Analyte	Depth Description	Units	Screening Level	Screening Level Basis	Number of Locations Sampled	Number of Locations w/ Exceedances	Minimum Exceedance	Maximum Exceedance
Antimony	Surface Sample (0 to 2 feet)	mg/kg	5	3	101	9	8.02	94
Antimony	Subsurface Sample (>2 feet)	mg/kg	5	3	53	2	5.38	6.04
Arsenic	Surface Sample (0 to 2 feet)	mg/kg	20	2	108	13	23.9	260
Arsenic	Subsurface Sample (>2 feet)	mg/kg	20	2	76	1	24.2	24.2
Barium	Surface Sample (0 to 2 feet)	mg/kg	102	3	105	21	102	673
Barium	Subsurface Sample (>2 feet)	mg/kg	102	3	75	8	103	303
Cadmium	Surface Sample (0 to 2 feet)	mg/kg	1.2	2	105	13	1.3	140
Cadmium	Subsurface Sample (>2 feet)	mg/kg	1.2	2	75	1	2.28	2.28
Chromium	Surface Sample (0 to 2 feet)	mg/kg	48	3	105	40	49.4	357
Chromium	Subsurface Sample (>2 feet)	mg/kg	48	3	75	10	48.1	60.8
Cobalt	Surface Sample (0 to 2 feet)	mg/kg	20	3	105	10	20.9	39.7
Cobalt	Subsurface Sample (>2 feet)	mg/kg	20	3	58	3	20	25.1
Copper	Surface Sample (0 to 2 feet)	mg/kg	36	2	105	88	36.3	9370
Copper	Subsurface Sample (>2 feet)	mg/kg	36	2	58	40	36	899
Lead	Surface Sample (0 to 2 feet)	mg/kg	50	3	107	48	53.9	7310
Lead	Subsurface Sample (>2 feet)	mg/kg	50	3	78	18	51.6	8610
Manganese	Surface Sample (0 to 2 feet)	mg/kg	1200	2	105	12	1200	1900
Manganese	Subsurface Sample (>2 feet)	mg/kg	1200	2	58	5	1580	4290
Mercury	Surface Sample (0 to 2 feet)	mg/kg	0.07	2	105	45	0.07	6.6
Mercury	Subsurface Sample (>2 feet)	mg/kg	0.07	2	75	27	0.07	3.71
Nickel	Surface Sample (0 to 2 feet)	mg/kg	48	2	105	31	48.4	169
Nickel	Subsurface Sample (>2 feet)	mg/kg	48	2	58	12	49.8	572
Selenium	Surface Sample (0 to 2 feet)	mg/kg	0.3	3	105	16	0.3	5.4
Selenium	Subsurface Sample (>2 feet)	mg/kg	0.3	3	75	11	0.3	0.9
Silver	Surface Sample (0 to 2 feet)	mg/kg	0.32	2	105	61	0.34	42.3
Silver	Subsurface Sample (>2 feet)	mg/kg	0.32	2	75	29	0.33	48.8
Thallium	Surface Sample (0 to 2 feet)	mg/kg	0.67	2	105	6	0.82	7
Thallium	Subsurface Sample (>2 feet)	mg/kg	0.67	2	58	4	0.82	1.2
Vanadium	Surface Sample (0 to 2 feet)	mg/kg	2	3	105	105	6.2	198
Vanadium	Subsurface Sample (>2 feet)	mg/kg	2	3	58	58	6.1	1400
Zinc	Surface Sample (0 to 2 feet)	mg/kg	86	3	105	52	88.5	4310
Zinc	Subsurface Sample (>2 feet)	mg/kg	86	3	58	14	86.1	1110

Screening Level Basis Footnotes
1 = Protection of Marine Surface Water
2 = Protection of Groundwater as Marine Surface Water
3 = Protection of Benthic and Ecological Receptors
4 = Protection of Human Health - Direct Contact

PORT ANGELES HARBOR

copper, mercury, zinc, silver, lead, arsenic, selenium

copper, mercury, zinc, cadmium, antimony, lead

copper, zinc, aresenic, thallium

nickel

silver

lead

lead

copper, silver

silver

Explanation

Metal Concentrations in Soil
(Highest ratio of reported analyte concentrations to screening levels at each sample location determines symbol color)

For results with PQLs that were less than or equal to the screening levels, the analytes either were not detected or were detected at concentrations below the screening levels.

