

Complying with the EPA Region 2 EDD



Presented by
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CDM

Points for Today's Discussion

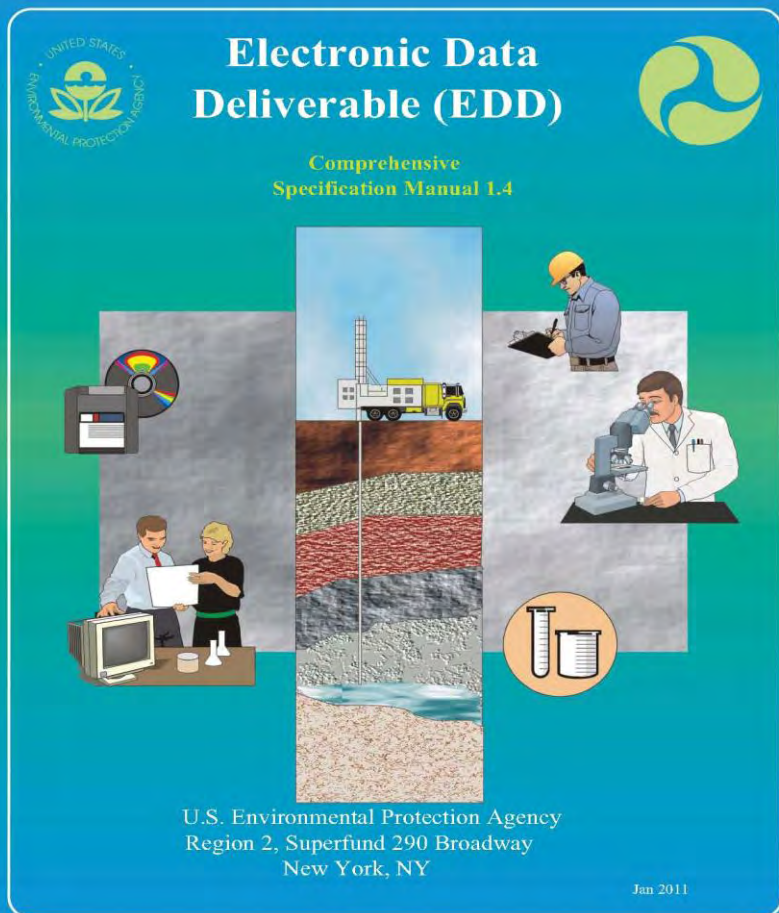
- Overview of the EDD – 10,000-foot level
- Stages of planning and executing a project to help in meeting the EDD requirement
- Challenges that contractors may encounter while meeting the requirements of the EPA Region 2 EDD
- Working with laboratories and other subcontractors to aid the process

