## APPENDIX J

# HUMAN HEALTH RISK ASSESSMENT TABLES AND FIGURES

Table J.2.1. Summary of Site-related Chemical and COPC Screening for WBG Groundwater<sup>1</sup>

												Detects >	^	Region LX	Region LX Max Detect >	٨		
			Re	Results >						96%	Site	Sile		Tap	Tap			
			2	tection.	Detection Minimum Maximum Minimum Maximum	um Mir	nimum M	laximum	Average	UCL B	UCL Background Background	Backgrou	pu	Water	Water	MCL N	MCL Max Defect >	٨
	Analysis Type	Analyte	Units I	Limit	Nondetect Nondetect	fect	Detect	Detect	Result	on Mean	Criteria <sup>2</sup>	Criteria	sRC?	(ˈ]/͡ɕn)	Criteria	(ng/L)	MCL	coPC?
		1 3 Divited and a	ľ.ou	1/8	1.00E-01 1.00E-01		3.40E-02	3.40E-02	9.18E-02	1.07E-01			Yes	3.7E-01	Ŷ		Nane	Ň
	Explosives	1.0-Dimensionalizaria		9/6				4,40E-02	6.05E-01	1.63E+00			Yes	7.3E+00	Ň		None	Ŋ
	Explosives	2,4-URINOUNCERS 2 Nitrateliceos		16				7.60E-02	9.70E-02	1.03E-01			Yes	3.7 <b>E+0</b> 1	Ňo		None	0 N
	Explosives	3-Mirototototo	ug/L	6/1					1.11E+00	2.71E+00			Yes	1.8E+02	Ň		None	°N N
	Explosives	Niltobenzene		1/8			5.90E-02	5.90E-02	9.49E-02	1.05E-01			Yes	3.4E-01	°N N		None	° N
	Explosives		- dr	50				3.20E+01	3.87E+00	1.04E+01			Yes	6.1E-02	Yes		None	Yes
		Bacium	uo't	6/9	1.12E+01 1.77E+01		7.60E+00 §	9.81E+01	3.68E+01 1.35E+02	1.35E+02	8.21E+01	1/9	Yes	2.6E+02	ů	2.0E+03	PN	No No
		Calcium	ua/L	6/6			35E+04	4.65E+04 1.18E+05	7.38E+04	9.78E+D4	1.15E+05	1/9	Ŷ		None		None	Ň
	Metals	Conner	ng/L	27	1.25E+01 1.25E+01		30E+00	9.8DE+00	3.30E+00 9.80E+00 1.08E+01 1.33E+01	1.33E+D1	0.00E+00	72	Yes	1.4E+02	٥N	* 1300	Ŷ	Ň
	Motolic Motolic	Cvanicle	ua/L	1/9	5.00E+00 5.00E+00 1.90E+01 1.90E+01	E+00 1.5	0E+01	1.90E+01	6,56E+00	9.45E+00	0.00E+00	1/9	Yes	7.3E+01	ę		None	Ŷ
			- Nou	1/3	2.94E+01 9.10E+01 1.55E+02	E+01 1.5	55E+02		6.51E+01	8.83E+01	2.79E+02	6/0	Ö	1.1E+03	Ŷ		None	Ŷ
	Metals		ua/L	1/9	1.50E+00 1.50E+00	E+00 3		3.10E+00	1.68E+00	2.01E+0D	0.00E+00	1/9	Yes	4.0E-D1	Yes	15	Ŷ	Yes
	intelcio Matale	Mannesium	ng/L	6/6			1.03E+04	3.42E+04	3.42E+04 2.04E+04	2.73E+04	4.33E+04	6/0	ŝ		None		None	Ŷ
	Matalo Matalo	Manganese	ng/L	8/9	7.50E+00 7.50E+00		5.80E+01	2.92E+03	2.92E+03 5.49E+02	2.96E+04	1.02E+03	1/9	Yes	1.7E+02	Yes		None	Yes
-3	Metale	Mercury	ug/L	1/9	1.00E-01 1.00	.00E-01 8.	8.00E-02	8.005-02	9.78E-02 1.02E-01	1.02E-01	0,00E+00	6/1	Yes	1.1E+00	Ŷ	2.0E+00	Ŷ	No
		Potassium	,¢n	6/6		7.	7.77E+02	3.25E+03	1.59E+03	2.44E+03	2.89E+03	<del>8</del> 1	Ň		None		None	No
	Metals	Sodium	ug/L	6/8	2.86E+03 2.86	86E+03 3.	3.06E+03	3.58E+04	1.08E+04	2.92E+04	4.57E+04	6/0	Ŷ		None		None	No
	Malais	Zinc	ng/L	1/9	8.45E+00 2.84	84E+01 4	4.56E+01	4.56E+01	2.07E+01	2.76E+01	6.09E+01	6/0	Ŷ	1.1E+03	ž		None	No
	Omanice Somivolatila	Ris(2-ethvlhexvl)phthalate	, nov	1/8	5.00E+00 5.00	E+00 4.	50E+00	5.00E+00 4.50E+00 4.50E+00	4,94E+00	5.06E+D0			Yes	4.8E-01	Yes	6.0E+00	ů	Yes
	Omanice-Vinlatile	Chloraform	ug/L	e Se	2.50E+00 2.50	E+00 6	40E-01	1.70E+00	50E+D0 6.40E-01 1.70E+00 2.05E+00	2.50E+00			Yes	1.6E-02	Yes		None	Yes
			\$															

SRC = Site-related chemical; COPC = Chemical of potential concern.

<sup>1</sup> Only analytes with detected concentrations are shown on this summary.

<sup>2</sup> Metals that were never detected in background samples have been assigned the background criteria of 0 ug/L.

\* Action Level

Table J.2.2. Summary of Site-related Chemical and COPC Screening for WBG Surface Water<sup>1</sup>

Resurs > Detection												
5	^					95%	Site	Site		Tap	Tap	
	Й с	Detection Minimum Maxmum Minimum Maximum Average	Minimum	Maximum	Averaçe	UCL E	UCL Background Background	Background		Water	Maren	
Limi		Nondetect Nondatect	Detect	Delect	Result on Mean	Mean	Cr teria	Crteria	SRC7	(n3/L)	Criteria	COPC
			7.90E+00	7.90E+00 7.90E+00 7.90E+00	7.90E+00		4.75E+01	0/1	Ŷ	2.6E+02	Ŷ	Ŷ
			5.73E+03	5.73E+03 5.73E+03 5.73E+03	5.73E+03		4.14E+04	0/1	ŝ		None	Ŷ
			5.50E+C0	5,50E+00 5,50E+00 5,50E+00	5.60E+00		7.90E+00	07 I	Ŷ	1.4E+02	No	Ŷ
			B.67E+02	B.67E+02 8.67E+02 8.67E+02	B.67E+02		2 56E+03	۹.	ő	1.1E+03	Ŷ	¥
			1.75E+03	1.75E+03 1.75E+03 1.75E+03	1.75E+03		1.08E+04	5	ŝ		Name	¥
			1.03£+02	1.03E+02 1.03E+02 1.03E+02	1.03E+02		3.91E+02	5	g	1.7E+02	¥	£
			5 24E+02	5 24E+02 5.24E+02 5 24E+02	\$ 24E+02		3.17E+03	5	ů		None	Ŷ
			1.456+03	1.45E+03 1.45E+03 1.45E+03	1.45E+03		2.13E+04	- 70	Ň		Nane	Ŷ
			1.846+01	1.84É+01 1.84E+01 1.84E+01	1.B4E+01		4.20E+01	GV 1	ž	1.1E+03	ž	Ŷ
			7.20€+00	7.20E+00 7.20E+00 7.20E+00	7.20E+00				Yes	6.1E+01	Å	<sup>D</sup> Z

SRC = Site-related chemical; COPC = Chemical of potential concern.

 $^{\circ}$  Only analytes with detected concentrations are shown on this summary.

ing for WBG Sediment <sup>1</sup>
d COPC Screen
d Chemical and
r of Site-relate
2.3. Summary
Table J.

		-	Results >				-		95% 101 Po	95% Site	Detects > Site	ά ũ	Region IX Ma: Residential Re Soil	Max Detect > R Residential I Soil	Region IX Max Detect > Region IX Max Detect tesidential Residential Industrial Industrial Soil Soil Soil	ax Detect > hrdustrial Soil	
Analysis Type	Analyte	Units	Detection Limit	Minimum Nondetect	Maximum Nondelect	Minimum Datect	Maximum Detect	Average Resuft	on Mean			SRC <sup>7</sup>		Criteria	(Day6u)	Criteria	COPC?
C. cralice on a constraint of the constraint of	<ol> <li>4.3.5.Trivitotenzana</li> </ol>	ma/ka	2114	1.25E-01	1.25E-01	7 10E-02	1.506-01	1.19E-01	1.27E-01			Yes	1.6E+02	Ŷ	3.2E+03	P	ž
Explosives	13.Dinitruhanzene	marka	1/17	1.25E-01	1.25E-01	4.40E-02	4.40E-02	1.20E-01	1.29E-01			Yes	5.5E-01	No	1.1E+01	Ň	Ŷ
Explosives	2 4 6-Trintrotoluene	Daliper Daliper	4117	1.25E-01	1.256-01	9.40E-02	9.7DE-01	2.04E-01	2.96E-01			Yes	1.5E+00	Ŷ	1.0E+01	¥	Ň
C. S. Province	2.4-Dinitratokuene	mañg	1117	1.25E-01	1.25E-01	3.70E-02	3.70E-02	1.20E-01	1.295-01			Yes	1.1E+01	No	2.1E+02	ž	Ŷ
C.Xpro6wes	HMX	6yl6w	1/17	2.50E-01	1.D0E+00	1.20E-01	1 20E-01	8.165-01	9.61E-01			Yes	27E+02	۵N	5,3E+03	ŝ	ž
Explosives	Nitrobenzene	mgNg	1117	1 25E-01	1.30E-01	7.10E-02	7 105-02	1.26E-01	1.32E-01			Yes	1.6E+00	ů	1.0E+01	Ŷ	Ž
Matele	Auminum	mg/kg	17117			4.74E+03	1.796+04	1.09E+04	1.25E+04	1.395+04	5/17	Yes	7.5E+03	Yes	1.0E+04	Yes	Yes
a de la compara de la compa	Antimony	Byßw	<del>1</del> 6	1.50E-01	9.50E-01	3.20E-01	3.205-01	4.48E-01	6.71E-01	0.00E+00	94	Yes	3.0E+D0	Ň	7.5E+01	Ŷ	No
Matale Matale	Arsenic	By/8w	17117			7.70E+00	1.81E+01	1.23E+01	1.35E+01	1.95E+01	047	Ŷ	3.8E-02	Yes	3.0E-01	Yes	Ŷ
Matala	Barium	mg/kg	21171			3.68E+01	5.28E+02	1.33E+02	2.01E+02	1.23E+02	547	Yes	5.2E+02	Yes	1.0E+04	Ŷ	Yes
	Beryljium	тgNgm	¥	1.20E-01	4.55E-01	4.50E-01	6.00E-01	3.32E-01	4.93E-01	3.80E-01	98	58 X	1.5E+O1	ž	3.4E+02	Ŷ	Ŷ
Matak	Cedmium	руют	647	2.00E-02	9.50E-01	6.00E-02	5.60E-01	2.17E-01	3.28E-01	0.00E+00	647	Yes	3.7E+00	Ŷ	9.3E+01	No	Ŷ
	Calcium	mgMg	99			9.75E+02	3.91E+03	1.76E+03	3. <b>94E+03</b>	5.51E+03	9/0	¥		None		None	ŝ
eleneration electronic de la contraction de la contractica de la contractica de la contractica de la c	Chromium	то <b>ус</b> т	21/21			7.20E+00	2.13E+01	1.31E+01	1.49E+01	1,81E+01	1/17	Yes	3.0E+00	Y <b>e</b> s	6.4E+00	Yes	Yes
	Cobalt	mg/kg	68			5.70€+00	1.04E+01	7.956+00	9.99E+00	9,10E+00	<del>1</del> 16	Yes	3.3E+02	Ŷ	2.9E+03	Ñ	ŝ
	Copper	mp/kg	6/6			7.80 <b>E</b> +00	4.91E+01	1.97E+01	5.66E+01	2.76E+01	1/6	Yes	2.8E+02	No	7.0E+03	ŝ	Ŷ
Metals	Cvanicia	Byrðw	<b>5</b>	5.00E-02	9.50E-01	1,10E-01	1.10E-01	3.97E-01	6.61E-01	0.00E+00	1/6	Yes	1.1E+02	No	2.1E+03	ŝ	Ŷ
		paven	<del>6</del> /6			1.38E+04	2.40E+04	1.76E+04	2.27E+04	2.82E+04	90	ę	2.2E+03	Yes	1.0E+04	Yes	Ŷ
Seige	lead	mg/kg	17/17			1.02E+01	4.01E+01	1.76E+01	2.12E+01	2.74E+01	1/17	Yes	4.0E+01	Yes	1,0E+02	٩	Yes
Material State	Macrosium	By0w	8			1.18E+03	3.28E+03	2.01E+03	3.47E+03	2.76E+03	ŝ	<del>2</del>		None		None	ů
	Mandanese	Byłów	21/21			1.83E+02	1.05E+03	5.05E+02	6.85E+02	1,95E+03	0117	Q	3.1E+02	Yes	4.5E+03	۶	ž
Matals	Mercury	mgAg	3/17	1.50E-02	9 50E-02	4.00E-02	1.60E-01	4.32E-02	5.97E-02	5,90E-02	147	Yes	2.2E+00	Ŷ	5,6E+01	Ŷ	Ŗ
	Nickel	mgNg	88			1.01E+01	2.83E+01	1.72E+01	3.03E+01	1.77E+01	56	Yes	1.5E+02	Ŷ	3.7E+03	Ŷ	¥
Metale	Potassium	ացից	6/5			6.65E+02	1.58E+03	9.15E+02	1.38E+03	1.95E+03	90	Ŷ		None		None	¥
Matala	Seleníum	бубш	6/17	1.50E-01	9.50E-01	3.70E-01	1.70E+00	4.51E-01	6.11E-01	1,70E+00	017	Ň	3.7E+01	<b>N</b> o	9.4E+02	Ņ	¥
eleta M	Socialum	шÇүkg	5/6	4.83E+02	4.83E+02	2.59E+01	1.07E+02	1.28E+02	2.40E+03	1.12E+02	90	¥		None		None	Ŷ
alcom M	TheBiten "	вурш	2/6	3.80E-01	9.60E-01	1.50E+00	1.806+00	9.20E-01	1.42E+00	8.90E-01	2/6	Yes	6.0E-01	Yes	1.5E+01	ž	Yes
	Venadum	бу/бш	96			1.30€+01	2.92E+01	1.73E+01	2.385+01	2.61E+01	1/6	Yes	5.2E+01	ž	1 3E+03	Ž	£
aleton M	Zinc	Бурш	21/21			3.83E+01	1.66E+02	8.09E+01	9.85E+D1	5.32E+02	0/17	Ŷ	2.2E+03	Ŷ	2 OE +04	ž	Ŷ
Oreanice-Semicolatile	Anthracene	вурш	51	1.65 <b>E-</b> 01	1.65E-01	1.50E-01	1.50E-01	1.60E-01	1.75E-01			Yes	1.4E+03	ž	2.2E+04	ž	ž
Organica-Somiyolalija	Benzo(a)anthrecene	mgNg	13	1.65E-01	1.65E-01	5.60E-01	5.60E-01	2.97E-01	6.81E-01			Yes	5.6E-02	Yes	3 5E-01	Yes	Yes
Organics-Semiyolatile	Benzo(a)pyrene	шgүkg	1/3	1.65E-01	1.656-01	3.90E-01	3.90E-01	2,40E-01	4.59E-01			Yes	5.6E-03	Yes	3.6 <b>E-</b> 02	Yea	Yes
ı																	

# Table J.2.3. Summary of Site-related Chemical and COPC Screening for WBG Sediment<sup>1</sup>

			Results >						95%	Site Det	Detects > Site	Regi Residu	Region IX Max Detect > Residential Residential	Detect > R idential II	Region IX Max Detect > Region IX Max Detect > testdential Residential Industrial	lax Detect > Industrial	
Analysis Type	Analyte	Units	Detection	Minimum Nondelect	Max.mum Nondetect	Minimum Detect	Maximum Detect	Average Result	UCL Bac on Mean	Background Background Criteria <sup>2</sup> Criteria		SRC? (II	Soil (mg/kg)	Soil Cr <b>ite</b> ria	Soil (mg/kg)	Soil Criteria	coPC?
Organics-Semivolatite	Benzo(b)fluoranthene	Вубш	1/3	1,65E-01	1.65E-01	5.60E-01	5.60E-01	2.97E-01	6.81E-01		ř	Yes 5.6	5.6E-02	Yes	3.6E-01	Yes	Yes
Organics-Semivolatile	Berzo(g ir,i)perylene	рубт	13	1.65E-01	1.66E-01	1.30E-01	1.30E-01	1.536-01	1.87E-01		۶	Yes	•	None		Nane	Yes
Organics-Semivolatile	Benzo(k)fluoranthene	ш <mark>д</mark> ка	13	1.65E-01	1.65E-01	1.90E-01	1.905-01	1.73E-01	1.98E-01		۶	Yes 5.6	5.66-01	ŝ	3.6E+00	Ŷ	۶
Organics-Semivolatile	Chrysene	mg/kg	1/3	1.66E-01	1.65E-01	5,10E-01	5.10E-01	2.80E-01	6.16E-01		<del>،</del>	Yes 5.6	5.6E+00	Ŷ	3.6E+01	Ŷ	Ŷ
Organics-Semivolatile	Fluoranthene	щ <b>у</b> ка	1/3	1.65E-01	1.65E-01	1.50E+00	1.50E+00	6,10E-01	1.91E+00		7	Yes 2.0	2.0E+02	ŝ	3 7E+03	Ŷ	Ň
Organics-Semivolatile	Indeno(1,2,3-cd)pyrene	рудт	1/3	1.65E-01	1,65E-01	1.70E-01	1.70E-01	1.67E-01	1.72E-01		7	Yeis 5.6	5.68-02	Yes	36E-01	No.	Yes
Organics-Semivolatile	Phenanthrane	бурдш	1/3	1.65E-01	1.656-01	6.40E-01	6.40E-01	3.23E-01	7.86E-01		*	Yess	-	None		None	Yes
Organics-Semivolatile	Pyrane	Бубш	51	1.65E-01	1.65E-01	9.40E-01	9.40E-01	4.23E-01	1.18E+00		7	Yees 1.5	.5E+02	ž	2.6E+03	Ŷ	Ŷ
Organics-Volatile	Acatone	03/8m	12	2.50E-03	2.50E-03	2.10E-02	2.10E-02	1.18E-02	7.02E-02		7	Yess 1.4	1.4E+02	Ŷ	6.1E+02	Ŷ	Ň
Organics-Volatile	Chioraform	бубш	1/3	2.50E-03	4.05E-03	2.006-03	2.00E-03	2.85E-03	4.65E-03		7	Yees 2.4	2.4E-02	Ŷ	6.2E-02	No	٩
Organics-Votatite	Тольпе	Бубш	18	2.50E-03	4 05E-03	2.50E-02	2.50E-02	1.06E-02	3.17E-02		>	Yes 5.2	5.2E+01	Ŷ	5.2E+01	ŝ	No

SRC = Site-related chemical; COPC = Chemical of potential concern.

