U.S. Environmental Protection Agency
Region 4 Superfund Division

GUIDANCE

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Author

Name: Beth Walden
Title: Project Manager
Signature: *[signature]* Date: 1/24/17

Approvals

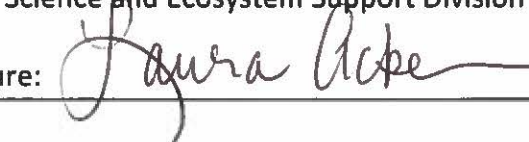|	
Name: Don Rigger Title: Chief, Restoration and Site Evaluation Branch Superfund Division	Date:
Name: Nardina Turner Title: Superfund Division Quality Assurance Coordinator Superfund Division Signature: *[signature]* Nardina G. Turner	Date: 01/30/17
Name: Franklin E. Hill Title: Superfund Division Director Signature: *[signature]*	Date: 7/13/17
Name: Laura Ackerman Title: Superfund and Air Section, Field Services Branch Science and Ecosystem Support Division Signature: *[signature]* Laura Acke	01/25/17 Date:

Revision History

This table shows changes to this controlled document over time. The most recent version is presented in the top row of the table. Previous versions of the document are maintained by the EPA Region 4 Superfund Division Document Control Coordinator.

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TABLE OF CONTENTS

Contents

1   General Information

1.1   Purpose

This document describes the methods to be used in submitting environmental data electronically to US EPA Region 4 Superfund Division personnel and their contractors as well as other EPA personnel working on a Region 4 Superfund Program sites/projects. These methods occur during field activities that result in creating, handling, and managing field documentation and resulting in the creation of environmental data to be submitted to the US EPA Region 4 data management system. The goal of this SOP for environmental data submission is that US EPA Region 4 Superfund Division personnel and contractors submit the appropriate electronic data.

1.2   Scope/Application

The methods described in this document are to be used by all data providers when preparing and submitting environmental data electronically to the US EPA Region 4, regardless of the originating program. The enforcement of such methods are supported by the Superfund Division Director's Memo: "Region 4 Data Management and Electronic Data Deliverables" that may be found at:
   http://www2.epa.gov/sites/production/files/2015-09/documents/ddeddmemo.pdf

This document does not cover the use of DART, EQuIS Professional, or creating maps and reports. Extensive documentation on the use of EQuIS Professional can be found at http://help.earthsoft.com/ .

1.3   Documentation/Verification

This procedure was prepared by persons deemed technically competent by Superfund personnel, based on their knowledge, skills and abilities and has been tested in practice and reviewed in print by a subject matter expert. The official copy of this procedure resides on the Region 4 Superfund Intranet and on the EPA Internet. The Document Control Coordinator is responsible for ensuring the most recent version of the procedure is placed on the Superfund Intranet and EPA Internet and for maintaining records of review conducted prior to its issuance.

1.4   Acronyms

CLP: Contract Laboratory Program

COC: Chain-of-Custody

DART: Data Archival and ReTrieval

EDD: Electronic Data Deliverable

EDP: EQuIS Data Processor

EPA**:** Environmental Protection Agency

GNIS: Geographic Names Information System

EQuIS: Environmental Quality Information System

LIMS: Laboratory Information Management System

SEMS: Superfund Enterprise Management System

SESD: Science and Ecosystem Support Division

SMO: Sample Management Office

OSC: EPA's On Scene Coordinator

PRP: Potentially Responsible Party

QAPP: Quality Assurance Project Plan

R4DART: United States Environmental Protection Agency (US EPA), Region 4 DART

R4LIMS: United States Environmental Protection Agency (US EPA), Region 4 LIMS

RCRA: Resource Conservation and Recovery Act

RPM: Remedial Project Manager

1.5   Definitions

Activity Code (task_type): Descriptive code for the EPA program (Superfund, RCRA, etc.) requiring the investigation. Activity Code values are a controlled vocabulary.

Analytical Data: Data reported by a fixed-base laboratory.

Complex Studies: An investigation of multiple waterbodies (or sites) combined into a single lab report. This designation is applicable only to certain SESD led studies.

Controlled Vocabulary: see Valid Values

Data Package: A data package is a software archive (.edd format) containing one or more Electronic Data Deliverables.

Data Provider: The entity responsible for the electronic submission of environmental data to Region 4. Data providers are identified by a code value that is a controlled vocabulary.

Data Submittal Summary: A summary of the data proposed for submittal by the data provider for the Potentially Responsible Party (PRP) and fund lead projects not scheduled through R4LIMS.

Electronic Data Deliverable (EDD): A zip file saved with an ".edd" extension holding one or more tab delimited text files containing the environmental data to be submitted.

Element: LIMS system used to report SESD and CLP analytical.

EQuIS Professional: EPA workstation software interface to the DART database.