Indicates analytes were detected at concentrations greater than the the screening levels but less than 10 times the screening levels.

Shallow Sample (0 to 2 feet)
Deep Sample (> 2 feet)

Indicates analytes were detected at concentrations greater than or equal to 10 times the screening levels but less than 100 times the screening levels.

Indicates analytes were detected at concentrations greater than or equal to 100 times the screening levels.

Indicates no sample was analyzed from the sample interval, or no analytes were detected above PQLs but the PQLs were greater than the screening levels.

- Monitoring Well Locations
- Former Monitoring Well
- Proposed Pipe Contents Sample
- Proposed Groundwater Grab Sample
- Proposed Soil Boring
- Proposed Test Pit
- Proposed Surface Water Sample
- Proposed Monitoring Well

Approximate areas where metals have been detected at concentrations greater than 10x their respective screening levels. In addition to the listed metals, vanadium concentrations greater than 10x the screening level are widespread throughout the study area.

Upland Study Area

Notes:
1. Sampling locations that had only non-detect results for which the PQLs were greater than the respective screening levels are not displayed on this figure.
2. The statistical summary table includes data from sampling locations that were subsequently excavated during interim actions. Locations excavated during interim actions are not shown on the map.
3. The locations of all features shown are approximate.
4. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
5. Dashed areas are approximate. Not all locations were sampled for all the listed metals, and some dashed areas may include locations where some listed metals did not exceed 10x the screening levels.

