

# Program Data Management Plan

## Portland Harbor Remedial Design Investigation Portland Harbor Superfund Site

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## **Definitions and Acronyms**

ASASOC	Administrative Settlement Agreement and Order on Consent
DMP	data management plan
EDD	electronic data deliverables
EPA	U.S. Environmental Protection Agency
ERT	EPA Emergency Response Team located in Edison, NJ
HUC	hydrologic unit code
ID	identification
ODEQ	Oregon Department of Environmental Quality
PHSS	Portland Harbor Superfund Site
RPM	Remedial Project Manager (EPA Region 10)
Scribe	data management application (created for ERT)
Scribe.NET	web-based portal for archiving Scribe project files and data

## **1.0 Introduction**

To ensure that environmental data collected at the Portland Harbor Superfund Site (PHSS) adhere to specific standards and practices, a programmatic level data management plan (DMP) was developed that provides guidance and data requirements for the various parties involved with the pre-design and design related data collection activities. While this DMP is a standalone document, it is to be used in concert with the Administrative Settlement Agreement and Order on Consent (ASAOC) statement of work, Region 10 data management plan, and the respective quality management plans developed for each performing party sampling effort.

### **1.1 Site Background**

The site is located along the lower reach of the Willamette River in Portland, Oregon, and extends from approximately river mile 1.9 to 11.8. While the site is extensively industrialized, it is within a region characterized by commercial, residential, recreational, and agricultural uses. Land use along the lower Willamette River in the site includes marine terminals, manufacturing, other commercial operations, public facilities, parks, and open spaces. The State of Oregon owns certain submerged and submersible lands underlying navigable and tidally influenced waters. The ownership of submerged and submersible lands is complicated and has changed over time.

This lower reach was once a shallow, meandering portion of the Willamette River but has been redirected and channelized via filling and dredging. A federally maintained navigation channel, extending nearly bank-to-bank in some areas, doubles the natural depth of the river and allows transit of large ships into the active harbor. Much of the river bank contains overwater piers and berths, port terminals and slips, and other engineered features. While a series of dams in the upper Willamette River watershed moderate's fluctuations of flow in the lower portions of the river, flooding still occurs approximately every 20 years, with the last occurring in 1996.

Armoring to stabilize banks covers approximately half of the harbor shoreline, which is integral to the operation of activities that characterize Portland Harbor. Riprap is the most common bank-stabilization measure. However, upland bulkheads and rubble piles are also used to stabilize the banks. Seawalls are used to control periodic flooding as most of the original wetlands bordering the Willamette in the Portland Harbor area have been filled. Some river bank areas and adjacent parcels have been abandoned and allowed to revegetate, and beaches have formed along some modified shorelines due to relatively natural processes.

Development of the river has resulted in major modifications to the ecological function of the lower Willamette River. However, several species of invertebrates, fishes, birds, amphibians, and mammals, including some protected by the Endangered Species Act, use habitats that occur within and along the river. The river is also an important rearing site and pathway for migration of anadromous fishes, such as salmon and lamprey. Various recreational fisheries, including salmon, bass, sturgeon, crayfish, and others, are active within the lower Willamette River.

### **1.2 Objective and Scope**

The objective of this DMP is to ensure that environmental data and supporting information are collected and managed in a manner that preserves, protects, and makes the information available to all stakeholders, performing parties, and other affected groups. This DMP applies to data and

information collected in support of the PHSS by the performing party's activities as related to the remedial design effort and per the individual ASAOC. While it does not cover all information (e.g., photos, field logs) that is managed for specific projects, it is intended to address those types of data deemed critical to decision making for the site. Appendix C provides a conceptual model depicting the comprehensive approach to the management of data derived from previous and future studies at the PHSS. The subsections below identify the general data categories, performing parties collecting environmental data, and major sampling activities.

### ***1.2.1 Data Categories***

This plan identifies standard data elements and data management processes for the following data categories:

- Project identification information
- Environmental sampling data
- Locational data

The individual data elements for each of these categories represent the minimal amount of information that is needed for project specific decision making and data sharing among stakeholders and performing parties. These are further identified in the Data Management section.

### ***1.2.2 Major Stakeholder Groups***

The major stakeholder groups have been identified as those groups who are actively involved in site-wide planning and environmental data collection and sharing for this site. The major stakeholders include signatories to the 2001 Memorandum of Understanding, performing parties, and community groups:

- Memorandum of understanding members
  - U.S. Environmental Protection Agency (EPA) Region 10
  - Oregon Department of Environmental Quality
  - Confederated Tribes and Bands of the Yakama Nation
  - Confederated Tribes of the Grand Ronde Community of Oregon
  - Confederated Tribes of Siletz Indians
  - Confederated Tribes of the Umatilla Indian Reservation
  - Confederated Tribes of the Warm Springs Reservation of Oregon
  - Nez Perce Tribe
  - National Oceanic and Atmospheric Administration
  - Oregon Department of Fish and Wildlife
  - U.S. Department of the Interior
- Performing Parties (these are typically potentially responsible parties)
- Primary community groups
  - Community Advisory Group
  - Willamette Riverkeeper
  - Portland Harbor Community Advisory Group

### ***1.2.3 Remedial Design Sampling Activities***

For the remedial design efforts, a performing party would implement an investigation to supplement existing site-wide data to inform and support remedial design.

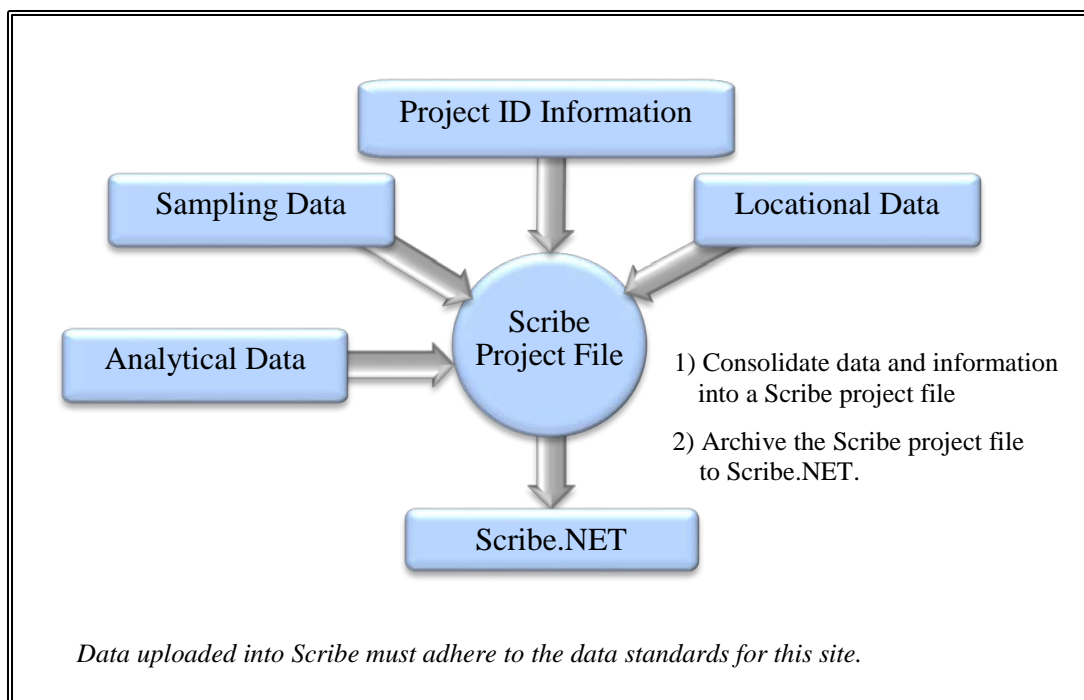
The following types of sample collection activities may be completed as specified in each respective EPA-approved sampling plan submitted by performing parties:

- Surface sediment sampling
- Fish tissue sampling
- Surface water sampling
- Sediment coring
- Soil sampling
- Porewater sampling

## **2.0 Data Management**

Effective data management among the Portland Harbor performing parties relies upon delivery of data to a central repository using a common data management platform. The platform selected for the PHSS is Scribe, and the repository is the Region 10 subscription to Scribe.NET. Although individual performing parties may have diverse data management systems, the Scribe software and Scribe.NET repository is required for consolidation and access to project information, sampling data, and applicable locational data for each sampling activity. For many projects Scribe will already be in use for managing environmental samples. In those cases, the same Scribe project files can be used to document the project information, receive the sampling data, and publish the complete set of information to Scribe.NET. A simplified data flow for the Scribe data management process is illustrated on Figure 1. The Scribe Project ID is required for each data set and is provided by the EPA Scribe.NET Data Coordinator. Sampling Data comprises sample nomenclature identification, temporal data, and details specific to the sampling event. Locational Data comprise the spatial information for each sample.

Independent of the Scribe and Scribe.NET repository, a site-wide repository is being developed by the State of Oregon to capture and provide access to comprehensive Portland Harbor data. Appendix C provides a conceptual model depicting the comprehensive approach to the management of data derived from previous and future studies as a part of the PHSS.

