EPA Region 10 Laboratory — **Analyses Required**

PRIORITY POLLUTANTS - ORGANICS

Project Name: RIDGEFIELD BRICK Project Code: HWD-127A Account Code: AGDD3A

Matrix Codes *(circle one only)*

- 10 Water-Total
- 11 Water-Dissolved
- 40 Sediment/Soil
- 45 Semi-Solid/Sludge
- 46 Sediment for EP Toxicity
- 70 Tissue
- 80 Oil/Solvent
- 00 Other

	Sample Numbers																	Analy/Comp Init/Date
	9113 0150	9113 0152	9113 0154	9113 0156	9113 0158	9113 0160	9113 0161	9113 0162	9113 0164	9113 0166	9113 0168							
GC/MS Organics																		
51 Volatile Organics — VOA	X	X	X	X	X	X	X	X	X	X	X							
62 Base/Neutrals Only — B/N																		
65 Acids Only — Acid																		
68 Base/Neutrals/Acids — B/N/A																		
60 Specific (GC/MS) Organics — list below *(additional space to list is provided below)*																		
PAH (SIM MODE)	X	X	X	X	X			X	X	X	X							
CHLOROPHENOLS (SIM MODE)	X	X	X	X	X			X	X	X	X							
GC Organics																		
42 EDB — EDB																		
53 Trihalomethanes — Trihal																		
54 Purgeable halocarbons — Purg																		
71 Pesticide/PCB's — Pest/PCB																		
72 Pesticides Only — Pest																		
73 Herbicides *(List each/circle on reverse)*																		
74 PCB's Only — PCB																		
77 Organophosphate Pesticides *(List each)*																		
70 Specific Pesticides *(List each)*																		
60 Specific (GC/MS) Organics *(List each)* *(additional space to list is provided below)*																		
Specific Organics/Other Miscellaneous																		
40 PolyAromHydro (HPLC) — PAH																		
67 Oil Identification — Oil-Id *(additional space to list is provided below)*																		

Save samples after analysis? **NONE** †SOME †ALL *(if SOME, circle sample numbers)*

USEPA RCRA 3057931

List any additional specific organics:

Special detection Limits and comments: PAH AND CHLOROPHENOLS TO BE ANALYZED BY GC/MS (SIM MODE)

Requester's Signature Gary A. Bruno 3/28/91

†If samples should be saved, why?

Sampled 3/27-3/28/91 Received 3/29/91

EPA X-91 Lab Copy

The following list shows the proper sample container e used when submitting samples to the lab. These containers represent the minimum volumes required. Proper containers should be submitted for each group o parameters requested.

Sample Container	Parameters
	INORGANICS
	General
☐ 1 Quart Cubitainer	Solid, Alkalinity, Hardness, Turbidity, Conductivity, pH, Chloride, Fluoride, Sulfate
	Nutrients
☐ 1 Quart Cubitainer	Nitrate, Nitrite, TOC, Ammonia, Kjeldahl Nitrogen, Phosphorus, COD
☐ 1 Gallon Cubitainer	**BOD**
☐ 1 Quart Cubitainer	**Metals**
☐ 1 Quart Cubitainer	**Cyanide**

Sample Container	Parameters
	ORGANICS
☐ 1 Quart Jar	**Phenols**
☐ 1 Quart Jar	**Oil & Grease**
☐ 1 Quart Jar	**Total Organic Halides (TOX)**
☐ 1 Gallon & ½ Gallon Jar	**PCB's, Pesticides, BN/Acids, PAH**
☐ 1/2 Gallon Jar	**Herbicides**
☐ 2 40 ml Vials	VOA's, Purgeables, Trihalomethanes
☐ 1 16 oz. Jar for sediments	inorganics and organics
☐ 1 8 oz. Jar for sediments	inorganics or organics