EQuIS Data Processor (EDP): Software used to check the EDDs prior to submission.

ESRI: is a software development and services company providing Geographic Information System (GIS) software.

Field Results Data: Field analytical data such as pH, dissolved oxygen, XRF, etc. These data may be generated from Scribe.

Geology Data: Specialized data relating to geology, such as lithology, well construction, etc.

LIMS (Laboratory Information Management System): Software for managing and reporting laboratory analyses.

Media Code (matrix_code): A two or more character code designating the sample matrix, i.e., SW is the media code for Surface Water. Media code values are a controlled vocabulary.

Project: A project is defined as the data generated for a report.

Project ID (task_code): Unique ID associated with a project QAPP or for R4LIMS projects, it is associated with a single sampling event. For R4LIMS, this value is assigned by the Project Tracking System for the dataset being submitted. For all other project types, the R4DART will provide this Project ID.

Project Number (task_code2): A Project ID may have multiple Project Numbers or be the same as the Project ID. For R4LIMS, this value is assigned by the Project Tracking

System for the Chain of Custody being submitted. For all other project types, R4DART will provide this Project Number.

Project Tracking System: EPA Region 4 SESD's project tracking system used for R4LIMS projects.

Quality Assurance Project Plan (QAPP): The controlling document for proposed field work. There may be multiple Project ID numbers assigned to the QAPP and will be used in EDDs generated for that project to uniquely identify the data to that an event.

Reference Value File (.rvf): The ".rvf" file is associated with the EQuIS Data Processor (EDP) from EarthSoft, Inc. This file contains the valid values reference tables used by EDP to populate the drop down menus used when a specific type of value is required in an EDD, such as the units "mg/kg" (milligrams per kilogram) or a media code such as "GW" (groundwater). These fields limit the type of data permitted in certain columns of the EDD, and only the most recent valid values are in the ".rvf" file. Therefore, it is extremely important to insure you are using the most current file. You should check the download web site to see if your version is current before working on your data. The link for this web site is provided below within section 2.3.2

Scribe: Scribe is a software tool developed by EPA to assist in the process of managing environmental data. Scribe captures soil, water, air, and biota sampling, observational, and monitoring field data. Scribe can import EDDs from analytical laboratories, location data from a global positioning system (GPS), and from specific laboratory and EQuIS EDDs.

Shapefiles: Map files used by ESRI GIS software.

Site (or Waterbody): The unique site or waterbody in DART for storing project data.

Station ID (sys_loc_code): Unique designation for a sample location.

Valid Values: All allowable values for the field have been pre-determined. The data provider must select one of the available choices, or request a new valid value be added.

Extended Markup Language (.xml) file: File format of the Scribe chain-of-custody EDD.

1.6   References

United States Environmental Protection Agency (US EPA), Region 4 Format Guide.

The EPA Region 4 Format Guide provides detailed information for the creation of the EDD files that are required to be submitted.

United States Environmental Protection Agency (US EPA), Region 4 EDP Reference Manual.

The Region 4 EDP Reference Manual provides the information needed to download, install and maintain the EDP software, as well as how to use the software to proof EDDs and create data packages.

There are occasions when these documents are updated by the R4DART coordinator on the EPA website at:

https://www.epa.gov/superfund/region-4-superfund-electronic-data-submission

The R4DART coordinator notifies the data providers via email when updates occur. The responsibility remains with the data provider to periodically review the site to obtain the latest versions.

2   Introduction

2.1   Data Sources

Data is submitted electronically to EPA Region 4 from multiple sources. It should be emphasized that the differences between the processes for data submittal arise solely from the inherent efficiencies afforded to EPA lead investigations because the work may be done 'in-house'. There is **no** difference in the types of data submitted, or the format of the files being submitted. Regardless of how EDD files are created (or what organization led the investigation), the files must meet the specifications of the EPA Region 4 Format Guide.

2.2   Overview

The following summary provides a general outline of the process for submitting environmental data to EPA Region 4.

Create the site or waterbody: If the site or waterbody does not exist in DART, it must be created. Creating the site or waterbody is the responsibility of the R4DART coordinator.

Create the project: For R4LIMS projects, before data can be accepted by SESD, a receiving project must be created in the R4LIMS System. Creating the project is the responsibility of EPA Region 4 Sample Coordinator or EPA SESD project lead.

Data Submittal Summary: For non R4LIMS a projects summary of the data must be submitted to provide a check that all data is received. The data provider is responsible for this task.

DART Reports: For R4LIMS projects, reports are sent out automatically after the COC information is uploaded to the Project Tracking System. The data provider (or EPA SESD project leader) is responsible for responding to these reports.

Create EDD(s): Create EDDs to match the Data Submittal Summary. The data provider (or EPA SESD project leader) is responsible for this task.

Check EDD(s) with EDP: All EDDs must be checked with EDP prior to submittal to the R4DART coordinator. The data provider (or EPA SESD project leader) is responsible for this task.

