

**TABLE 4-1**  
**SITE-SPECIFIC SOIL PRGs AND BENCHMARK VALUES FOR COMPARISON**  
**FIREWORKS SITE**  
[Reported from the Phase II CSA Report]

Chemicals of Potential Concern	Soil Preliminary Remediation Goals (PRGs)			MCP Method 1 Standard <sup>3</sup>				MassDEP Published Background Concentration <sup>4</sup>	
	Human Health		Environmental						
	Recreational Land Use PRG <sup>1,2</sup>	Commercial/Industrial Land Use PRG (Construction Worker and Utility Worker) <sup>1,2</sup>							
	0-3' BGS (mg/Kg)	0-6' BGS (mg/Kg)	Surface Soil (mg/Kg)	S-2/GW-2 (mg/Kg)	S-2/GW-3 (mg/Kg)	S-3/GW-2 (mg/Kg)	S-3/GW-3 (mg/Kg)	Natural Soil (mg/Kg)	Fill Material (mg/Kg)
1,1-Dichloroethene	0.011 [No Value]	0.005 [No Value]	--	40	1,000	40	3,000	--	--
Benzene	--	0.18 [6,000]	--	200	200	700	900	--	--
Di-n-octylphthalate	--	--	0.5 LOAEL	--	--	--	--	--	--
Hexachlorobenzene	--	--	0.1 LOAEL	5	5	30	30	--	--
Trichloroethene	4.3 [650]	1.6 [5,000]	--	2	700	2	2,000	--	--
Vinyl Chloride	0.30 [3.6]	0.11 [30]	--	0.7	4	0.7	30	--	--
Antimony	--	--	2.2 LOAEL	30	30	30	30	1	7
Arsenic	20 [9]	20 [350]	5.2 LOAEL	20	20	20	20	20	20
Barium	--	--	717 LOAEL	3,000	3,000	5,000	5,000	50	50
Cadmium	--	15.8 [No Value]	--	30	30	30	30	2	3
Chromium (total)	30 [No Value]	30 [No Value]	0.4 NOEC	200	200	200	200	30	40
Copper	--	--	88 LOAEL	--	--	--	--	40	200
Lead	586 [590]	800	189 LOAEL	300	300	300	300	100	600
Mercury	--	10.5 [11.5]	0.1 NOEC	30	30	30	30	0.3	1
Selenium	--	--	5 LOAEL	800	800	800	800	0.5	1
Thallium	--	--	0.2 LOAEL	60	60	80	80	0.6	5
Zinc	--	--	130 LOAEL	3,000	3,000	5,000	5,000	100	300

**NOTES AND ABBREVIATIONS:**

-- = No Value

LOAEL = Lowest Observable Adverse Effect Level

BGS = Below Ground Surface

NOEC = No Observable Effects Concentration

<sup>1</sup> Site-specific soil PRG is the maximum of the most stringent RBC, background, PQL, and policy criteria.

<sup>2</sup> Bracketed "[ ]" value indicates PRG excluding the inhalation pathway

<sup>3</sup> MassDEP, 2006. Massachusetts Contingency Plan, 310 CMR 40.0000. Effective April 3, 2006.

<sup>4</sup> MassDEP, 2002. Background Levels of Polycyclic Aromatic Hydrocarbons and Metals in Soil. Technical Update. May.