

Figure U-37  
Soil Invertebrate Risk Summary  
Based on Spatial Exposure Point Concentrations

Study Area	Terrestrial Invertebrates												
	SWP	SW	ADB	BTA	CDA	FPP	LQT	MSA	ROS	RCRA	RWA	WCS	BKG
<b>CPEC</b>													
<b>Inorganics</b>													
Barium	6	6	<1	<1	2	3	<1	2	6	19		4	<1
Cadmium	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1
Chromium	300	310	70	97	79	134	84	290	213	393		1328	118
Cobalt	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1
Copper	2	2	<1	<1	<1	<1	<1	<1	<1	<1		5	<1
Total Cyanide	11	11	<1	<1	<1	<1	11	<1	<1	<1		<1	
Lead	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1
Manganese	<1	<1	2	<1	<1	<1	<1	<1	<1	<1		<1	<1
Mercury	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1
Molybdenum	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1
Nickel	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1
Selenium	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	<1
Vanadium	20	21	23	23	17	19	17	17	22	21		21	51
Zinc	2	2	<1	<1	<1	<1	<1	2	<1	2		2	<1
<b>Herbicides</b>													
MCPA													
MCPP													
<b>Polychlorinated Biphenyls (PCBs)</b>													
Aroclor 1260	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	
Sum of PCB Congeners	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	
<b>Pesticides</b>													
4,4'-DDE	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	
4,4'-DDT	<1	<1	<1	<1	<1	<1	19	<1	<1	<1		<1	
Total DDT	<1	<1	<1	<1	<1	<1	19	<1	<1	<1		<1	
<b>Semi-Volatile Organic Compounds (SVOCs)</b>													
Bis(2-ethylhexyl)phthalate	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	
<b>Volatile Organic Compounds (VOCs)</b>													
Tetrachloroethylene	<1	<1	<1	2	11	5	<1	<1	<1	<1		<1	
Trichloroethylene	120	130	<1	2400	21	<1	<1	<1	53	<1		<1	

**Notes:**

Not evaluated
HQ ≤ 1
HQ > 1
HQ > 10
HQ > 100

CPEC = Constituent of Potential Ecological Concern  
 HQ = Hazard Quotient  
 LMW PAH = Low Molecular Weight Polycyclic Aromatic Hydrocarbons  
 HMW PAH = High Molecular Weight Polycyclic Aromatic Hydrocarbons  
 NOAEL = No Observed Adverse Effect Level  
 LOAEL = Lowest Observed Effect Level  
 TRV = Toxicity Reference Value  
 NOAEL and LOAEL TRVs are not available for ecological communities.  
 HQs presented for these receptors are based on a single TV  
 (with the exception of sediment invertebrates). Low and high  
 TVs are available in the literature for sediment invertebrates and  
 were used for risk estimation.

**Study Areas:**

SW = Sitewide  
 SWP = Sitewide Including Ponds (Ponds 18 and A-5)  
 ADB = Administration Building Area  
 BTA = Burial Trench Area  
 CDA = Central Drainage Area  
 FPP = Former Ponds and Pads  
 LQT = Liquid Treatment Area  
 MSA = Maintenance Shed Area  
 ROS = Remaining On-site Areas  
 RCRA = RCRA Canyon  
 RWA = Roadway Areas  
 WCS = West Canyon Spray Area  
 ASP = A-Series Pond  
 P13 = Pond 13  
 P18 = Pond 18  
 PA5 = Pond A-5  
 RCF = RCF Pond  
 STW = Stormwater Ponds (Pond 13, A-Series Pond, and RCF Pond)  
 NDR = North Drainage  
 ADR = A Drainage  
 BDR = B Drainage  
 UCD = Upper C Drainage  
 LCD = Lower C Drainage  
 BKG = Background