 $^{\dagger}$  Only analytes with detected concentrations are shown on this summary.

<sup>2</sup> Metals that were never detected in background samples have been assigned the background criteria of 0 mg/kg.

- Thalkium concentrations were compared against the Region IX PRGs for Thalkum catoonate, the most conservative form of thalkium available.

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											Detects >		Region (X	Max Detect >	Region. IX	Max Detect >	
		-	< sılıs>						<b>3</b> 5%	Sile	Site	_	Residential	Residentia	Incustrial	Industrial	
Analysis			Detection	Minimum	Maxìmum	Minimum	Maximum	Average	UCL Ba	UCL Background Background	ackground		Soil	Soil	Soil	Soil	
Type	Analyte	Units	Limit	Nondetect	Nondetect	Detect	Detect	Result	on Mean	Criteria <sup>2</sup>	Criteria	SRC?	(mg/kg)	Criteria	(ըչկցա)	Criteria	COPC?
							:		1			;			5 0E (03		Voc
Explosíves	1,3,5-Trinitrobenzene	бубш	16/99	1.25E-01	1.25E+01	5.50E-02	4.90E+02	6.28E+00	1.46E+U1			192	1.05-102	8	0.4	2	
Explosives	1,3-Dinitrobenzene	Бую́ш	1/99	1.25E-01	3.10E+01	8,40E-02	8.40E-02	6.53E-01	1.22E+00			Yes	5.5E-01	ş	10+01	Ŷ	Ŷ
Explosives	2,4,6-Trinitrololuene	буубш	29/89	1.25E-01	2.25E-01	3.00E-02	3.80E+03	7.95E+01	1.65E+02			Yes	1.5E+00	Yes	1 0E+01	Yes	Yes
Explosives	2,4-Dinitrotokene	mgrkg	868	1.256-01	6.25E+D0	6.50E-02	5.50E-01	1.986-01	3.01E-01			Yes	1.1E+01	Ŷ	2 1E+02	Q	ŝ
Explosives	2,6-Dinitrotoluene	նչինա	3/60	1.25E-01	6.50E+D0	7.50E-02	6.20E-01	1.97E-01	3.05E-01			Yes	5.56+00	Ÿ	1.1 E+02	QN	ŝ
Explosives	2-Nitrotoluene	երեն	96Æ	1.26E-01	3.10E+01	7.40E-02	1.70E-01	6.54E-01	1.22E+00			Yes	5.5E+01	₽	1.1E+03	No.	Ŷ
Explosives	3-Nitrataluene	ն¥յնա	66 <b>/</b> E	1.25E-01	1.25E+01	9.10E-02	2.10E+Dt	5.52E-01	9.71E-01			Yes	5.6E+D1	Ņ	1.1E+03	No	Ŷ
Explosives	4-Nitrotoluene	քանա	2/99	1.25E-D1	3.10E+01	1.30E-01	1.90E-01	6.55E-01	1.22E+00			Yes	5.5E+01	Ň	1.1E+03	<mark>0</mark> N	Ŷ
Explosives	HMX	₿ <b>ң</b> /đա	14/99	2.50E-01	5.00E+01	1 10E-01	1.70E+03	1.96E+01	4 8†E+01			Yes	2.7E+02	Yes	5.3E+03	8	Yes
Explosives	Närobenzana	₿ <sub>Ŋ</sub> /ðw	2/99	1.25E-01	3.10E+01	3.50E-02	5.40E-02	6.59E-01	1 23E+00			Yes	1.6E+00	Ÿ	1.DE+01	0N N	Ŷ
Explosives	Nitrocellulose as N	Յչ/Յա	7/20	1.00E+00	2.95E+00	2.50E+00	3.15E+02	2.81E+01	5.83E+01			Yes		None		None	Yes
Explosives	Nitroglycerin	₿y∕đw	2/21	1.25E+00	2.60E+00	6.50E+00	1.20E+01	2.03E+00	2.96E+00			Yes		None		None	Yes
Explosives	RDX	B∖yÐw	10/99	2.50E-01	2.50E+01	1.80E-01	9.50E+03	1.01E+02	2:60E+02			Yes	4.0E-01	Yes	2.7E+00	Yes	Yes
Explosives	Tetry	ნყნო	66/5	3.25E-01	8 00E+01	8.805-02	4.80E-01	1.69E+00	3.15E+00			Yes	5.5E+01	ž	1.1E+03	g	£
Metals	Aluminum	вубш	149/149			1.41E+03	5.01E+04	1.246+04	1.31E+04	1.77E+04	12/149	Yes	7 5E+03	Yes	1.0E+04	Yes	Yes
Metals	Antimony	6y6w	38/77	1.50E-01	8.00E-01	4.80E-01	2.79E+01	3.36E+00	4,54E+00	9.60E-01	34/77	Yes	3.0E+00	Yes	7.5E+01	Ŷ	Хөг
Metals	Arsenic	0 <b>V</b> 6m	149/149			2.50E+00	3.58E+01	1.32E+01	1.37E+01	1.54E+01	31/149	Yes	3.BE-02	Yes	3.0E-01	Yes	Yes
Metals	Berium	т ВИС	148/149	1.34E+01	1.346+01	1.17E+01	1.04E+04	3.84E+02	5.47E+02	8.84E+01	69/149	Yes	5.2E+02	Yes	1.0E+04	Yees	Yes
Metals	Beryllium	0 MB/KG	21/76	9.50E-02	4,05E-01	2.30E-01	3.40E+00	4.21E-01	5.24E-01	B.80E-01	8/76	Yes	1.5E+01	Ŷ	3.4E+02	2 Z	ź
Metals	Cadmium	Byßw	102/148	2.00E-02	3.50E-01	6.00E-02	8.77E+02	1.13E+01	2,14E+D1	0.00E+00	102/148	Yes	3.7E+00	Yes	9.3E+01	Yees	Yes
Metafs	Calcium	6y/đw	17177			8.05E+02	1.11E+05	1.02E+04	1,37E+04	1.58E+04	11/77	ŝ		None		Norte	ź
Metals	Chromium	6y/0w	149/149			5.40E+00	1.89E+02	1.92E+01	2.16E+01	1.74E+01	54/149	Yes	3.0E+00	Yes	6.4E+00	Yes	Yes
Metals	Cobalt	£y∕gm	76/77	9.55E+00	9.55E+00	1.20E+00	1.27E+01	7.87E+00	8.27E+00	1.04E+01	5/T7	Yes	3.3E+02	°N	2.9E+03	Ŷ	ź
Metals	Copper	£y/gm	2017			9.30E+00	1.68E+04	4.17E+02	7.9 <b>2E</b> +02	1.77E+01	63/77	Yes	2.8E+02	Yes	7.0E+03	Yes	Yes
Metals	Cyanide	By/0w	7/76	5.00E-02	3.60E-01	6.40E-02	1.20E+D0	3.29€-01	3.58E-01	0.00E+00	1/76	Yes	1.1E+02	Ŷ	2.1E+03	Ŷ	ÿ
Metals	lron	By/Ow	דחוד			9.45E+03	3,91E+04	2.24E+04	2.35E+04	2.31E+04	36777	Ŷ	2.2E+03	Yes	1.0E+04	¥es	ÿ
Metals	Lead	երեր	149/149			1.02E+01	2.20E+03	1.68E+02	2.19E+02	2.81E+01	76/149	Хes	4.0E+01	Yes	1.0E+02	Yes	Yes
Metals	Magnesium	бубш	77177			1.41E+03	1.67E+04	<b>3.19E+0</b> 3	3.63E+03	3.03E+03	24/77	Ŷ		Nane		None	N
Metais	Manganese	вубш	149/149			6.54E+01	3.91E+03	5.60E+02	6.02E+02	1.45E+03	51148	Ŷ	3.1E+02	Yes	4.5E+03	٩	Ÿ
Metals	Mercury	<b>вую</b> ш	77M49	1.50E-02	6.50E-02	2.50E-02	1.20E+00	7.46E-02	9.43E-02	3.60E-02	63/149	Yes	2.2E+00	Ŷ	5.6E+01	8	R

# Table J.2.4. Summary of Sire-related Chemical and COPC Screening for WBG Surface Soil<sup>1</sup>

											Detects >		Region IX	Max Detect >	Region IX N	Max Detect >	
		Ť	Results >						85%	Site	Site	-	Residernial	Residential	Industrial	Industrial	
Analysis		-	Detection	Minimum	Maximum	Minimum	Maximum	Average	UCL B	Background B	Background		Soi	Soil	Sei	Scil	
	Analyte	Units	Limit	Nondelect	Nondetect	Delect	Detect	Result	on Mean	Criteria <sup>2</sup>	Criteria	SRC7	(Bybu)	Criteria	(by/6w)	Criteria	COPC?
Metals	Nickel	0y6u	17077			7.40E+00	1.33E+02	2.08E+01	2.36E+01	2.11E+01	25/77	Yes	1.5E+02	ž	3.7E+03	Ŷ	Ŷ
Metals	Polassium	тдир	17177			4 00E+02	3.05E+03	1.21E+03	1.34E+03	9.27E+02	57077	ž		Norie		None	Ŷ
Metals	Selenium	mg/kg	100/149	1,55E-01	4.85E-01	3.40E-01	5.00E+00	B.63E-01	9.56E-01	1.40E+00	17/149	Yes	3.7E+01	¥	9.4E+02	Ŷ	Ŷ
Metals	Silver	mg/kg	25/149	9.50E-02	7.00E-01	2.20E-01	3.32E+01	8.94E-01	1.29E+00	0.00E+00	25/149	Yes	3 7E +01	Ŷ	9.4E+02	Ŷ	8
Medals	Sodium	mg/kg	42/76	1.41E+01	5.80E+01	4,35E+01	1.08E+03	1.29E+02	1.66E+02	1.23E+02	23/76	Ŷ		None		None	Ŷ
Metals	Thallium *	Byđu	1777	2.80E-01	6.00E-01	1.40E+00	3.10E+00	4.87E-01	5.89E-01	0.00E+00	1777	Yes	6 DE-01	Yes	1.5E+01	Ŷ	Yes
Metals	Vanadium	6y/6w	77177			1.12E+01	3.40E+01	2.10E+01	2.19E+01	3.11E+01	3/77	Ŷ	5.2E+01	Ŷ	1.3E+03	Ŷ	Ŷ
<b>Metals</b>	Zinc	₿x/ôw	149/149			2.86E+01	2.49E+04	4.24E+02	7.04E+02	6.18E+01	97H49	Yes	2.2E+03	Yes	1.0E+04	Yes	Yes
Organics-Semívolatile	2-Methyinaphtnakene	6y/ôw	3/14	1.65E-01	2.00E-01	4.70E-02	1.50E-01	1 62E-01	1.BCIE-01			Yes		None		None	Yes
Organics-Semivolatile	Acenephthene	ßγ/6́ш	2/14	1.65E-01	3. <b>4</b> 5E-01	1.40E-01	1.50E-01	1 88E-01	2.11E-01			Yes	2.6E+02	Ŷ	2.8E+03	ž	Ŷ
Organics-Semivolatile	Anthracene	Bylgm	2/14	1.6SE-01	3.45E-01	4.40E-01	4.80E-01	2.33E-01	2. <b>B4</b> E-01			Yes	1.4E+03	Ŷ	2.2E+04	ž	Ŷ
Organics-Sem ivolatile	Benzo(a)anthracene	Бу́дш	4/14	1.65E-01	3.45E-01	4.30E-02	1.00E+00	2.69E-01	3.87E-01			Yes	5.6E-02	Yes	3.6E-01	Yes	Yes
Organics-Semivolatile	Benzo(a)pyrene	Byđw	414	1.65E-01	3.45E-D1	6.00E-02	8.00E-01	2.49E-01	3.40E-01			Yes	5.6E-03	¥es	3.6E-02	Yes	Yes
Organics-Semivolatile	Benzo(b)fluoranthene	вубш	4114	1.66E-01	3. <b>4</b> 5E-01	9.30E-02	1.10E+00	2.89E-01	4.19E-01			Yes	5.6E-02	Yes	3.6E-01	Yes	Yes
Organics-Semivolatile	Benzo(g,h,i)perylene	6 <b>W</b> Gm	3/14	1.66E-01	3.45E-01	1.10E-01	3.90E-01	2.01E-01	2.36E-01			Yes		None		Nane	Yes
Organics-Semivolatile	Benzo(k)fluoranthene	mg/kg	3/14	1.66E-01	3.45E-01	9.10E-02	5.00E-01	2.20E-01	2.70E-01			Yes	5.6E-01	No	3.6E+00	ž	Ŷ
Organics-Semivolatile	Bis(2-ethylhexyl)phthalate	mg/kg	114	1.65E-01	3.45E-01	3.40E-02	3.40E-02	1.87E-01	2.17E-01			Yes	3.2E+00	Ŷ	2.1E+01	ž	Ŷ
Organics-Semivolatile	Carbazole	mg/kg	2114	1.65E-01	3.45E-01	2.00E-01	2.70E-01	2.01E-01	2.24E-01			Yes	2.2E+00	No	1.5E+01	ž	Ŷ
Organica-Semívolatile	Chrysene	вубш	4/14	1.65E-01	3.45E-01	5 00E-02	1.00E+00	2.70E-01	3.87E-01			Yee	5.6E+00	<del>N</del>	3.6E+01	Ň	Ň
Organics-Semivolatile	Di⊰n-butyi Phihalate	04/gm	1/14	1.66E-01	3.45E-01	5.30E-02	5.30E-02	1.88E-01	2 16E-01			Yes	5.5E+02	No	1.1E+04	ž	Ŷ
Organics-Semiyolatite	Dibenzo(a,h)anthracane	mg/kg	2/14	1.65E-01	3.45E-01	5.40E-02	1.10E-01	1.79E-01	2.09E-01			¥8,	5.6E-03	Yes	3.6E-02	Yes	Yes
Organics-Semivolatile	Dibenzofuran	бубш	2/14	1.65E-01	3.45E-01	1.10E-01	1.605-01	1.86E-01	2.11E-01			Yers	21E+01	No	3.2E+02	Ň	ŝ
Organics-Semivolatile	Fluoranthene	By/6w	5/14	1.65E-01	3.45E-01	4.00E-02	2.70E+00	4.98E-01	B.78E-01			Yess	20E+02	Na	3.7E+03	ÿ	Ŷ
Organics-Semivolatile	Fluorene	₿y/ðw	2/14	1.65E-01	3.45E-01	1.80E-01	2.40E-01	1.97E-01	2.20E-01			Yes	1.8E+02	2	2.2E+03	Ŷ	₽
Organics-Semivolatile	Inderro(1,2.3-od)pyrane	Byðu	3/14	1.65E-01	3.45E-01	1.30E-01	4.80E-01	2.11E-01	2.55E-01			Yes	5.6E-02	Yes	<b>3.6</b> E-01	Yes	Yes
Organics-Semivolatile	Naphthalene	byGw	1/14	1.65E-01	2.10E-01	7.60E-02	7.60E-02	1.77E-01	1.93E-01			Yes	5.5E+00	Ŷ	1.9E+01	No	Ŷ
Organics-Semivolatile	Phenarthrene	рубт	5/14	1.65E-01	2.00E-01	7.00E-02	2.40E+00	4.12E-01	7.25E-01			Yes		None		None	Yes
Organics-Semivolatile	Pyrene	ნუნო	5/14	1.65E-01	3.45E-01	3.606-02	2.10E+00	4.00E-01	6.74E-01			Yes	1.5E+02	Ñ	2.6E+03	<sup>II</sup> N	No.
Organics-Volatile	Chloraform	смот	1/10	2.50E-03	3.10E-03	2.00E-03	2.00E-03	2.60E-03	2.786-03			Yes	2.4E-02	Ñ	5.2E-02	Ŝ	Ň
Organics-Volatile	Methylene Chloride	მყნო -	1/10	2.50E-03	1.00E-02	1.20E-02	1.20 <b>E-0</b> 2	4.90E-03	6.89 <b>E-</b> 03			Yes	8.5E-01	Ŷ	2.0E+00	£	Ŷ

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Table J.2.4. Summary of Sire-related Chemical and COPC Screening for WBG Surface Soil<sup>1</sup>

			copca	Ñ	
lax Detect >	Industrial	Sail	Criteria	Ň	
Region IX N	Industrial Industrial	Soil	(by/6u)	5.2E+01	
Region IX Max Detect > Region IX Max Detect >	Residential	Sail	Criteria	R	
Region IX 1	Residential Residential	Soil	(Եչթա)	5 2E+01	
			SRC?	Yes	
Detects >	Site	Background	Criteria		
	Sile	ackground	Criteria <sup>2</sup>		
	95%	UCL Background Background	on Mean	1.44E+00	
		Average	Result	3.36E-02 1.44E+00	
		Maximum	Detect	1.70E-01	
		Minimum	Detect	7.90E-04 1.70E-01	
		Maximum	Nondetect	2.50E-03	
		Minimum	Nondelect	2.50E-03	
	desults >	Detection	Units Limit	840	
	œ		Units	бубш	
			Analyte	Toluane	
		Analysis	Type	Organics-Volatile	

SRC = Site-related chemical, COPC = Chemical of potential concern.

 $^{1}$  Only analytes with detected concentrations are shown on this summary.

<sup>2</sup> Metals that were never detected in background samples have been assigned the background criteria of 0 mg/kg.

\* Thallium concentrations ware compared against the Region IX PRGs for Thallium cabonate, the most conservative form of thallium available.