Submit EDD(s): Submit all EDDs to R4DART@epa.gov. Attach the EDD(s) to the requesting email. The data provider (or EPA SESD project leader) is responsible for this task.

Proof and correct as needed: Notify R4DART@epa.gov of any needed corrections. It is EPA Region 4's responsibility to provide these reports to the data provider. It is then the

responsibility of the data provider (or EPA SESD project leader) to proof the data for accuracy and submit any needed corrections.

The system is designed for data to be submitted once, i.e., sample coordinates and screening intervals for a monitoring well are submitted one time.

The details for successfully completing the above steps can be found in Section 3 for EPA fund lead data submittals and Section 4 for Potentially Responsible Party (PRP) lead data submittals.

2.3   Standalone EDP

If you are a data provider to EPA Region 4 and do not have access to an EPA workstation, you will need to download and install the EQuIS Data Processor (EDP) software. There is no charge to the user for this software. If you have access to an EPA workstation and need EDP installed, email R4DART@epa.gov.

2.3.1   Obtaining Standalone EDP

Instructions for obtaining, installing, registering, and maintaining standalone EDP can be found in the EPA Region 4 EDP Reference Manual.

2.3.2   Using Standalone EDP

EDP can be used to create smaller EDD files, but its primary function is to check EDDs for errors and create data packages for submittal.

The structure of the EPA Region 4 EDD files is determined by the format file. If the format of any of the EDDs must be changed (rarely) then it will be necessary for users of the standalone version of EDP to obtain the updated format file. Instructions for downloading and installing updated format files can be found in the EPA Region 4 EDP Reference Manual.

Likewise, if the valid values used by EPA Region 4 are updated, it will then be necessary for users of the standalone version of EDP to obtain the updated reference value file (.rvf). The current version of the EPA Region 4 .rvf file is at http://www2.epa.gov/superfund/region-4-superfund-electronic-data-submission. This file is updated periodically, as the valid values are updated.

EPA Region 4 will notify all data providers, currently in the database, when it is necessary to update these files, but it is the responsibility of the data provider to ensure that the most current version is being used.

2.3.3 Valid Values in EDP

EPA Region 4 valid values can be viewed in EDP by starting EDP, then clicking on the "Reference Values" tab in the lower left corner.

If you need a valid value that is not in the list (rare analyte, new analytical method, etc.), you may request it be added as outlined in the EPA Region 4 Format Guide.

2.3.4 Data Package

A data package is created by EDP when the 'sign and submit' function is used to save the EDD. This creates an archive file (.zip) containing all EDDs that were loaded into EDP. The data package must be properly named and attached to an email request before submittal to EPA Region 4.

2.4 Information Required

An EDD is a tab-delimited text file containing environmental data in the EPA Region 4 format. Detailed information on all EDD formats may be found in the EPA Region 4 Format Guide. A summary of the more commonly used formats can be found below.

Location EDDs: These files provide coordinates for sampling locations, along with a simple indication of the quality of the information. Because all other EDDs rely upon this information, the Location EDD is the first EDD that is submitted.

FieldResults EDDs: These EDDs provide the results of field analyses, for example XRF, pH, temperature, turbidity, etc.

Water Level EDDs: Provide groundwater elevation data. If a water level EDD is submitted, a Location EDD with the surface elevation (measured to top of casing for wells) is required. In addition, each Water Level EDD must have a matching Well Datum EDD (EPAR4_WellDatum_v1) to identify the measuring point of the Water Level Depth. The Well Datum EDD is required when submitting water levels for the first time as well as any time a well is modified.

Geology EDDs: These EDDs provide information about well construction, lithology, etc. If groundwater samples are to be submitted, the screening intervals must have been recorded using the well construction EDD (EPAR4_WellConstruction_v1)

Analytical Data EDDs: Provide the fixed-base laboratory analytical data. The data is in a three file format.

2.5 Common Fields

With few exceptions, the values described below are the first four columns of all EPA Region 4 EDDs. See the EPA Region 4 Format Guide for details on your specific EDD format.

2.5.1   Data Provider Codes (sampling_company)

Data Provider codes are used to identify the source of the data within DART.

For R4LIMS projects, the data provider code is selected within the Project Tracking System as the project is created.

For all other projects, the data provider code is determined by R4DART (and is then provided to the data provider). If a data provider code does not exist in the system, R4DART will create one.

2.5.2   Project IDs (task_code)

The Project ID is a unique identifier for all data collected during an investigation. It allows data from a given study to be retrieved by the original report with which it was submitted.

For R4LIMS fund lead projects, the Project ID is generated by the R4LIMS Project System when the project is created. The Project ID is provided to data providers via the SESD Project Tracking System email reporting system. For non R4LIMS projects, the data provider requests the Project ID from the R4DART.

