EPA Region 10, 1200 Sixth Avenue, Seattle, WA 98101

Sample Custody & Analysis Required Form

EPA Manchester Laboratory, 7411 Beach Drive East, Port Orchard, WA 98366, 360-871-8700

Form Effective Date: July 2005

Revision 1

Project Name	Ky Valley Education Center
Project Code	OCE-0070
Account Code	2017 2018 B/DP50/E50
EPA Project Manager/phone number	Michelle Mullins
Method of Shipment/carrier	
Airbill Number (if known prior to sealing):	

Check all that apply: ☐ Enforce/Custody ☐ Possible Toxic/Hazardous ☐ Data Confidential

Sampler Names (Print & Sign). Mark (R) after name of principal recorder.

Kendall Moore

If applicable, circle the set of selected metals:

Al	Sb	As	Ba	Be
B	Cd	Ca	Cr	Co
Cu	Fe	Pb	Mg	Mn
Mo	Ni	K	Se	Ag
Na	Sn	Tl	V	Zn

(see reverse for more to add/circle)

① Matrix Codes:
10 Water/Liquid (Total)
20 Water/Liquid (Filtered)
40 Sediment/Soil/Solid/Bulk
70 Tissue
80 Oil/Solvent
44 Air filter
42 Wipe/Swab[1]
00 _____

[1] PCB wipe is to be 10cm x 10cm (100 cm²)

#C ② enter the number of containers for each preservative type followed by the appropriate preservation code P ③:

A - HCl
B - HNO_3
C - NaOH
D - H_2SO_4
E - $Na_2S_2O_3$
F - ascorbic acid², then HCl
²$Na_2S_2O_3$ if required by plan.
G - $Na_2S_2O_3$+EDTA
H - EDTA
N - No chemical preservation
P - Bottles pre-preserved at lab
T - To be preserved at the lab

W - _____

☐ Check here if the cooler is iced

④ Enter the letter or range of letters on each container for each group of containers with the same preservative type. Each container for each unique sample number must have a unique letter on it.

Laboratory: see the applicable QAPP, SOW and/or Analytical Support Request for specific methods and detection, reporting, and/or quantitation limits

Sampler's comments for the laboratory:

EPA Sample number Yr	Wk	Sequence	Sampling Date & Time Yr	Mo	Day	Time	Matrix ①	#C ②	P ③	#C ②	P ③	#C ②	P ③	#C ②	P ③	Sampler Initials	Sample/Station Description/Field Measurements	Organics (see reverse) VOA	BNA	Pest	PCB	PAH	Metals (see reverse) CLP	Selected	Mercury	Micro (see reverse) E. Coli	F. Coliform	T. Coliform	General Chemistry (see reverse) TSS	TDS	BOD 5	NO2+NO3	Oil & Grease	Asbestos	Additional Write in Analyses (see reverse)		
17	15	4100	17	04	11	1340	42	1	N							KM	Blank				X																
		4101				1345											Annex Electrical room floor																				
		4102				1350											" " " wall																				
		4103				1358											Large Gym Electrical rm. floor																				
		4104				1403											" " " " wall																				
		4105				1415											Small gym Electrical rm. transformer																				
		4106				1420											" " " " floor																				
		4107				1430											" " " " wall																				
		4108				1440											Pool Building Electrical Rm. floor																				

Chain of Custody Record

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
Kendall Moore	4/13/17	1130			
Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
Relinquished by (Signature)	Date	Time	Received by Mobile Lab for Field Analysis (Signature)	Date	Time
Shipped by (Signature)	Date	Time	Received for lab by (Signature)	Date	Time
			D Nelson	4/13/17	11:30

Receiving Laboratory Information Condition of Samples upon Receipt at Lab:

Good - Hand Delivered

Custody Seals Intact: ☐ yes ☐ no ☒ none

Distribution: White - Laboratory Copy; Yellow - Regional Sample Control Center (RSCC) Copy; Pink - Field or Office Copy

Additional Matrix Codes: 30 Leachate 50 Sludge 60 Air

Matrix codes: these are the codes in use at the EPA Region 10 Laboratory. Pick the matrix code that best matches the sample matrix. If in the opinion of the sampler, the sample matrix needs to be specially described, select 00 and write in a matrix description. Remember, tissue can be animal or vegetable in nature.

If the write in area becomes filled, cross out one of the pre-printed analyses and write in what is needed. Try to use the bolded analyte symbol/abbreviation (some analyses are not abbreviated).

Organics pre-printed on the form:

PAH Polynuclear Aromatic Hydrocarbons (these are a subset of the compounds reported from GC-MS analyses for BNA - PAH by HPLC or SIM-GC/MS methods are usually requested in order to get low reporting limits) **Pest** Organochlorine Pesticides **PCB** Polychlorinated Biphenyls aka Aroclors **VOA** (aka VOC) - volatile organic compounds **BNA** (aka SVOC or SVOA) - semivolatile organic compounds

Organics that can be written in:

AED scan (detects chlorinated or brominated hydrocarbons) **Butyltins** Butyltins (mono, di, tri, tetra substituted) **CB Con** - Chlorinated Biphenyl Congener analysis **Chlor Hyd**. Chlorinated Hydrocarbons **Chlorophenols** **Gua/Cat** Guaiacols/Catechols scan **Herb** Herbicides **OP Pest** Organophosphorous Pesticides **PBDE** Polybrominated diphenylethers **Resin Acids** **TPH-Dx** Total Petroleum Hydrocarbons, diesel range **TPH-Dx-ext** Total Petroleum Hydrocarbons, diesel range extended to motor oil **TPH-Gx** Total Petroleum Hydrocarbons, gasoline range **TPH-HCID** Total Petroleum Hydrocarbons, identification **THMs** Trihalomethanes