· WBG Subsurface Soil <sup>1</sup>
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											Detects >	_	Region IX Max Detect >	ax Detect >	Region IX Max Detect	ax Detect >	
			Results >						<b>%</b> 56	Site	Site	æ	Residentia: F	Residential	Industrial	Industrial	
Analysis			Detection	Minimum	Maximum	Minimum	Maximum	Average	ncr	Background Background	ackground		Soil	Soil	Soil	Soil	
Type	Analyte	Units	Limit	Nondetect	Nondetect	Defect	Detact	Result o	an Mean	Criteria²	Criteria	SRC7	(0%gm)	Criteria	(mg/kg)	Criteria	COPC?
Ļ	an a	1710-00	061/62	1 25E-01	1 256+01	2.70E-02	4.80E+02	4.91E+00 1	1.12E+01			Yes	1 6E +02	Yes	3.2E+03	Ŷ	Yes
EXplosives Explosives	1.3.Dinitrobenzene	Byou	2/130	1.25E-01	3.10E+01	8.40E-02			1.03E+00			Yes	5 SE-01	Ň	1.1 <b>E+0</b> 1	<b>N</b> D	Ŷ
Explosives	2,4,6-Trinkrotoluene	Вубш	<b>4</b> 9/130	1.26E-01	2.25E-01	3.00E-02	3.80E+03 6	6.13E+01 1	1.26E+02			Yes	1.5€+00	Yers	1.0E+01	Yes	Yes
Explosives	2,4-Dinitrololuene	0yp6m	16/130	1.25E-01	6.25E+00	3 20E-02	5.50E-01	1.77E-01	2.56E-01			Yes	1.1E+01	Ŷ	2.1E+02	<b>N</b> a	Ŷ
Explosives	2,6-Dinitratoluene	в <b>у</b> бш	6/130	1.25E-01	6.50E+00	6.50E-02	6.20E-01	1.81E-01	2.62E-01			Yes	5.5E+00	ŝ	1.1E+02	Ň	Ň
Explosives	2-Nitrotatuene	mg/kg	5/130	1.25E-D1	3.10E+01	7.406-02	4.80E+00	5.91E-01 1	1.03E+00			Yes	5.5E+01	Ŷ	1.1E+03	Ň	Å
Explosives	3-Nitrotaluene	03/6m	7/130	1.25E-01	1.25E+01	6.50E-02	2.10E+01	5.23E-01	8.50E-01			Yes	5.5E+01	Ŷ	1.1E+03	8	ĉ
Explosives	4-Nitrotaluene	бубш	5/130	1.25E-01	3.10E+01	8.40E-02	1.90E-01	6.01E-01 1	1.04E+00			Yes	5.5E+01	Ŷ	1.1E+03	ÿ	Ň
Explosives	XMH	mg/kg	32/130	2.50E-01	5.00E+01	1.00E-01	1.70E+03	1.52E+01 3	3.68E+01			Yes	2.7E+02	Yes	5.3E+03	<b>N</b>	Yes
Explosives	Nitrabenzerte	бу/бш	6/130	1.25E-01	3.10E+01	3.30E-02	3.60E-01	5.96E-01 1	1.03E+00			Yes	1.6E+00	Ŷ	1.0E+01	ů	ŝ
Explosives	Nitrocellulose as N	0%0m	10/26	1.00E+00	2 95E+00	2.50E+00	3.15E+02	2.65E+01 4	4.90E+01			Yes		None		None	Yes
Fxnlosives	Nitroglyberin	mg/kg	3/52	1.25E+00	2.60E+00	5.50Ë+00	1.205+01	1.68E+00 2	2.10E+00			Yes		None		None	Yes
Explosives	RDX	шаука	23/130	2.50E-01	2.50E+01	1.40E-01	9 50E+03	7.76E+01 1	1.99E+02			Yes	4.0E-01	Yes	2.7E+00	Yas	Yes
Explosives	Tetryl	бубш	12/130	3.25E-01	8.00E+01	5.40E-02	4.BOE-01	1.54E+00 2	2.67E+00			¥95	5.5E+01	¥	1.1E+03	aN	No
Metals	Aluminum	буюш	180/180			1.41E+03	5.01E+04	1.24E+04 1	1.30E+04	1,95E+04	94180	운	7.5E+03	Yes	1.0E+04	Yes	No
Metals	Artimony	mgikg	51/108	1.50E-01	8.00E-01	3.40E-01	2.796+01	2.54E+00 3	3.40E+00	9.60E-01	37/108	Yees	3.0E+00	Yes	7.5E+01	P	Yes
Metals	Ar servic	бубш	180/180			2.50E+00	3,58E+01	1.33E+01 1	1.37E+01	1,986+01	7/180	ŝ	3.8E-02	Yes	3.05-01	Yes	No
Metaks	Barium	0 mg/kg	179/180	1.34E+D1	1.34E+01	1.176+01	1,04E+04	3.38E+02 4	4.73E+02	1,24E+02	63/180	7 <del>8</del> 8	5.2E+02	Yes	1.0E+04	Yes	Yes
Metals	Beryllium	Եւթնա	31/107	9.50E-02	4.05E-01	2.30E-01	3.40E+00	4.04E-01	4.80E-01	B.B0E-01	94107	Yes	1.5E+01	ž	3.4E+02	P	Ň
Metals	Cadmium	бу/8ш	106/179	2.00E-02	3.50E-01	6.00E-02	8,77E+02	9.47E+00	1.79E+01	0.00E+00	106/179	Yes	3.7E+00	Yes	9.3E+01	Yes	Yes
Metals	Calcium	მაქმო	107/108	3.29E+02	3.29E+02	3.33E+02	1.11E+05	8.37E+03	1.09E+04	3.55E+04	5/108	¥		None		None	Ň
Metals	Сітотінт	0y/du	180/180			5.40E+00	1.89E+02	1.87E+01	2.08E+01	2.72E+01	15/180	Yes	3.0E+00	Yes	6.4E+D0	Yes	Yes
Metals	Cobatt	буðш	107/108	9.55E+00	9.55E+00	1.20E+00	2.54E+01	8.68E+00 \$	9.16E+00	2.32E+01	1/108	ž	3.3E+02	ž	2.9E+03	<b>N</b>	Ñ
Metals	Copper	вурш	108/108			9.30E+00	1.68E+04	3.00E+02	5.71E+02	3.23E+01	53/108	Yes	2.8E+02	Yes	7.0E+03	Yes	Yes
Metals	Cyanide	მენთ	2/106	5.00E-02	3.60E-01	6.40E-02	1.20E+00	3.22E-01	3.43E-01	0.0000+00	2/106	Yes	1.1E+02	Ŷ	2.1E+03	N	Ŷ
Metals		mgAc	108/108			9.45E+03	3.91E+04	2.31E+04	2.39E+04	3.52E+04	3/108	¥	2.2E+03	Yes	1.0E+04	Yes	Ŷ
Metals	Lead	танка	160/180			9.90E+00	2.20E+03	1.43E+02	1.85E+02	1.91E+01	100/180	Yes	4.0E+D1	Yes	1.0E+02	Yes	Yes
Metals	Magnesium	markg	103/108			1.41E+03	1.67E+04	3.20E+03	3.52E+03	8.79E+03	2/106	£		Nane		None	Ňo
Metals	Manganése	mg/kg	180/130			B.54E+01	3.91E+03	5.57E+02 (	6.21E+02	3.03E+03	3/180	£	3.1E+D2	Yes	4.56+03	Ŷ	Ŷ
Metals	Mercury	тgNg	82/180	1 50E-02	6.50E-02	2.50E-02	4.20E+00	6.89E-02	8.53E-02	4.40E-02	48/180	Yes	2.2E+D0	Ŷ	5.6E+01	QN N	Ŷ

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Table J

Results         Results           Arayys         Limit         Macimun         Macimun         Macimun         Macimun           Arayys         Limit         Nordelect         Macimun         Macimun         Macimun         Macimun           Arayys         Limit         Nordelect         Macimun         Macimun         Macimun         Macimun           Role         macimu         macimun         Macimun         Macimun         Macimun         Macimun           Solen         macimu         macimun         Macimun         Macimun         Macimun         Macimun           Solen         maging         10810         261100         126501         126501         126501         126501           Solen         maging         6010         10810         20100         136501         130501         130501           Solen         maging         10910         10810         2021         156501         140501         156501         156501         156501         156501         156501         156501         156501         156501         156501         156501         156501         156501         156501         156501         156501         156501         156501         156501         156501												Detects >		Region IX Max Detect >	lax uetect >	Region IA Max Defen	אומע הפופרו א	
Notice         Notice<			-	Results >						¥98	Site	Site	ι <u>τ</u>		Residentiat	Industrial	Industrial	
App.         Unit         Unit <th< th=""><th>Ana vsis</th><th></th><th>-</th><th>Detection</th><th>Minimum</th><th>Maximum</th><th></th><th>Maximum</th><th>Average</th><th></th><th></th><th>Background</th><th></th><th>Soil</th><th>Sail</th><th>Soil</th><th>Soil</th><th></th></th<>	Ana vsis		-	Detection	Minimum	Maximum		Maximum	Average			Background		Soil	Sail	Soil	Soil	
Nial         Nial <th< th=""><th></th><th>Analyte</th><th></th><th>Limit</th><th></th><th>Nondetect</th><th>Detect</th><th>Detect</th><th>Result</th><th>on Mean</th><th>Criteria<sup>2</sup></th><th></th><th>SRC?</th><th>(0y/đu)</th><th>Criteria</th><th>(նչկնա)</th><th>Criteria</th><th>COPC?</th></th<>		Analyte		Limit		Nondetect	Detect	Detect	Result	on Mean	Criteria <sup>2</sup>		SRC?	(0y/đu)	Criteria	(նչկնա)	Criteria	COPC?
Note         Note </th <th></th> <th>-</th> <th></th> <th>00000</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>2.33E+01</th> <th>6 07E+01</th> <th>1/108</th> <th>z</th> <th>1.5E+02</th> <th>£</th> <th>3 7E+03</th> <th>ŝ</th> <th>Ŷ</th>		-		00000						2.33E+01	6 07E+01	1/108	z	1.5E+02	£	3 7E+03	ŝ	Ŷ
Feature         <		NICKel	Fyni	601 (OD )						1 455-4073	3 355403	1/1/08	ŝ		None		None	Ŷ
Boloution         ope         C2700         15660         40660         53660         15670         14670         53760         15670         14670         57670         169         746000         74600         74600 <t< th=""><th></th><th>Potassium</th><th>ByyGuu</th><th>801/801</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>2</th><th>1</th><th></th><th></th><th></th><th>-</th><th>4</th></t<>		Potassium	ByyGuu	801/801								2	1				-	4
Size         mpg         2010         30500         3050         3050 <th< th=""><th></th><th>Selenium</th><th>mg/kg</th><th>102/180</th><th>1.56E-01</th><th>4.85E-01</th><th></th><th>5.00E+00</th><th>7.74E-01</th><th>8.54E-01</th><th>1.50E+00</th><th>16/180</th><th>Yes</th><th>3.7E+01</th><th>²</th><th>9.4E+02</th><th>2</th><th>ŝ</th></th<>		Selenium	mg/kg	102/180	1.56E-01	4.85E-01		5.00E+00	7.74E-01	8.54E-01	1.50E+00	16/180	Yes	3.7E+01	²	9.4E+02	2	ŝ
Sedar         Sedar         rand		Silver	m <b>g</b> rkg	26/180	9.50E-02	7.00E-01			8.51E-01	1.18E+00	0:00E+00	26/180	Yes	3.7E+01	Ň	9.4E+02	No	Ŷ
Thallin,         Thallin,         Thy         Th         Th <th></th> <th>Sodium</th> <th>в<b>уб</b>ш</th> <th>54/100</th> <th>1.41E+01</th> <th>5.80E+01</th> <th></th> <th></th> <th>1.15E+02</th> <th>1.44E+02</th> <th>1.45E+02</th> <th>27/100</th> <th>Ŷ</th> <th></th> <th>Nane</th> <th></th> <th>None</th> <th>Ŷ</th>		Sodium	в <b>уб</b> ш	54/100	1.41E+01	5.80E+01			1.15E+02	1.44E+02	1.45E+02	27/100	Ŷ		Nane		None	Ŷ
Vandation         mg/g         1001         1010         1020		Thalium ⁺	mg/kg	10/108	2.80E-01	6.00E-01	7.60E-01		4.S0E-01	5.25E-01	9.10E-01	B/108	Yes	6.05-01	Yes	1.5E+01	2	Yes
Zue         mg/g         RGUID         Access to the dimensional solution         Solutional solution         Solution		Vanadium	трука	108/106					2.13E+01	2.22E+01	3.76E+01	1/108	Ŷ	5.2E+01	Ŷ	1.3E+03	0N N	Ŷ
Sectionizity         2.4600, mappinging         mg/y         4.05         1.660-01         4.760-01		Zinc	mg/kg	190/160			2.86E+01		3.64E+02	5.96E+02	9.33E+01	73/180	Yes	2.2E+03	Yes	1.0E+04	Yes	Yes
Activation         mg/g         2.23         (66:C)         3.46:C         1.46:C	re.Samivolatila	2-Methvinanhthalene	така	4/23	1.65E-01	2.05E-01	4.70E-02	1.50E-01	1.70E-01	1.86E-01			Yes		None		None	Yes
Antionene         mg/g         323         1.68E-01         3.46E-01         2.15E-01         2.15E-01         2.46E-01         2.46E-01         3.46E-01         3.4		Arenenhihane	marka	2/23	1.65E-01	3.45E-01	1.406-01	1.50E-01	1.92E-01	2.05E-01			Yes	2.6E+02	No	2.8E+03	Ŷ	Ŷ
Matrix         Matrix         SSE of		Anthracane	mo/kg	3/23	1.65E-01	3.45E-01	9.806-02	4.80E-01	2.15E-01	2.48E-01			Yes	1 4E +03	°N N	2.2E+04	Ŷ	Ŷ
Berevelophylometer         mpg         62:3         166:C0         3.45:C0         500:C0         2.35:C0         2.35:C0         Yes         56:C0         Yes         36:C0         Yes		Benzo(a)amhracène	marka	6/23	1.65E-01	3.45E-01	4.306-02	1.00E+00	2.47E-01	3.20E-01			Yes	5 6E-02	Yes	3,6E-01	Yes	Yes
Baraccip/Hubarathonic         mg/g         623         156E-01         345E-01         246E-01	Ornanics-Semivolatile	Benzo(a)pwene	щkg	6/23	1.65E-01	3 45E-01	6.00E-02	8.00E-01	2.36E-01	2.95E-01			Yes	5 6E-03	Yes	3.66-02	Yes	Yes
Berociça, I, Devrojene         mg/g         423         1 45E-01         3.4E-01         1.0E-01         2.4E-01	Organics-Semivolatile	Berzo(b)fluoranthene	рубш	6/23	1.65E-01	3.45E-01	7.60E-02	1.10E+00	2.69E-01	3.55E-01			Yes	5.6E-02	Yes	3.66-01	Yes	Yes
Bertochylnhorarthane         mydd         473         166E-01         3.45E-01         3.46E-01         9.66E-01         9.66E-01	Organics-Semivolatile	Berrzo(g,h,i)perylene	mgilkg	4/23	1.66E-01	3.45E-01	1.10E-01	3.90E-01	204E-01	2 27E-01			Yes		Nome		None	Yes
Big/2 artiv/free/interime         mg/v         156E-01         3.45E-01         3.40E-02         3.40E-02         1.91E-01         2.01E-01         1.92E-01         1.92E-01<	Organics-Semivolatile	Benzo(k)fluoranthene	тgrkg	4/23	1.65E-01	3.45E-01	9.10E-02	5.00E-01	2.15E-01	2.45E-01			Yes	5.6E-01	Ŝ	3.6E+00	ŝ	Ŋ
Cartazolo         mg/g         323         155E-01         345E-01         1.95E-01         1.95E-01         1.95E-01         1.95E-01         1.95E-01         1.95E-01         No         2.2E+00         No         1.5E+01           Chywene         mg/g         623         1.65E-01         3.45E-01         5.00E-02         2.51E-01         3.25E-01         Yes         5.6E+02         No         1.5E+01           Di-H-Un/I Phrutalize         mg/g         3.23         1.65E-01         3.45E-01         5.30E-02         1.92E-01         2.05E-01         Yes         5.6E+02         No         1.5E+01           Di-H-Un/I Phrutalize         mg/g         3.23         1.65E-01         3.45E-01         1.00E-02         2.50E-02         1.92E-01         1.5E-01         Yes         5.5E+02         No         1.1E+04           Diberzole         mg/g         3.23         1.65E-01         3.45E-01         1.00E-02         2.70E+01         1.5E-01         Yes         5.5E+02         No         3.25E+02         No         3.25E+02         No         3.25E+01         No         3.25E+02         No         3.25E+02         No         3.25E+02         No         3.25E+02         No         3.25E+02         No         3.25E+02 <t< th=""><th>Organics-Semivolatile</th><th>Bis(2-ethylhexyl)phthalate</th><th>mg/kg</th><th>1/23</th><th>1.65E-01</th><th>3.45E-01</th><th>3.40E-02</th><th>3,40E-02</th><th>1.91E-01</th><th>2.08E-01</th><th></th><th></th><th>发</th><th>3.2E+00</th><th>ŝ</th><th>2.1E+01</th><th>N</th><th>Ŷ</th></t<>	Organics-Semivolatile	Bis(2-ethylhexyl)phthalate	mg/kg	1/23	1.65E-01	3.45E-01	3.40E-02	3,40E-02	1.91E-01	2.08E-01			发	3.2E+00	ŝ	2.1E+01	N	Ŷ
Chysele         mg/kg         523         1.56E-01         3.45E-01         5.00E-02         1.50E-01         3.26E-01         3.26E-01         No         5.6E+02         No         3.6E+01           Di-h-bu/l Phtwalate         mg/kg         1/23         1.66E-01         3.45E-01         5.40E-02         1.91E-01         2.06E-01         3.45E-01         3.45E-01         3.45E-01         3.45E-01         3.45E-01         3.45E-01         1.06E-01         1.91E-01         1.91E-01         No         5.5E+02         No         1.1E+04           Diberzofallmath         mg/kg         3.23         1.66E-01         3.45E-01         1.06E-01         1.91E-01         1.91E-01         Yes         5.6E-02         No         3.26E-02           Diberzofallmath         mg/kg         3.23         1.66E-01         3.45E-01         1.00E-01         1.91E-01         Yes         2.1E+01         No         3.26E-02           Huoranthena         mg/kg         7/23         1.66E-01         3.45E-01         1.00E-01         1.91E-01         Yes         2.1E+01         No         3.26E-02         No         3.26E-01         No         3.26E-02         No         3.26E-02         No         3.26E-02         No         2.26E+02         No         2.	Organics-Semiwolatile	Carbazole	труби	3/23	1.65E-01	3.45E-01	8.60E-02	2,70E-01	1.95E-01	2.11E-01			Yes	2.ZE+00	ŝ	1.5E+01	No	Ν
Di-Houtyl Prittalate         reg/d         1.55E-01         3.45E-01         5.30E-02         1.92E-01         2.06E-01         0.0         5.5E+02         No         1.1E+04           Diemazo(a.))arthracene         mg/d         323         1.65E-01         3.45E-01         3.45E-01         1.65E-01         3.45E-01         3.45E-01         1.65E-01         3.45E-01         1.65E-01         3.45E-01         1.65E-01         3.45E-01         1.65E-01         1.65E-01         3.45E-01         1.60E-01         1.91E-01         2.05E-01         Yes         5.6E-02         Yes         3.6E-02         No         1.1E+04           Diberzoturan         mg/d         723         1.65E-01         3.45E-01         1.06E-01         1.91E-01         2.05E-01         Yes         3.6E-02         No         3.7E+02           Huoranthene         mg/d         723         1.65E-01         3.45E-01         1.91E-01         2.05E-01         Yes         2.7E+02         No         3.7E+02           Huoranthene         mg/d         723         1.65E-01         3.45E-01         1.90E-02         2.90E-02         1.95E-01         Yes         2.7E+02         No         3.7E+02           Huoranthene         mg/d         1.23         1.85E-01         1.96E	Organics-Semivolatile	Chrysene	бу/бш	6/23	1.65E-01	3.45E-01	5.00E-02	1.00E+00	2.51E-01	3.26E-01			Yes	5.6E+00	° X	3.6E+01	Ÿ	Ŷ
Diberzofunathmedne         mg/kg         323         1.65E-01         3.45E-01         1.06E-01         1.91E-01         206E-01         2.06E-01	Organics-Semivolatile	Di-n-butyl Phthalate	ნაცნ	1/23	1.65E-01	3.45E-01	5.30E-02	5.30E-02	1.92E-01	2.08E-01			ş	5.5E+02	Ŷ	1.1E+04	Ÿ	Ŷ
Diperzolutian         mg/g         223         1.65E-01         3.45E-01         1.010-01         1.91E-01         2.05E-01         3.25E+02         No         3.25E+02           Huoranthene         mg/g         7/23         1.65E-01         3.45E-01         1.006-02         2.70E+00         4.20E-01         5.55E-01         Yes         2.1E+01         No         3.2F+02           Huoranthene         mg/g         2/23         1.65E-01         3.45E-01         1.80E-01         2.40E-01	Organics-Semivolatile	0ibenzo(a.h)anthracene	вудш	3/23	1.65E-01	3.45E-01	5.40E-02	1.10E-01	1.81E-01	2.006-01			Yes	5.66-03	Yes	3.6E-02	Yes	Yes
Hursenthene         mg/g         7/23         1.65E-01         3.45E-01         4.00E-02         2.70E+00         4.20E-01         6.55E-01         %         2.0E+02         No         3.7E+03           Fluorene         mg/g         2/23         1.65E-01         3.45E-01         1.80E-01         2.40E-01         1.87E-01         2.10E-01         Yes         1.8E+02         No         3.7E+03           Huorene         mg/g         4/23         1.65E-01         3.45E-01         1.80E-01         2.40E-01         2.14E-01         2.10E-01         Yes         1.8E+02         No         2.2E+03           Napnthalene         mg/g         1/23         1.65E-01         3.45E-01         1.80E-01         2.40E-01         2.40E-	Organics-Semivolatila	Dibenzofuran	0у/бш	2/23	1.65E-01	3.45E-01	1.10E-01	1.60E-01	1.91E-01	2.05E-01			<b>8</b>	2.1E+01	Ÿ	3.2E+02	Ÿ	ŝ
Fluenene         mg/kg         223         1.65E-01         3.45E-01         1.80E-01         2.40E-01         2.10E-01         2.10E-01         2.00E-01         2.00E-02         7.00E-02         7.00E-02         2.00E-02         2.0	Organics-Semivolatile	Fluoranthena	Вубш	7/23	1.65E-01		4.00E-02	2.70E+00	4.20E-01	6.55E-01			۶,	2.0E+02	Ņ	3.7E+03	a N	Ŷ
Indemo(1,2,3-cd)pyrene         mg/kg         4/23         1.65E-01         3.45E-01         3.65E-01         7.86         5.6E-02         Yes         3.6E-01         3.6E-01           Phenamitrinene         mg/kg         1/23         1.65E-01         2.06E-02         7.60E-02         2.40E+00         3.86E-01         1.95E-01         No         5.5E+00         No         1.9E+01           Pyrena         mg/kg         7/23         1.65E-01         2.06E-02         2.40E+00         3.47E-01         5.55E-01         Yes         1.5E+02         No         1.9E+01           Actione         mg/kg         1/1         2.56E-01         3.60E-02         2.10E+00         3.47E-01         5.16E-01         Yes         1.5E+02         No         1.9E+01           Actione         mg/kg         1/1         2.56E-01         3.60E-02         5.20E-02         3.45E-01         Yes         1.5E+02         No         5.6E+03           Actione         mg/kg         1/1         2.56E-03         3.66E-02	Organics-Semivolatile	Fluorene	щđ	2/23	1.65E-01		1.80E-01	2.40E-01	1.97E-01	2.10E-01			¥es	1.8E+02	Ŷ	2.2E+03	a X	ŝ
Napritratione         mg/kg         1/23         1/55E-01         2/10E-07         7.60E-02         7.60E-02         1.85E-01         1/55E-00         No         1.9E+01         1/9E+01           Phenawrithmene         mg/kg         7/23         1.55E-01         2.06E-07         7.00E-02         2.40E+00         3.38E-01         5.25E-01         Yes         None         1.9E+01           Pyrene         mg/kg         7/23         1.55E-01         2.45E-01         3.45E-01         3.45E-01         Yes         None         2.6E+03           Acctorie         mg/kg         1/1         2.55E-01         3.45E-01         3.45E-01         7.00E         None         2.6E+03         None         0.6E+03         None         2.6E+03         None         2.6E+03         None         0.6E+03         2.00E-03         2.36E+03         None </th <th>Ornanics-Semivolatile</th> <th>Indeno(1,2,3-cd)pyrene</th> <th>Буюш</th> <th>4/23</th> <th>1.65E-01</th> <th>3.45E-01</th> <th>1.30E-01</th> <th>4.80E-01</th> <th>2.14E-01</th> <th>2.42E-01</th> <th></th> <th></th> <th>Yes</th> <th>5.6E-02</th> <th>Yes</th> <th>3.6E-01</th> <th>Yas</th> <th>Yes</th>	Ornanics-Semivolatile	Indeno(1,2,3-cd)pyrene	Буюш	4/23	1.65E-01	3.45E-01	1.30E-01	4.80E-01	2.14E-01	2.42E-01			Yes	5.6E-02	Yes	3.6E-01	Yas	Yes
Phenantitrene         mg/kg         7/23         1.65E-01         2.06E-02         2.40E+00         3.38E-01         5.25E-01         Yes         None           Pyrene         mg/kg         7/23         1.65E-01         3.45E-01         3.60E-02         2.10E+00         3.47E-01         5.16E-01         Yes         1.5E+02         No           Actione         mg/kg         1/1         2.50E-03         5.00E-02         5.10E+00         3.47E-01         5.16E-01         Yes         1.5E+02         No         2.6E+03           Actione         mg/kg         1/1         2.50E-03         5.20E-03         5.20E-02         5.18E-02         1.70E-02         Yes         1.4E+02         No         5.1E+02           Actione         mm/kn         1/15         2.50E-03         2.00E-03         2.05E-03         2.05E-03         2.05E-03         2.05E-03         2.05E-03         2.05E-03         2.05E-03         2.05E-03         2.6E-02         Yes         1.5E+02         No         5.6E+03	Oroanics-Semivolatile	Naphthalane	ლეტე	1/23	1.65E-01		7.60E-02	7.60E-02	1.B5E-01	1.95E-01			ů	5.5E+00	₽	1.96+01	ž	Ŷ
Pyrene         mg/kg         7/23         1.55E-01         3.45E-01         3.47E-01         5.16E-01         3.47E-01         5.16E-01         3.45E-01         5.6E-03         2.65E-03         3.45E-01         3.45E-01         5.6E-03         5.20E-02         5.20E-03         5.20E-02         5.20E-03         5.20E-02         5.20E-02         5.20E-02         5.20E-02         5.20E-02         5.20E-02         5.20E-02         5.20E-02         5.20E-	Organics-Semivolatile	Phenamithrene	р <b>у</b> вш	7173	1.65E-01		7.00E-02	2.40E+00	3.36E-01	5.25E-01			Yes		Nane		None	Yes
Acetone mg/kg 1/11 2.50E-03 6.00E-03 5.20E-02 9.18E-02 1.70E-02 7.75E-02 7.65 1.4E+02 No 6.1E+02 Acetone mn/kn 1/15 2.50E-03 3.10E-02 2.00E-03 2.73E-03 2.74E-03 2.73E-03 2.74E-03 2.74	Organics-Semivolatile	Pyrene	DAVG III	7/23	1.65E-01	3.456-01	3.60E-02	2.10E+00	3.47E-01	5.166-01			Yes	1.5E+02	ž	2.6E+03	¥	Ŷ
Autorium multin 1/15 2 50E-03 3 10E-03 2 00E-03 2 73E-03 2 83E-03 Yes 2 4E-02 No 5 2E-02	Organics-Volatile	Acetorie	mgikg	1/11	2.50E-03		5.20E-02	5.20E-02	9.18E-03	1.70E-02			Yes	1.4E+02	¥	6.1E+02	¥	Ŷ
	Omenice-Volatile	Chloroform	mg/kg	1/15	2 SOE-03	3.10E-03	2.00E-03	2.00E-03	2.73E-03	2.88E-03			Yes	2.4E-02	¥	5.2E-02	ÿ	Ñ