200 0 200
Feet

N W E S

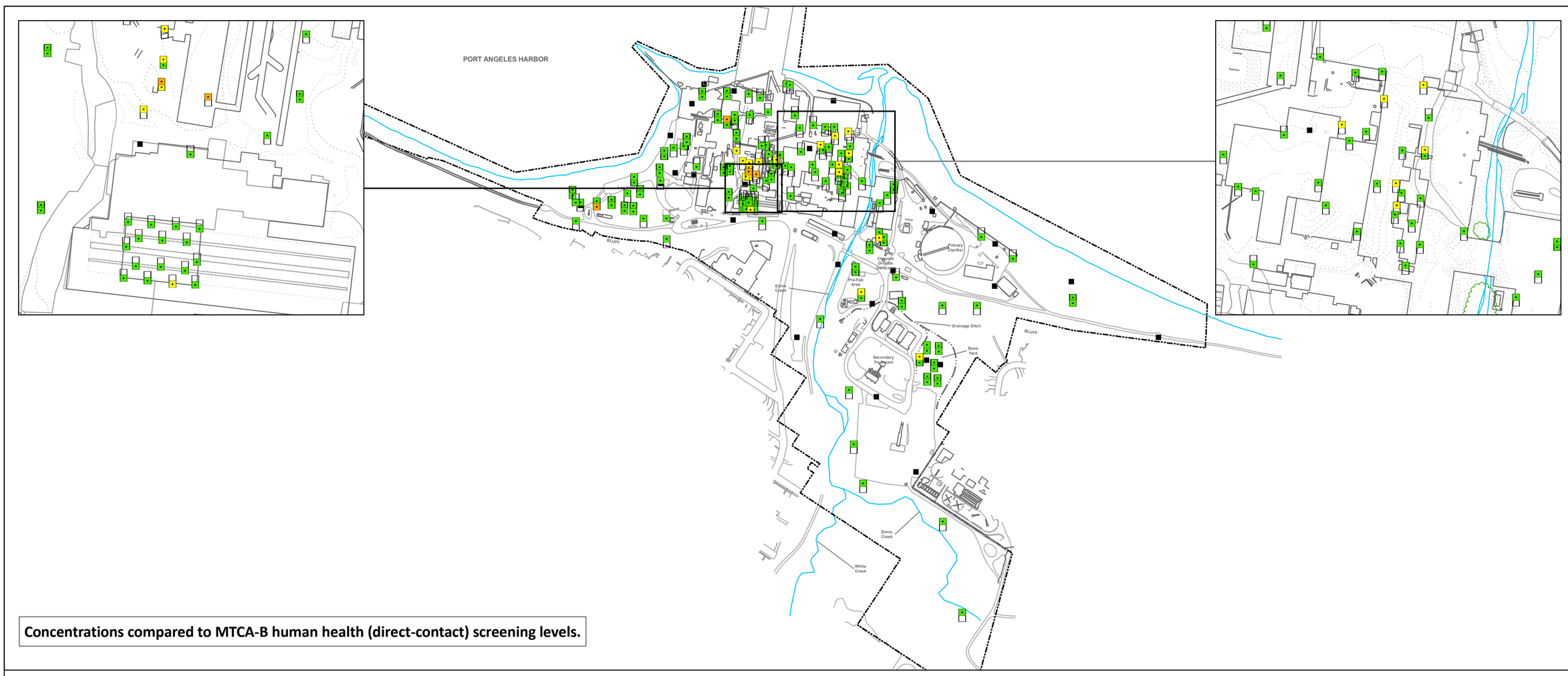
Metal Concentrations in Soil

Port Angeles Rayonier Mill Study Area
Port Angeles, Washington

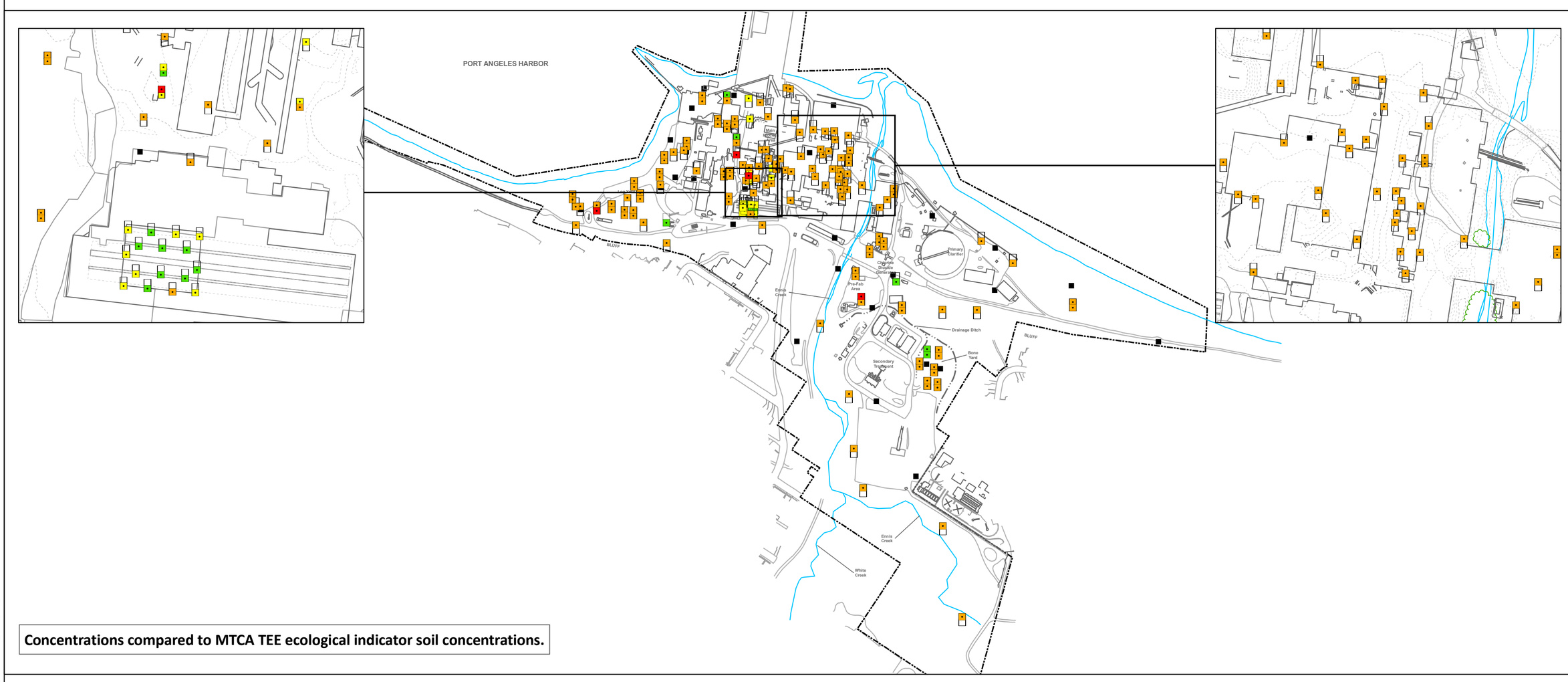
GeoEngineers

Figure 16A