10,000-Foot View

THE REQUIREMENTS OF THE REGION 2 EDD

Guidance Documents

Documentation for version 2 shown here



**ENVIRONMENTAL PROTECTION
AGENCY**

ELECTRONIC DATA DELIVERABLE VALID VALUES REFERENCE MANUAL

**Appendix to EPA Electronic Data Deliverable (EDD)
Comprehensive Specification Manual**

<http://www.epa.gov/Region2/superfund/medd.htm>

April 14, 2011

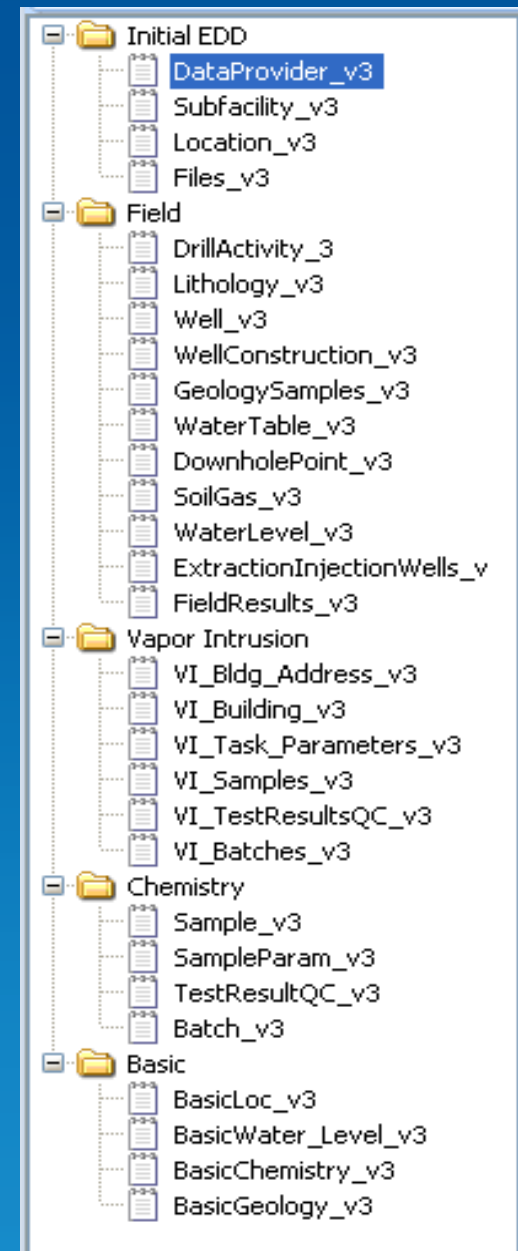
General Submittals

- The EPA Region 2 EDD submittal is comprised of 4 sets of files
 - Initial
 - Field
 - Vapor Intrusion (added in version 3)
 - Chemistry

Note: historical data sets can have a reduced deliverable called “Basic” submittals

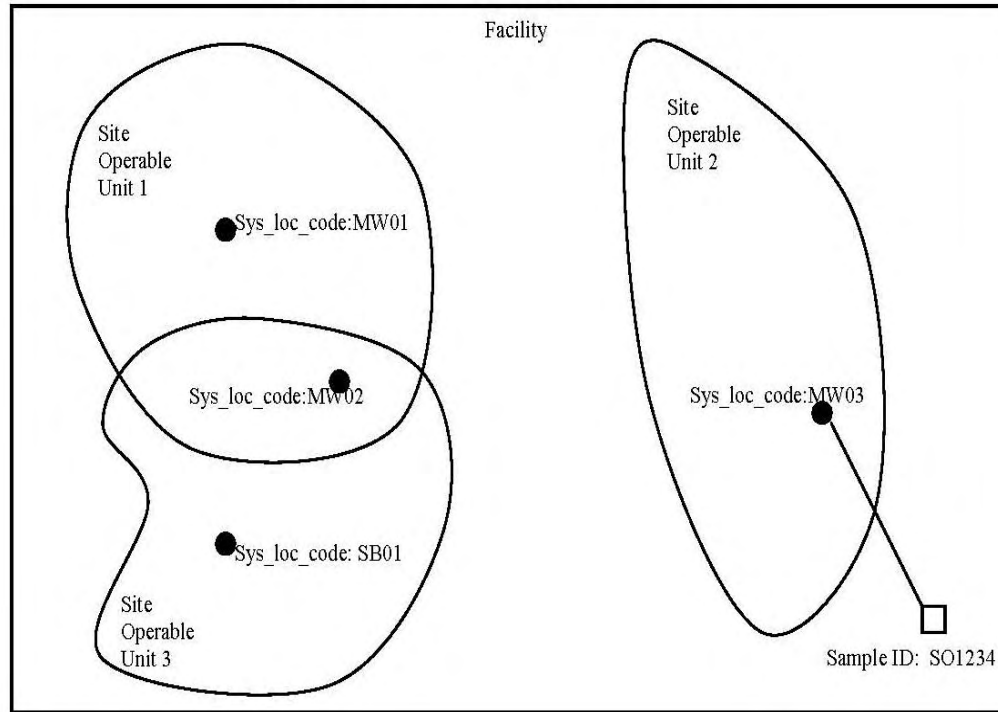
Additional EDD Details

Each of the EDD data sets is made up of several individual files containing the related data.