**Figure 1. Data Flow and Archiving for Scribe**

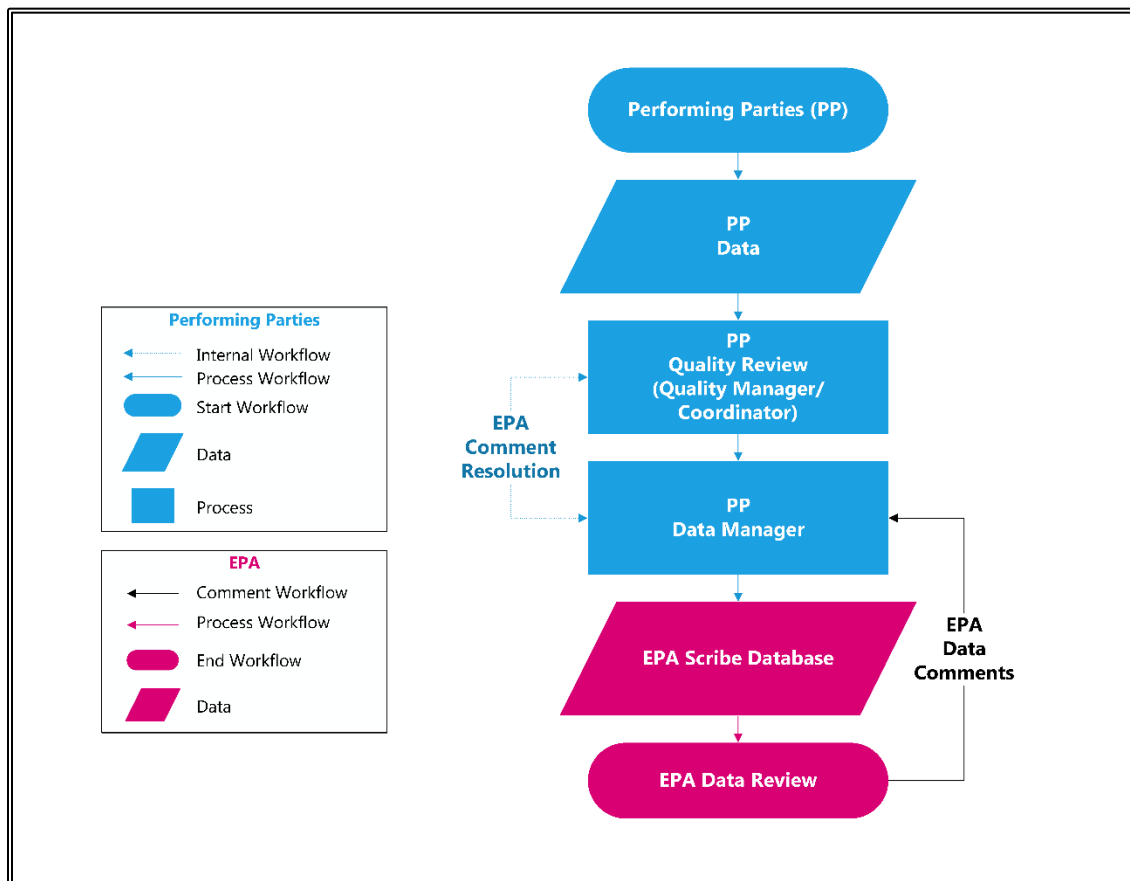
## 2.1 Data Management Platform

The data management platform selected for the PHSS is Scribe. This software is based on a Microsoft database and is available for download ([www.ert.org](http://www.ert.org)). In addition to the Scribe software, an EPA Region 10 template, which contains the required data fields, data lists, and validation criteria, needs to be downloaded and installed. For each project, a Scribe project file is created. Here, the project-specific information is entered, which identifies both the performing party or group conducting the sampling and the type of sampling activity performed.

## 2.2 Roles and Responsibilities

The major roles and responsibilities for data management are identified for the performing parties in addition to the role of the data manager within each organization. The performing parties will be responsible for their own in-house data management but will designate a “data manager” who will fill the role as defined within this DMP. Figure 2 provides an overview of the workflow between EPA Region 10 and the performing parties.



**Figure 2. Process Workflow**

### 2.2.1 Performing Parties

EPA Region 10 has the primary responsibility for oversight of all sampling and monitoring activities. EPA has identified the minimal data elements and data delivery requirements that would allow it to achieve its oversight goals and share data among the other stakeholders, performing parties, and community groups. Each of the performing parties is responsible for collecting the necessary data elements covered under their respective sampling activity as approved by EPA, and providing that information to EPA by submitting electronic data deliverables (EDD's) or entering or uploading the information into a Scribe project file, and publishing (archiving) the complete file to Scribe.NET. Coordination with EPA and the Oregon Department of Environmental Quality (ODEQ) is required to ensure data requirements for a sampling event are met. To accomplish this task on a project-specific basis, the performing party will need:

- DMPs to cover their respective sampling activities
- A data manager designated to complete the Scribe project file or EDD's

Details regarding the roles and responsibilities of the data manager are provided in the following section.

### 2.2.2 Data Manager

Each of the performing parties will need to designate a data manager to create the EDD submittals or create and manage the Scribe project file and upload the file to Scribe.NET. Regardless of the

data management system each performing party utilizes, a Scribe EDD or Scribe project file is required for consolidation and archiving of the project data to a designated national server. The major responsibilities of the data manager are:

- Creation of EDD submittals or the Creation of the Scribe project file
- Coordination with EPA and/or ODEQ regarding all data matters.
- Participation in the Portland Harbor data management coordination calls for ongoing discussion and updates or suggested revisions to this DMP

Designation and training for the data manager can be coordinated with the EPA's Regional Scribe.NET Data Coordinator if direct use of Scribe project files is planned. Web training sessions are also available from the EPA Emergency Response Team (ERT) on a regular basis. To begin, the data manager will need to go to the ERT website ([www.ert.org](http://www.ert.org)) and download on to their computer:

- Scribe (Version 3.9.4 or current)
- EPA Region 10 Scribe template

Once these have been installed, the EPA Region 10 template will need to be selected during the startup of Scribe after which it will become the default template for future projects. As a security measure, once a Scribe project file has been started, it stays locked to the originating computer until it has been relinquished by the data manager. Data and information can be uploaded into Scribe via an import wizard or hand entered through the user interface. During use, it is a recommended practice to regularly back up the Scribe project file to Scribe.NET to preserve the information in the event the originating computer is lost, stolen, or experiences a system failure.

It is anticipated that there will be no coordination with respect to the EPA regional laboratory program for any of the sampling events conducted by any performing party. Section 2.2.4 describes how contact may be made to discuss specific requirements regarding Scribe EDD submittals and/or Region 10 Scribe template.

### ***2.2.3 EPA Remedial Project Managers***

EPA's oversight of the performing parties at the Portland Harbor site resides with EPA's Superfund Remedial Project Managers (RPM). The RPM will work directly with the performing parties on the direction and type of environmental sampling activities conducted. This includes data quality objective development; approval of sampling plans; and acceptance of sampling reports, assessments, and data for entry into the agency's administrative record. Central to this role is the identification of critical data needs on each approved sampling activity at each sediment management area. In addition, the RPM will participate in the Portland Harbor data management calls and coordinate with the performing party's data manager for refinements to the DMP if needed.

### ***2.2.4 EPA Regional Scribe.NET Data Coordinator***

The EPA Scribe.NET Data Coordinator (to be determined) is the project's EPA Scribe data management point of contact and reviews all EPA Region 10 Scribe deliverables for adherence to the EPA Region 10 DMP.

As part of the Portland Harbor data management coordination calls, the EPA Scribe.NET Data Coordinator will communicate with all performing parties regarding all data issues related to the management of data, Scribe EDD submittals and/or Scribe templates. The coordinator will also be the central point of contact for all technical information and database requirements related to the publishing of data to Scribe.NET.

## **2.3 Data Elements**

As stated in Section 1.2.1, the plan identifies standard data elements for project identification information, environmental sampling data, and locational data. A complete list of data elements is provided in Appendix A and the valid values in Appendix B. Valid values are also provided as drop-down entry items in the Region 10 Scribe template/Portland Harbor template (when available). The following sections summarize the information in these appendices as they relate to the major data categories.

### ***2.3.1 Project Identification Information***

Project identifiers provide the necessary descriptive information (metadata) about the project. This allows data users an efficient way of categorizing and searching archived Scribe project files. A complete list of these data elements is found in Appendix A under the Site and Event Categories. Critical among these is identification of the project, monitoring organization, and type of monitoring activity (see Appendix A; Events – Activity data element). The Activity data type is a Superfund identifier that distinguishes environmental data by its intended programmatic use (i.e., Performance Evaluation, Remedial Action). The EPA Region 10 template contains a list of valid values for the Activity data element. It is important for the data manager to verify with the EPA RPM on the agreed upon Activity type during the project planning.

### ***2.3.2 Environmental Sampling Data***

The data elements for environmental sampling data allow for a complete identification of the analytical results such that the data may be subject to interpretation. This includes the identification of the sample matrix, sample collection time, measurement parameter, units of measurement, limits of detection, dates of analysis, analytical method, and so on. A complete list of these data elements and their descriptors are in Appendix A under the Samples and Lab Results categories. For data being uploaded into the Lab Results table of Scribe, the sample numbers must match up against the sample numbers that are already loaded into the Samples table.

### ***2.3.3 Locational Data***

The locational data establish the spatial representativeness of the environmental sample and are critical for data analysis. These include latitude, longitude, datum, elevation, and geomethod for sample collection points. Additional spatial identifiers for water monitoring (e.g., hydrologic unit codes [HUCs]) have been added for this site as these were identified as required geospatial identifiers by EPA. Valid values for the HUCs have been incorporated into the Region 10 template. A complete list of the locational data elements is in Appendix A under the Location and Samples categories.

## **2.4 Data Repository**

The repository for archiving and retrieving Scribe project files is Scribe.NET. This repository resides within a national server maintained by ERT and is accessed directly from Scribe. For each project file, a unique ID is assigned at the time the file is first published to Scribe.NET. Access to the archived Scribe project file can be granted to other stakeholders, performing parties, and groups upon submitting a request to ERT; however, the repository files can only be updated from the computer that originated the file (unless the Scribe project file is relinquished by the originator in Scribe). Independent of the Scribe.NET repository, a site-wide repository being developed by the State of Oregon, will capture and provide access to comprehensive Portland Harbor site data.

## **3.0 Data Verification**

If the Scribe project is initiated by a performing party for Portland Harbor, Scribe is configured to undergo a self-inspection of information as part of the data generation or file upload process. The Region 10 template contains auditor rules for verification of Scribe project files as they are uploaded to Scribe.NET. Close observance of these rules is the responsibility of the data manager.