When Scribe is used for the project, the Project ID is entered during the initial set-up with the Site Information.

2.5.3   Project Numbers (task_code2)

The Project Number is typically the same as the Project ID. These are unique identifiers for all data collected during an event for the investigation or when multiple laboratories are needed. It allows data from a given study to be retrieved by the original report with which it was submitted.

For R4LIMS fund lead projects, the Project Numbers are generated by the R4LIMS Project System when the project is created. The Project Numbers are provided to data providers via the SESD Project Log Summary Report email. For non R4LIMS projects, the Project Number may be the same as the Project ID provided by R4DART. If a unique Project Number is required to track an individual event, request a new Project Number from R4DART.

When Scribe is used for the project, the Project Number is entered during the chain-of-custody set-up.

2.5.4 Program/Activity Codes (task_type)

The Program/Activity code identifies the program activity associated for the sampling event requesting the investigation to the DART database.

For R4LIMS lead projects, the Program\Activity code is provided by the person entering project data into the R4LIMS Project System.

For non R4LIMS lead projects, the Program/Activity code is determined by the site manager (RPM or OSC) and is then provided to the data provider for entry into the activity_code in the EDD.

When Scribe is used for the project, the Program/Activity Code is entered during the initial set-up with the Site Information.

2.5.5 Station IDs (sys_loc_code)

A Station ID is the permanent designation for a sample collection point. Once a sampling point has been established, the Station ID designation will be used for all future sampling events <u>regardless</u> of the entity leading the investigation. Note that the sampling point is established for a location, not a sample type.

A Station ID is <u>not</u> a Sample ID. Sample IDs should be distinct from Station IDs to prevent confusion.

Station ID designations should be simple and easy to remember. Do not use spaces, dashes, or underscore characters. The Station ID should be kept to 8 or fewer characters if possible.

For example, two samples are collected from the same location in Sandy Creek, sample SC-001-SW (a surface water sample) and SC-001-SD (a companion sediment sample). Because they were collected at the same location, both will have the same Station ID, such as SC001.

Additional example, a soil sample is collected as a part of a monitoring well installation. The subsurface soil sample is designated RF-007C-SB. The well being installed is being given the designation MW012. Sample RF-007C-SB (and all other samples collected at that well location) will have the Station ID MW012.

It may help to think of the Station ID as the permanent name for a sampling location, while any number of samples (from any media available) may be collected at that given location. A Station ID is a point on a map, and many samples may be collected from that point during an investigation (or series of investigations).

All environmental samples must have a Station ID – Surface water, groundwater, sediment, surface soil, etc.

Field Blanks (trip blanks, equipment rinse blanks, etc.) do not have coordinates and therefore do not have Station IDs. The logic for this is built into EDP – if you try to enter a Station ID for a sample type (media code) that does not allow it, EDP will display an error. Likewise, if a media code requires a Station ID that is missing, EDP will again display an error.

3 EPA Lead Data Submittals

3.1 EPA Lead Projects

Data from all EPA lead projects (SESD, States and EPA contractor performing organizations) using EPA laboratory resources (CLP and special purchase laboratories) must be permanently archived in DART. It is the responsibility of the EPA manager (RPM or OSC) to ensure that the data provider(s) for the investigation properly prepare and submit all EDDs.

All questions about data submittals for EPA Lead projects should be directed to: R4DART@epa.gov.

Procedures for projects that are being conducted by PRPs can be found below (Section 4).

3.2 Software Requirements

The software listed below is required for electronic submittal of data from EPA lead projects in EPA Region 4.

3.2.1 Scribe

Scribe is an EPA developed and distributed software program that is used in EPA Region 4 to generate EDD files of COC information.

Scribe is available at https://www.ertsupport.org/Scribe.

In EPA Region 4, this program is used with DART to provide more compatibility between Element and DART, making EDD creation and submittal easier. The EPA Region 4 Samplers should run the Field Results macro to install the necessary customizations specific for the EPA Region 4 Scribe configuration. Contact R4DART@epa.gov to obtain the necessary files.

The EPA Region 4 Scribe macro will add Custom DART Data Views as well as the ability to export a Field Results EDD.

3.2.2 EQuIS Data Processor (EDP)

EDP is used to check EDDs for errors prior to submission, and to create the data package for submittal. It can also be used to create smaller EDDs. It is available as a free download, if the data provider does not have access to an EPA workstation. See Section 2.3 for more information on standalone EDP.

3.3   Create Site or Waterbody

3.3.1   Site Creation

Before data can be submitted, the site must be created in DART.

Proper site\waterbody creation is important to success. DART is intended to be a permanent archive for the data generated by these investigations.

For EPA lead projects conducted by SESD, the Project Leader has the responsibility for site or Waterbody creation. For EPA lead projects not conducted by SESD, the EPA Region 4 program office will submit the required information. Site creation requests must be sent to R4DART@epa.gov.