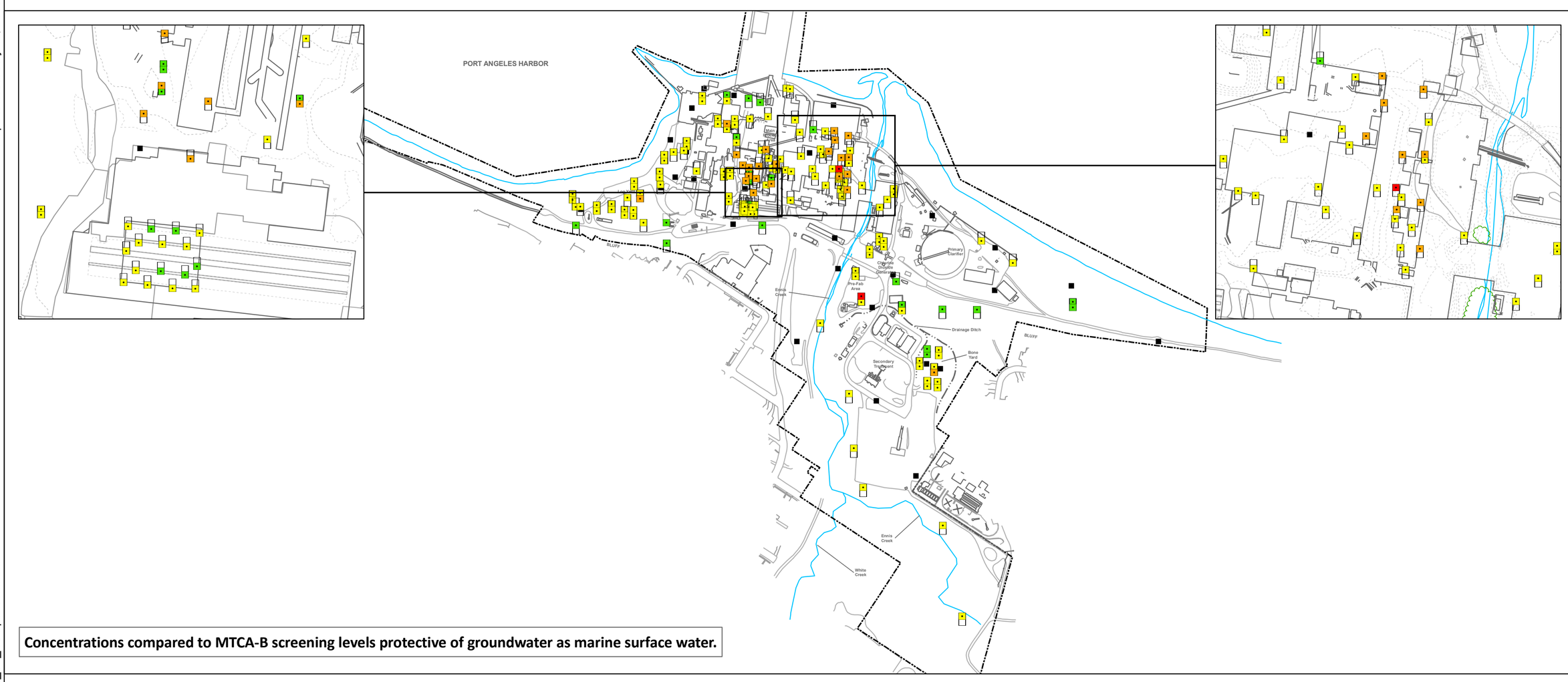
Map Revised: July 20, 2010 TCK:CRC
Path: \\Sea\projects\0\0137015\GIS\0137015_F16_Metals_Concentration_Soil_detects.mxd
Office: TAC



Concentrations compared to MTCA-B human health (direct-contact) screening levels.