Table J.2.5. Summary of Site-related Chemical and COPC Screening for WBG Subsurface Soil

ť	7		coPC?	No	°2	
	Industria	Soil	Criteria	Ň	¥	
- VI LOIBAN	Industrial Industrial	Soil	(BNBm)	2.0E+00	5.2E+01	
Kedion IX Max Detect > Region IX Max Detect >	Residential Residential	Soi	Criter a	Ŷ	Ŷ	
Kegion iv	Residential	Soi	(B)(B)	8.5E-01	5.2E+01	
		-	SRC?	Yes	Yes	
Delects >	Site	Background	Criteria			
	Site	UCL Background Background	Result on Mean Criteria <sup>2</sup> Criteria			
	95%	ncr	on Mean	5 S8E-03	2.036-01	
		Average		4.26E-03	2.31E-02 2.03E-01	
		Maximum	Detect	1.20E-02	1.70E-01	
		Maximum Minimum Maximum Average		1.00E-02 1.20E-02 1.20E-02 4.26E-03 5 56E-03	3.00E-03 4.30E-04	
		Maximum	Nondetect Defect	1.00E-02	3.00E-03	
		Detection Minimum	Nondelect	2.50E-03	2.50E-03	
	Results >	Detection	Limit	1/15		
			Units	бубш	ђувш	
			Analyte	Methylene Chloride	Touene	
		Analysis	Type	Organics-Volatile	Organios-Volatile	

SRC = Site-related chemical; COPC = Chemical of potential concern.

<sup>1</sup> Only analytes with detected concentrations are shown on this summary.

<sup>2</sup> Metals that were never detected in background samples have been assigned the background criteria of 0 mg/kg.

\* Thalfurn concentrations were compared against the Region |X PRGs for Thalfurn cabonate, the most conservative form of thalfurn available.

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Chemical	Groundwater	Surface Water	Sediment	Surface Soil	Sub-surface Soil
Quantitative COPCs Inorganics					
Antimony Arsenic Barium			x	x x x	x x
Cadmium Chromium			x	x	x
Manganese Thallium Zinc	x		x	x x	x x
Organics					
1,3,5-Trinitrobenzene 2,4,6-Trinitrotoluene Benzo(a)anthracene			x x	x x x x	x x x x
Benzo(a)pyrene Benzo(b)fluoranthene Bis(2-ethylhexyl)phthalate Chloroform	x x		x	х	X
Dibenzo(a,h)anthracene HMX Indeno(1,2,3-cd)pyrene RDX	x		x	X X X X	x x x x
Qualitative COPCs Inorganics					
Aluminum Copper Lead	x		x x	X X X	x x
Organics					
2-Methylnaphthalene Benzo(g,h,i)perylene Nitrocellulose as N			x	X X X	x x x
Nitroglycerin Phenanthrene			х	x x	x x

## Tables J.2.6. Summary of quantitative and qualitative COPCs for each medium

COPC = Chemical of potential concern.

Quantitative COPCs are those COPCs for which risks and/or hazards have been calculated. Qualitative COPCs are those COPCs for which risks and/or hazards have not been calculated, based on a lack of toxicity data.

•

Analyte	Oral chronic RID	Confidence	10 %	Dermal	Inhalation	R(D) basis	Critical effect	Uncertainty
	(mg/kg-d)	level	absorption <sup>d</sup>	chronic R(D (mg/kg-d)	chronic RfD (mg/kg-d)	(vehicle)		lactor; modifying factor *, b
,3,5-Trinitorobenzene	3.00E-02	Medium (0)	65	1.95E-02		Oral: (rat)	Methemoglobinemia and spleen- ervthroid cell hyperplasia	(O)UF=100
2,4,6-Trinitrotoluene Antimony	5.00E-04 4.00E-04	Medium (O) Low	60 2	3.00E-04 8.00E-06		Oral: (dog) Oral: water	Liver effects Gastrointestinal liver, cardiovascular and develonmental	(O)UF=1000 (O)UF=1000
Arsenic	3.00E-04	Medium (O)	41	1.23E-04		Oral: water	toxicity Hyperpigmentation and keratosis and nossible vascular complications	(O)UF=3
Barium	7.00E-02	Medium (O)	7	4.90E-03	1,43E-04	Oral: water: Inhalation	(O): increased blood pressure (human)(I): baritosis (human)	(O)UF=3 (I)UF=1000
Bis(2-ethylhcxyl)phthalate	2.00E-02	Medium (0)	19	<b>3.80E-03</b>		Oral: (guinea pig)		(O)UF=1000
Cadmium	1.00E-03	High	1	1.00E-05		Oral	(guinea pig) Renal toxicity, osteomalacia, osteoporosis, and significant	(O)UF=10
Chloroform Chromium <sup>c</sup>	1.00E-02 3.00E-03	Medium (O) Low (O)	20	2.00E-03 6.00E-05	2.86E-05	Oral: (dog) Oral	proteinuria Liver fatty cyst formation (dog) (O): local gastrointestinal effects at very high doses (animals)	(O)UF=1000 UF=500
HMX Manganesc	5.00E-02 4.60E-02	Law (O) NA	15 4	7.50E-03 1.84E-03	1.43E-05	Oral: (rat) Oral: water Inhalation:	<ol> <li>respiratory effects (human)</li> <li>Hepatic lesions</li> <li>Iethargy, tremors, mental disturbance, muscle tonus, and central nervous system effects</li> </ol>	(0)UF=1000 (0)UF=1 (0)MF=3 (1)UF=1000
RDX	3.00E-03	High (O)	100	3.00E-03		Oral	<ul> <li>(1) Impaired neurobehavioral function (human)</li> <li>(0): Inflammation of the prostate</li> </ul>	(O)UF=100 (O)MF=1
Thallium <sup>d</sup>	8.00E-05	Low (O)	20	4.00E-05		Oral: (rat)	<ul> <li>(O): Increased levels of SGOT and LDH</li> </ul>	(O)ÚF=3000
Zinc	3.00E-01	Medium	20	6.00E-02		Oral: (human)	<ul> <li>(0): copper deficiency and hypochromic microcytic ancmia (hurnan)</li> <li>(1): pulmonary and gastrointestinal effects (hurnan)</li> </ul>	UF=10

Table J.4.1. Noncarcinogenic reference doses

Notes: IAA = not available, for a more part of a secondance with EPA (1995a), other chemical-specific GP% absorption values were taken from Energy Systems (1996). #(1) indicates inhalation; (0) indicates oral. #GT% absorption default values of 20, 50, or 80 were used in accordance with EPA (1995a), other chemical-specific GP% absorption values were taken from Energy Systems (1996). #GT% absorption default MF is 1. #Chromium evaluated with toxicity of Chromium VI (particulates) for soil and sediment; chromium was not a COPC for groundwater or surface water. #GTMalfium evaluated with toxicity of Thallium Carbonate.

		100 10		Inteletion close	UDA TEED	TEED	Type of cancer
Analyte	Oral slope factor (mg/kg-day) <sup>-1</sup>	% Gl absorption <sup>a</sup>	Dermai stope factor - Innalation stope (mg/kg-day) <sup>-1</sup> factor (mg/kg-day) <sup>-1</sup>	ипацацон stope factor (mg/kg-day) <sup>1</sup>	class	1	
0 1 / TT 2. 2. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	1 (ME-07	60	5.00E-02		U		Urinary bladder papilloma and carcinoma (rats)
2,4,6-1 finitrotolucite	1 408+60	4	3.66E+00	5.00E+01C	A		Respiratory system tumors
	7 30F-010	: 5	$2.35E+0.0^{b}$	$3.10E-01^{b}$	B2	0.1	Stomach tumors (mouse)
Benzo( <i>a</i> )anthracene <sup>2</sup>	730E+00b	31	2.35E+01 <sup>b</sup>	3.10E+00 <i>b.c</i>	B2	1.0	Stomach, nasal cavity, larynx, trachea, and pharynx
Benzo(a)pyrenew		1					tumors
6 1 1	7 30E_010	15	$2.35E+00^{b}$	$3.10E-01^{b}$	B2	0.1	Tumors
Benzo(b)lluorantiene	1 405-00	61	7.37E-02		B2		Liver neoplastic nodule and hepatocellular carcinoma
Bis(2-ethylnexyl)phinalate		:		6.10E+00c	Bl		Respiratory tract and lung tumors
Cadmium	A INF-03	20	3.05E-02	8.10E-02€	<b>B</b> 2		Colon, rectum, bladder, and liver carcinoma (mouse)
		<b>،</b> ا		4.10E+01e	۷		Lung tumors
Chromium <sup>4</sup>	400+002 L		2.35E+01b	$3.10E+00^{6}$	B2	1.0	Immunodepressive effects (mouse)
Dibenzo( $a,n$ )anunactue	7 300-010		2.35E-00b	3.10E-016	<b>B</b> 2	0.1	Tumors
lndeno(1,2,3-cd)pyrcne <sup>v</sup>	1.105-01	100	1.10E-01		U		Hepatocellular adenomas and carcinomas (micc)

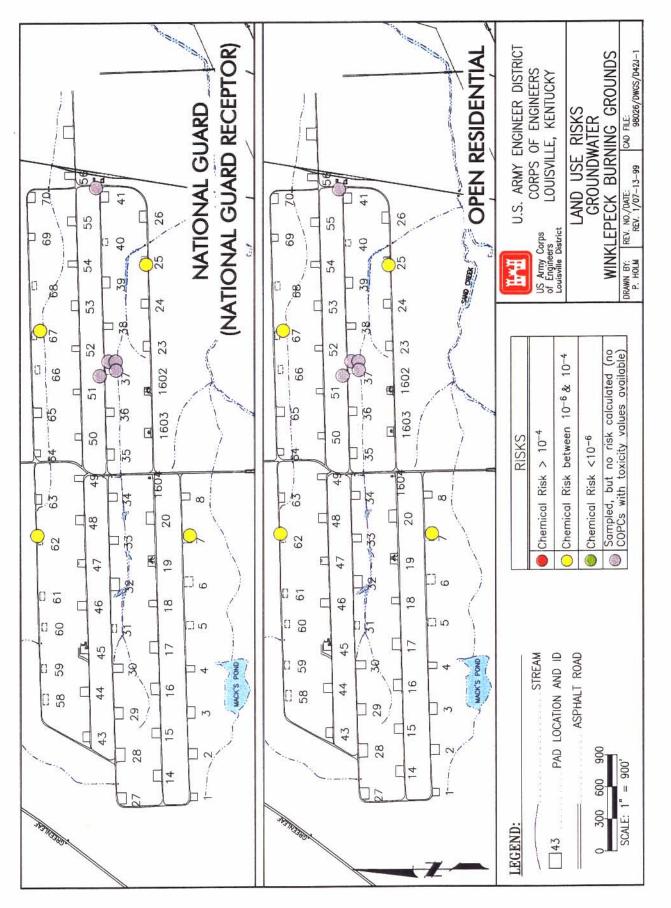
Table J.4.2. Carcinogenic slope factors

NOTES: Unless otherwise footnoted, slope factors are from IRIS or have been derived from values in IRIS.