Organics - Base/Neutral Extractables
Workgroup(s) 68

Phenol
bis(2-Chloroethyl) ether
2-Chlorophenol
1,3-Dichlorobenzene
1,4-Dichlorobenzene
Benzyl Alcohol
1,2-Dichlorobenzene
2-Methylphenol
bis(2-Chloroisopryl)ether
4-Methylphenol
N-Nitroso-di-n-Propylamine
Hexachloroethane
Nitrobenzene
Isophorone
2-Nitrophenol
2,4-Dimethylphenol
Benzoic Acid
bis(2-Chloroethoxy) methane
Phenol, 2,4-dichloro-
Benzene, 1,2,4-trichloro
Napthalene
Aniline, 4-chloro-
Butadiene, Hexachloro-
4-Chloro-3-methylphenol
2-methyl napthalene
Cyclopentadiene, hexachlor
Phenol, 2,4,6-trichloro-
Phenol, 2,4,5-trichloro-
Napthalene, 2-chloro-
Aniline, 2-nitro-
Phthalate, dimethyl
Acenaphthylene
Aniline, 3-nitro-
Acenaphthene
Phenol, 2,4-dinitro-
Phenol, 4-nitro-
Dibenzofuran
Toluene, 2,4-dinitro-
Toluene, 2,6-dinitro-
Phthalate, diethyl
Ether, 4-chlorophenyl, phenyl
Fluoene
Aniline, 4-nitro
4,6 Dinitro-2-methylphenol
Nitrosamine, diphenyl-
Ether, 4-bromphenyl phenyl
Benzene, hexachloro-
Phenol, pentachloro-
Phenanthrene
Anthracene
Phthalate, di-n-butyl-
Fluoranthene
Pyrene
Phthalate, n-butyl benzyl
Benzidine, 3,3'-dichloro
Anthracene, benzo(a)-
Phthalate, bis (2-ethylhexyl)
Chrysene
Phthalate, di-n-octyl
Fluoranthene benxo(b)
Fluoranthene benxo(k)-

Organics - Volatile
Workgroup 51

Chloromethane
Bromoethane
Vinyl Chloride
Chloroethane
Methylene Chloride
Acetone
Carbon Disulfide
1-1-Dichloroethene
1-1-Dichloroethane
Trans-1,2-Dichloroethene
Chloroform
1,2-Dichloroethane
2-Butanone
1 1 1-Trichloroethane
Carbon Tetrachloride
Vinyl Acetate
Bromdichloromethane
1,2-Dichloropropane
Trans-1,3-Dichloropropene
Trichloroethene
Dibromochloromethane
1,1,2-Trichloroethane
Benzene
Cis-1,3-Dichloropropene
Bromoform
2-Hexanone
4-Methyl-2-Pentanone
Tetrachloroethene
Toluene
Chlorobenzene
Ethylbenzene
Styrene
Total Xylenes

Trihalomethanes
Workgroup 53

Chloroform
Dichlorobromomethane
Chlorodibromomethane
Bromoform

Purgeable Halocarbons
Workgroup 54

Chloroform
Dichlorobromomethane
Chlorodibromomethane
Bromoform
Carbon Tetrachloride
Chlorobenzene
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
1,2-(trans)-Dichloroethene
1,2-Dichloropropane
Methylene Chloride
Tetrachlorethene
1,1,1-Trichlorethane
1,1,2-Trichlorethane
Trichlorethene

Polycyclic Aromatic Hydrocarbons
Workgroup 67

Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(ghi)perylene
Benzo(k)fluoranthene
Chrysene
Dibenzo(a,h)anthracene
Fluoranthene
Fluorene
Indeno(1,2,3-cd)pyrene
Naphthalene
Phenanthrene
Pyrene

PCB Analysis Only
Workgroup 74

PCB-1016
PCB-1221
PCB-1232
PCB-1242
PCB-1248
PCB-1254
PCB-1260

Organophosphorous Pesticides
Workgroup 77

Melvinphos
Phorate
Dimethoate
Diazinon
Methyl Parathion
Ethyl Parathion
Malathion
Ethion
Carbophenothion
Azinphos (methyl or ethyl)
Dichlorvos
Dioxathion
Ronnel
Fenthion
Phosphamidon
Folex
DEF
Phencapton
Monocrotophos
EPN
Imidan
Coumaphos
Disulfoton

Chlorinated Hydrocarbons
Workgroup 70

1,2-Dichlorobenzene
1,2,3-Trichlorobenzene
1,2,4,5-Tetrachlorobenzene
Pentachlorobenzene
Hexachlorobenzene

Pesticides Only
Workgroup 72

Aldrin
Chlordane
Dieldrin
DDT, 4'4'-
DDE, 4'4'-
DDD, 4'4'-
Endosulfan, alpha-
Endosulfan, beta-
Endosulfan sulfate
Endrin
Endrin aldehyde
Heptachlor
Heptachlor epoxide
BHC, alpha-
BHC, beta-
BHC, gamma-
BHC, delta-
Toxaphene