## **4.0 Data Reporting Procedures**

Final project information, sampling, and locational data are delivered to EPA in the form of an EDD or Scribe project file that has been fully populated and published to Scribe.NET. Upon completion of Scribe project file and upload to Scribe.NET, the performing party data manager notifies the EPA RPM and the EPA Scribe.NET Data Coordinator and provides the Scribe project ID number (assigned at the time of publishing to Scribe.NET) associated with the project for identification and access by EPA Region 10. The concept for integrating the analytical and locational data of Scribe.NET with the comprehensive data management repository is provided in Appendix C.

## **5.0 Data Access**

Major stakeholder groups have been identified as those groups who are actively involved in site-wide planning and environmental data collection and sharing for the PHSS. The major stakeholders include signatories to the 2001 Memorandum of Understanding, performing parties, and community groups: These stakeholders are provided access to the Portland Harbor subscription of Scribe.NET. Data access is performed through Scribe. For all the Portland Harbor Scribe project files, each stakeholder, performing party, or primary community groups has data access rights and can download the Scribe project file from Scribe. Only the originating performing party data manager can update files that have been published to Scribe.NET. Appendix C provides a conceptual model depicting the comprehensive approach to the site-wide management and sharing of data derived from previous and future studies at the PHSS.

## **6.0 References**

U.S. EPA. *Memorandum: Superfund Site Data Definitions and Recommended Practices*.  
29 Nov. 2017.

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## **Appendix A – Required Data Elements**

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Data Element Field Names	Required, Optional, Conditional, Not Applicable (R/O/C/NA)	Description or Preferred Values		Field Format/Length		Origin
CASE_NUMBER	Conditional	Unique ID assigned to groups of samples scheduled for analysis. Required for the Contract Lab Program. Possible values are determined by the CLP Contract.		Numeric / 5	5	Scribe / Lab
SAMPLE_DELIVERY_GROUP	Conditional	A set of samples scheduled under a Case Number (max = 20). Required for the Contract Lab Program.	Possible values are determined by the CLP Contract.	Text / 30	30	Lab
SAMPLE_ID	Conditional	EPA Sample Number. Required if data are reported by the Contract Lab Program.	Possible values are determined by the CLP Contract.	Text	25	Lab
CAS_NUMBER	Required	Chemical Abstracts Service (CAS) Registry Number for the chemical compound or element reported.	Possible values are determined by the CAS Registry.	Text	50	Lab
ANALYTE	Required	Name of the chemical compound or element that was measured.	Name comprised of any combination of alpha-numeric values which may also contain hyphens and commas.	Text	60	Lab
FINAL_RESULT	Required	The final validated result of the chemical compound or element that was measured.	Numeric value which may be integer or decimal.	Numeric	8	Lab / Data Reviewer
RESULT_UNITS	Required	The units of measurement for the "Final Result" and "Lab Result".	Possible values are determined by the CLP Contract or the lab. Examples: ug/kg, mg/kg, ug/L, mg/L, ug	Text	20	Lab
FINAL_VALIDATION_QUALIFIER	Required	National Functional Guidelines Data Validation Qualifiers.	Possible values assigned by the National Functional Guidelines.	Text	10	EDM / Data Reviewer
DATA_VAL_LABEL	Required	EPA Data Validation Label Code from the "Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use".	Possible values assigned by the guidance document.	Text	250	EDM / Data Reviewer

Data Element Field Names	Required, Optional, Conditional, Not Applicable (R/O/C/NA)	Description or Preferred Values		Field Format/Length		Origin
SAMPLE_ADJUSTED_CRQL	Required	The Contract Required Quantitation Limit (CRQL) or lab's Reporting Limit that has been adjusted for sample weight, sample volume, dilution, percent solids, etc.	Numeric value which may be integer or decimal.	Numeric	8	Lab
SAMPLE_ADJUSTED_MDL	Required	The Method Detection Limit (MDL) that has been adjusted for sample weight, sample volume, dilution, percent solids, etc.	Numeric value which may be integer or decimal.	Numeric	8	Lab
LAB_RESULT	Required	The analytical result as reported by the testing laboratory.	Numeric value which may be integer or decimal.	Numeric	8	Lab
LAB_QUALIFIERS	Required	Lab Applied Data Qualifier(s). Qualifer codes which describe certain aspects of data utility or quality (e.g., non-detect, estimated value, etc.).	Possible value defined by either the CLP Statement of Work or the lab.	Text	10	Lab
METHOD_CRQL	Required	Un-adjusted CRQL or Reporting Limit	Numeric value which may be integer or decimal.	Numeric	8	Lab
NONMOISTURE_SAMPLE_ADJUSTED_CRQL	NA	Contract Required Quantitation Limit (CRQL) or Reporting Limit that is adjusted for sample weight, volume, dilution, <b>BUT NOT</b> percent solids. Created by the data review program used to validate CLP data.	Numeric value which may be integer or decimal.	Numeric	8	EDM
CRQL_UNITS	Required	Sample Adjusted Contract Required Quantitation Limit (CRQL) or Reporting Limit Units of Measurement.	Possible values are determined by the CLP Contract or the lab. Examples: ug/kg, mg/kg, ug/L, mg/L, ug	Text	20	Lab
INSTRUMENT_MDL	Optional	Instrument Detection Limit (MDL) that is not adjusted for sample mass/volume or percent moisture (solids).	Numeric value which may be integer or decimal.	Numeric	8	Lab
NONMOISTURE_SAMPLE_ADJUSTED_MDL	NA	Method Detection Limit (MDL) that is adjusted for sample weight, volume, dilution, <b>BUT NOT</b> percent solids. Created by the data review program used to validate CLP data.	Numeric value which may be integer or decimal.	Numeric	8	EDM
MDL_UNITS	Required	MDL Measurement Units	Possible values are determined by the CLP Contract or the lab. Examples: ug/kg, mg/kg, ug/L, mg/L, ug	Text	20	Lab

Data Element Field Names	Required, Optional, Conditional, Not Applicable (R/O/C/NA)	Description or Preferred Values		Field Format/Length		Origin
PERCENT_SOLIDS	Required	The Percent Solids for soils and sediments. Used to determine the dry weight basis of the chemical analyses.	Reported as a "Percent".	Numeric	8	Lab
PERCENT_MOISTURE	Required	The Percent Moisture content for soils or sediments. Used to determine the dry weight basis of the chemical analyses.	Reported as a "Percent".	Numeric	8	Lab
DILUTION_FACTOR	Required	Dilution Factor applied to the digest or extract. The dilution factor is only applied when the laboratory has diluted the extract or digest due to a high concentration of analyte(s).	Integer values e.g., 1, 2, 3, etc.	Numeric	8	Lab
ANALYSIS_FRACTION	Required	Identifies the type of analysis fraction or method category of the analysis.	Possible values determined by the CLP Contract or reporting Lab.	Text	100	Lab
ANALYSIS_LEVEL	Conditional	The concentration range or level performed by the lab for the analytical methods.	Possible values are determined by the CLP Contract. Examples: trace, low, med	Text	15	Lab
REPORTING_BASIS	Required	Indicates whether the results were adjusted due to the moisture content of the sample.	For Water samples = WET, For Soil and Sediment samples = DRY or WET depending upon whether moisture correction was applied.	Text	10	Lab
SAMPLE_DATE_TIME	Required	The Date & Time of Sample Collection	For all field samples (including Field Blank and Performance Evaluation samples) = MM/DD/YYYY HH:MM:SS	Date/Time	20	Scribe

Data Element Field Names	Required, Optional, Conditional, Not Applicable (R/O/C/NA)	Description or Preferred Values		Field Format/Length		Origin
DATE_SHIPPED	Required	Date of Sample Shipment.	<p>For all field samples (including Field Blank and Performance Evaluation samples) = MM/DD/YYYY</p> <p>For Matrix Spike, Post-Digestion Spike, Duplicates, Matrix Spike Duplicate = Ship Date of associated Parent Sample</p>	Date	20	Scribe
DATE_TIME_RECEIVED	Required	Date & Time of Sample Receipt at Lab.	<p>For all field samples (including Field Blank and Performance Evaluation samples) = MM/DD/YYYY HH:MM:SS</p> <p>For Matrix Spike, Post-Digestion Spike, Duplicate, Matrix Spike Duplicate = Sample Receipt Date and Time of associated Parent Sample</p>	Date/Time	20	Lab

Data Element Field Names	Required, Optional, Conditional, Not Applicable (R/O/C/NA)	Description or Preferred Values		Field Format/Length		Origin
PREP_DATE_TIME	Required	Date & Time of Sample Digestion/Extraction.	<p>For all laboratory samples = MM/DD/YYYY HH:MM:SS</p> <p>For Matrix Spike, Post-Digestion Spike, Duplicate, Matrix Spike Duplicate = Sample Receipt Date and Time of associated Parent Sample</p>	Date/Time	20	Lab
ANALYSIS_DATE_TIME	Required	The Date & Time of Analysis of the sample digest or extract.	<p>For all laboratory samples = MM/DD/YYYY HH:MM:SS</p>	Date/Time	20	Lab
LAB_SAMPLE_TYPE	Required	Identifies types of samples as either "field" or specific lab QCbut does not identify field QC types. Required by the Contract Lab Program.	Possible values are determined by the CLP Contract or Reporting Lab. Examples: Field_Sample, Method_Blank, Matrix_Spike, Serial_Dilution, etc.	Text	40	Lab
SAMPLE_MATRIX	Required	Identifies the matrix type of soil, water, etc. as reported by the lab. Required by the Contract Lab Program.	Possible values are determined by the CLP Contract or reporting Lab. Examples: Water, Soil, Sediment, Wipe, Filter	Text	20	Lab
RESULT_COMMENT	Conditional	Concatenated result information (can be from FORM I Comment Field)	Comments are recorded in the field. Required if passed from the Scribe XML to the Lab.	Text	250	Scribe

