CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit B	None					None						
(Total)								(Total)						
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)						
Total Adult Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes						

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

**Table 10.4 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE**  
**Child Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit B	None					None					
(Total)								(Total)					
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)					
Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes					

Notes:  
 NA = not available

Total Adult Risk Across All Media and All Exposure Routes:   
 Total Adult and Child Risk Across All Media and All Exposure Routes:

**Table 10.5 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Adult Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit A	None					None						
			(Total)					(Total)						

Total Risk Across Air (Indoor Vapors)

Total Adult Risk Across All Media and All Exposure Routes

Total Hazard Index Across Air (Indoor Vapors)

Total Hazard Index Across All Media and All Exposure Routes

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.5 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit A	None					None						
(Total)								(Total)						
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)						
Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes						

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.5 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE**  
**Adult Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit A	None					None						
			(Total)					(Total)						
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)						
Total Adult Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes						

Notes:  
 NA = not available

Total Child Risk Across All Media and All Exposure Routes   
 Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.5 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE**  
**Child Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit A	None					None							
			(Total)					(Total)							
				Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)			
				Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes			

Notes:  
 NA = not available

Total Adult Risk Across All Media and All Exposure Routes   
 Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.5 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Adult Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit A	None					None						
(Total)								(Total)						
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)						
Total Adult Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes						

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.5 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit A	None					None						
(Total)								(Total)						
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)						
Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes						

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.5 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE**  
**Adult Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit A	None					None						
			(Total)					(Total)						
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)						
Total Adult Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes						

Notes:  
 NA = not available

Total Child Risk Across All Media and All Exposure Routes   
 Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.5 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE**  
**Child Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit A	None					None							
			(Total)					(Total)							
				Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)			
				Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes			

Notes:  
 NA = not available

Total Adult Risk Across All Media and All Exposure Routes   
 Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.6 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Adult Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit C	None					None						
			(Total)					(Total)						

Total Risk Across Air (Indoor Vapors)

Total Adult Risk Across All Media and All Exposure Routes

Total Hazard Index Across Air (Indoor Vapors)

Total Hazard Index Across All Media and All Exposure Routes

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.6 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient							
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total			
Air	Indoor Vapors	Exposure Unit C	None					None								
(Total)								(Total)								
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)								
Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes								

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.6 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE**  
**Adult Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit C	None					None						
(Total)								(Total)						
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)						
Total Adult Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes						

Notes:  
 NA = not available

Total Child Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.6 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE**  
**Child Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit C	None					None							
			(Total)					(Total)							
				Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)			
				Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes			

Notes:  
 NA = not available

Total Adult Risk Across All Media and All Exposure Routes   
 Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.6 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Adult Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit C	None					None						
			(Total)					(Total)						

Total Risk Across Air (Indoor Vapors)

Total Adult Risk Across All Media and All Exposure Routes

Total Hazard Index Across Air (Indoor Vapors)

Total Hazard Index Across All Media and All Exposure Routes

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.6 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient							
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total			
Air	Indoor Vapors	Exposure Unit C	None					None								
(Total)								(Total)								
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)								
Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes								

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.6 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE**

**Adult Resident CTE  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit C	None					None						
(Total)								(Total)						
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)						
Total Adult Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes						

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

**Table 10.6 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE**  
**Child Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit C	None					None					
(Total)								(Total)					
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)					
Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes					

Notes:  
 NA = not available

Total Adult Risk Across All Media and All Exposure Routes   
 Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.7 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Adult Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit D	None					None						
(Total)								(Total)						

Total Risk Across Air (Indoor Vapors)

Total Adult Risk Across All Media and All Exposure Routes

Total Hazard Index Across Air (Indoor Vapors)

Total Hazard Index Across All Media and All Exposure Routes

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.7 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient							
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total			
Air	Indoor Vapors	Exposure Unit D	None					None								
(Total)								(Total)								
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)								
Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes								

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.7 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE**  
**Adult Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit D	None					None						
			(Total)					(Total)						
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)						
Total Adult Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes						

Notes:  
 NA = not available

Total Child Risk Across All Media and All Exposure Routes   
 Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.7 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE**  
**Child Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit D	None					None					
			(Total)					(Total)					

Notes:  
 NA = not available

Total Risk Across Air (Indoor Vapors)	
Total Child Risk Across All Media and All Exposure Routes	
Total Adult Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

Total Hazard Index Across Air (Indoor Vapors)	
Total Hazard Index Across All Media and All Exposure Routes	

**Table 10.7 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Adult Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit D	None					None						
			(Total)					(Total)						

Total Risk Across Air (Indoor Vapors)

Total Adult Risk Across All Media and All Exposure Routes

Total Hazard Index Across Air (Indoor Vapors)

Total Hazard Index Across All Media and All Exposure Routes

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.7 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient							
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total			
Air	Indoor Vapors	Exposure Unit D	None					None								
(Total)								(Total)								
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)								
Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes								

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.7 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE**  
**Adult Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit D	None					None						
			(Total)					(Total)						
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)						
Total Adult Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes						