Concentrations compared to MTCA TEE ecological indicator soil concentrations.



Concentrations compared to MTCA-B screening levels protective of groundwater as marine surface water.

Explanation

Metal Concentrations in Soil
(Highest ratio of reported analyte concentrations to screening levels at each sample location determines symbol color)

Shallow Sample (0 to 2 feet)
Deep Sample (> 2 feet)

- For results with PQLs that were less than or equal to the screening levels, the analytes either were not detected or were detected at concentrations below the screening levels.
- Indicates analytes were detected at concentrations greater than the the screening levels but less than 10 times the screening levels.
- Indicates analytes were detected at concentrations greater than or equal to 10 times the screening levels but less than 100 times the screening levels.
- Indicates analytes were detected at concentrations greater than or equal to 100 times the screening levels.
- Indicates no sample was analyzed from the sample interval, or no analytes were detected above PQLs but the PQLs were greater than the screening levels.

- Monitoring Well Locations
- Upland Study Area

Notes:
1. Sampling locations that had only non-detect results for which the PQLs were greater than the respective screening levels are not displayed on this figure.
2. The locations of all features shown are approximate.
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N W E S

Metal Concentrations in Soil by Exposure Pathway

Port Angeles Rayonier Mill Study Area
Port Angeles, Washington

GeoEngineers

Figure 16B

Office: SEA Path: \\SEA\projects\0\0137015\GIS\0137015O3_FX_Metals_SL_Comparison.mxd Map Revised: July 16, 2010 TCK:CRC

Analyte	Depth Description	Units	Screening Level	Screening Level Basis	Number of Locations Sampled	Number of Locations w/ Exceedances	Minimum Exceedance	Maximum Exceedance
Total Dioxins/Furans TEC	Surface Sample (0 to 2 feet)	ng/kg	5.2	2	65	46	5.496635	3046.9
Total Dioxins/Furans TEC	Subsurface Sample (>2 feet)	ng/kg	5.2	2	31	13	5.2790656	188.8560235

Screening Level Basis Footnotes:
1 = Protection of Freshwater Surface Water
2 = Protection of Groundwater as Marine Surface Water
3 = Protection of Terrestrial Ecological Receptors
4 = Protection of Human Health - Direct Contact

PORT ANGELES HARBOR

RB21 PZ-3 DK20 MW-55 MW-51 MW-56 TP-1 TP-2 MW-54 PC20 TP-3 RB02 RB01 SSB-7 GWG-3 MR06 MW-62 SW-1 SW-2 SW-3 Main Process Area MW-53 PZ-2 BP20 DB21 GWG-2 SSB-6 GWG-4 FR20 SR24 SR03 SR20 MW-58 FR02 AP02 SSB-1 TP-12 TP-11 TP-13 TP-5 MW-29 TP-4 MW-23 TP-6 SSB-2 MW-28 GWG-6 MW-13 TP-17 TP-16 AP03 SR23 PIPE-1-SR23 GWG-1 PZ-4 SSB-3 BP04 MR09 GWG-5 MR11 SSB-5 ECO33 MW-63 PA-24 MW-41 Log Yard MW-60 MW-52 SSB-8 MW-11 TP-7 TP-14 TP-8 TP-15 TP-9 TP-10 SSB-4 PA-15 PA-17 SL21 PZ-9 BLUFF Primary Clarifier GWG-8 PZ-5 GWG-7 Chlorine Dioxide Generator PA-19 GWG-9 Pre-Fab Area SSB-9 PZ-7 Ennis Creek PZ-10 MW-59 Drainage Ditch BLUFF PZ-13 PZ-6 Bone Yard PZ-11 PA-21 Secondary Treatment PZ-12 PA-23 SW-4 Ennis Creek White Creek SW-5

200 0 200
Feet

N W E S

Explanation

Total Dioxin/Furan Concentrations in Soil
(Highest ratio of reported analyte concentrations to screening levels at each sample location determines symbol color)

Shallow Sample (0 to 2 feet)
Deep Sample (> 2 feet)

- For results with PQLs that were less than or equal to the screening levels, the analytes either were not detected or were detected at concentrations below the screening levels.
- Indicates analytes were detected at concentrations greater than the the screening levels but less than 10 times the screening levels.
- Indicates analytes were detected at concentrations greater than or equal to 10 times the screening levels but less than 100 times the screening levels.
- Indicates analytes were detected at concentrations greater than or equal to 100 times the screening levels.
- Indicates no sample was analyzed from the sample interval, or no analytes were detected above PQLs but the PQLs were greater than the screening levels.