Pesticide/PCB Analysis
Workgroup 71

Aldrin
Chlordane
Dieldrin
DDT, 4'4'-
DDE, 4'4'-
DDD, 4'4'-
Endosulfan, alpha-
Endosulfan, beta-
Endosulfan sulfate
Endrin
Endrin aldehyde
Heptachlor
Heptachlor epoxide
BHC, alpha-
BHC, beta-
BHC, gamma-
BHC, delta-
Toxaphene
PCB-1016
PCB-1221
PCB-1232
PCB-1242
PCB-1248
PCB-1254
PCB-1260

Organics - Herbicides
Workgroup 73

2,4-D
2,4-DB
2,4,5-TB
Silvex (2,4,5-TP)
MCPA
MCPP
MCPB
Pentachlorophenol
Tetrachlorophenol
Dicamba
Bromoxynil
Ioxynil
Dinoseb
Picloram

Note: *To obtain a complete Priority Pollutant scan, request* **WG 68, 51, 71, and 40** *on this sheet and* **31** *on the metals analysis request form.*

EPA Region 10 Laborato | **Analyses Required**

METALS

Project Name: RIDGEFIELD BRICK & TILE Project Code: HWD-127A Account Code: AG003A

Matrix Codes *(circle one only)*
- (10 Water - Total)
- 11 Water - Dissolved
- 17 Liquid for TCLP
- 40 Sediment/Soil
- 45 Semi-Solid/Sludge
- 47 Sediment for TCLP
- 70 Tissue
- 80 Oil/Solvent
- 00 Other - see reverse

Enter Matrix Code from above if other than the **one** circled >>>>>>>>>>>>>>>>>>>>>>>>>

Check the Work Group *(see reverse for additional WG's)* **and/or specific metals below for each sample** *(please be sure metals checked coincide with those identified in the sampling and analysis plan).*

Sample Numbers	9113 0150	9113 0152	9113 0154	9113 0158	9113 0162	9113 0164	9113 0166	9113 0168								Analy/Comp Init/Date
Workgroups (WG):																
WG 19 CLP In. Anal.																
WG 32 Metals - DW-RCRA																
Specific Metals:																
Aluminum Al																
Antimony Sb																
Arsenic As	X	X	X	X	X	X	X	X								
Barium Ba																
Beryllium Be																
Cadmium Cd																
Calcium Ca																
Chromium Cr	X	X	X	X	X	X	X	X								
Cobalt Co																
Copper Cu																
Iron Fe																
Lead Pb																
Magnesium Mg																
Manganese Mn																
Mercury Hg																
Molybdenum Mo																
Nickel Ni																
Potassium K																
Selenium Se																
Silver Ag																
Sodium Na																
Thallium Tl																
Vanadium V																
Zinc Zn																
*Hexavalent Chromium Cr+6																

**The Laboratory requires advance notice prior to receiving samples for Cr+6*

Save samples after analysis? (NONE) SOME** ALL** *(if* **SOME**, *circle sample numbers)* BB

Special limits, methods and comments: ARSENIC BY EPA METHOD ~~218.2~~ 206.2
CHROMIUM BY EPA METHOD 218.2 (EPA-600/4-79-020)

Gary A. Bruno — 3/28/91
Requester's Signature — *Date*

*****If samples should be saved, why?***

Note: *Any element may be determined by AA or ICP.* Sampled 3/27-3/28/91 Received 3/29/91

Metal workgroup and standard pa ters: (each metal must be specified/circ on reverse side)
Note that for matrices other than soil/sediment or water, some metals may not be analyzed for.

WG	3A	Metals Total Recoverable ICP	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Hg Mo Ni K Se Ag Na Sr Tl Sn Ti V Zn
WG	3B	Metals TCLP	As Ba Cd Cr Pb Hg Se Ag
WG	3C	Metals TCLP ICP Scan	As Ba Cd Cr Pb Se Ag
WG	19	CLP Inorganic Analysis	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Hg Ni Se Ag Na Tl V Zn
WG	30	Standard Metals	Al Sb As Ba Be B Cd Ca Cr Cr+6 Co Cu Au Fe Pb Mg Mn Hg Mo Ni K Se Si Ag Na Sr Tl Sn Ti W V Zn
WG	31	Priority Pollutants	Sb As Be Cd Cr Cu Pb Hg Ni Se Ag Tl Zn
WG	32	Drinking Water	As Ba Cd Cr Pb Se Ag
WG	33	Acid Rain	As Ca Pb Mg K Na
WG	34	EP Toxicity	As Ba Cd Cr Pb Hg Se Ag
WG	36	Hazardous Waste	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Hg Ni Se Ag Na Tl Sn Ti V Zn
WG	37	Total Recoverable Metals	Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Hg Mo Ni K Se Ag Na Sr Tl Sn Ti V Zn
WG	38	Metals by ICP	Al Sb As Ba Be B Cd Ca Cr Cr+6 Co Cu Fe Pb Mg Mn Mo Ni K Se Si Ag Na Sr Tl Sn Ti W Zn Zr
WG	39	EPTOX Metals by ICP	As Ba Cd Cr Pb Se Ag

