

**Arizona Department of Environmental Quality UST Program
Release Reporting & Corrective Action Guidance**

Table 6.1.2.a. Tier 1 Clean-up Standards

COMPOUNDS OF CONCERN	SOIL ¹				GROUNDWATER ²		Soil/Water
	RESIDENTIAL	NON RESIDENTIAL	SOIL LEACHING	ADEQ Recommended Risk Based Level	DRINKING WATER	MCL or Risk Based Level	Lab Reporting Limit
	(SRL)	(SRL)	(ADEQ model)	residential	(AWQS)		(ppb)
Volatile Organic Compounds							
Benzene	0.62	1.4	0.71		5.0		50 / 1
N-Butyl benzene	3,100	82,000				240	250 /
sec-Butyl benzene	3,100	82,000				240	250 /
tert-Butylbenzene	3,100	82,000				240	250 /
1,2-Dichloroethane	2.5	5.5	0.21		5.0		50 /
Ethyl benzene	1,500	2,700	120		700		500 /
Ethylene dibromide	0.049	0.2	0.0033		0.05		100 /
Methyl cyclohexane						6300	250 / 20
Methyl ethyl ketone (MEK)	7,100	27,000			NE	1900	500 /
Methyl isobutyl ketone (MIBK)	770	2,800			NE	140	500 / 20
Methyl tertiary butyl ether (MTBE)	320	3,300			NE	20	250 /

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Toluene	790	2,700	400		1,000		100 / 1
1,2,4-Trimethyl benzene	NE	NE		3900		12	100 /
1,3,5-Trimethyl benzene	NE	NE		3900		12	100 /
Xylenes, total	2,800	2,800	2,200		10,000		150 / 2
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	3,900	41,000			NE	370	400
Acenaphthylene	NE	NE			NE		400
Anthracene	20,000	200,000			NE	1800	40
Benz(a)anthracene	6.1	26			NE	0.1	40
Benzo(a)pyrene	0.61	2.6			0.2	0.01	10
Benzo(b)fluoranthene	6.1	26			NE	0.1	40
Benzo(k)fluoranthene	61	260			NE	0.9	40

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Chrysene	610	2,600			NE	92	40
Dibenzo(a,h)anthracene	0.61	2.6			NE	0.01	40
Fluoranthene	2,600	27,000			NE	1500	40
Fluorene	2,600	27,000			NE	240	40
Indeno(1,2,3-c,d)pyrene	6.1	26			NE	0.1	20
Methyl Naphthalene			1600			120	100
Naphthalene	2,600	27,000			NE	6.5	250
Phenanthrene	NE	NE			NE		80
Pyrene	2,000	20,000			NE	180	40
Petroleum Hydrocarbons							
HC 10 - 32	4,100	18,000			NE		100

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	(SRL)	(SRL)	(ADEQ model)	residential	(AWQS)		(ppb)
Inorganic Compounds							
Arsenic	10	10					
Cadmium	70				18		
Chromium, total	230						
Chromium (III)	120,000					55000	
Chromium (VI)	230					110	
Lead	400	1200					
Mercury	23						
Other Organic Compounds							
Carbon disulfide	720	720			1300		
2-Methyl phenol (o-cresol)	1300	34,000					

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Carbazole	24	96				33	

Notes:

- 1 Soil concentrations are in milligrams per kilogram. Soil Remediation Levels (SRLs) are enforceable Tier 1 cleanup standards. ADEQ minimum GPLs are recommended Tier 1 cleanup standards for soil leachability.
- 2 Groundwater concentrations are in micrograms per liter.

Abbreviations: NA = Not applicable NE = Not established

Remarks:

Method Reporting Limits (MRL) were provided for soil only. Water matrix will be reported at a later time. The MRL shown is the greater concentration of those reported by the following laboratories: Columbia Analytical Services, Turner Laboratories, Del Mar Analytical, and Precision Analytical Laboratories. In subsequent drafts, MRL will be reached by a consensus determination process through the Arizona Laboratories Association.

This table is provided in draft until the recommended Tier 1 levels (those not published by rule) are verified for consistency with updated toxicological data. Recommended Tier 1 levels are calculated using the same methodology as used for the determination of enforceable Tier 1 levels (those promulgated by rule).