Metals pre-printed on the form *(underlined = 'CLP metals' - mercury must be separately requested)*:

Al aluminum **Sb** antimony **As** arsenic **Ba** barium **Be** beryllium **B** boron **Cd** cadmium **Ca** calcium **Cr** chromium **Co** cobalt **Cu** copper **Fe** iron **Pb** lead **Mg** magnesium **Mn** manganese **Hg** mercury **Ni** nickel **K** potassium **Se** selenium **Ag** silver **Na** sodium **Sn** tin **Tl** thallium **V** vanadium **Zn** zinc

Metals that can be written in and then circled under the box used for designating selected metals:

Au gold **Cr+6** hexavalent chromium **Mo** molybdenum **Sr** strontium **Ti** titanium **W** tungsten **Zr** zirconium

Note: some metals may not be analyzed for on matrices other than soil/sed or water.

Microbiology Analyses pre-printed on the form:

E. Coli Escherichia coli **F. Coliform** Fecal Coliform **T. Coliform** Total Coliform

Microbiology Analyses that can be written in:

Enterococci **MPA** Microscopic Particulate Analysis for Determining GWUDI **G/C** Giardia/Cryptosporidium **Coliphage** **Staph a** Staphylococcus aureus

Toxicity Characteristic Leaching Procedure (TCLP) write in analyses[3]:

TCLP BNA **TCLP Herb** TCLP Herbicides **TCLP met+Hg** TCLP metals including mercury **TCLP met** TCLP metals not including mercury **TCLP Hg** TCLP mercury **TCLP Pest** TCLP Pesticides **TCLP VOA**

[3] *Analyses are normally only conducted for analytes with a TCLP regulatory criteria.*

General analyses pre-printed on the form:

BOD Biochemical Oxygen Demand **NO_2+NO_3** Nitrite plus Nitrate **Oil & Grease** **TDS** Total Dissolved Solids **TSS** Total Suspended Solids

General analyses that can be written in:

Acidity **Alk** Alkalinity **TNH3** Ammonia **HCO_3** Bicarbonate **Br** Bromide **CO_3** Carbonate **COD** Chemical Oxygen Demand **Cl** Chloride **Color** Color **Cond** Conductivity **CN** Cyanide **CN-W&D** Cyanide, weak & dissociable **Flash** Flash Point **F** Fluoride **Grn Siz** Grain Size **Hard** Hardness **NO_2** Nitrite **NO_3** Nitrate **TNVS** Non-Volatile Solids **NVSS** Non-Volatile Suspended Solids **CLO_4** Perchlorate **pH** **Phenol** Phenolics **SiO_2** Silica - dissolved **SO_4** Sulfate **S** Sulfide **TOC** Total Organic Carbon **TS** Total Solids **% V Slds** % Volatile Solids **TVS** Volatile Solids **TVSS** Volatile Suspended Solids **SetSlds** Settleable Solids **% Tot** % Total Solids **TKN** Total Kjeldahl Nitrogen **T-Phos** Total Phosphorous **D-Phos** Dissolved Phosphorous **O-Phos** Ortho Phosphrous **D-O-Phos** Dissolved Ortho Phosphrous **Turb** Turbidity

Container guidance.

Note: this is general information only - consult the QA Project Plan on appropriate containers and preservatives for each project. Modifying methods may require modifying the number/type of containers. Freezing samples for one or more analyses may require collection of individual containers. Contact the laboratory for minimum sample volumes in situations where sample material is limited. Minimum volumes required for analysis will depend on the analysis and required reporting limits.

Containers for soil/sediment:

Metals/cyanide/mercury: 1, wide mouth 8 ounce glass or HDPE.
Extractable organics: 1, 8 ounce wide mouth amber glass, for one or two analyte groups
Inorganics and organics: 1, sixteen ounce wide mouth amber glass.
VOAs/purgeables: Contact the laboratory for the proper number/type of special Closed-System sample containers.

Containers/chemical preservatives for water[4]:

Metals/regular mercury: 1, one liter HDPE, HNO3 to pH<2
Mercury by method 1631: HCl and 250 mL containers provided by MEL
Cyanide: 1, 250 mL or larger HDPE, remove sulfides and/or residual chlorine then add NaOH to pH>12
Extractable organics (BNA, Pest, PCP, PAH etc.): two, one liter amber glass containers **for each analysis** - if more than one liter will be extracted for the project, it is advisable that the container size match (but not exceed) the volume to be extracted. Two separate volumes are usually collected for each analysis to allow for re-extraction if needed.
VOAs/purgeables: 3, zero headspace 40 mL amber glass vials with Teflon Septa, remove residual chlorine then add HCl to pH<2
Alkalinity: 1, 250 mL or larger HDPE, no extra volume for lab QC
Ammonia: 1, 250 mL or larger HDPE, H2SO4 to pH<2, no extra volume for lab QC
BOD 5: 1, one gallon HDPE, no extra volume for lab QC
TSS: 1, one liter or larger HDPE, no extra volume for lab QC
TDS: 1, 250 mL or larger HDPE, no extra volume for lab QC
Oil & Grease: 1, one liter clear glass, HCl to pH<2, submit 4 **separate** containers for the lab QC sample
NO2+NO3: 1, 250 mL or larger HDPE, H2SO4 to pH<2, no extra volume for lab QC
Br, Cl, F, SO4, CLO4: for analysis by ion chromatography, 1, 100 mL or larger HDPE, no extra volume for lab QC

[4] *Water samples to be designated for lab QC should have double volume submitted for metals, triple volume for organics. In general, extra volume is usually not required for lab QC for soil/sediment.*