Matrix Codes:

00	Other	10	Water-Total	11	Water-Dissolved
12	Water-Sus Frac	15	Liquid	16	EPT-Liq
17	TCLP-Liq	40	Sediment	45	Sld/SemiSld
46	EPT-Sld	47	TCLP-Sld	48	SWLP-Sld
60	Air	70	Tissue	80	Oil/Solvent
85	Oil-Frac Sludge				

The following list shows the proper sample containers to be used when submitting samples to the lab. These containers represent the minimum volumes required. Proper containers should be submitted for each group of parameters requested.

Sample Container	Parameters
	Inorganics
☐ 1 Quart Cubitainer	**General** Solid, Alkalinity, Hardness, Turbidity, Conductivity, pH, Chloride, Fluoride, Sulfate
☐ 1 Quart Cubitainer	**Nutrients** Nitrate, Nitrite, TOC, Ammonia, Kjeldahl, Nitrogen, Phosphorus, COD
☐ 1 Gallon Cubitainer	**BOD**
☐ 1 Quart Cubitainer	**Metals**
☐ 1 Quart Cubitainer	**Cyanide**
	Organics
☐ 1 Quart Jar	**Phenols**
☐ 1 Quart Jar	**Oil & Grease**
☐ 1 Quart Jar	**Total Organic Halides (TOX)**
☐ 1 Gallon & ½ Gallon Jar	**PCB's, Pesticides, BN/Acids, PAH**
☐ ½ Gallon Jar	**Herbicides**
☐ 2 40 ml Vials	VOA's, Purgeables, Trihalomethanes
☐ 1 16 oz. Jar for sediments	inorganics and organics
☐ 1 8 oz. Jar for sediments	inorganics or organics

☆ GPO 1991-592-681/1003-M

EPA Region 10 Laboratc..

Analyses Required

METALS

Project Name: RIDGEFIELD BRICK & TILE Project Code: HWD-127 A Account Code: AGDD 3A

Matrix Codes *(circle one only)*

10 Water - Total
11 Water - Dissolved
17 Liquid for TCLP
40 Sediment/Soil
45 Semi-Solid/Sludge
47 Sediment for TCLP
70 Tissue
80 Oil/Solvent
00 Other - see reverse

Enter Matrix Code from above if other than the **one** circled >>>>>>>>>>>>>>>>>>>>>>>>

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Antimony Sb																
Arsenic As	X	X	X	X	X	X	X	X								
Barium Ba																
Beryllium Be																
Cadmium Cd																
Calcium Ca																
Chromium Cr	X	X	X	X	X	X	X	X								
Cobalt Co																
Copper Cu																
Iron Fe																
Lead Pb																
Magnesium Mg																
Manganese Mn																
Mercury Hg																
Molybdenum Mo																
Nickel Ni																
Potassium K																
Selenium Se																
Silver Ag																
Sodium Na																
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Zinc Zn																
*Hexavalent Chromium Cr+6																

**The Laboratory requires advance notice prior to receiving samples for Cr+6*

Save samples after analysis? **NONE** **SOME**** **ALL**** *(If* **SOME**, *circle sample numbers)*

Special limits, methods and comments: ARSENIC BY EPA METHOD 206.2
CHROMIUM BY EPA METHOD 218.2 (EPA-600/4-79-020)

Gary R. Bruno — *Requester's Signature* — Date 3/28/91

***If samples should be saved, why?*

Note: *Any element may be determined by AA or ICP.* Sampled 3/27-3/28/91 Received 3/29/91

EPA X-92 — Lab Copy - *White* — Project Officer Copy - *Blue*

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❑ 1 Quart Cubitainer	**Metals**
❑ 1 Quart Cubitainer	**Cyanide**
	Organics
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❑ 1 Quart Jar	**Oil & Grease**
❑ 1 Quart Jar	**Total Organic Halides (TOX)**
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