- Monitoring Well Locations
- Former Monitoring Well
- Proposed Pipe Contents Sample
- Proposed Groundwater Grab Sample
- Proposed Soil Boring
- Proposed Test Pit
- Proposed Surface Water Sample
- Proposed Monitoring Well
- Upland Study Area

Notes:
1. Sampling locations that had only non-detect results for which the PQLs were greater than the respective screening levels are not displayed on this figure.
2. The statistical summary table includes data from sampling locations that were subsequently excavated during interim actions. Locations excavated during interim actions are not shown on the map.
3. The locations of all features shown are approximate.
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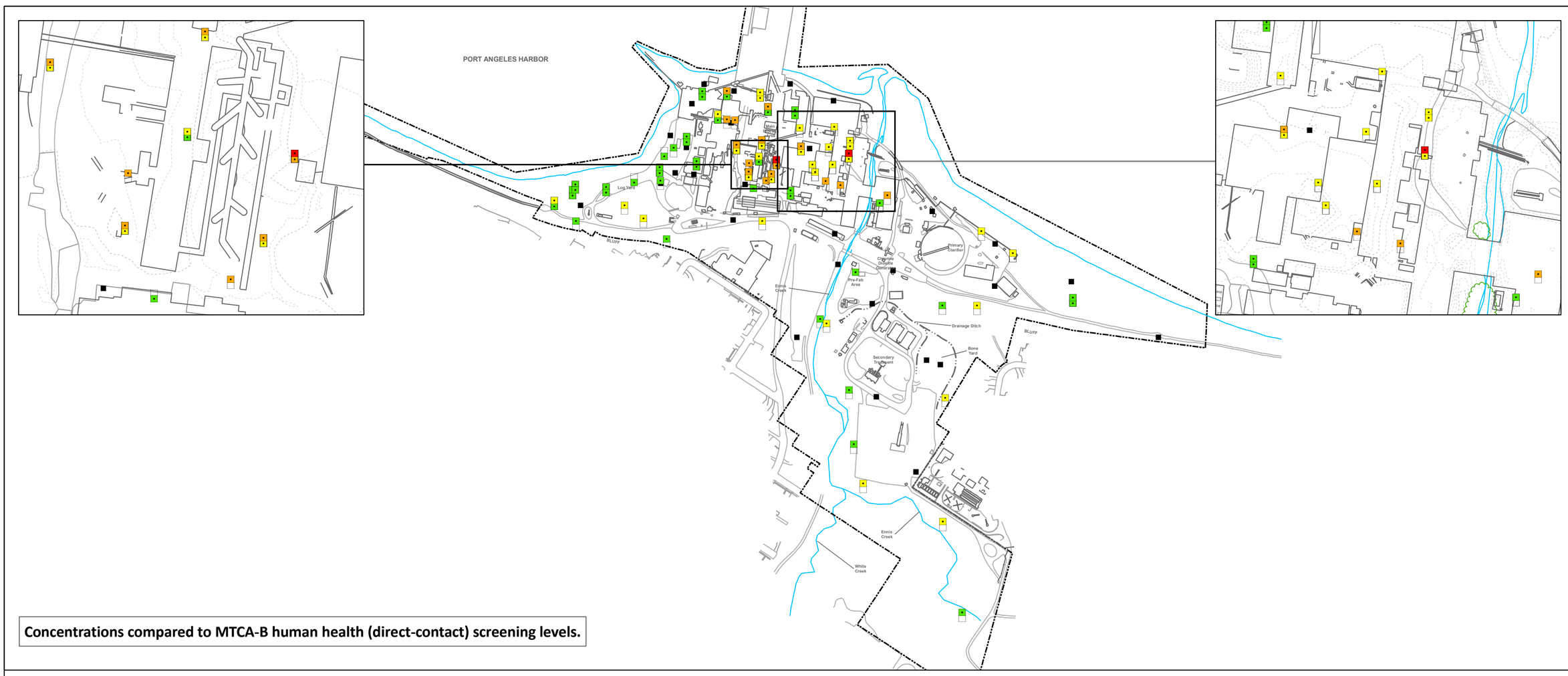
Total Dioxin/Furan Concentrations in Soil