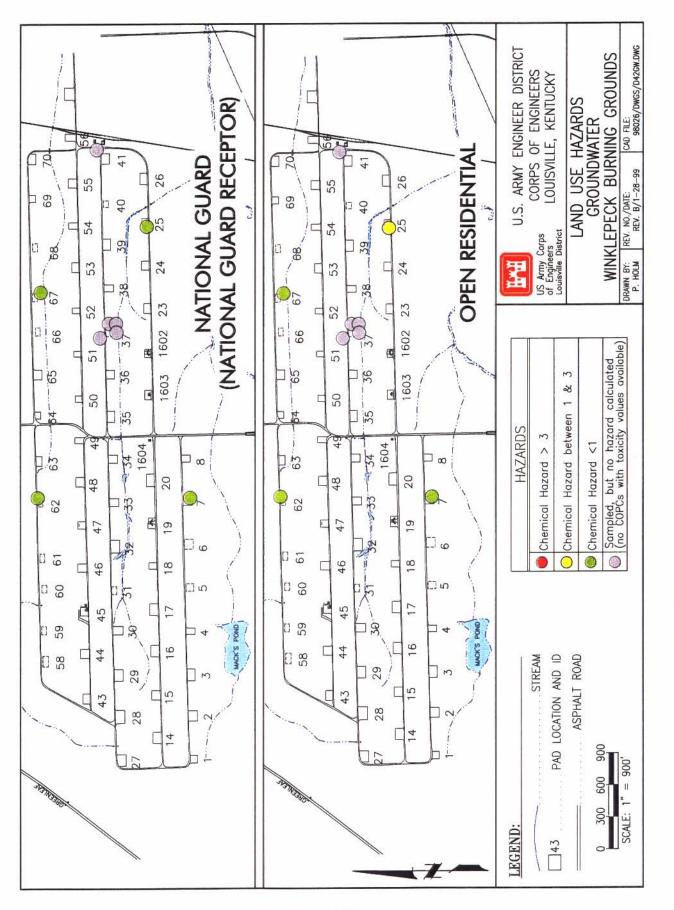
G1% absorption default values of 20, 50, or 80 were used in accordance with EPA (1995a); other chemical-specific G1% absorption values were taken from Energy Systems (1996).
 <sup>b</sup> Toxicity Equivalence Factor (TEF) have been used, based on the relative potency of each compound relative to that of benzo(a)pyrene (EPA 1995a).
 <sup>c</sup> EPA-withdrawn toxicity values or provisional values were used.
 <sup>d</sup> Chromium evaluated with toxicity of Chromium VL.
 <sup>e</sup> Value is from HEAST.

Table J.6.1	General	uncertainty	factors in	risk assessment
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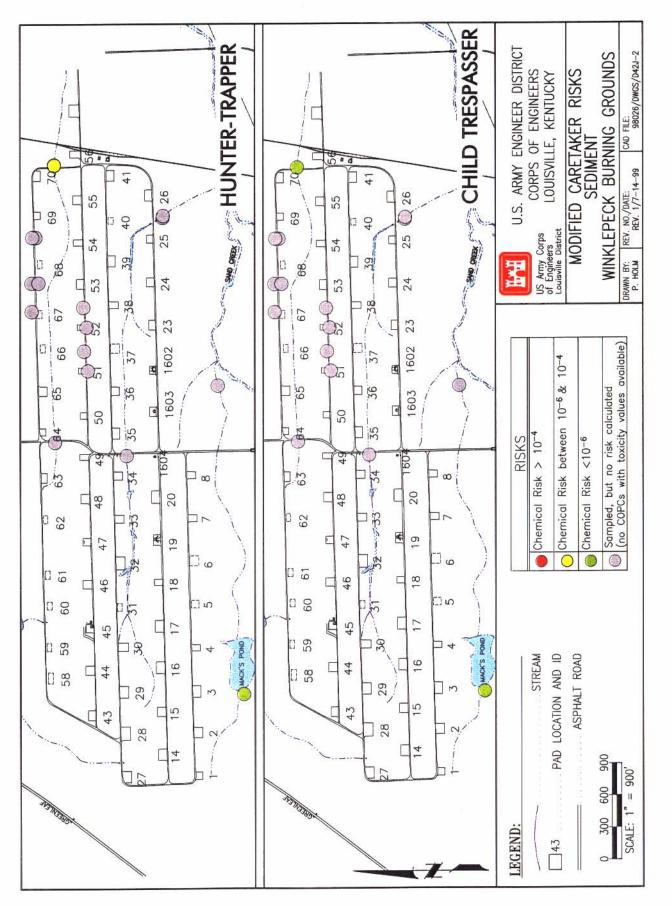
Uncertainty factor	Effect of uncertainty	Comment
Use of cancer slope factors	May overestimate risks	Slope factors are upper 95th percent confidence limit of the slope of the dose- response curve; considered unlikely to underestimate true risk
Risks/doses within an exposure route assumed to be additive	May over- or underestimate risks	Does not account for synergism or antagonism
Toxicity values derived primarily from animal studies	May over- or underestimate risks	Extrapolation from animal to humans may induce error due to differences in pharmacokinetics, target organs, and population variability
Toxicity values derived primarily from high doses; most exposures are at low doses	May over- or underestimate risks	Assumes linearity at low doses; tends to have conservative exposure assumptions
Toxicity values	May over- or underestimate risks	Not all values represent the same degree of certainty; all are subject to change as new evidence becomes available
Effect of absorption	May over- or underestimate risks	The assumption that absorption is equivalent across species is implicit in the derivation of the critical toxicity values; absorption may actually vary with species and age
Effect of applying critical toxicity values to soil exposures	May overestimate risks	Assumes bioavailability of contaminants sorbed onto soils is the same as detected in laboratory studies; contaminants detected in studies may be more bioavailable
Exposures assumed constant over time	May over- or underestimate risks	Does not account for environmental fate, transport, or transfer that may alter the concentration
Metal analysis for total metals only	May overestimate risks	Does not distinguish between valences or speciation; assume the metal is present in its most toxic form
Not all chemicals at the site have toxicity values	May overestimate risks	These chemicals are not addressed quantitatively
Exposure assumptions	May over- or underestimate risks	Assumptions regarding media intake, population characteristics, and exposure patterns may not characterize exposure



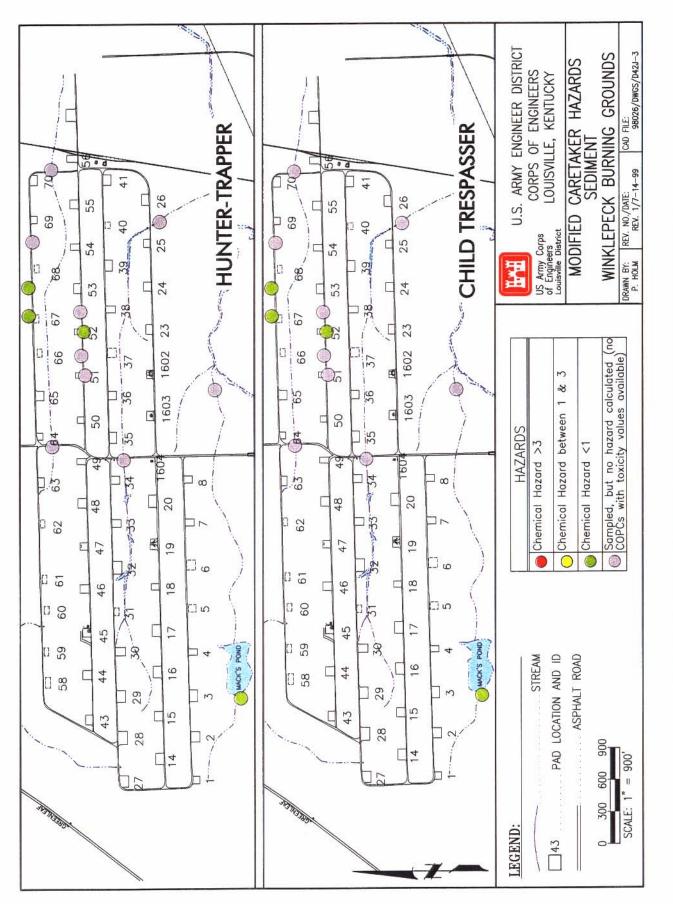














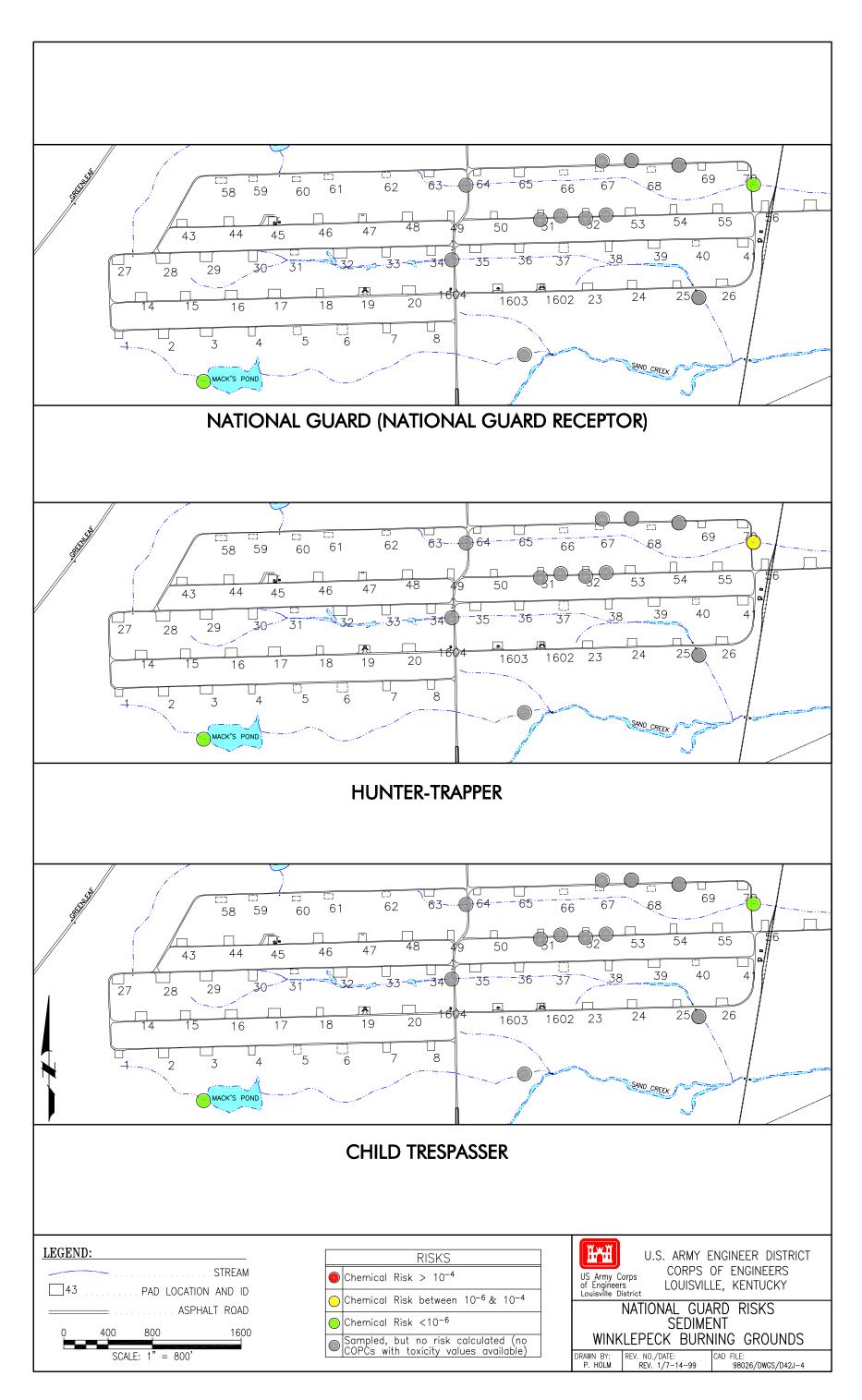


Figure J-5. Chemical Risks from Direct Exposure to Sediment: National Guard Land Use

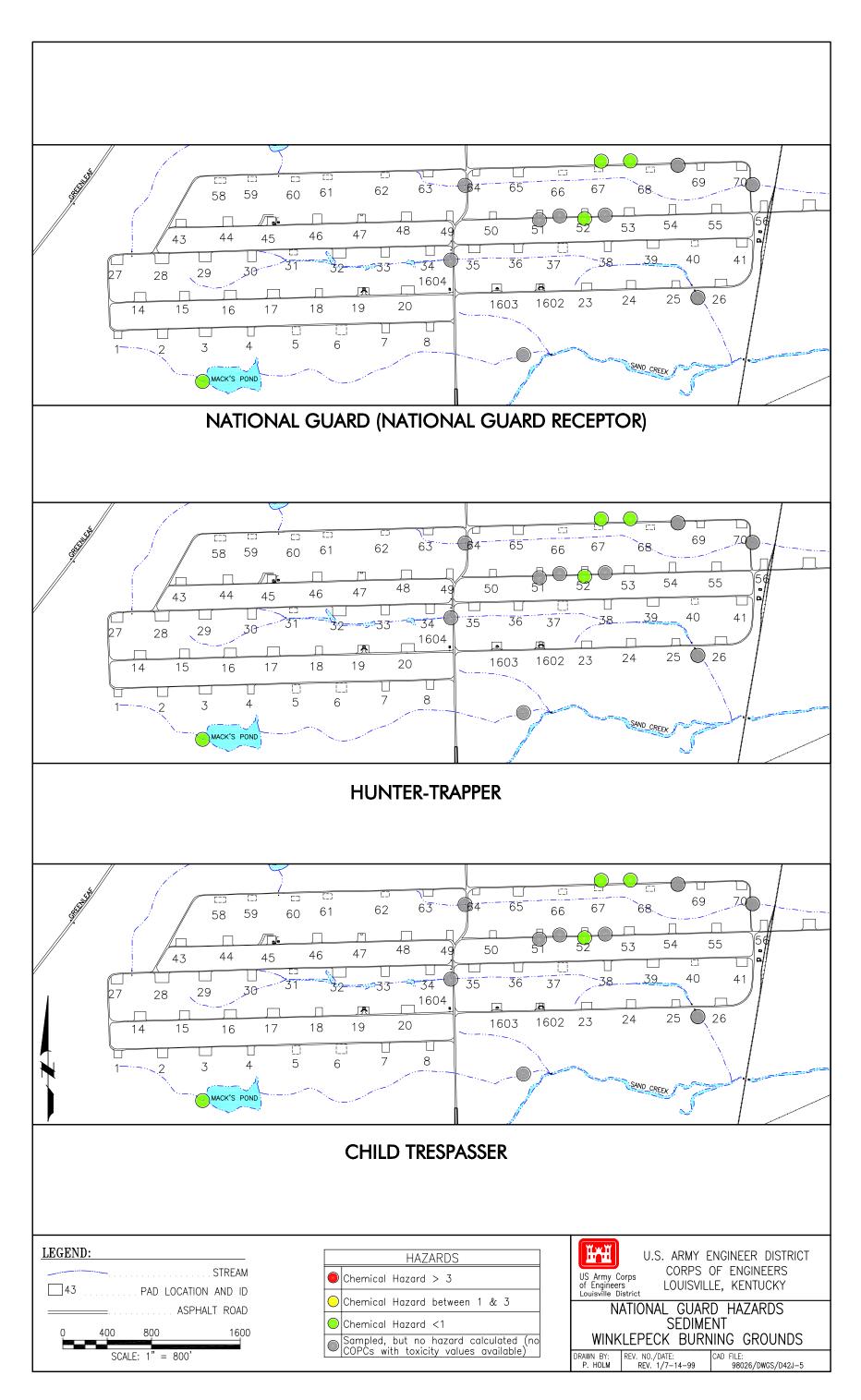
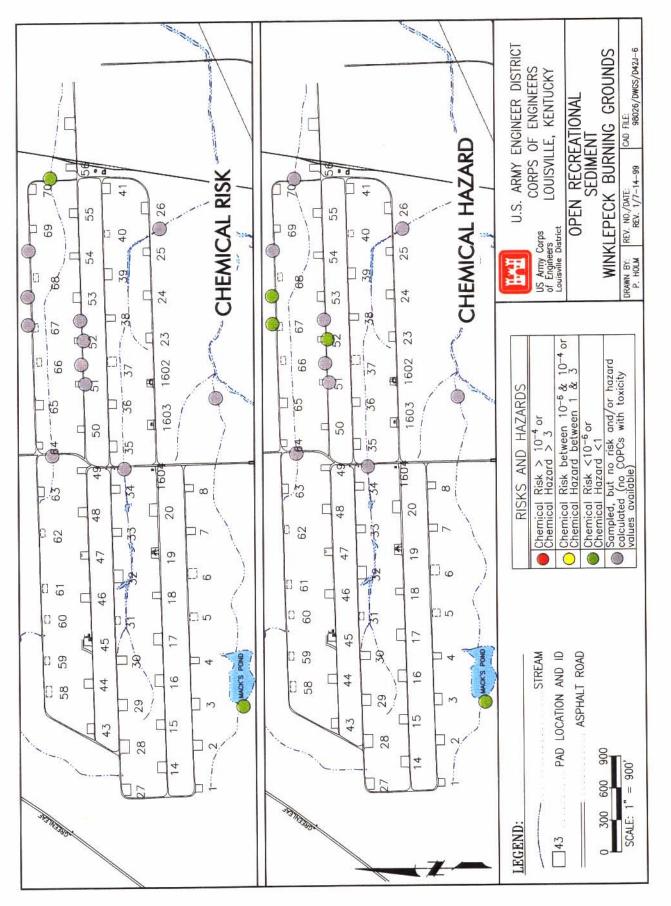
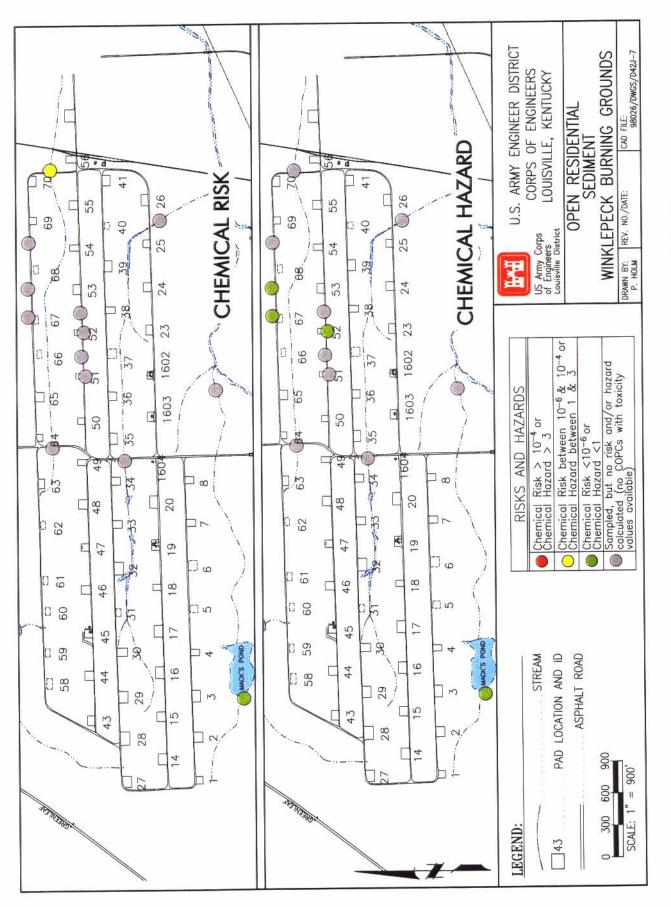