Data Element Field Names	Required, Optional, Conditional, Not Applicable (R/O/C/NA)	Description or Preferred Values		Field Format/Length		Origin
LAB_NAME	Required	Laboratory Name (long name)	Possible values are determined by the CLP Contract or reporting Lab.	Text	50	Lab
LAB_CODE	Conditional	An abbreviated form of the Lab Name.	Possible values are determined by the CLP Contract. The abbreviated lab name is a code used for reporting.	Text	30	Lab
CONTRACT_NUMBER	Conditional	Laboratory Contract Number assigned under the CLP.	Possible values are determined by the CLP Contract or reporting Lab.	Text	30	Lab
METHOD_NUMBER_OR_CLP_SOW	Required	Identifies the analytical method reference number or statement of work.	Valid EPA or other reference methods or CLP SOW editions. Examples: ISM01.3, 6010, 8270, etc.	Text	100	Lab
MA_NUMBER	Conditional	The Modified Analysis (MA) Number is a tracking number used by the CLP for non-standard or altered methods.	Possible values are determined by the CLP Contract or reporting Lab.	Text	30	Lab
TR_COC_NUMBER	Required	The Traffic Report (TR) /Chain of Custody Form Number is a unique tracking number assigned to the COC.	Long segmented number separated by hyphens.	Text	30	Scribe
LAB_SAMPLE_ID	Conditional	Laboratory Sample ID (internal ID#). Labs issue their own sample IDs for internal sample tracking and reporting purposes.	Possible values are determined by the CLP Contract or reporting Lab.	Text	25	Lab
LAB_FILE_ID	Conditional	Laboratory File ID (Internal to the lab only)	Possible values are determined by the CLP Contract or reporting Lab.	Text	25	Lab
INSTRUMENT_ID	Conditional	Unique Instrument Identification Number	Possible values are determined by the CLP Contract or reporting Lab.	Text	25	Lab

Data Element Field Names	Required, Optional, Conditional, Not Applicable (R/O/C/NA)	Description or Preferred Values		Field Format/Length		Origin
SAMPLE_ALIQUOT	Required	The mass or volume of sample that removed for extraction or digestion.	Numeric value may be an integer or decimal.	Numeric	8	Lab
SAMPLE_ALIQUOT_UNITS	Required	The units of measurement for the mass or volume of sample that removed for extraction or digestion.	Examples: "g" for grams, "mL" for milliliters.	Text	20	Lab
FINAL_VOLUME	Required	The final volume of the sample Digest or Extract.	Numeric value may be an integer or decimal.	Numeric	8	Lab
FINAL_VOLUME_UNITS	Required	Volume of Sample Digest /Extract Units	For Organic: uL For Inorganic: mL	Text	20	Lab
SOIL_EXTRACT_VOLUME	Conditional	The volume of extract used for a Medium Level VOC soils analysis.	Numeric value may be an integer or decimal.	Numeric	8	Lab
SOIL_EXTRACT_VOLUME_UNITS	Conditional	Soil Extract Volume Units (Medium VOA)	For Organic (VOA): uL	Text	20	Lab
SOIL_ALIQUOT_VOLUME	Conditional	The volume of aliquot removed from the extract used for a Medium Level VOC soils analysis.	Numeric value may be an integer or decimal.	Numeric	8	Lab
SOIL_ALIQUOT_VOLUME_UNITS	Conditional	Soil Aliquot Volume Units (Medium VOA)	For Organic (VOA): uL	Text	20	Lab
PURGE_VOLUME	Conditional	For analysis of Volatile Organic Compounds, the volume of an aqueous sample that is used to "purge" the VOCs.	Numeric value may be an integer or decimal.	Numeric	8	Lab
PURGE_VOLUME_UNITS	Conditional	Purge Volume Units (VOA)	For Organic (VOA only): mL	Text	20	Lab
SPIKE_ADDED	Conditional	Amount Added for Lab Matrix Spike or Spike Duplicate sample or Laboratory Control Sample	Numeric value may be an integer or decimal.	Numeric	8	Lab
CONCENTRATED_EXTRACT_VOLUME	Conditional	Concentrated Extract Volume (SVOA/PEST/PCB)	Numeric value may be an integer or decimal.	Numeric	8	Lab

Data Element Field Names	Required, Optional, Conditional, Not Applicable (R/O/C/NA)	Description or Preferred Values		Field Format/Length		Origin
CONCENTRATED_EXTRACT_VOLUME_UNITS	Conditional	Concentrated Extract Volume Units (SVOA/PEST/PCB)	For Organic (SVOA, Pesticides, PCBs): uL	Text	20	Lab
INJECTION_VOLUME	Conditional	The volume of extrac injected into the instrument. (SVOA/PEST/PCB)	Numeric value may be an integer or decimal.	Numeric	8	Lab
INJECTION_VOLUME_UNITS	Conditional	Injection Volume Units (SVOA/PEST/PCB)	For Organic (SVOA, Pesticides, PCBs): uL	Text	20	Lab
PREPARATION_METHOD	Required	Type of Extraction for Organics or Digestion for Inorganics. "SONC" for sonication etc. (SVOA/PEST/PCB) of Organics and most relevant method digestion numbers for Inorganic.	Possible values are determined by the CLP Contract or reporting Lab. For Organic: Sonication, Soxhlet, Pressurized_Fluid , Liq_Liq, Liq_Membrane For Inorganic: 200.7, 200.8, 3050B, 3015A, 3051A, 7300, 7470A, 7471B, Midi-distillation, Micro-distillation	Text	100	Lab
GPC_CLEANUP	Conditional	Cleanup Type (SVOA/PEST/PCB)	For Organic (SVOA, Pesticides, PCBs): Y or N	Text	20	Lab
GPC_FACTOR	Conditional	1.0 if no GPC, 2.0 if GPC is performed (SVOA/PEST/PCB)	"1.0 if no GPC, 2.0 if GPC is performed" derived from presence or absence of GPC value in CLEANUP_TYPE field	Numeric	8	Lab



Data Element Field Names	Required, Optional, Conditional, Not Applicable (R/O/C/NA)	Description or Preferred Values		Field Format/Length		Origin
DECANTED	Conditional	Identifies if the Lab decanted the sample in a Yes or No response. (SVOA/PEST/PCB)	Possible values are determined by the CLP Contract or reporting Lab. For Organic (SVOA, Pesticides, PCBs): Decanted or Not_Decanted	Text	20	Lab
PH	Conditional	The pH Determination of a soil or water sample. Reported in pH Units (SVOA/PEST/PCB, and Inorganic water samples)	Numeric value may be an integer or decimal.	Numeric	8	Lab
COLOR_BEFORE	Optional	Description of sample before & after digestion. Used in CLP Metals analysis of waters.	Possible values are determined by the CLP Contract or reporting Lab.	Text		Lab
COLOR_AFTER	Optional	Description of sample before & after digestion. Used in CLP Metals analysis of waters.	Possible values are determined by the CLP Contract or reporting Lab.	Text		Lab
CLARITY_BEFORE	Optional	Description of sample before & after digestion. Used in CLP Metals analysis of waters.	Possible values are determined by the CLP Contract or reporting Lab.	Text		Lab
CLARITY_AFTER	Optional	Description of sample before & after digestion. Used in CLP Metals analysis of waters.	Possible values are determined by the CLP Contract or reporting Lab.	Text		Lab
TEXTURE	Optional	Description of sample. Used in CLP Metals analysis of soil/sediments.	Possible values are determined by the CLP Contract or reporting Lab.	Text		Lab
ARTIFACTS	Optional	Description of sample. Used in CLP Metals analysis of soil/sediments.	Possible values are determined by the CLP Contract or reporting Lab.	Text		Lab
COOLER_TEMP	Required	Recorded temperature of the sample cooler upon Receipt at the Lab.	Recorded in Degrees Celcius.	Numeric	8	Lab

Data Element Field Names	Required, Optional, Conditional, Not Applicable (R/O/C/NA)	Description or Preferred Values		Field Format/Length		Origin
SAMPLE_FRACTION	Conditional	Identifies the representativeness of a water sample due to any pretreatment (e.g., filtration at 0.45 micron).	"D" for dissolved (filtered at 0.45 micron), "F" for other filtered, "T" for total (unfiltered). If "F" is used then the filter size/type should be entered in the Result_Comment field.	Text	1	Scribe
METHOD_SPECIATION	Conditional	Part of a chemical characteristic (Nitrogen "As" ...)	Detemined by the analytical method.	Text	30	Lab
SAMPLE_SUBMATRIX	Required	Scribe Matrix, expanded to include surface water, surface sediment etc. Use a custom list in Scribe	Examples: Air, AirIndoor, Sediment, Sediment Subsurface, Sediment Surface, Soil, Soil Surface, Soil Subsurface, SoilGas, Tissue, Waste, Waste SolidWaste, Waste LiquidWaste, Water, Water SurfaceWater, Water GroundWater, Water Potable, Water SepticEffluent, Water Stormwater	Text	40	Scribe