Site Relationship Logic

Figure 2-2. Facility component definitions



Facility ID = EPA ID #

Site = Site Operable Unit = site_code must be unique at a facility

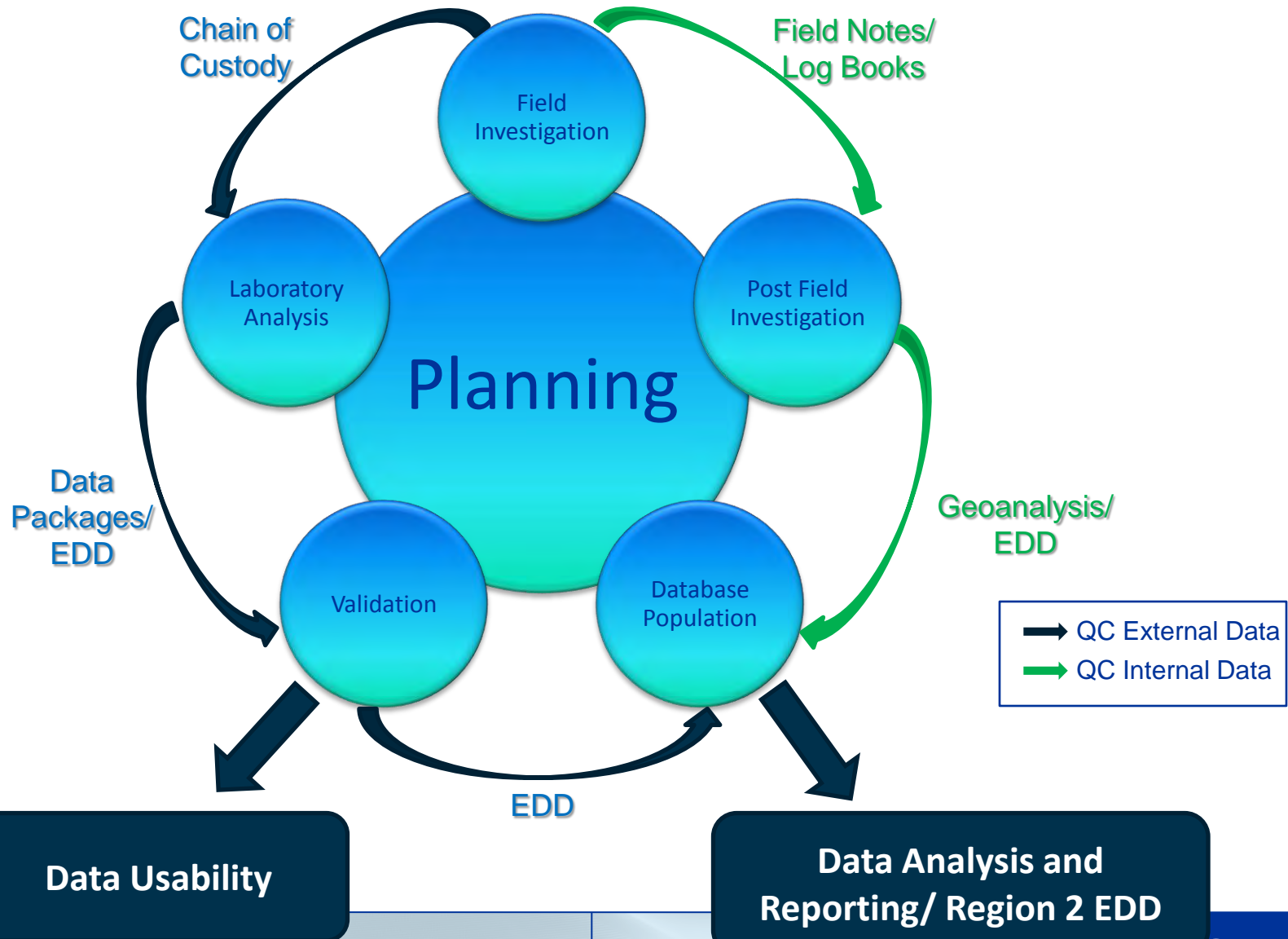
Location = sample location= sys_loc_code must be unique at a facility