Figure J-6. Chemical Hazards from Direct Exposure to Sediment: National Guard Land Use









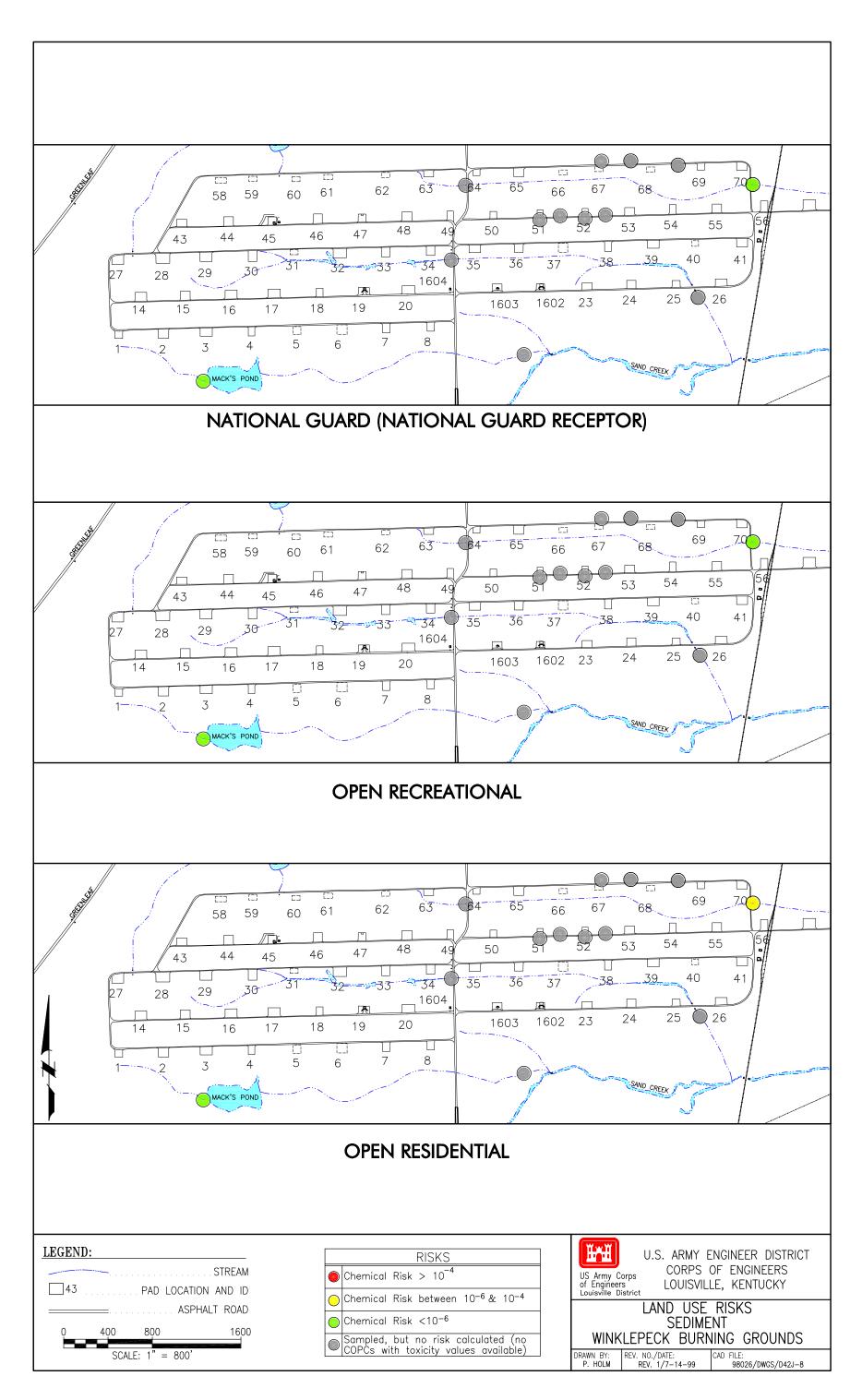
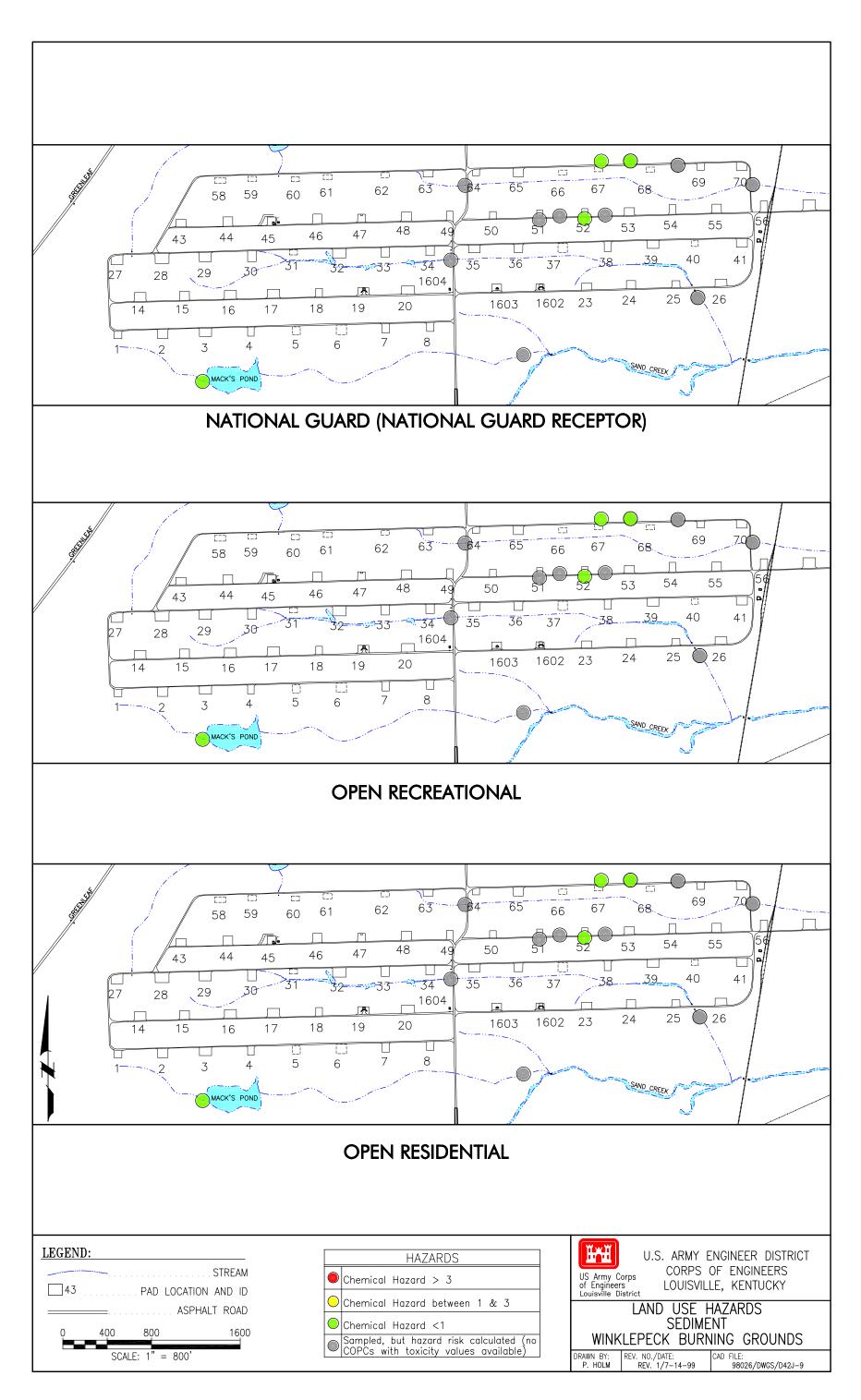


Figure J-9. Chemical Risks from Direct Exposure to Sediment: A Comparison of Land Uses



### Figure J-10. Chemical Hazards from Direct Exposure to Sediment: A Comparison of Land Uses

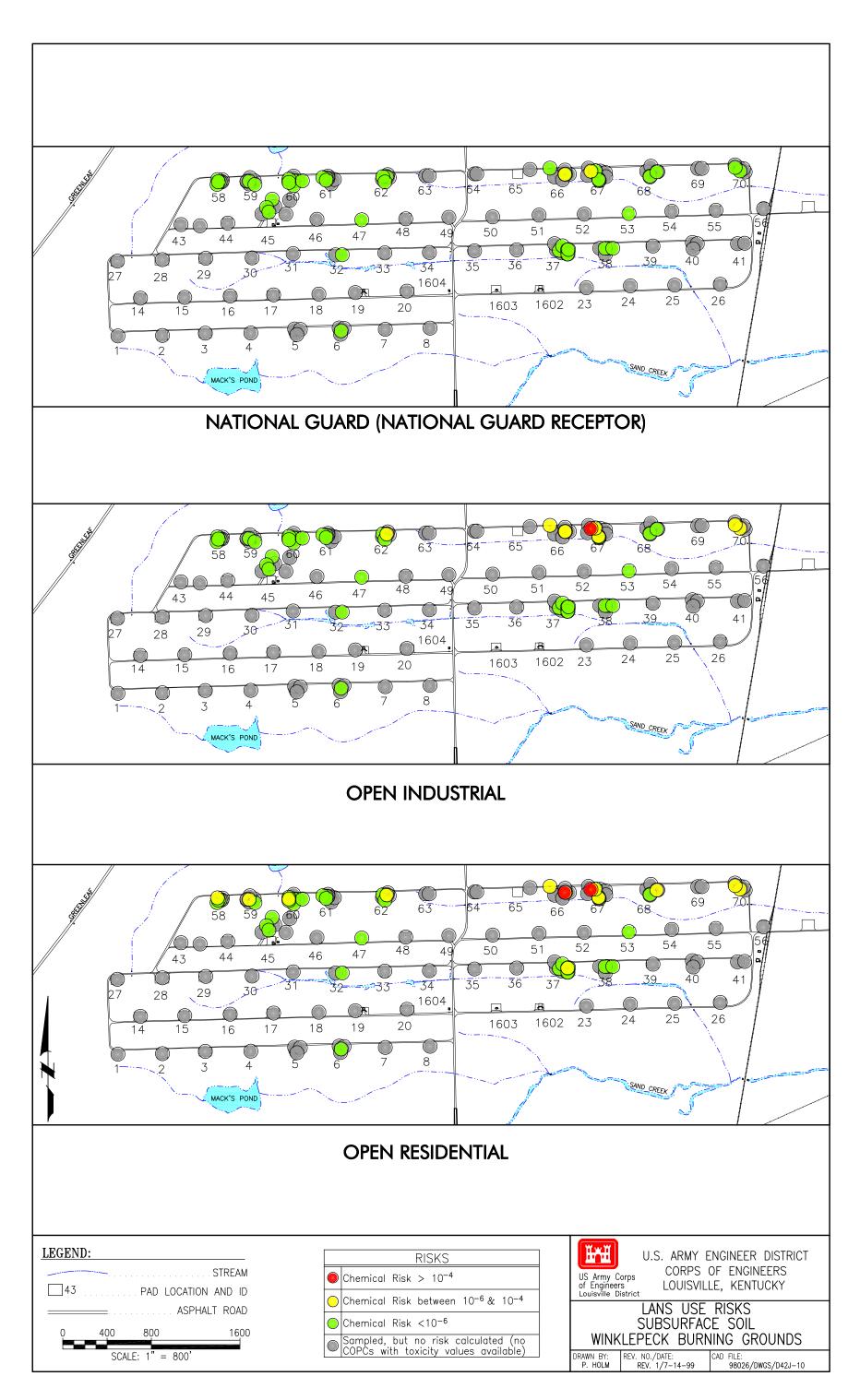


Figure J-11. Chemical Risks from Direct Exposure to Subsurface Soils: A Comparison of Land Uses

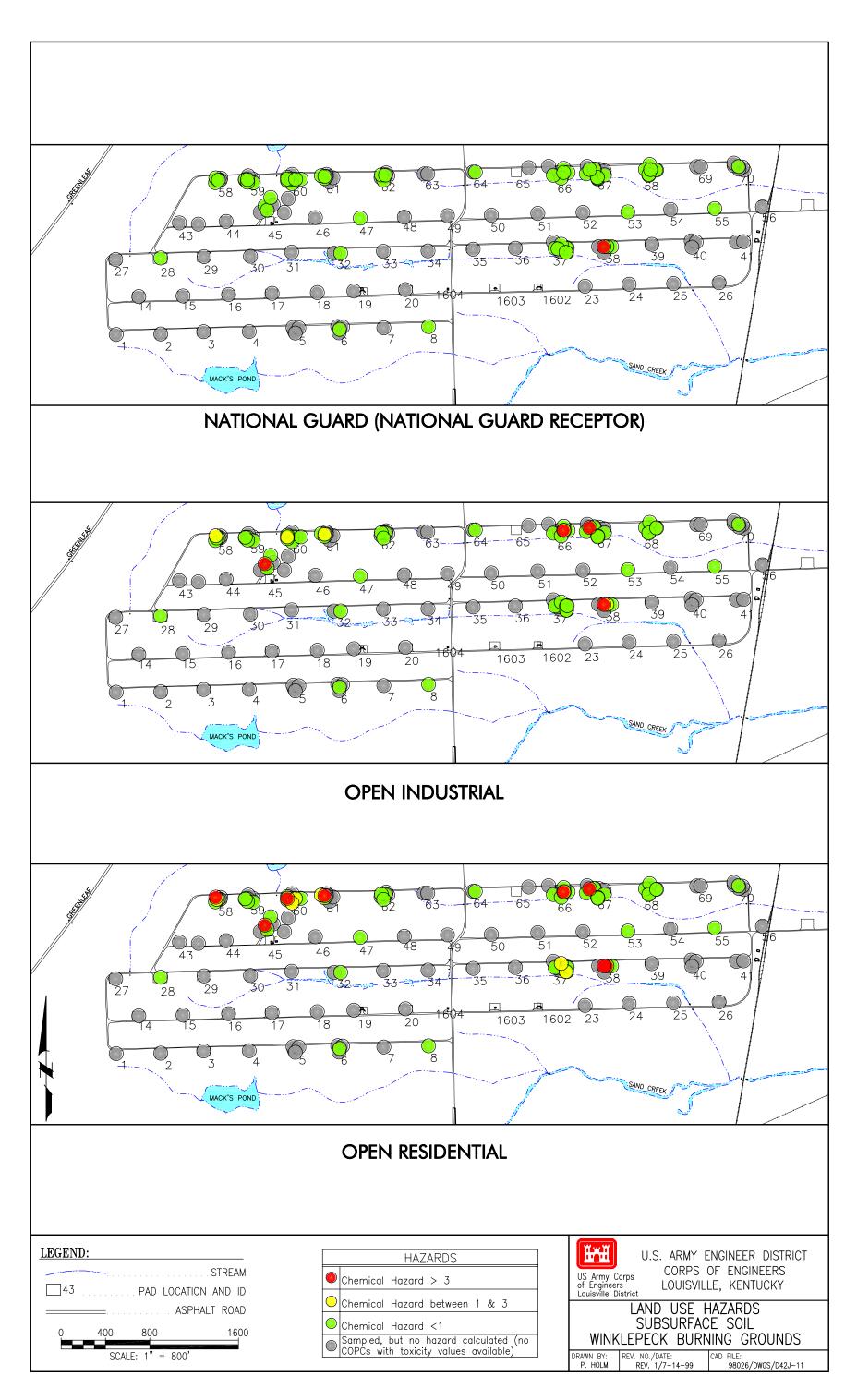


Figure J-12. Chemical Hazards from Direct Exposure to Subsurface Soils: A Comparison of Land Uses