Data Element Field Names	Required, Optional, Conditional, Not Applicable (R/O/C/NA)	Description or Preferred Values		Field Format/Length		Origin
SAMPLING_REASON	Required	General program or technical reason for the study. Program reasons are specific and tie the data collection to more prescribed data uses.	Examples: Emergency Response, Site Investigation, Preliminary Assessment, Site Assessment, Remedial Investigation, Remedial Action	Text	30	Scribe
SAMPLE_COLLECTION_METHOD	Required	Sample Collection Method (i.e., Grab, Composite, Discrete Interval)	Examples: Grab, Composite, Discrete Interval	Text	30	Scribe
EPA_REGION	Required	The EPA Regional designation number	Valid Values: 1 - 10	Text	10	Scribe
STATION_LOCATION	Required	Station Location Codes	Determined by the project.	Text	50	Scribe
LOCATION_DESCRIPTION	Required	Further describes the Station Location.	Determined by the project.	Text	100	Scribe
SCRIBE_SAMPLE_NUMBER	Required	The Scribe / field sample number. This may be Scribe generated or a Regionally assigned number.	Possible value determined by the Scribe Project Manager or the Regional Sample Control Coordinator.	Text	50	Scribe
LOCATION_ZONE	Required	The type of area that is impacted by the sample location.	Examples: Lake, Land, River/Stream, Well	Text	25	Scribe
LATITUDE	Required	The geographic latitude where the sample was collected or field measurement was taken.	12 character decimal degrees. Decimal places should be carried out to a minimum of 6 places in order to ensure minimal accuracy.	Numeric	12	Scribe

Data Element Field Names	Required, Optional, Conditional, Not Applicable (R/O/C/NA)	Description or Preferred Values		Field Format/Length		Origin
LONGITUDE	Required	The geographic longitude where the sample was collected or field measurement was taken.	12 character decimal degrees (preceded by a negative sign for North America, -). Decimal places should be carried out to a minimum of 6 places in order to ensure minimal accuracy.	Numeric	12	Scribe
DATUM	Required	The horizontal coordinate system reference Datum name.	WGS84	Text	50	Scribe
GEOMETHOD	Required	The method used to determine latitude and longitude.	GPS, Survey	Text	30	Scribe
SURFACE_ELEVATION	Conditional	The determined elevation of a geographic point where the sample was collected or field measurement was taken. This is required for groundwater monitoring wells and where surface elevation data is needed for a project.	In feet or meters, need to provide for GW Wells that have been surveyed and not just GPS.	Numeric	8	Scribe
SURFACE_ELEVATION_UNITS	Conditional	The units of measurement for the surface elevation data. This is required when surface elevation measurements are reported.	meters, feet	Text	20	Scribe
SURFACE_ELEVATION_METHOD	Conditional	The method used to determine the surface elevation. This is required when surface elevation measurements are reported.	GPS, Survey	Text	30	Scribe
SURFACE_ELEVATION_DATUM	Conditional	The vertical control datum for the surface elevation measurement. This is required when surface elevation measurements are reported.	NAVD88	Text	50	Scribe
TOP_DEPTH	Conditional	Top depth of Sample Collection (for cores) or depth of sample collection for a monitoring well.	Numeric value may be an integer or decimal.	Numeric	8	Scribe
BOTTOM_DEPTH	Conditional	Depth To bottom of sample collection for a core sample.	Numeric value may be an integer or decimal.	Numeric	8	Scribe
TOP_DEPTH_UNITS	Conditional	Units of Sample Depth	Feet or meters	Text	20	Scribe
BOTTOM_DEPTH_UNITS	Conditional	Units of the Bottom Depth	Feet or meters	Text	20	Scribe
SAMPLER_NAME	Required	Sampler Name	Full name of the sampler.	Text	30	Scribe

Data Element Field Names	Required, Optional, Conditional, Not Applicable (R/O/C/NA)	Description or Preferred Values		Field Format/Length		Origin
SAMPLING_COMPANY_CONTACT	Required	Sampling Company Contact Name	Full name of the sampling contact. Person usually coordinates sample collection on behalf of the sampling company.	Text	50	Scribe
SAMPLING_COMPANY_NAME	Required	Sampling Company Name	Full name of the sampling company.	Text	50	Scribe
PROJECT_NAME	Required	Site Name / Project Name	Assigned by the Sample Control Coordinator.	Text	50	RSCC/EDM
SITE_PROJECT_CODE	Required	Regional Project Code	Assigned by the Sample Control Coordinator.	Text	50	RSCC/EDM
SITE_EVENT_ID	Required	EventID. Use to group data by sampling/monitoring events (i.e. EOC, Site Assessment) (Primary Key)	A unique ID used by Scribe.	Text	50	Scribe
STATE	Required	State where sample collection occurred. This field is populated in CLPSS during ASR entry	2 Character State Abbreviation	Text	20	RSCC/EDM
CITY	Required	City where sample collection occurred. This field is populated in CLPSS during ASR entry	Full City Name	Text	60	RSCC/EDM
CERCLIS	Required	CERLIS ID	The CERCLIS identification. Used only by the Superfund program.	Text	20	Scribe
SCRIBE_SITE_NUMBER	Required	Scribesite key (Primary Key)	A unique ID used by Scribe.	Text	12	Scribe
SCRIBE_NET_PROJECT_ID	Required	ScribeNetID Project ID	A unique ID used by Scribe.	Long Integer	4	Scribe
SCRIBE_SAMPLES_ID	Required	Scribe Database AutoGenerated Number	A unique ID used by Scribe.	Long Integer	4	Scribe
SAMPLE_TAG	Required	Container ID codes - autogenerated if left blank	A unique ID used by Scribe.	Text	15	Scribe
SCRIBE_COMMENT	Conditional	Comment field from Scribe	Filled in by sampler to denote special sample treatment or conditions. Required if the entry is filled in by Scribe.	Memo	65K+	Scribe

Data Element Field Names	Required, Optional, Conditional, Not Applicable (R/O/C/NA)	Description or Preferred Values		Field Format/Length		Origin
FIELD_SAMPLE_TYPE	Required	Distinguishes field samples from lab QC, field QC and other associated sample types.	Possible values used in the Scribe template. Example: "Field Sample", etc.	Text	30	Scribe
VERSION_CODE	NA	Reserved for use by another Region.				
DATA_PROVIDER	NA	Reserved for use by another Region.				
PARENT_SAMPLE_NAME	NA	Reserved for use by another Region.				
PARENT_SAMPLE_LOCATION	NA	Reserved for use by another Region.				
LAB_REPLICATE_TYPE	NA	Reserved for use by another Region.				
SAMPLE_SOURCE	NA	Reserved for use by another Region.				
ORGANIC_YN	NA	Reserved for use by another Region.				
PRESERVATIVE	NA	Reserved for use by another Region.				
TEST_BATCH_TYPE	NA	Reserved for use by another Region.				
PREP_BATCH_ID	NA	Reserved for use by another Region.				
ANALYSIS_TYPE	NA	Reserved for use by another Region.				
SAMPLE_ANALYSIS_LOCATION	NA	Reserved for use by another Region.				
COLUMN_ID	NA	Reserved for use by another Region.				
RUN_BATCH_ID	NA	Reserved for use by another Region.				
ANALYSIS_BATCH_ID	NA	Reserved for use by another Region.				
ANALYST_NAME	NA	Reserved for use by another Region.				
ANALYTE_TYPE	NA	Reserved for use by another Region.				
REPORTABLE_RESULT	NA	Reserved for use by another Region.				

Data Element Field Names	Required, Optional, Conditional, Not Applicable (R/O/C/NA)	Description or Preferred Values		Field Format/Length		Origin
DETECT_FLAG	NA	Reserved for use by another Region.				
TIC_RETENTION_TIME	NA	Reserved for use by another Region.				
TIC_RETENTION_TIME_UNITS	NA	Reserved for use by another Region.				
EXPECTED_VALUE	NA	Reserved for use by another Region.				
QC_ORIGINAL_CONC	NA	Reserved for use by another Region.				
QC_SPIKE_MEASURED	NA	Reserved for use by another Region.				
QC_SPIKE_RECOVERY	Required	Percent Recovery of lab QC types (matrix spikes, surrogates, etc).	Numbers are represented as "%".	Numeric	8	Lab
QC_DUP_ORIGINAL_CONC	NA	Reserved for use by another Region.				
QC_DUP_SPIKE_ADDED	NA	Reserved for use by another Region.				
QC_DUP_SPIKE_MEASURED	NA	Reserved for use by another Region.				
QC_DUP_SPIKE_RECOVERY	NA	Reserved for use by another Region.				
QC_RPD	NA	Reserved for use by another Region.				
QC_SPIKE_LCL	NA	Reserved for use by another Region.				
QC_SPIKE_UCL	NA	Reserved for use by another Region.				
QC_RPD_CL	NA	Reserved for use by another Region.				
QC_SPIKE_STATUS_FLAG	NA	Reserved for use by another Region.				
QC_DUP_SPIKE_STATUS_FLAG	NA	Reserved for use by another Region.				
QC_RPD_STATUS	NA	Reserved for use by another Region.				
SAMPLE_RUN	NA	Reserved for use by another Region.				
PARAMID	NA	Reserved for use by another Region.				

Data Element Field Names	Required, Optional, Conditional, Not Applicable (R/O/C/NA)	Description or Preferred Values		Field Format/Length		Origin
PAR_VAL_UNCERT	NA	Reserved for use by another Region.				
RESULT_ERROR_DELTA	NA	Reserved for use by another Region.				
INTERPRETED_QUALIFIERS	NA	Reserved for use by another Region.				
SYS_LOC_CODE	NA	Reserved for use by another Region.				
TASK_CODE	NA	Reserved for use by another Region.				
COLLECTION_QUARTER	NA	Reserved for use by another Region.				
SAMPLE_CLASS	NA	Reserved for use by another Region.				
COMPOSITE_DESC	NA	Reserved for use by another Region.				
LEACH_LOT	NA	Reserved for use by another Region.				
LEACHATE_METHOD	NA	Reserved for use by another Region.				
LEACHATE_DATE	NA	Reserved for use by another Region.				
LEACHATE_TIME	NA	Reserved for use by another Region.				
RESP	NA	Reserved for use by another Region.				
CUSTOM_FIELD_1	NA	Reserved for use by another Region.				
CUSTOM_FIELD_2	NA	Reserved for use by another Region.				
CUSTOM_FIELD_3	NA	Reserved for use by another Region.				
COMMENT	NA	Reserved for use by another Region.				