*Sample ID = sample = sys_sample_code must be unique at a facility

Planning and Collecting

COLLECTING THE DATA TO MEET THE REGION 2 EDD REQUIREMENT

Data Flow Chart



Data From Planning

- Background Information
 - Site information
 - Historical data
- Basic Planning Information
 - GIS – location data, coordinates, and dxf submittal
 - Well and boring locations
 - Location identification scheme
 - Sample identification scheme
 - Analytical requirements

Data From The Field

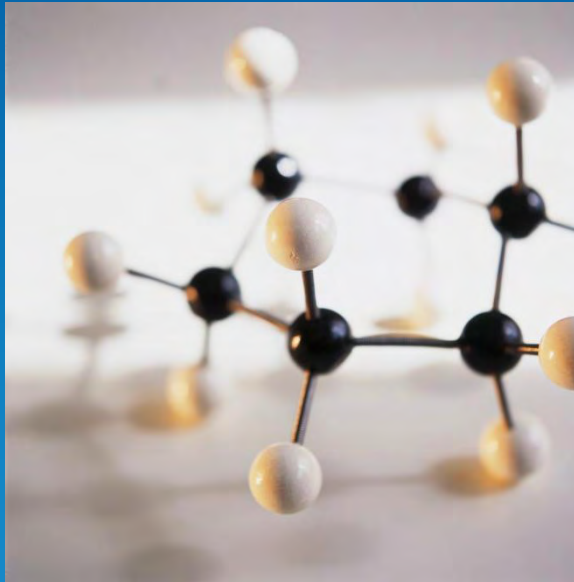
- Field Work
 - Sample information – chains of custody
 - Well construction and boring data – boring logs
 - Water level – field logs
 - Field measurements – purge data
- Post Field Investigation – Field Data Consolidation
 - Trip reports – incorporate EDD templates
 - Geology software – electronic boring logs
 - Recording field measurements into EDDs or data tables