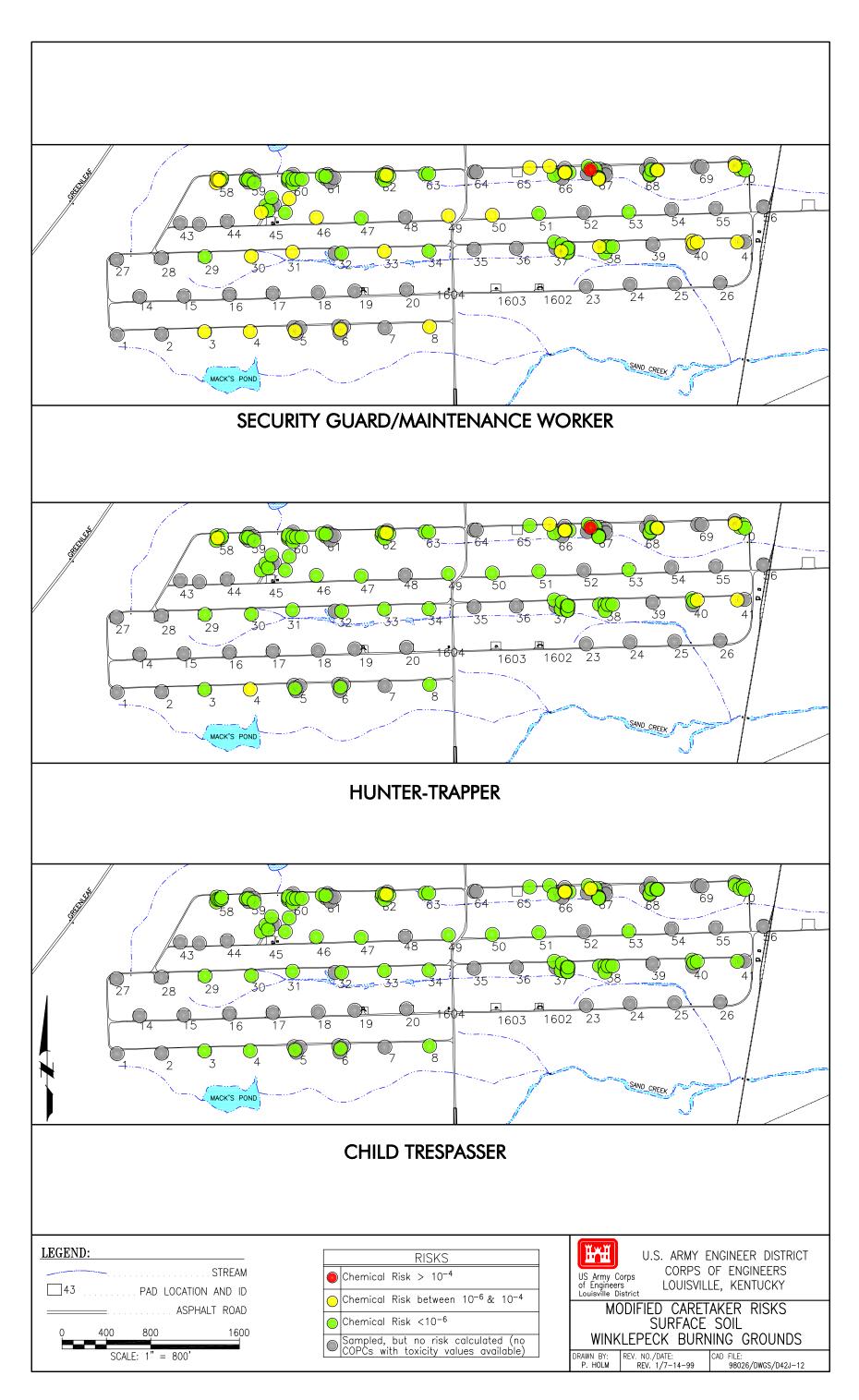


Figure J-13. Chemical Risks from Direct Exposure to Surface Soils: Modified Caretaker Land Use

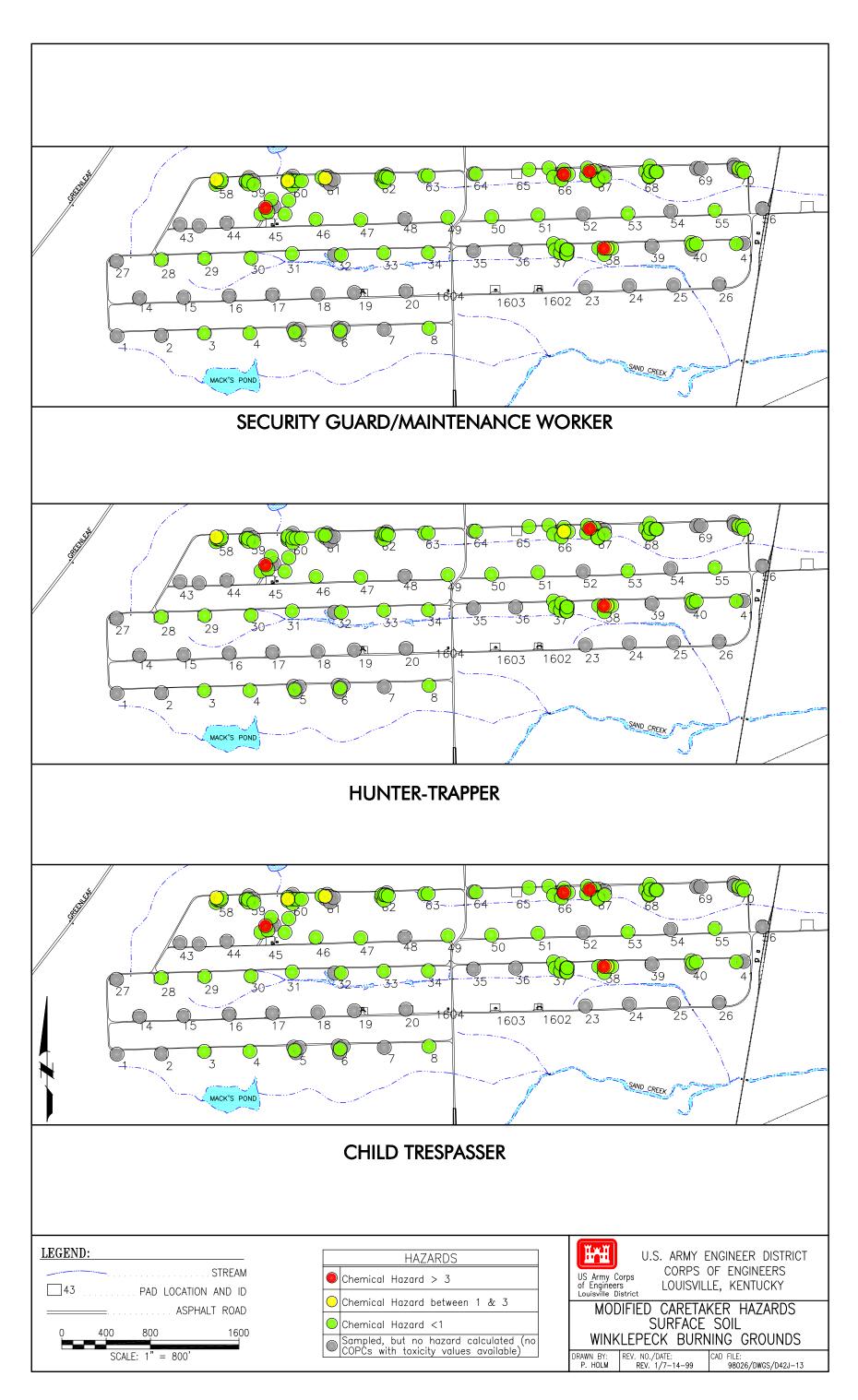


Figure J-14. Chemical Hazards from Direct Exposure to Surface Soils: Modified Caretaker Land Use

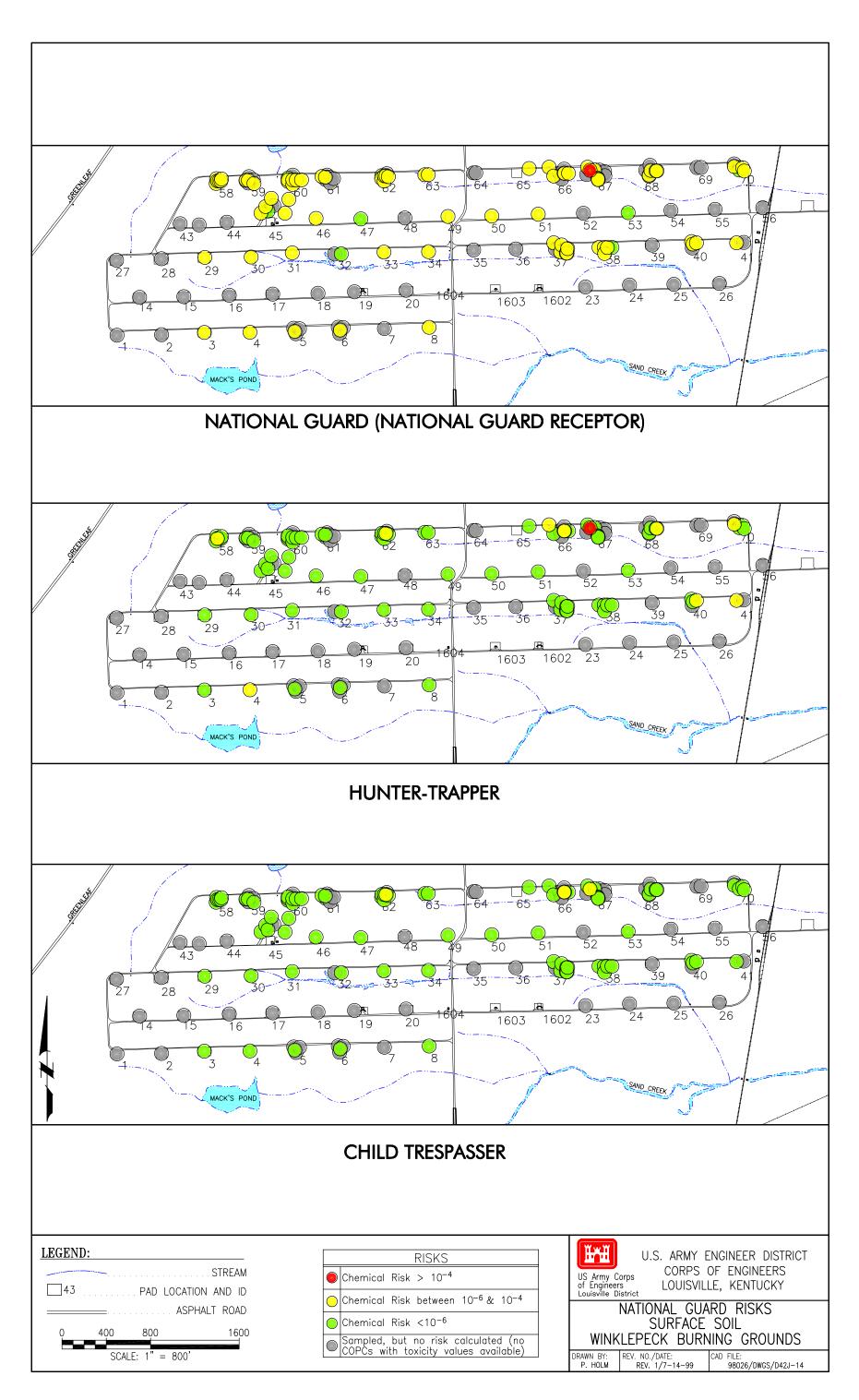


Figure J-15. Chemical Risks from Direct Exposure to Surface Soils: National Guard Land Use

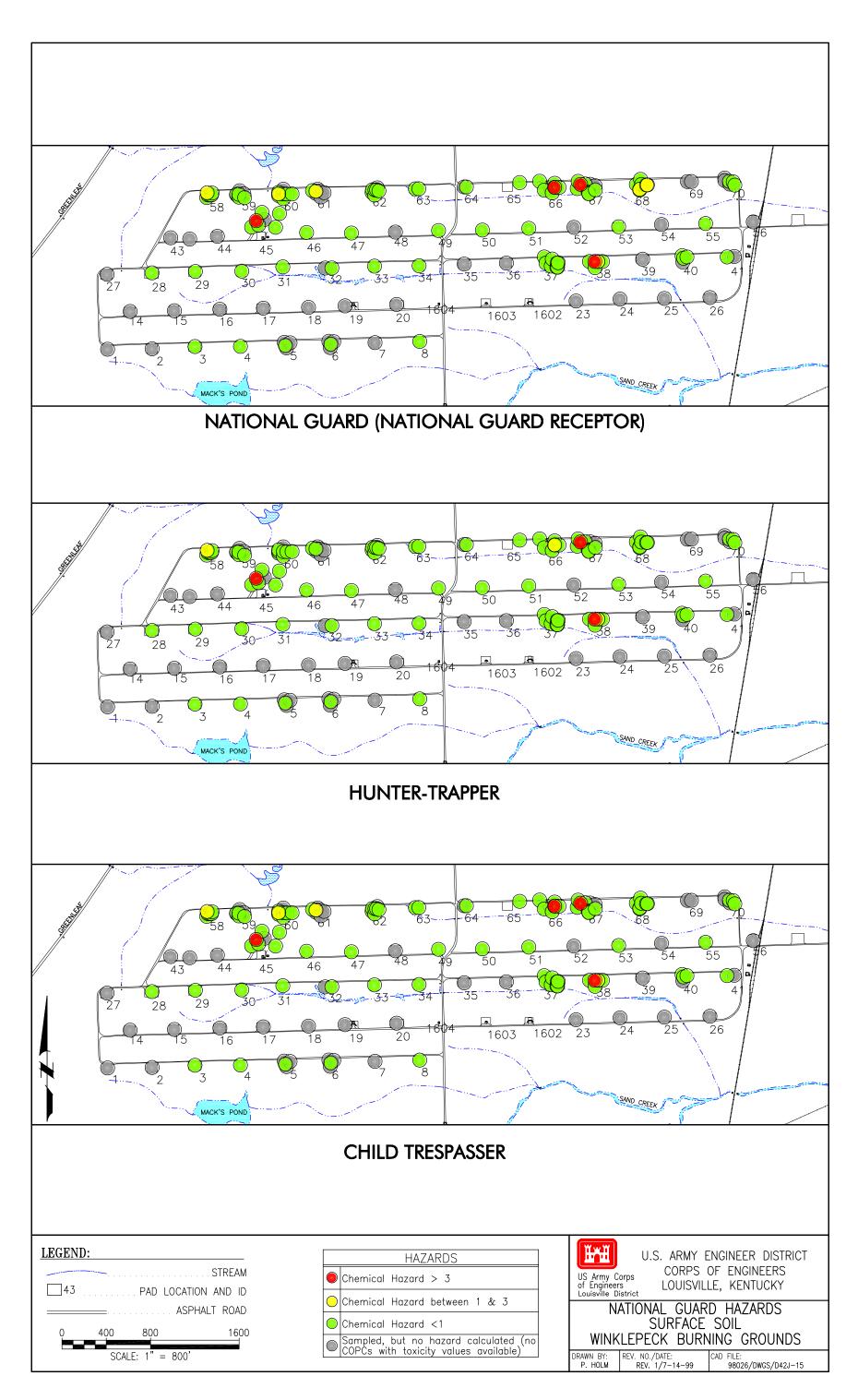
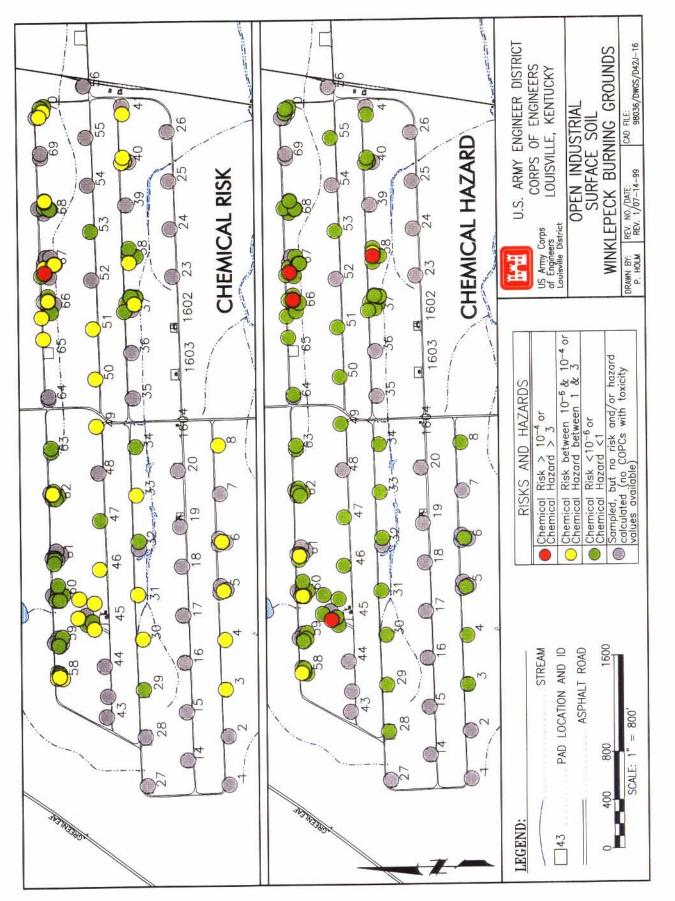
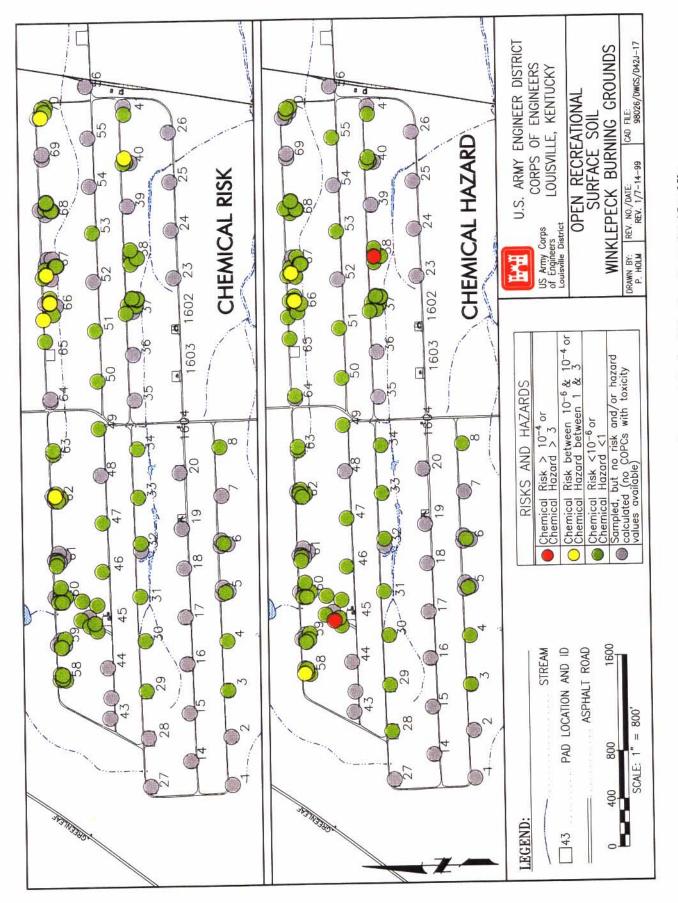