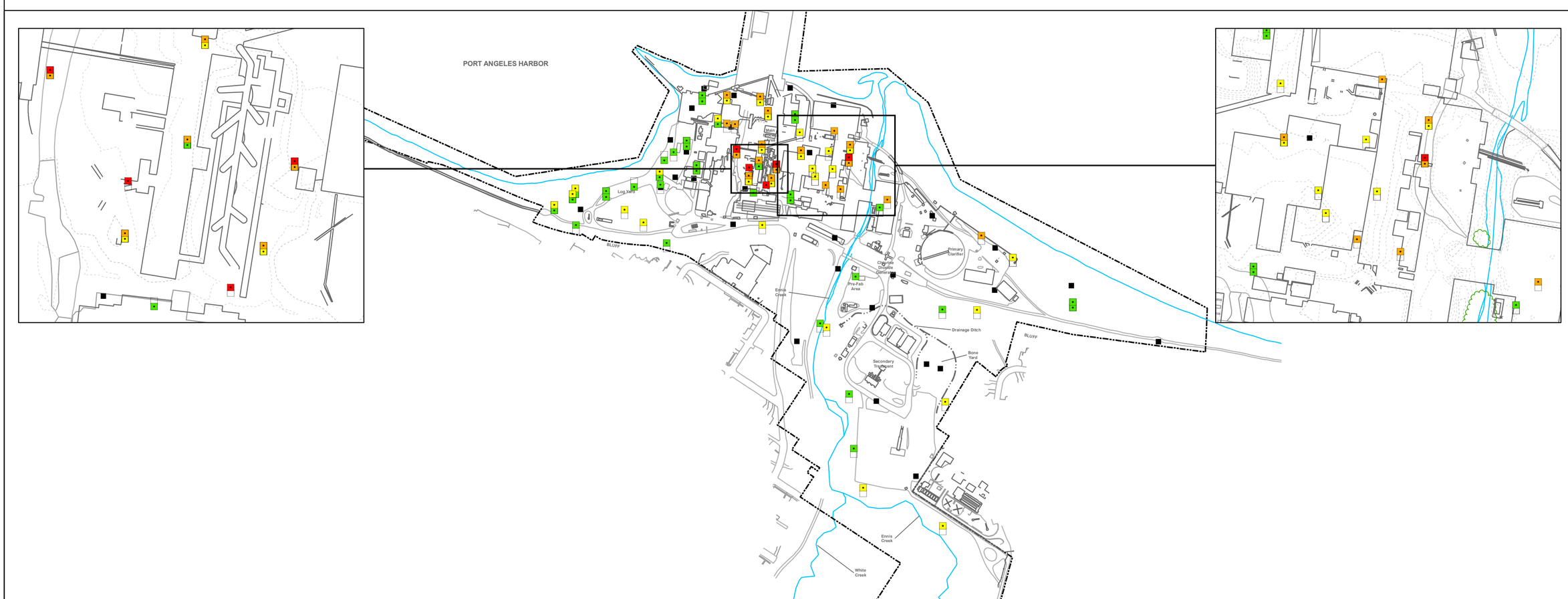
Port Angeles Rayonier Mill Study Area
Port Angeles, Washington