Begin by checking with the R4DART coordinator to see if the site has been created. Internal to EPA Region 4, anyone with access to the R4LIMS Project Information may check the dropdown for R4LIMS projects. If the site is not within DART, it must be created.

- To create a site in DART, go to the EPA EnviroFacts website at:
      http://www3.epa.gov/enviro/
- This will utilize a Multisystem query retrieval and may return several related sites. Find the site matching the address and if the site is found, first select the Facility Report icon. When the page is updated, if there is an EPA Registry ID listed, copy the URL (website address) from the Facility report feature and paste it into an email to R4DART@epa.gov requesting the site be created.
- If there is no EPA Registry ID listed, go to the SEMS website at:
      https://cumulis.epa.gov/supercpad/cursites/srchsites.cfm
- Verify the search results and identify if there is an EPA ID recorded and copy the URL (website address) from the search results and paste it into an email to R4DART@epa.gov requesting the site be created.
- If the site is not in these databases, send the following information to R4DART@epa.gov:

> Site Name
> Address,
> City, State, Zip Code
> County

3.3.2   Waterbody Creation

First contact the R4DART coordinator to see if the waterbody already exists in DART. If the waterbody does not exist in the EQuIS DART database, it must be created.

To create a waterbody in DART, the project leader must provide the USGS GNIS ID number for the Waterbody. The GNIS ID numbers for all waterbodies in the US can be found at this website: http://geonames.usgs.gov/

- At the website, select 'Search Domestic Names'
- In the dialog box that opens, enter the 'Feature Name'
- Select your 'Feature Type' and 'State'
- Click 'Submit Query'
- In the dialog box that opens, click the Feature Name for details.
- Copy the URL (website address) of the page that opens and paste it into an email to R4DART@epa.gov requesting the waterbody be created.

If the waterbody does not exist in the USGS database, send the best available name to R4DART@epa.gov.

3.3.3   Criminal and Enforcement Confidential

If the field investigation is criminal or enforcement confidential, extra precaution must be taken to keep the project data confidential.

For these investigations, determine if the site is in DART as outlined above. If found, check the Facility Code field. If it does not begin with 'R4SC-', copy the name and Facility Code of the site and forward to R4DART@epa.gov with a request to create the site as criminal or enforcement confidential.

If the site or waterbody does not exist in DART, find the needed information as outlined above (Sections 3.3.1 and 3.3.2) and forward to R4DART@epa.gov. The subject line of the email should state the site is for criminal or enforcement confidential data.

If the site or waterbody cannot be found in the EPA or USGS databases, send the best available information to R4DART@epa.gov. The subject line of the email must state the site is for criminal or enforcement confidential data.

3.4   Project Creation (Project ID)

After the project has been created, but prior to the field investigation, for R4LIMS lead, the data provider will receive an email with the Project Log Summary information required to successfully submit an electronic chain-of-custody to SESD. Use the information in this report to setup your investigation in Scribe.

When the QAPP for the investigation is logged into the R4LIMS System, a Project ID is assigned and a project is automatically created in the R4LIMS System. The Project ID is then embedded in the EDDs and is used to tie that data to the original study. For non R4LIMS projects, contact R4DART for the assigned Project ID.

As part of the project setup, for non R4LIMS projects, information about the types of data that will be collected (and EDDs submitted) should be sent to R4DART using the Data Submittal Summary Template.

3.5 Chain of Custody (Scribe and DART)

All EPA lead projects in EPA Region 4 must submit an electronic COC to SESD. For all soil and sediment type sampling a copy of the chain-of-custody xml file must also be sent to R4DART@epa.gov. This file can be generated using Scribe.

This EDD file is different in one major aspect from all other EDDs submitted from EPA lead projects:

These COC EDDs must be submitted to R4SampleCustody@epa.gov. This process is detailed in the DART helpfile"

This submittal does not satisfy the requirement for a signed COC to accompany the samples at all times.

3.5.1 Scribe

Scribe is a software program developed by US EPA for managing environmental data (including COCs). The installation file may be obtained at:
https://www.ertsupport.org/Scribe

To use Scribe in EPA Region 4, you must also have the latest EPA Region 4 template and the Field Results macro, FieldResults.exe. These are available by submitting a request to the EPA Region 4 R4DART coordinator.

To use the template, download the file and copy it to your Scribe template directory (by default C:\Program Files\Scribe\Template). When setting up a new project, you may use the browse feature to select the template used to create the project.

To use the macros within Scribe, your version of MS Access must be configured to enable macros. Save the FieldResults.exe file to your computer. Then:

- Start MS Access and update your macro settings to Enable all macros
- Go to the location where the FieldResults.exe was saved and select to run

3.6   DART Reports

After your COC data is received and the samples logged into the R4LIMS (Element) system, you will receive automated reports if additional information or corrections are required. These emails are sent the night samples are logged into the R4LIMS (Element) system and each Monday thereafter.