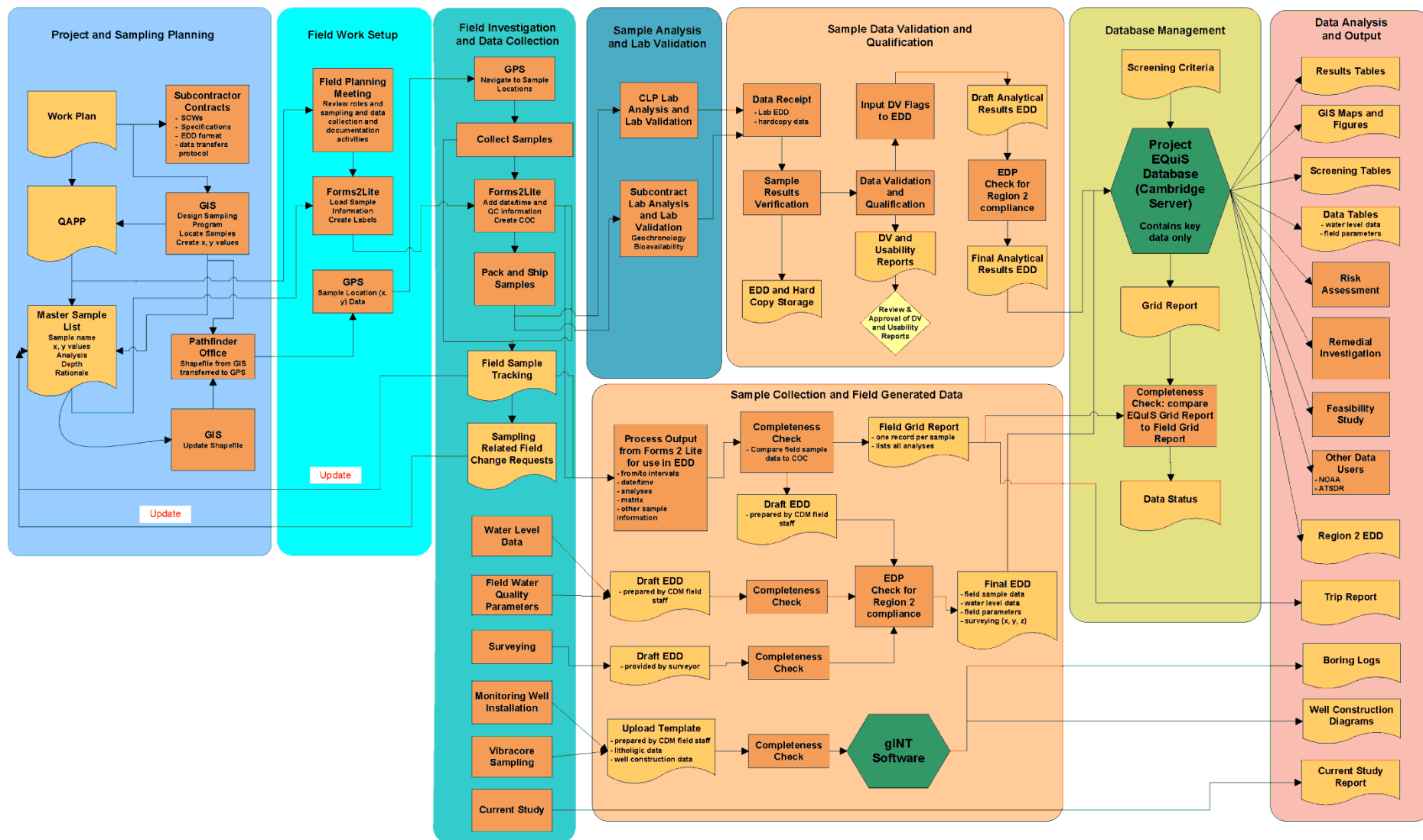
Data From Additional Field Work

- Survey Data
 - Refine/confirm location data
 - Final well construction data and elevations
- Subsequent rounds of sampling
 - Unique sample IDs – add data or round/quarter information
 - New water level data

Data From Analytical Work

- Laboratory analysis
 - Analytical information – methods
 - Results
 - Analytical QC – MS/MSD, duplicates
 - Batch QC
- Post analysis
 - Data validation