Scribe Table.DataFieldName	Upload into Scribe from EDD?	Comments / Questions
Site.CaseNumber	N	In Scribe this is found in the "COC.CaseNumber" and "Site.CaseNumber" fields. In the xml file it is the Site.CaseNumber element. If not uploading this to the Lab Results table then no need to upload, correct?
LabResults.Lab_Batch_No	Y	Generated by the Lab.
SamplesTags.CLP_Samp_No LabResults.Sample_CLP_No	Y	Originates in Scribe in the "SamplesTags.CLP_Sample_No" field but is also uploaded into the "LabResults.Sample_CLP_No" field. Correct?
LabResults.Cas_No	Y	Generated by the Lab.
LabResults.Analyte	Y	Generated by the Lab.
LabResults.Result	Y	Generated by the Lab & verified by Data Reviewer. May be edited in EDM whereas the "Lab_Result" field below cannot be edited during data validation. The Final_Result field needs to be the mandatory reporting field for MEL and other labs.
LabResults.Result_Units	Y	Generated by the Lab.
LabResults.Result_Qualifier	Y	Generated by the EDM or Data Reviewer.
LabResults.QA_Comment	Y	Generated by the EDM or Data Reviewer. The Scribe LabResults Table doesn't have a designated field for the Data Validation Label. Because this is a recently required data element, we should update the table to address it.

Scribe Table.DataFieldName	Upload into Scribe from EDD?	Comments / Questions
LabResults.Quantitation_Limit	Y	Generated by the Lab.
LabResults.MDL	Y	Generated by the Lab.
	N	There's no data field for this in the LabResults Table. The result that passes validation will be considered the final result.
LabResults.Lab_Result_Qualifier	Y	Generated by the Lab.
LabResults.Reporting_Limit	Y	Generated by the Lab.
	N	There's no data field for this in the LabResults Table. Region 10 does not use this field.
LabResults.Quantitation_Limit_Units LabResults.Reporting_Limit_Units	Y	Generated by the Lab. The Quantitation and Reporting Limit data elements as we're applying them use the same units of measurement so this data element needs to be uploaded into two different fields.
	N	There's no data field for this in the LabResults Table.
	N	There's no data field for this in the LabResults Table. Region 10 does not use this field.
LabResults.MDL_Units	Y	Generated by the Lab.

Scribe Table.DataFieldName	Upload into Scribe from EDD?	Comments / Questions
LabResults.Percent_Solids	Y	Generated by the Lab.
LabResults.Percent_Moisture	Y	Generated by the Lab.
LabResults.Dilution_Factor	Y	Generated by the Lab.
LabResults.Analysis	Y	Generated by the Lab.
	N	There's no data field for this in the LabResults Table.
LabResults.Basis	Y	Generated by the Lab.
Samples.Sampleddate LabResults.Date_Collected	Y	Originates in Scribe in the "Samples.Sampleddate" field but is also uploaded into the "LabResults.Date_Collected" field. Correct? Need to make sure this isn't populated when the Samples.Sampleddate field is filled in. You know, the whole differential integrity-database thing.

Scribe Table.DataFieldName	Upload into Scribe from EDD?	Comments / Questions
COC.DateShipped	N	There's no data field for this in the LabResults Table and it already appears in the COC Table.
LabResults.Date_Received	Y	Generated by the Lab. Need to double check the date/time fields in the LabResults Table. The Scribe Table Defn. file shows the length of these fields to be "8" but we need them to be "20".

Scribe Table.DataFieldName	Upload into Scribe from EDD?	Comments / Questions
LabResults.Extracted	Y	Generated by the Lab.
LabResults.Analyzed	Y	Generated by the Lab.
LabResults.QC_Type	Y	Generated by the Lab. This data type uses Lab QC long names (e.g., "Laboratory_Control_Sample) and perfectly matches the data definition of the QC_Type data field. The previously identified Sample_Type_Code was only 10 characters long.
Samples.Matrix LabResults.Matrix_ID	Y	Generated by the Lab. CLP has it's definitions but does it also need to match up with the Samples.Matrix Scribe data field? I thought these were populated separately.
LabResults.Comments	Y	Generated by the Lab. For the CLP this was concatenated from the Form I comment field to provide information such as size fraction.

Scribe Table.DataFieldName	Upload into Scribe from EDD?	Comments / Questions
LabResults.Lab_Name	Y	There's no data field for this in the LabResults Table.
	N	There's no data field for this in the LabResults Table.
	N	There's no data field for this in the LabResults Table.
LabResults.Analytical_Method	Y	Generated by the Lab.
	N	There's no data field for this in the LabResults Table.
SamplesTags.COC LabResults.Lab_Coc_No	Y	Generated by the Lab.
LabResults.Lab_Samp_No	Y	Generated by the Lab.
	N	There's no data field for this in the LabResults Table.
	N	There's no data field for this in the LabResults Table.

Scribe Table.DataFieldName	Upload into Scribe from EDD?	Comments / Questions
LabResults.SubSample_Amount	Y	Generated by the Lab.
LabResults.SubSample_Amount_Unit	Y	Generated by the Lab.
LabResults.Final_Volume	Y	Generated by the Lab.
LabResults.Final_Volume_Unit	Y	Generated by the Lab.
	N	There's no data field for this in the LabResults Table. The analysis requires the use of too many fields (e.g., final volume is already filled).
	N	There's no data field for this in the LabResults Table. The analysis requires the use of too many fields (e.g., final volume is already filled).
	N	There's no data field for this in the LabResults Table. The analysis requires the use of too many fields (e.g., final volume is already filled).
	N	There's no data field for this in the LabResults Table. The analysis requires the use of too many fields (e.g., final volume is already filled).
LabResults.Final_Volume	Y	Generated by the Lab.
LabResults.Final_Volume_Unit	Y	Generated by the Lab.
	N	There's no data field for this in the LabResults Table.
	N	There's no data field for this in the LabResults Table. The analysis requires the use of too many fields (e.g., final volume is already filled).

Scribe Table.DataFieldName	Upload into Scribe from EDD?	Comments / Questions
	N	There's no data field for this in the LabResults Table. The analysis requires the use of too many fields (e.g., final volume is already filled).
	N	There's no data field for this in the LabResults Table.
	N	There's no data field for this in the LabResults Table.
LabResults.Extraction_Method	Y	Generated by the Lab.
	N	There's no data field for this in the LabResults Table.
	N	There's no data field for this in the LabResults Table.



Scribe Table.DataFieldName	Upload into Scribe from EDD?	Comments / Questions
	N	There's no data field for this in the LabResults Table.
	N	There's no data field for this in the LabResults Table.
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	N	There's no data field for this in the LabResults Table.
	N	There's no data field for this in the LabResults Table.

Scribe Table.DataFieldName	Upload into Scribe from EDD?	Comments / Questions
LabResults.Total_Or_Dissolved	Y	Generated by the Lab.
	N	Generated by the Lab. There's no data field for this in the LabResults Table.
Samples.Matrix	N	Already in Scribe. No place for it in the LabResults Table.

Scribe Table.DataFieldName	Upload into Scribe from EDD?	Comments / Questions
Site.Site_Action	N	Already in Scribe. No place for it in the LabResults Table.
Samples.SampleCollection	N	Already in Scribe. No place for it in the LabResults Table.
Site.EPARegionNumber	N	Already in Scribe. No place for it in the LabResults Table.
Location.Location	N	Already in Scribe. No place for it in the LabResults Table.
Location.LocationDescription	N	Already in Scribe. No place for it in the LabResults Table.
Samples.Samp_No LabResults.Samp_No	Y	Originates in Scribe in the "Samples.Samp_No" field but is also uploaded into the "LabResults.Sample_CLP_No" field. Correct?
Location.LocationZone	N	Already in Scribe. No place for it in the LabResults Table.
Location.Latitude	N	Already in Scribe. No place for it in the LabResults Table.

Scribe Table.DataFieldName	Upload into Scribe from EDD?	Comments / Questions
Location.Longitude	N	Already in Scribe. No place for it in the LabResults Table.
Location.Datum	N	Already in Scribe. No place for it in the LabResults Table.
Location.GeoMethod	N	Already in Scribe. No place for it in the LabResults Table.
Location.Surf_Elev	N	Already in Scribe. No place for it in the LabResults Table.
Location.Surf_Units	N	Already in Scribe. No place for it in the LabResults Table.
Location.ElevMethod	N	Already in Scribe. No place for it in the LabResults Table.
Location.ElevDatum	N	Already in Scribe. No place for it in the LabResults Table.
Samples.Samp_Depth	N	Already in Scribe. No place for it in the LabResults Table.
Samples.Samp_Depth_To	N	Already in Scribe. No place for it in the LabResults Table.
Samples.Samp_Depth_Units	N	Already in Scribe. No place for it in the LabResults Table.
Samples.Samp_Depth_Units	N	Already in Scribe. No place for it in the LabResults Table.
Samples.Sampler	N	Already in Scribe. No place for it in the LabResults Table.

Scribe Table.DataFieldName	Upload into Scribe from EDD?	Comments / Questions
Site.CTRContact	N	Already in Scribe. No place for it in the LabResults Table.
Site.Contractor	N	Already in Scribe. No place for it in the LabResults Table.
Site.Site_Name	N	Already in Scribe. No place for it in the LabResults Table.
COC.ProjectCode	N	Already in Scribe. No place for it in the LabResults Table.
Events.EventID	N	Already in Scribe. No place for it in the LabResults Table.
Site.Area	N	Already in Scribe. No place for it in the LabResults Table.
Site.Area	N	Already in Scribe. No place for it in the LabResults Table.
Site.CERCLIS	N	Already in Scribe. No place for it in the LabResults Table.
Site.Site_No	N	Already in Scribe. No place for it in the LabResults Table.
Site.ScribeNetProjectID	N	Already in Scribe. No place for it in the LabResults Table.
Samples.SamplesID	N	Already in Scribe. No place for it in the LabResults Table.
SamplesTags.Tag	N	Already in Scribe. No place for it in the LabResults Table.
Samples.Remarks	N	Already in Scribe. No place for it in the LabResults Table.