When all needed corrections have been made to Project Log and Element, the project setup in the Project Tracking System is checked to see what additional EDDs (Location, FieldResults, Geology or Water Level) are required.

The data provider will receive at least one DART report from the Project Tracking System, even if no errors are found and no additional data is required. This is to allow for an opportunity to proof and correct the data in the system.

3.6.1   Sample Information Requests

These email alerts are triggered by missing or incorrect information in Project Log or Element that will prevent the lab analytical data from loading to DART once reported. These corrections <u>must</u> be made <u>before</u> the data is reported by the SESD laboratory. If the corrections are not made before the data is reported, it will be necessary for the lab to re-report the data.

These emails contain a due date in the subject line. Corrections and missing data must be submitted prior to the due date.

3.6.1.1 Corrections to Project Log

For R4LIMS lead projects, if the Project Summary report email shows information missing, forward the email to R4DART@epa.gov and supply the missing information. This portion of the report checks for:

- Valid site or waterbody selected
- Valid Project ID selected
- Valid program\activity selected
- Valid data provider selected

3.6.1.2 Corrections to Element

Errors within Element are not easily corrected when system information conflicts with the official hardcopy. Changes to Element must be accompanied by supporting information, such as corrected COC, logbook information, explanation (to attach to official documents in the file). Information presented in this portion of the email shows your sampling information as it currently resides in Element.

Station IDs and Media Codes are checked to ensure compliance with business rules (Section 2.5.4). If you have a missing or incorrect Station ID or Media Code, type the correct value in the appropriate 'Edited' column and forward the email to R4DART@epa.gov and cc the R4SampleCustody@epa.gov.

3.6.2 EDD Requests

These emails contain a due date in the subject line. Requested EDDs must be submitted prior to the due date.

- After any errors in Project Log and Element are corrected, a Location EDD is requested for Station IDs that cannot be matched in DART. A weekly reminder to submit the Location EDD will be sent until the data is received.

- Once the Location EDD has been received, requests for any additional EDDs will be sent based upon the information in the project setup.

3.6.3 'Overdue' Reports

If corrections and EDDs are not submitted before the analytical data is reported by the lab for R4LIMS lead projects, 'Overdue' reports will be generated. These reports will be sent each Monday morning until the requested data is received.

3.7 Creating EDDs

EDDs can be created in a number of ways. The best method will depend upon the amount of data to be submitted, and how the chain-of-custody was generated.

It should be noted that for small amounts of data, any of the EDD(s) listed below can be created directly in EDP. Detailed instructions for creating EDDs can be found in the EPA Region 4 Format Guide and the EPA Region 4 EDP Instruction Manual.

3.7.1 Location EDDs

Attached File: Each email request for a Location EDD has a partially completed Location EDD file attached, with the required Station IDs in the correct format. Open the attached file in a spreadsheet or complete in EDP.

Scribe View: If you used Scribe to generate your COC, you can create a Location EDD by choosing the Field Results macro that will include an EPAR4_ Location_v1.txt file.

Complex Studies: If your investigation is 'complex', your Location EDD must be split. Submit a Location EDD for each stream or waterbody investigated.

ESRI© Shapefiles: You can also create a Location EDD from an ESRI© shapefile using the GPS Shapefiles utility in the Scribe macro. The Scribe EPA Region 4 help file has more information. This FieldResult.chm file may be found at: C:\Program Files (x86)\DART FieldResults\Files or accessed from your computer's program files > DART FieldResults > Region 4 Scribe EDDs Help

3.7.2   FieldResults EDDs

Scribe: if you created your COC using Scribe, you may use the Scribe Lists – Advanced – Macros. Check the FieldResults option and select the Run Macro(s) button to export the FieldResults EDD. After selecting a folder to save the file to a pop-up window lists all of the available field parameters available. Check the parameters to be submitted and update the units as necessary as long as they are compatible with DART. Selecting the OK button will simply export the file as a text file with the required EPAR4_FieldResults_v1.txt file name. Use the EDP software to check and complete the data prior to sending to R4DART@epa.gov

3.7.3   Water Level EDDs

Required for all groundwater elevation measurements and for all surface water elevation measurements tied to groundwater elevation.

If you used Scribe to enter your data, you can create a Water Level EDD by choosing the Field Results macro that will include an EPAR4_WaterLevel_v1.txt file.

3.7.4   Geology EDDs

It is recommended that these EDDs be prepared by professionals with experience with this type data. Details for the various formats are specified in the EPA Region 4 Format Guide.

3.7.5   Analytical Data EDDs

Preparation of these files should be performed by individuals with experience in understanding unfiltered laboratory reports. The format is specified in the Region 4 Format Guide.