Notes:  
 NA = not available

Total Child Risk Across All Media and All Exposure Routes   
 Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.7 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE**  
**Child Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit D	None					None							
			(Total)					(Total)							
				Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)			
				Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes			

Notes:  
 NA = not available

Total Adult Risk Across All Media and All Exposure Routes   
 Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.8 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Adult Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit F	None					None						
(Total)								(Total)						

Total Risk Across Air (Indoor Vapors)

Total Adult Risk Across All Media and All Exposure Routes

Total Hazard Index Across Air (Indoor Vapors)

Total Hazard Index Across All Media and All Exposure Routes

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.8 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit F	None					None						
(Total)								(Total)						
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)						
Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes						

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.8 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE**  
**Adult Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit F	None					None						
			(Total)					(Total)						
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)						
Total Adult Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes						

Notes:  
 NA = not available

Total Child Risk Across All Media and All Exposure Routes   
 Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.8 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE**  
**Child Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
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Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit F	None					None							
			(Total)					(Total)							
				Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)			
				Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes			

Notes:  
 NA = not available

Total Adult Risk Across All Media and All Exposure Routes   
 Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.8 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Adult Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit F	None					None						
			(Total)					(Total)						

Total Risk Across Air (Indoor Vapors)

Total Adult Risk Across All Media and All Exposure Routes

Total Hazard Index Across Air (Indoor Vapors)

Total Hazard Index Across All Media and All Exposure Routes

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.8 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit F	None					None						
			(Total)					(Total)						
				Total Risk Across Air (Indoor Vapors)					Total Hazard Index Across Air (Indoor Vapors)					
				Total Child Risk Across All Media and All Exposure Routes					Total Hazard Index Across All Media and All Exposure Routes					

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.8 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE**  
**Adult Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit F	None					None						
			(Total)					(Total)						
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)						
Total Adult Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes						

Notes:  
 NA = not available

Total Child Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.8 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE**  
**Child Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit F	None					None							
			(Total)					(Total)							
				Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)			
				Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes			

Notes:  
 NA = not available

Total Adult Risk Across All Media and All Exposure Routes   
 Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.9 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Adult Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit E	None					None						
			(Total)					(Total)						

Total Risk Across Air (Indoor Vapors)

Total Adult Risk Across All Media and All Exposure Routes

Total Hazard Index Across Air (Indoor Vapors)

Total Hazard Index Across All Media and All Exposure Routes

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.9 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE  
Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit E	None					None						
			(Total)					(Total)						
				Total Risk Across Air (Indoor Vapors)					Total Hazard Index Across Air (Indoor Vapors)					
				Total Child Risk Across All Media and All Exposure Routes					Total Hazard Index Across All Media and All Exposure Routes					

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes   
Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.9 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE**  
**Adult Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit E	None					None						
			(Total)					(Total)						
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)						
Total Adult Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes						

Notes:  
 NA = not available

Total Child Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.9 Risk Assessment Summary (Chemicals of Concern) - NCEA Slope Factor for TCE**  
**Child Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit E	None					None							
			(Total)					(Total)							
				Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)			
				Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes			

Notes:  
 NA = not available

Total Adult Risk Across All Media and All Exposure Routes	
Total Adult and Child Risk Across All Media and All Exposure Routes	

**Table 10.9 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Adult Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current
Receptor Population: Resident
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit E	None					None						
			(Total)					(Total)						

Total Risk Across Air (Indoor Vapors)

Total Adult Risk Across All Media and All Exposure Routes

Total Hazard Index Across Air (Indoor Vapors)

Total Hazard Index Across All Media and All Exposure Routes

Notes:  
NA = not available

Total Child Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.9 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE  
Child Resident RME  
RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Air	Indoor Vapors	Exposure Unit E	None					None					
(Total)								(Total)					
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)					
Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes					

Notes:  
NA = not available

Total Adult Risk Across All Media and All Exposure Routes

Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.9 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE**  
**Adult Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Adult
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Air	Indoor Vapors	Exposure Unit E	None					None						
			(Total)					(Total)						
Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)						
Total Adult Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes						

Notes:  
 NA = not available

Total Child Risk Across All Media and All Exposure Routes   
 Total Adult and Child Risk Across All Media and All Exposure Routes

**Table 10.9 Risk Assessment Summary (Chemicals of Concern) - CalEPA Slope Factor for TCE**  
**Child Resident CTE**  
**RIVERFRONT OU4**

Scenario Timeframe: Current Receptor Population: Resident Receptor Age: Child
---

Medium	Exposure Medium	Exposure Point	Chemical	Carcinogenic Risk				Chemical	Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	Exposure Routes Total		Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Air	Indoor Vapors	Exposure Unit E	None					None							
			(Total)					(Total)							
				Total Risk Across Air (Indoor Vapors)								Total Hazard Index Across Air (Indoor Vapors)			
				Total Child Risk Across All Media and All Exposure Routes								Total Hazard Index Across All Media and All Exposure Routes			

Notes:  
 NA = not available

Total Adult Risk Across All Media and All Exposure Routes   
 Total Adult and Child Risk Across All Media and All Exposure Routes