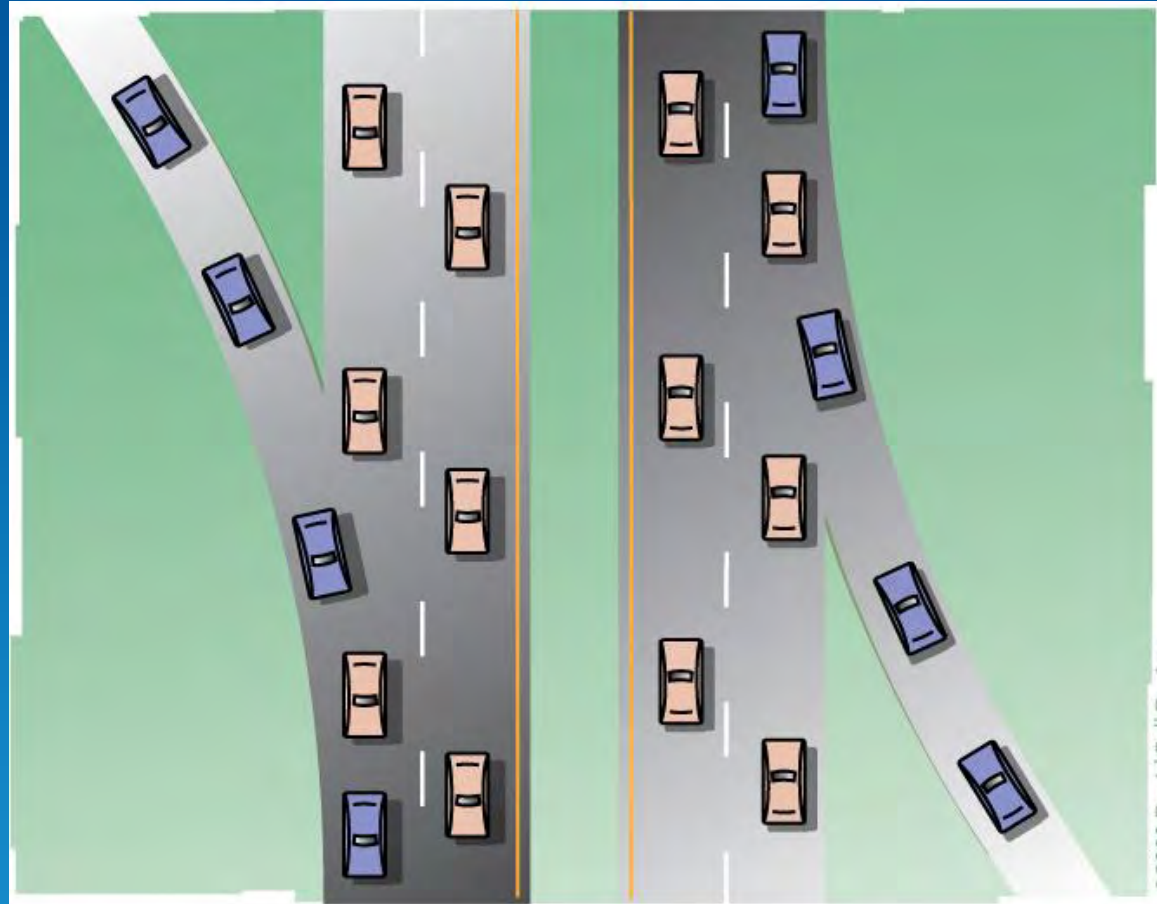




Sample and Data Management Plan