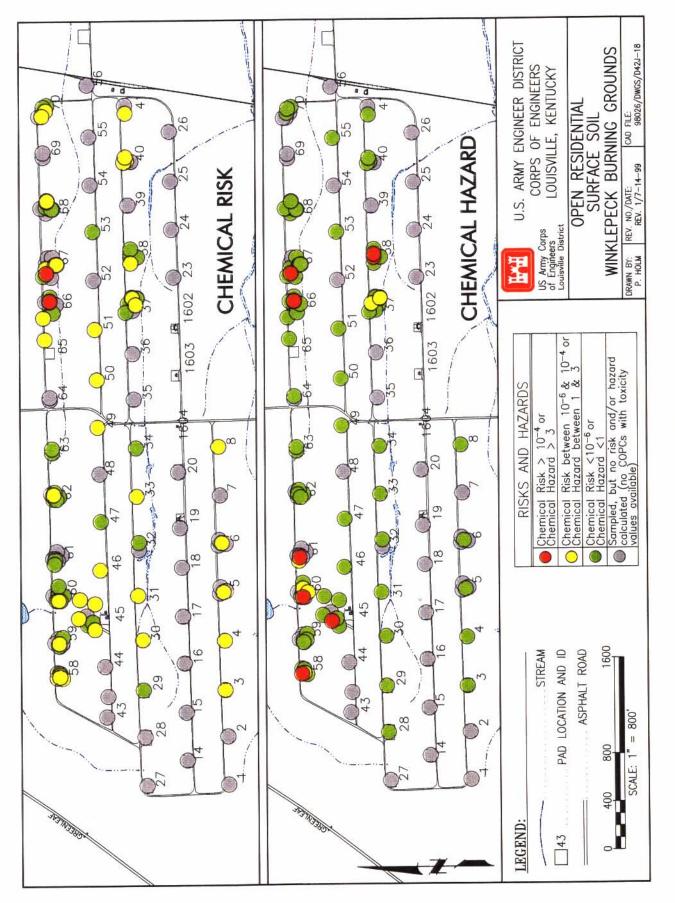
Figure J-16. Chemical Hazards from Direct Exposure to Surface Soils: National Guard Land Use













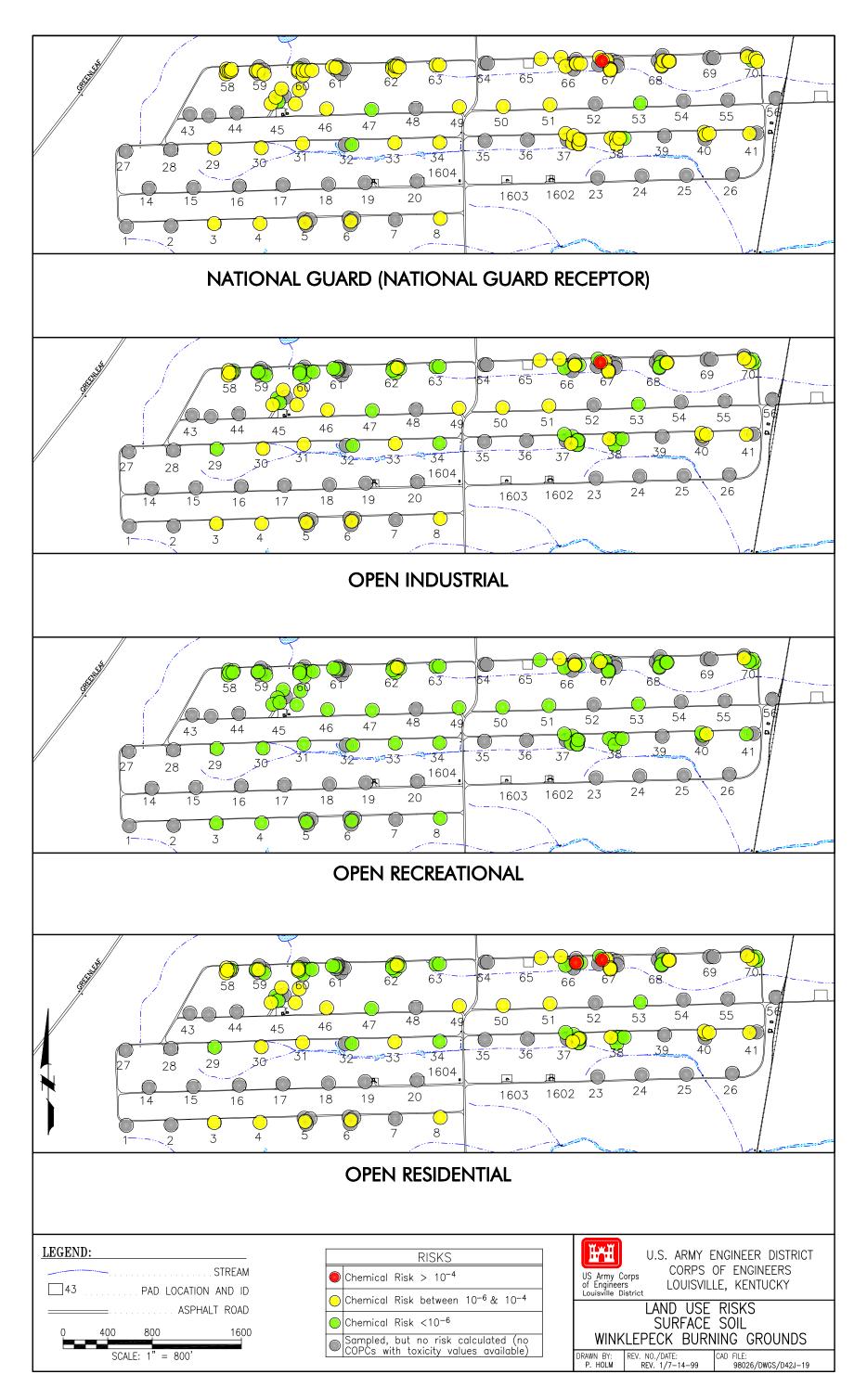


Figure J-20. Chemical Risks from Direct Exposure to Surface Soils: A Comparison of Land Uses

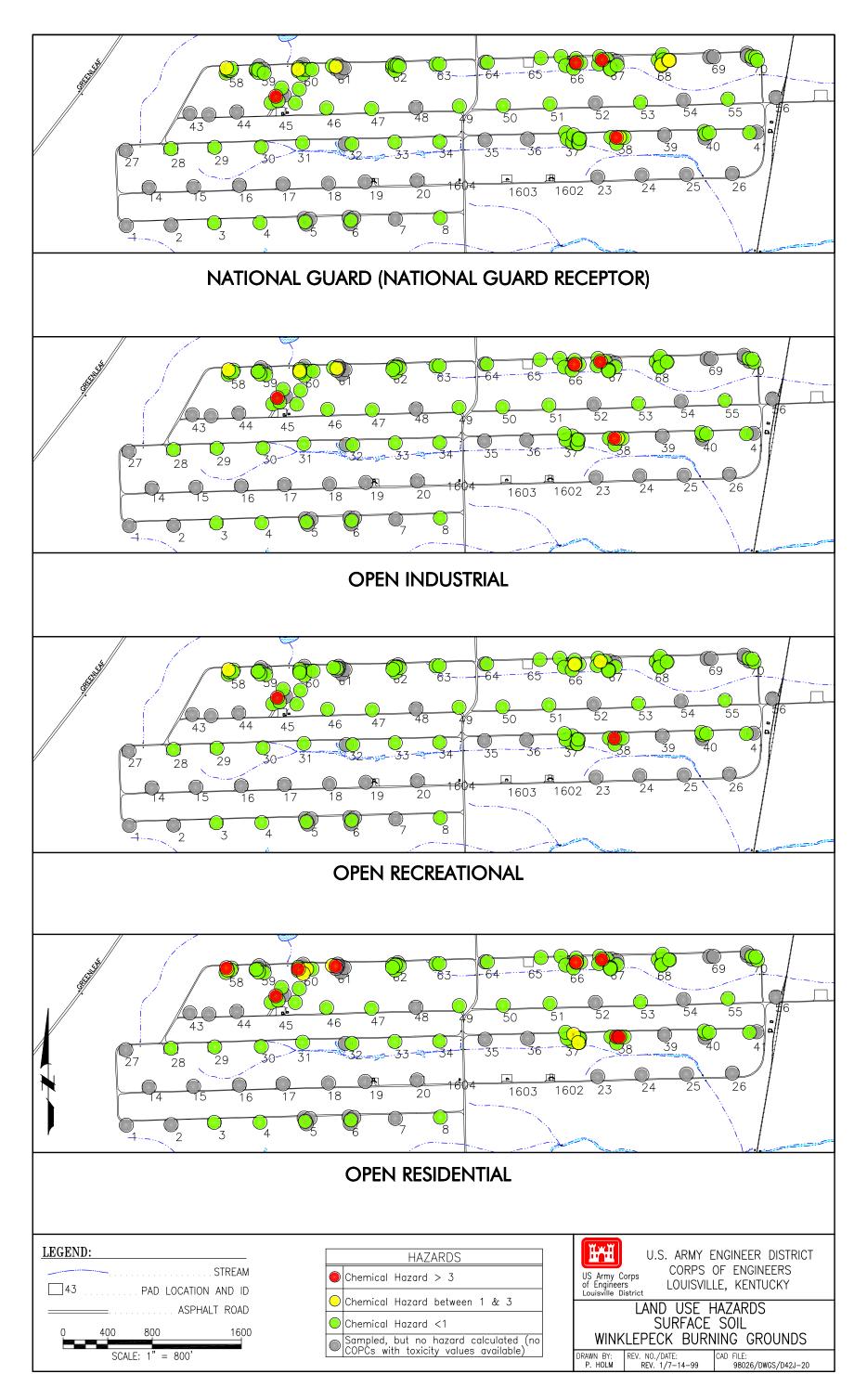


Figure J-21. Chemical Hazards from Direct Exposure to Surface Soils: A Comparison of Land Uses

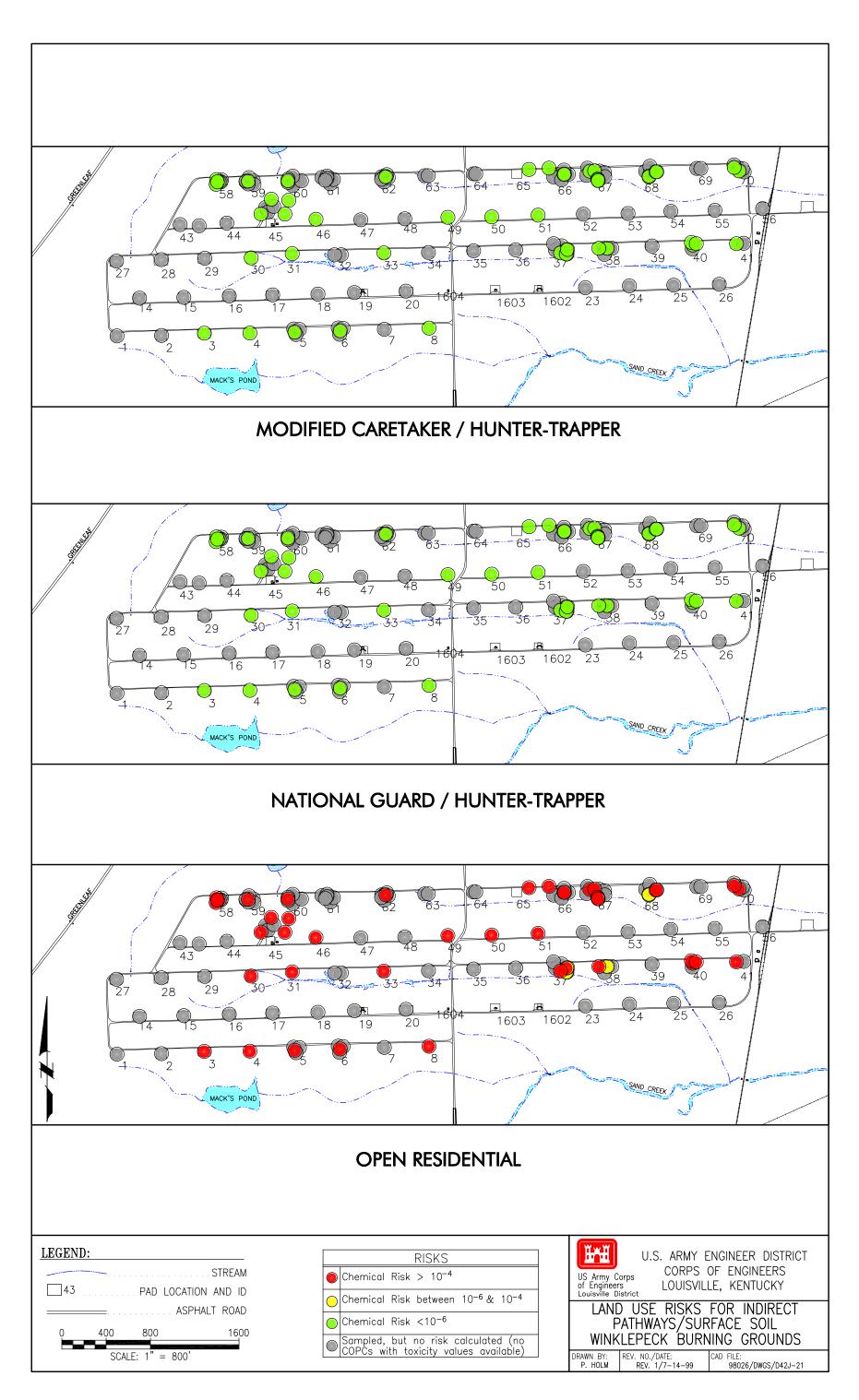


Figure J- 22. Chemical Risks from Indirect Exposure to Surface Soils (Ingestion of Foodstuffs): A Comparison of Land Uses

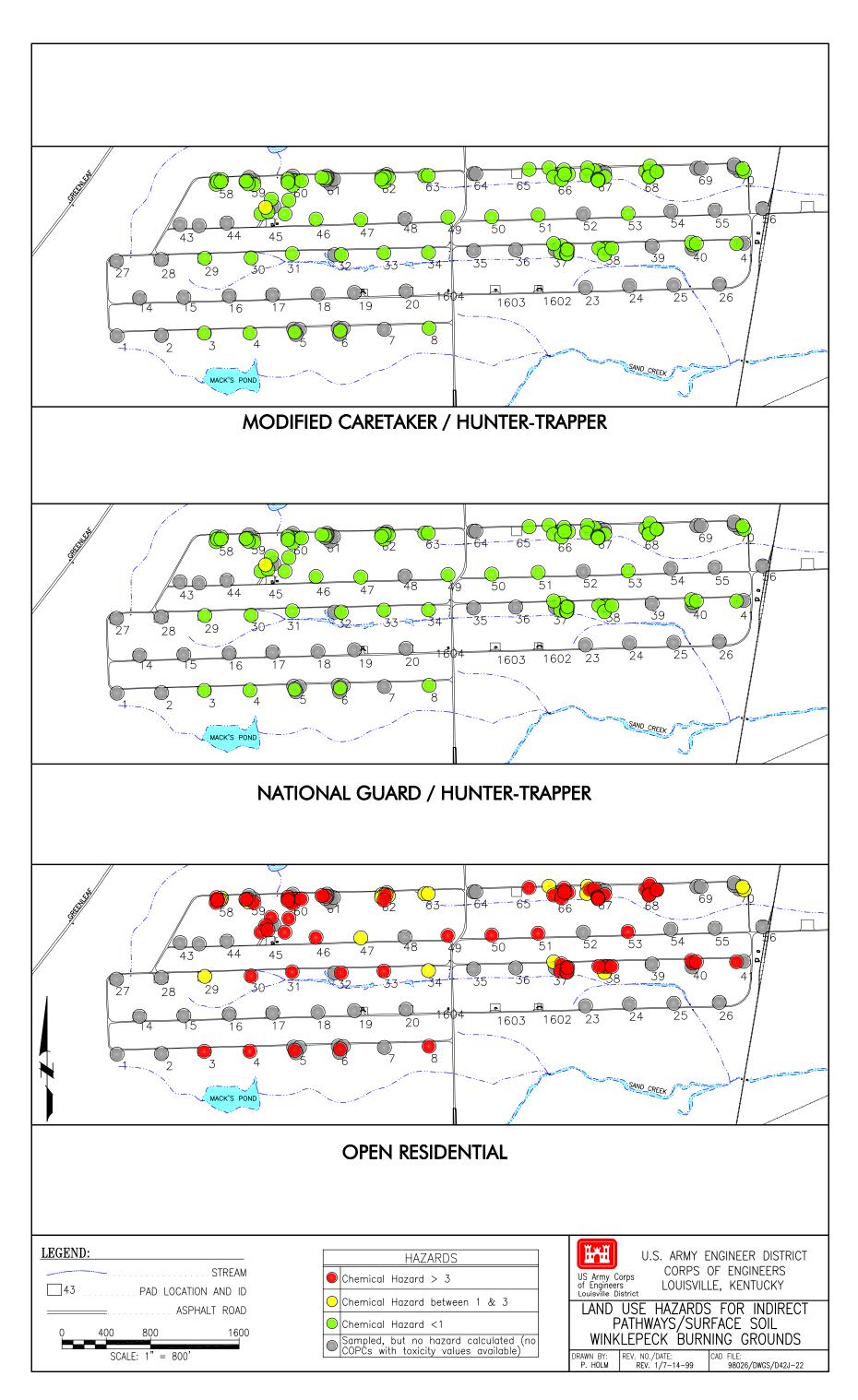


Figure J-23. Chemical Hazards from Indirect Exposure to Surface Soils (Ingestion of Foodstuffs): A Comparison of Land Uses