Element: Analytical data reported by the EPA Region 4 LIMS (Element) is formatted for EQuIS, and is automatically loaded upon receipt of a valid Location EDD.

Subcontracts/Interagency Agreements: Any non-Element data must be placed in the EQuIS format by the data provider. To help ensure accuracy, the performing laboratory may be requested to report the data in the EPA Region 4 EQuIS format as part of the bid.

3.8   Error Checking with EQuIS Data Processor (EDP)

For information on obtaining, installing, maintaining and using Standalone EDP, refer to the EPA Region 4 EDP Reference Manual. If you are using Standalone EDP, be sure EDP is up to date before using.

If you are using EDP on an EPA workstation, start EDP by logging in to EQuIS Professional and selecting your site (facility). Once connected to the database, select the EDP icon in the upper left corner.

Use EDP to check all EDDs for errors before submission. EDP contains a help file to assist with error correction. Let the mouse hover over any cell with a non-white background to view a detailed error message. Hover the mouse over any column header to view additional information specific to the field.

Complete instructions for using EDP can be found in the EPA Region 4 EDP Reference Manual.

If you are unable to correct the problem, email the EDD's Error Log along with the file causing the problem to R4DART@epa.gov with your contact information.

3.9   Submitting EDDs

After correcting any errors in your EDD, save the file from EDP using the sign and submit menu option to save the data package. A user name and password is required to successfully create the EDD package and upload the data into DART.   If you do not have a valid user name and password for DART, email R4DART@epa.gov.   Please use the following naming convention for the EDD package:

- Task Code
- Site Name
- Company Code
- Date Submitting (YY MM DD)
- Type(Loc-Location/Ch-Chemistry/FR-FieldResults/WL-WaterLevel)
- .FacilityCode.EPAR4.edd

For example:
13-0001_YouSite_PL-YourCompany_14 01 08_Ch.110001224773.EPAR4.edd

Attach the EDD to the email requesting the sampling for R4LIMS lead projects and forward to R4DART@epa.gov. If the file is named improperly or not attached to the requesting email, it will be returned to the data provider.

Complete instructions for using EDP can be found in the EPA Region 4 EDP Reference Manual.

NOTE: .zip files are automatically removed by the EPA email server. Be sure your data package is properly named and has the .edd filename extension.

3.10   Proofing and Corrections

Notify the DART coordinator of any errors you find in the system. Send corrections to R4DART@epa.gov.

After the data has been successfully loaded, an automated email will be sent to the data provider from R4DART notifying the file has been accepted and no errors were found. If the data is rejected, an automated email will be sent to the data provider from R4DART with the error log attached as a .dat file. To open the error log, download the .dat file from the email and rename the file extension from .dat to .zip prior to opening."'

Once the errors have been corrected, recreate the EDD package following the same process as the original sign and submit. The one exception will be the file name may not be identical to any previous submissions or it will be rejected due to a duplicate file name. The resubmitted file name should include a capital letter suffix after the type submitted but before the period directly in front of the FacilityCode. (i.e. A.FacilityCode.EPAR4.edd)

For example:
13-0001_YourSite_PL-YourCompany_14 01 08_ChA.110001224773.EPAR4.edd
The data provider is responsible for the receipt of all automated emails based on the information provided when requesting a user name and password. Should the data provider not receive the automated emails regarding their EDD submission or feel an error was inaccurately returned, notify EPA Region 4 at R4DART@epa.gov for any errors found.

4 PRP Lead Data Submittals

4.1 PRP Lead Projects

Responsible Parties conducting environmental investigations in EPA Region 4 for the Superfund program must report their data to EPA Region 4 electronically. The types of data required to be submitted are outlined in Section 2.4. The responsible party is responsible for the information contained in the files submitted by the data provider.

Address all data submittals and questions to R4DART@epa.gov.

Procedures for EPA lead projects can be found in Section 3.

4.2 Software Requirements

All data providers are required to use EDP to check their data files for errors prior to submittal. EDP is software used to both check all EDDs for errors prior to submittal, and to create properly formatted data packages. EDP can also be used to create smaller EDDs. EDP is available as a free download. See Section 2.3 for information on obtaining and using Standalone EDP.

4.3 Site Creation

All NPL sites in EPA Region 4 have been created in DART. If, however, a site is found to be missing (or a new site is added to the NPL), it must first be created using information from EPA's national database as described in Section 3.3.1

To create the site, the RPM or OSC must email the URL for the search results (Envirofacts or SEMS) to R4DART@epa.gov.

If the site is not in these databases, the Program Manager or OSC must send the following information to R4DART@epa.gov:

Site Name
Address,
City, State, Zip Code
County

4.4 Project Creation (Project ID)

For current and historical data (as defined in the EPA Region 4 Format Guide), the project must be created manually (assuming no past fund lead projects are available in the R4LIMS Project System). The R4DART coordinator will use the DART system to setup

the proposed data submittal, and to get the data provider contact information (email address) in the system.