Scribe Table.DataFieldName	Upload into Scribe from EDD?	Comments / Questions
Samples.SampleType	N	Already in Scribe. No place for it in the LabResults Table.
	N	There's no data field for this in the LabResults Table. Region 10 does not use this field.
	N	There's no data field for this in the LabResults Table. Region 10 does not use this field.
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	N	There's no data field for this in the LabResults Table. Region 10 does not use this field.
	N	There's no data field for this in the LabResults Table. Region 10 does not use this field.



## **Appendix B – Data Element Valid Values**

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R10 Bunker Hill Valid Values

Category (Database Table)	Data Element (Database Field)
Events	Activity
Events	Activity
Events	QAPP_Approved
Events	QAPP_Approved
Events	QAPP_ApprovedBy
Events	QAPP_ApprovedBy
Location	CountryCode
Location	CountyCode
Location	Datum
Location	Datum
Location	Datum
Location	ElevDatum
Location	ElevDatum
Location	ElevDatum
Location	ElevDatum
Location	ElevMethod
Location	ElevMethod
Location	ElevMethod
Location	ElevMethod
Location	ElevMethod
Location	GeoMethod
Location	GeoMethod
Location	GeoMethod
Location	GeoMethod
Location	GeoMethod
Location	HorizAccuracyMeasureUnit
Location	HorizAccuracyMeasureUnit
Location	HucEightDigitCode
Location	HucTwelveDigitCode
Location	HucTwelveDigitCode
Location	HucTwelveDigitCode
Location	HucTwelveDigitCode
Location	HucTwelveDigitCode
Location	HucTwelveDigitCode
Location	HucTwelveDigitCode
Location	HucTwelveDigitCode
Location	HucTwelveDigitCode
Location	HucTwelveDigitCode
Location	HucTwelveDigitCode
Location	<Structuring of location (Site, subsite[by river mile], and SMA) will be determined with the EPA RPM> Developed as a part of the Portland Harbor Scribe Template.
Location	LocationZone
Location	LocationZone
Location	LocationZone
Location	LocationZone

























R10 Bunker Hill Valid Values

Category (Database Table)	Data Element (Database Field)
LabResults	QA_Comment
LabResults	QA_Comment
LabResults	QA_Comment
LabResults	QA_Comment
LabResults	Result_Qualifier
LabResults	Result_Qualifier
LabResults	Result_Qualifier
LabResults	Result_Qualifier
LabResults	Result_Qualifier
LabResults	Result_Qualifier
LabResults	Validated
LabResults	Validated
LabResults	ValidationLevel
LabResults	ValidationLevel
LabResults	ValidationLevel
LabResults	ValidationLevel
LabResults	ValueType
LabResults	ValueType
LabResults	ValueType
LabResults	ValueType
LabResults	ValueType

R10 Bunker Hill Valid Values

Valid Value
Remedial Design
Remedial Design Oversight
Y
N
US EPA Region 10
ODEQ
US
051
NAD83
UNKWN
WGS84
NAVD88
NGVD29
OTHER
UNKWN
Altimetry
GPS
Interpolation
Other
Survey
GPS-Unspecified
Unknown
GPS
Interpolation
Survey
Ft
Meter
17090012
170900120201
170900120202
170900120301
170900120305
170900120304
170900120302
170900120303
170900120102
170900120104
170900120101
170900120103
Borehole
Canal Transport
Combined Sewer
Estuary



R10 Bunker Hill Valid Values

Valid Value
Facility Industrial
Facility Other
Lake
Land
Land Flood Plain
Landfill
Ocean
Other-Ground Water
Other-Seawater
Other-Surface Water
Other-Surface Water
Pond-Stormwater
Reservoir
River/Stream
River/Stream
Seep
Spring
Storm Sewer
Test Pit
Waste Pit
Waste Sewer
Well
Wetland Undifferentiated
OR
Lower Willamette
Pre-Design
Design
Air
Air Indoor
Asbestos
Biological
Benthic
Drinking Water
Dust
Filtered Water
Ground Water Dissolved
Ground Water Total
Habitat
Lab Sand
Liquid Waste
Porewater Dissolved
Porewater Total
Potable Water
Saline Water Dissolved
Saline Water Total
Sand
Sediment
Sediment <2mm

R10 Bunker Hill Valid Values

Valid Value
Sediment <63um
Sediment 125-250um
Sediment 63-125um
Sediment 63-250um
Sediment Bulk
Sediment Subsurface
Sediment Surface
Septic Effluent
Soil
Soil Gas
Soil Subsurface
Soil Surface
Solid Waste
Stormwater
Surface Water
Surface Water Dissolved
Surface Water Total
Tissue
Waste
Subsurface Soil/Sediment
Surface Soil/Sediment
Ft
Activity Trap
A-Frame Net
Anchor Box Dredge
Artificial Substrate
Backpack Electroshock
Beach Seine Net
Beam Trawl
Benthic Corer (Other)
Benthic Dredge (Other)
Benthic Grab (Other)
Birge Closing Net
Black Light Trap
Block Net
Boat-Mounted Electroshock
Bod Dredge
Bongo Net
Boomerang Corer
Boomerang Grab
Box Corer
Box Sampler
Brail
Bucket
Burrell Epibenthic Sled
Campbell Grab
Cast Net
Center Bag

## R10 Bunker Hill Valid Values

Valid Value
Chain Dredge
Clam-Shell Grab
Clarke-Bumpus Net
Concussion
Creel Survey
Danish Seine Net
Dart Corer (Gravity)
D-Frame Net
DH-81
DH-95
Dietz-Lafond Grab
Dip Net
Draw Down
Drift Gill Net
Drilled Sampler
Drive Sampler (Generic)
Drop Net
Ekman Grab
Electric Seine
Electroshock (Other)
Emergence Trap
English Umbrella Net
Erwin Piston Corer
Ewing Gravity Corer
Experimental Brail
Experimental Gill Net
Fish Weir
Free Fall Grab
Fry Trap
Funnel Trap
Fyke Net
Glass Slide
Glass Slide Device
Gravity Corer (Generic)
Hand Corer
Herring Trawl
Hess Sampler
Hester-Dendy
Hook And Line
Hydraulic Grab
Hydroacoustics
Hydroplastic (PVC) Corer
Insect Trap
Isaacs-Kidd Trawl
Juday Trap
Kemmerer Bottle
Kick Net
Kullenberg Gravity Corer

## R10 Bunker Hill Valid Values

Valid Value
Larval Light Fish Trap
Long Line
Marmap Neuston Net
Minnow Seine Net
Miscellaneous (Other)
Mochness Net
Modified Surber Sampler
MTD Net
Nansen Bottle
Natural Substrate
Net Vertical Tow (Other)
Net/Horizontal Tow (Other)
Net/Non Tow (Other)
Niskin Bottle
Norpac Net
Orange-Peel Grab
Original Surber Sampler
Other Toxicant
Otter Trawl
Pair Trawl
Pamatmat Multiple Quartz Corer
Peterson Grab
Petite Ponar Grab
Phleger Corer (Gravity)
Pipe Dredge
Piston Corer (Generic)
Plankton Net
Plexiglass Slide Device
Plexiglass Trap
Plummet Net
Polar Orga. Chem. Integrative Sampler
Ponar Grab
Pound Net
Pram Electroshock
Probe/Sensor
Pull Sled
Pump/Air Lift
Pump/Bailer
Pump/Centrifugal
Pump/Jet
Pump/Non-Submersible
Pump/Peristaltic
Pump/Piston
Pump/Rotary
Pump/Submersible
Pump/Turbine
Purse Seine Net
Push Net

## R10 Bunker Hill Valid Values

Valid Value
Push Point Sampler
Radiello
Rectangular Net
Remotely Operated Vehicle
Rock Basket
Roller Frame Trawl
Rotenone
Roving Drop Net
Scoop Fish Grab
Sediment Trap
Seine Net
Semipermeable Membrane Device
Set (Passive) Gill Net
Shelby Tube
Ship Sea Chest
Shipek Grab
SHOVEL
Shrimp Trawl
Simple Conical Net
Single-Vessel Operated Tow Net
Smith-McIntire Grab
Sodium Cyanide
Spear/Gun
Spear/Hand
Spear/Hawaiian Sling
Split Spoon
Square-Mouth Net
Stainless Steel Spoon
Stationary Drop Net
Still Camera
Stop Net
Storm Water Sampler
Stovepipe Sampler
Stream-Side Electroshock
Suction Dredge
Summa
Surber Sampler
Syringe
Terminal Bag
Tile Plate
Tow Net
Towed Dredge
Trammel Net
Trap Net
Trap Substrate (Other)
Traveling Screen
Trot Line
T-Sampler

R10 Bunker Hill Valid Values

Valid Value
Tucker Net
Two-Vessel Operated Tow Net
Van Dorn Bottle
Van Veen Grab
Variable Mesh Gill Net
Vibrating Corer
Video Camera
Vinyl Tube
Visual Sighting
Water Bottle
Water Sampler (Other)
WBH-96
Whirl-pak bag
Wisconsin-Style Net
Yankee Trawl
Young Grab
<Performing Parties> Will be added as they are defined and organized into groups
Depth Integrated Sample
Field Duplicate
Field Msr/Obs
Field Sample
Incremental Sampling Horiz
Incremental Sampling Vert
QC Blank - Bottle/Preservative
QC Blank - Field
QC Blank - Filter
QC Blank - Rinsate/Equipment
QC Blank - Trip
Sample-Composite Without Parents
<To be determined from performing party site specific sampling plan>
1,1-Dichloroethane
1,1-Dichloroethene
1,1-Dichloroethylene
1,1,1-Trichloroethane
1,1,1,-Trichloroethane
1,1,2-Trichloroethane
Trichloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethane
1,2-Dibromoethane
Dibromoethane
1,2-Dichloroethane
Ethylene dichloride
1,2-Dichloropropane
Propylene dichloride
1,2,3-Trichloropropane
1,2,3,4,7,8-HxCDF
1,2,3,7,8-PeCDD