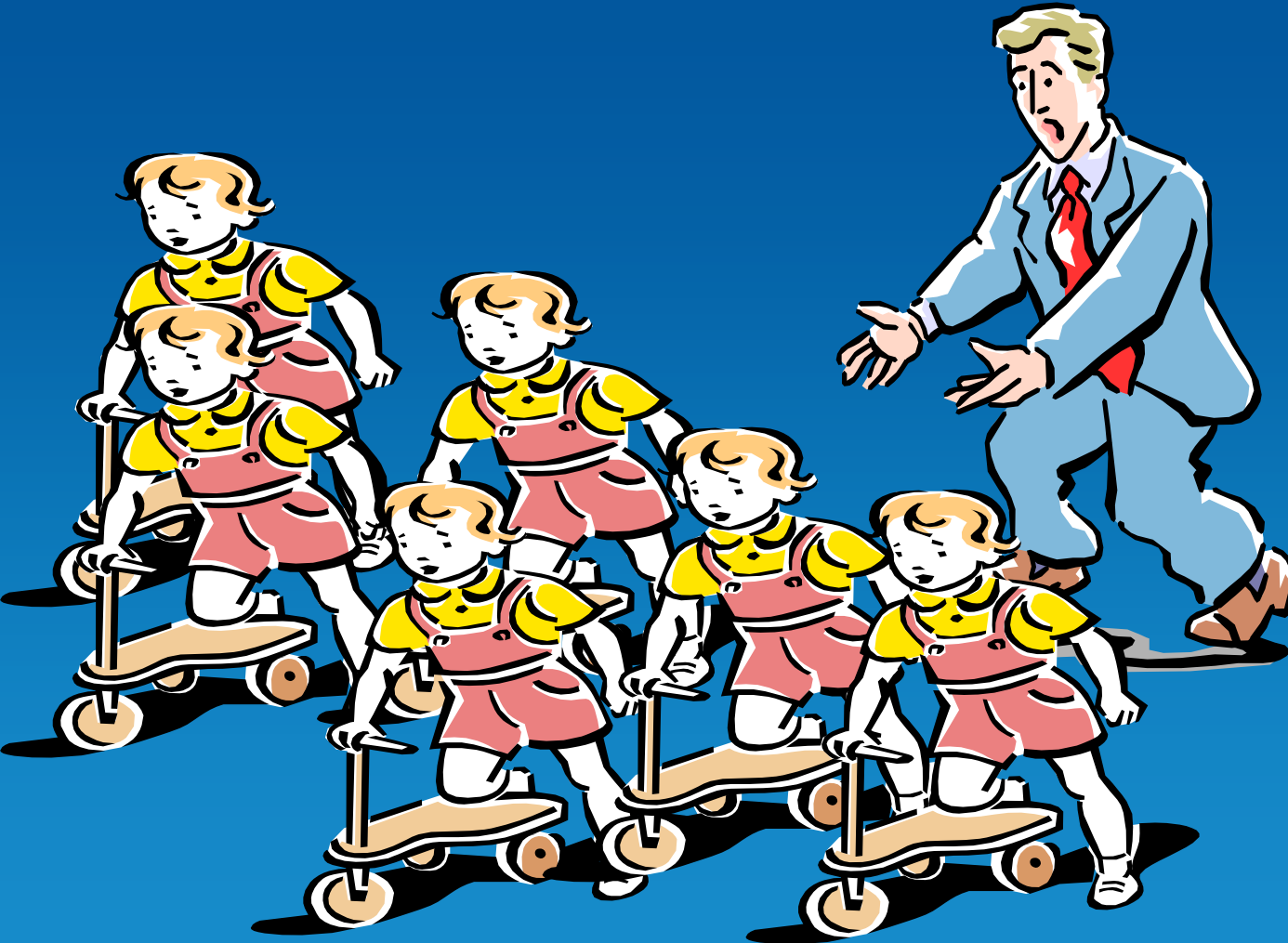
Bringing the Pieces Together & The Zipper Effect