When the project has been successfully established, a report may be sent to the data provider containing any existing Station IDs and their coordinates. The data provider must review the report for existing sampling stations. If samples are to be collected (or were collected) at an existing Station, the established Station ID must be used.

4.5   Data Submittal Summary

After the project is created US EPA Region 4 will notify the data provider to submit the Data Submittal Summary for non R4LIMS sampling and email to R4DART@epa.gov for tracking. When this information has been received and accepted by the RPM, the R4DART will be prepared to receive the project data. Information on the Data Submittal Summary format can be found in the EPA Region 4 Format Guide and downloaded from the Superfund site at:
    http://www2.epa.gov/superfund/region-4-superfund-electronic-data-submission

4.6   DART Reports

After the information from the Data Submittal Summary is entered into the Project Tracking System and accepted by the RPM, automated reports detailing any errors or additional information needed will be sent to the data provider. These emails are sent the night the Data Submittal Summary is loaded, and each Tuesday thereafter until all data for the given project has been received.

Note the order for the data submittals below. This order is both dictated by a desire to offer data providers with the opportunity to review each step in the data submittal process, and by the database logic of EQuIS.

4.6.1   Location EDD Request

If the Data Submittal Summary contains additional information for an established sampling station, the data provider **MUST** use the Station ID(s) provided.

Because the system will begin requesting the remaining EDDs upon receipt of the first Location EDD file, the data provider may prefer to submit all Station IDs in a single Location EDD file. Multiple Location EDDs may be submitted if needed.

A report containing the submitted Station IDs and coordinates will be sent to the data provider upon the receipt of each Location EDD, to provide an opportunity for proofing and correction.

If the Location EDD is found to contain an error not related to the coordinates, the PRP must send a spreadsheet with a list of the incorrect and corrected information.

For bad coordinates (or if better coordinates become available), the original Location EDD may be edited and re-submitted. Delete the rows in the original Location EDD that do not need to be updated, edit the coordinates for the remaining rows, and re-submit to R4DART@epa.gov. The phrase 'Updated coordinates' should be in the subject line.

4.6.2 Other EDD Requests

Upon receipt of the Location EDD, the Project Tracking System will make weekly requests the remaining EDDs that were specified in the original Data Submittal Summary and accepted by the PRP. The remaining EDDs will be checked against Station IDs as they are received, and rejected if no matching Station ID can be found.

4.7 Creating EDDs

EDDs can be created using spreadsheet software, directly in EDP, or in a word processor such as Notepad. More information about the file format can be found in the EPA Region 4 Format Guide.

The best method for creating EDDs will depend upon the amount of data to be submitted. It should be noted that for small amounts of data, any of the EDD(s) listed below can be created directly in EDP. Detailed instructions for creating EDDs can be found in the EPA Region 4 Format Guide and the EPA Region 4 EDP Reference Manual.

4.8 EQuIS Data Processor (EDP)

For information on obtaining, installing, maintaining and using standalone EDP, refer to the EPA Region 4 EDP Reference Manual, and Section 2.3 of this guidance document.

Use EDP to check all EDDs for errors before submission. EDP contains a help file to assist with error correction. Hover the mouse over any cell with a non-white background to view a detailed error message. Hover the mouse over any column header to view additional information specific to the field.

If you have errors you are unable to correct, email the EDD's Error Log along with the file(s) causing the problem to R4DART@epa.gov with your contact information. Place the site name and the Project ID in the subject line.

4.9 Submitting EDDs

Remember to submit Location EDDs **before** submitting any other EDDs. The database structure requires locations to be loaded prior to all other environmental data.

While EDP permits the submittal of combined EDDs, this feature is not supported in the EPA Region 4 implementation. Submit each EDD separately (**except** for Analytical EDDs which are **always** submitted as a three file set – See the Format Guide).

When all errors have been corrected, save the EDD(s) using 'sign and submit' (see EPA Region 4 EDP Reference Manual). Name all files as specified. Improperly named files will be returned to the data provider. The required names can be found in the EDD request reports sent to the data provider.

To submit your prepared data package, attach the data package to the EDD request and forward to R4DART@epa.gov. Data packages must be attached to the requesting report. Data packages received without the proper requesting report will be returned to the data provider.

NOTE: .zip files are automatically removed by the EPA email server. Be sure your data package is properly named and has the .edd filename extension.

4.10   Proofing and Corrections

After the data has been successfully loaded, an automated email will be sent to the data provider from R4DART notifying the file has been accepted and no errors were found. If the data is rejected, an automated email will be sent to the data provider from R4DART with the error log attached as a .dat file. To open the error log, download the .dat file from the email and rename the file extensions from .dat to .zip prior to opening.