GeoEngineers | **Figure 17A**

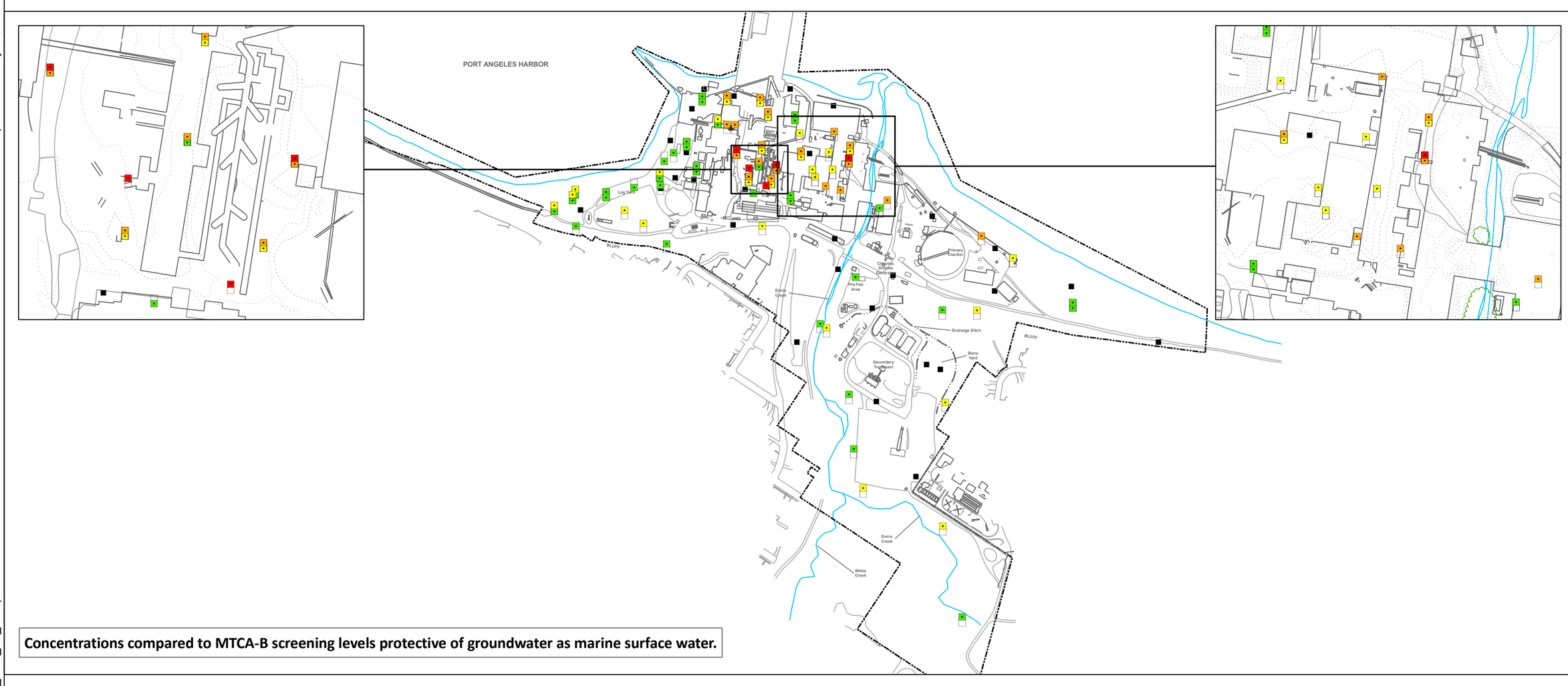
Map Revised: July 20, 2010 TCK:CRC
Path: \\Seaprojects\0\0137015\GIS\013701503_F17_DF_TEC_Concentration_Soil_detects.mxd
Office: TAC



Concentrations compared to MTCA-B human health (direct-contact) screening levels.



Concentrations compared to MTCA TEE ecological indicator soil concentrations.



Concentrations compared to MTCA-B screening levels protective of groundwater as marine surface water.

Explanation

Total Dioxin/Furan Concentrations in Soil
(Highest ratio of reported analyte concentrations to screening levels at each sample location determines symbol color)

Shallow Sample (0 to 2 feet)
Deep Sample (> 2 feet)

- For results with PQLs that were less than or equal to the screening levels, the analytes either were not detected or were detected at concentrations below the screening levels.
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- Monitoring Well Locations
- Upland Study Area

Notes:
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N W E S

Total Dioxin/Furan Concentrations in Soil by Exposure Pathway

Port Angeles Rayonier Mill Study Area
Port Angeles, Washington

GeoEngineers

Figure 17B

Office: SEA Path: \\SEA\projects\0\0137015\GIS\013701503_F17B_DF_TEC_SL_Comparison.mxd Map Revised: July 19, 2010 TCK:CRC