## R10 Bunker Hill Valid Values

Valid Value
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2-Butanone
Methyl Ethyl Ketone
2-Hexanone
2-Chloroethylvinyl Ether
2,4,5-TP (Silvex)
2,2'-oxybis(1- Chloropropane)
2,3,4,6-Tetrachlorophenol
2,3,4,7,8-PeCDF
2,3,7,8-TCDF
2,3,7,8-TCDD-Dioxin
2,3,7,8-TCDD
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-D
2,4-Dimethylphenol
Dinitrophenol
2,4-Dinitrophenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
o-Cresol
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3'-Dichlorobenzidine
3,3'- Dichlorobenzidine
3-Nitroaniline
Methyl isobutyl ketone
4-Methyl-2-Pentanone
4-Bromophenyl- phenylether
4-Bromophenyl phenyl ether
3-Methyl-4-chlorophenol
4-Chloro-3-methylphenol
4-Chloro-3- methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Chlorophenyl- phenyl ether
4-Methylphenol
p-Cresol
4-Nitroaniline
4-Nitrophenol

## R10 Bunker Hill Valid Values

Valid Value
Acenaphthene
Acenaphthylene
Acrolein
Acrylonitrile
Aldrin
Aluminum
Aluminim
Anthracene
Antimony
Arsenic
Benzene
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(ghi)perylene
Benzo(g,h,i)perylene
Benzo(k)fluoranthene
Benzoic Acid
Benzyl alcohol
bis(2-Chloroethoxy) methane
Bis(2-chloroethyl) ether
bis(2-Chloroethyl)ether
bis(2-Ethylhexyl) phthalate
Di(2-ethylhexyl)phthalate
Bromochloromethane
Bromodichloromethane
Dichlorobromomethane
Tribromomethane
Bromoform
Bromomethane
Methyl Bromide
Butylbenzylphthalate
Butyl benzyl phthalate
Cadmium
Carbazole
Carbon Disulfide
Tetrachloromethane
Carbon Tetrachloride
Chlorobenzene, total
Chlorobenzene
Chlorobenzene (each)
Chlorodibromomethane
Dibromochloromethane
Chloroethane
Chloroform
Methyl Chloride
Chloromethane
Chromium



## R10 Bunker Hill Valid Values

Valid Value
Chrysene
cis-1,2-Dichloroethylene
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Copper
Cyanide
Cyanide, free (total)
Dibenzo(a,h)anthracene
Dibenzo(a,h)- anthracene
Dibenzofuran
Dibromomethane
Dichlorodifluoromethane
DDD
4,4'-DDD
p,p'-DDD
p,p'-DDE
4,4'-DDE
EDDE
DDE
p,p'-DDT
Total DDT
4,4'-DDT
DDT
Dieldrin
Diethylphthalate
Dimethyl phthalate
Dimethylphthalate
Di-n-butyl phthalate
Di-n-butylphthalate
n-Butylphthalate
Di-n-octyl phthalate
Di-n-octylphthalate
Endosulfan I
a-Endosulfan
b-Endosulfan
Endosulfan II
Endosulfan sulfate
Endrin
Endrin aldehyde
Endrin ketone
Ethyl benzene
Ethylbenzene
Fluoranthene
Fluorene
Heptachlor
Heptachlor Epoxide
Hexachlorobenzene
Hexachlorobutadiene

## R10 Bunker Hill Valid Values

Valid Value
Hexachlorocyclopentadiene
Hexachloroethane
Indeno(1,2,3-c,d)pyrene
Indeno(1,2,3-cd)- pyrene
Iodomethane
Isophorone
Isopropylbenzene
Manganese
Mercury
Mercury, Inorganic
Methoxychlor
Methylmercury
2-Methyl-4,6-Dinitrophenol
4,6-Dinitro-2- methylphenol
4,6-Dinitro-2-methylphenol
Methylene chloride
Dichloromethane
Methyl tert-Butyl Ether
Naphthalene
Nickel
Nitrobenzene
N-Nitroso-di-n propylamine
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
N-Nitroso diphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Selenium
Silver
Styrene
Tetrachloroethylene
Tetrachloroethene
Toluene
Toxaphene
1,2-Trans-Dichloroethylene
trans-1,2-Dichloroethylene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
trans-1,4-Dichloro-2-Butene
Tributyl tin
Trichloroethylene
Trichloroethene
Trichlorofluoromethane
Vanadium
Vinyl Acetate
Vinyl Chloride

R10 Bunker Hill Valid Values

Valid Value
Xylene
Xylene, total
Xylenes (total)
Zinc
alpha-BHC
a-BHC
beta-BHC
b-BHC
g-BHC
gamma-BHC (Lindane)
Lindane (g-BHC)
delta-BHC
d-BHC
<To be determined from performing party site specific sampling plan>
Total
Dissolved
NA
DI Leach
MWM (Meteoric Water Mobility Ext)
SPLP
Suspended
TCLP
Acid Soluble
Bioavailable
Comb Available
Extractable
Filterable
Fixed
Free Available
Inorganic
Non-filterable
Non-settleable
Non-volatile
Organic
Pot. Dissolved
Settleable
Supernate
Total Recoverable
Total Residual
Vapor
Volatile
WAD
<To be determined from performing party site specific sampling plan>
Wet
Dry
<To be determined from performing party site specific sampling plan>
Final

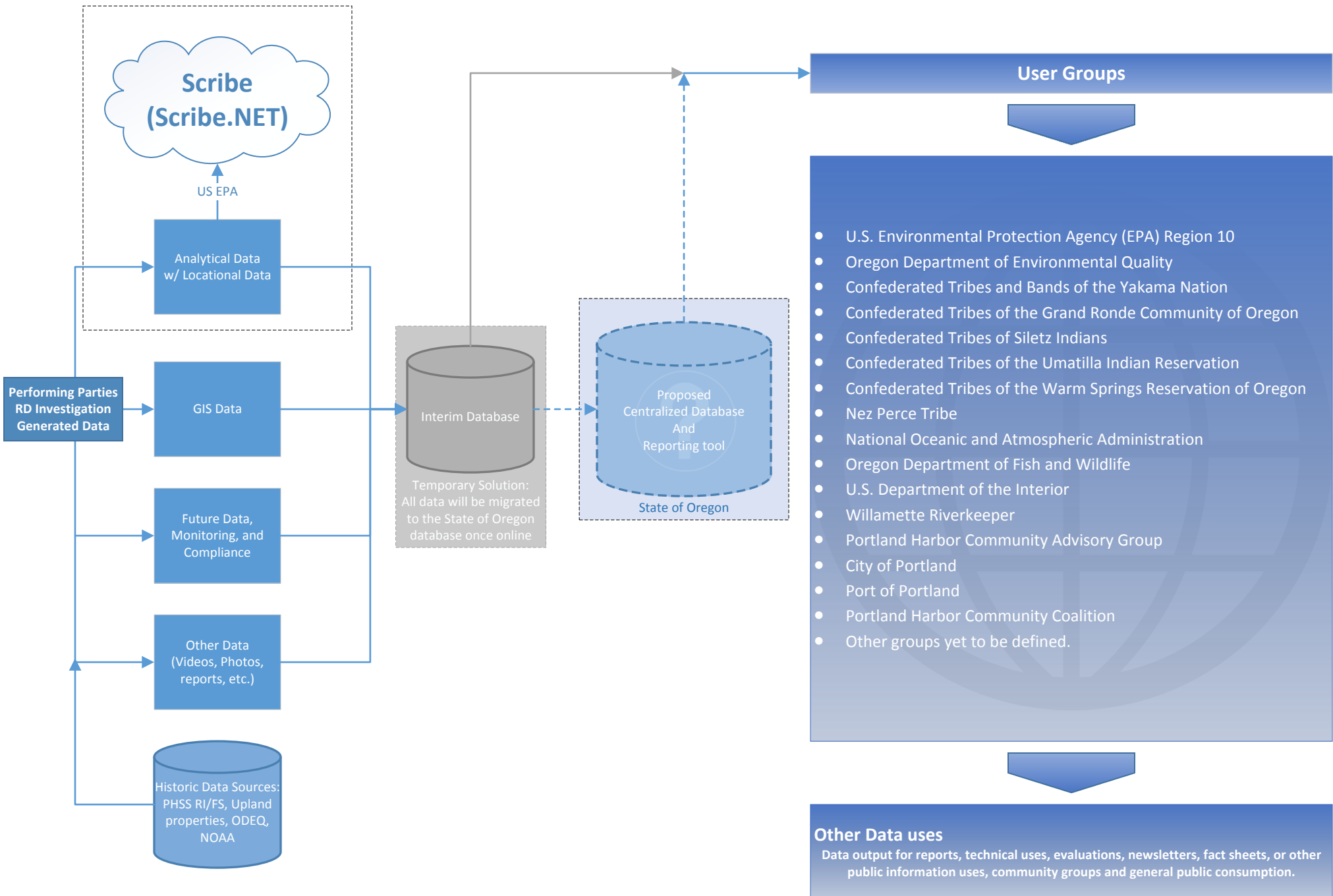
R10 Bunker Hill Valid Values

Valid Value
Accepted
Preliminary
Rejected
Validated
J
U
UJ
J-
J+
R
Yes
No
S2BVEM
S3VEM
S4VEM
NA
Actual
Calculated
Blank Corrected Calc
Control Adjusted
Estimated

## **Appendix C - Data Management Conceptual Model**

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# Data Management Conceptual Model



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