

Table 5-1A
Occurrence, Distribution and Selection of COPCs
115kV Switchyard

Medium	CAS No.	Chemical	Min. Conc.	Max. Conc.	Units	Location of Maximum	Detection Frequency	Average Conc.	Screening Conc.	Risk Based Conc. ¹	Selected as COPC	Rationale	
Soils													
Metals	7429-90-5	ALUMINUM	9600	23900	mg/kg	MY05TP08(6.5-6.8)	3/3	16733	23900	7600	Y	ASL	
	7440-36-0	ANTIMONY	0.04	0.07	mg/kg	MY05TP08(6.5-6.8)	2/3	0.04	0.07	3.1	N	BSL	
	7440-38-2	ARSENIC	8.4	11.1	mg/kg	MY05TP06(6.5-6.8)	3/3	9	11.1	0.39	Y	ASL	
	7440-39-3	BARIIUM	47.1	86.5	mg/kg	MY05TP08(6.5-6.8)	3/3	68	86.5	540	N	BSL	
	7440-41-7	BERYLLIUM	0.4	0.7	mg/kg	MY05TP08(6.5-6.8)	3/3	0.547	0.7	150	N	BSL	
	7440-42-8	BORON	1.2	3.4	mg/kg	MY05TP08(6.5-6.8)	2/3	1.595	3.4	1600	N	BSL	
	7440-43-9	CADMIUM	0.12	0.12	mg/kg	MY05TP07(5.5-5.8)	1/3	0.057	0.12	3.7	N	BSL	
	7440-70-2	CALCIUM	1450	2980	mg/kg	MY05TP08(6.5-6.8)	3/3	2217	2980	NA	N	NUT	
	7440-47-3	CHROMIUM	20.5	56.2	mg/kg	MY05TP08(6.5-6.8)	3/3	38	56.2	10000	N	BSL	
	7440-48-4	COBALT	6.4	13.5	mg/kg	MY05TP06(6.5-6.8)	3/3	11	13.5	90	N	BSL	
	7440-50-8	COPPER	17.7	25.1	mg/kg	MY05TP08(6.5-6.8)	3/3	20	25.1	310	N	BSL	
	7439-89-6	IRON	15500	33200	mg/kg	MY05TP08(6.5-6.8)	3/3	24533	33200	2300	Y	ASL	
	7439-92-1	LEAD	8	12.2	mg/kg	MY05TP07(5.5-5.8)	3/3	11	12.2	40	N	BSL	
	7439-95-4	MAGNESIUM	4840	9480	mg/kg	MY05TP08(6.5-6.8)	3/3	6963	9480	NA	N	NUT	
	7439-96-5	MANGANESE	304	660	mg/kg	MY05TP06(6.5-6.8)	3/3	474	660	180	Y	ASL	
	7439-97-6	MERCURY	0.03	0.03	mg/kg	MY05TP07(5.5-5.8)	1/3	0.013	0.03	2.3	N	BSL	
	7439-98-7	MOLYBDENUM	0.86	1.1	mg/kg	MY05TP06(6.5-6.8)	3/3	0.960	1.1	39	N	BSL	
	7440-02-0	NICKEL	17.3	45.8	mg/kg	MY05TP08(6.5-6.8)	3/3	32	45.8	160	N	BSL	
	7440-09-7	POTASSIUM	2110	5890	mg/kg	MY05TP08(6.5-6.8)	3/3	4100	5890	NA	N	BSL	
	7440-23-5	SODIUM	106	238	mg/kg	MY05TP08(6.5-6.8)	3/3	184	238	NA	Y	NTX	
	7440-28-0	THALLIUM	0.22	0.26	mg/kg	MY05TP08(6.5-6.8)	2/3	0.18	0.26	0.52	N	BSL	
	7440-62-2	VANADIUM	23.1	50.6	mg/kg	MY05TP08(6.5-6.8)	3/3	38	50.6	55	N	BSL	
	7440-66-6	ZINC	53.8	74.4	mg/kg	MY05TP08(6.5-6.8)	3/3	67	74.4	2300	N	BSL	
	SVOCs	120-12-7	ANTHRACENE	260	260	ug/kg	MY05TP07(5.5-5.8)	1/3	230	260	2200000	N	BSL
		56-55-3	BENZO(A)ANTHRACENE	430	430	ug/kg	MY05TP07(5.5-5.8)	1/3					
		50-32-8	BENZO(A)PYRENE	380	380	ug/kg	MY05TP07(5.5-5.8)	1/3					
		205-99-2	BENZO(B)FLUORANTHENE	470	470	ug/kg	MY05TP07(5.5-5.8)	1/3					
		218-01-9	CHRYSENE	430	430	ug/kg	MY05TP07(5.5-5.8)	1/3					
193-39-5		INDENO(1,2,3-CD)PYRENE	230	230	ug/kg	MY05TP07(5.5-5.8)	1/3						
		BENZO(A)PYRENE equivalent		493	ug/kg				493	62	Y	ASL	
191-24-2		BENZO(G,H,I)PERYLENE	210	210	ug/kg	MY05TP07(5.5-5.8)	1/3	213	210	NA	Y	NTX	
206-44-0		FLUORANTHENE	1000	1000	ug/kg	MY05TP07(5.5-5.8)	1/3	477	1000	230000	N	BSL	
85-01-8		PHENANTHRENE	990	990	ug/kg	MY05TP07(5.5-5.8)	1/3	473	990	NA	Y	NTX	
129-00-0		PYRENE	720	720	ug/kg	MY05TP07(5.5-5.8)	1/3	383	720	230000	N	BSL	
VOCS		67-64-1	ACETONE	13	13	ug/kg	MY05TP06(6.5-6.8)	1/3	8	13	160000	N	BSL
	75-09-2	METHYLENE CHLORIDE	90	90	ug/kg	MY05TP06(6.5-6.8)	1/3	35	90	9100	N	BSL	

BOLD - individual carcinogenic PAH compounds modified by the appropriate TEF and summed to yield a Benzo(a)pyrene equivalent concentration- see text

¹ - USEPA Region 9 Soil PRGs modified to an HI = 0.1. Same units as reported concentrations

COPC - Compounds of Potential Concern

DRO - Diesel Range Organics

J - estimated concentration

NTX - Insufficient toxicity information

Conc. - Concentration

Min. - Minimum

Max - Maximum

NUT - Essential Nutrient

BSL - Below Screening Level

ASL - Above Screening Level