Information from multiple sources coming together neatly as planned...



© 2008 David Ball Design

Adverse Zipper Effect



EDD Preparation and Processing

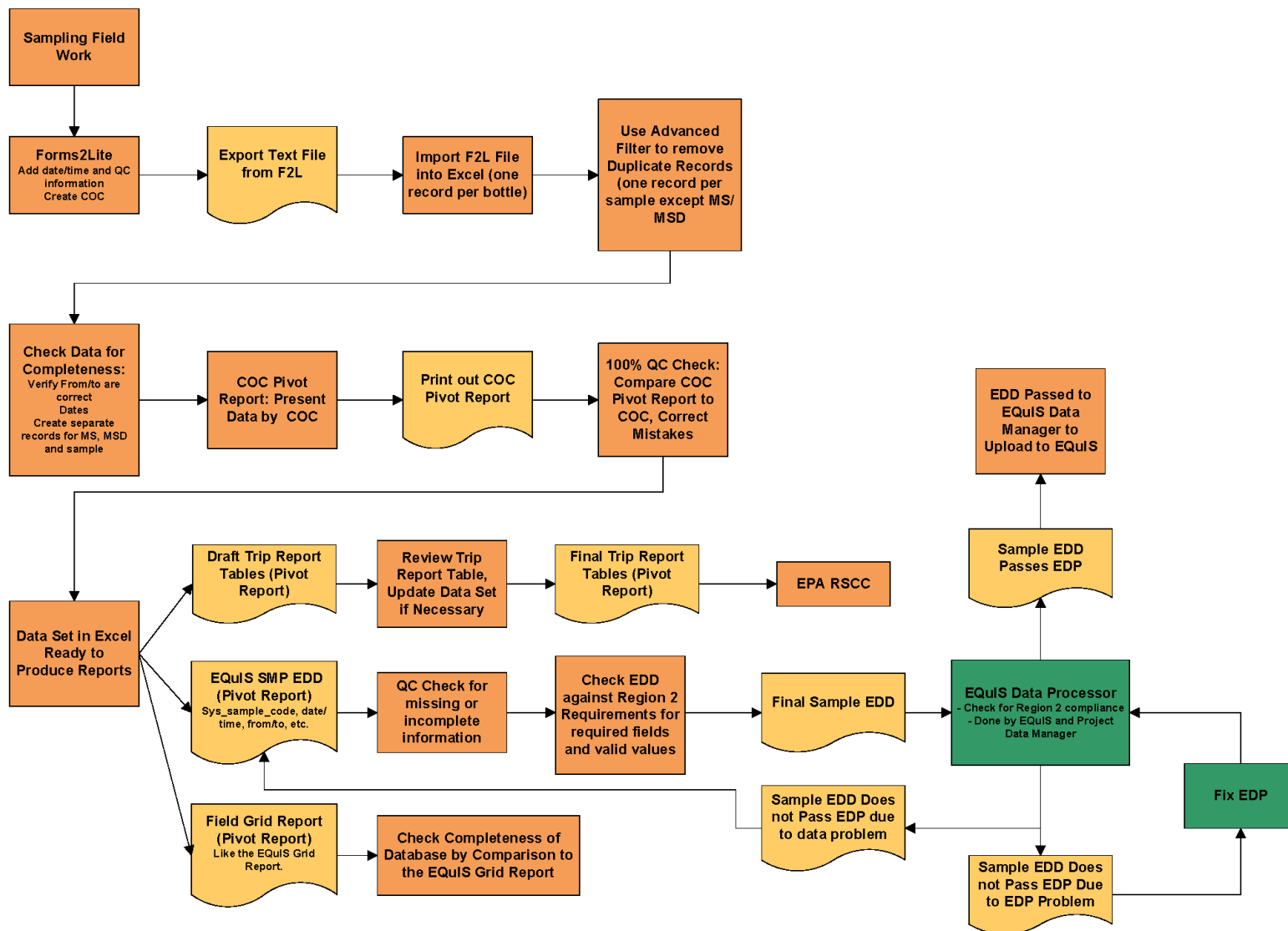
COMMON CHALLENGES TO CAPTURING THE DATA

Working With Various Software

- Software compatibility, ease of export/import, and process flow
 - ESRI or AutoCAD - not directly compatible
 - Can be used organize your data
 - Exports can be created to produce a usable format
 - Rockworks and Gint – not directly compatible exports
 - Can be used organize your data
 - Exports can be created to produce a usable format
 - Forms 2 Lite – not directly compatible exports and not easy to work with
 - Scribe – not directly compatible export but more flexible

Groundwater Sampling Data Management: Field Team Responsibilities

1/9/11



Certain Analytical Data

- Analytical data that can be challenging
 - Grain size and other geophysical data
 - Many geophysical laboratories may not routinely produce EDDs
 - The valid values and reporting formats may differ from the regions
 - Dioxin and PCB congener analytical data
 - Contain unique data qualification and reporting requirements
 - Dioxins have the estimated maximum possible concentration (EMPC)
 - » This is a validation qualifier
 - » It does not fit the interpreted qualifier rule of 2 characters
 - PCB congeners have coeluting peaks
 - These need to be identified
 - Can cause problems with reporting
 - Dioxin and PCB congener analyses have expanded list of surrogates that may require updated CAS numbers

Certain Analytical Data continued

- Analytical data that can be challenging continued
 - Radiological (RAD) data
 - Radiological laboratories are generally set up to meet DOE requirements
 - There is additional information required for these results
 - The Region 2 EDD has been set up to capture these data
 - If you are unfamiliar with RAD data you should work through the EDD with your radiological laboratory

Validation/Review in the EDD

- Data validation or EDD review
 - Flagging reportable and not reportable results
 - Your validator or laboratory must
 - Review reanalyses and dilutions to identify the reportable data, set the reportable result flag to “YES “or “NO”
 - Results reported from dual column analyses, one must be set as not reportable
 - Your validator or laboratory must update/populate the validation and/or interpreted qualifier field
 - Your validator must identify the data as being validated and to what level within the results EDD
 - Your validator must set the detect flag and possibly update the reporting limit if they qualify data based on blank results

Historical Data Items to Consider

- Beware the phrase “We have it electronically”
- Need to review the data set in detail
- These data may take significant effort to meet even the basic deliverable
 - How will new sample, location and analytical data be combined?
 - May need to rename historical data
 - May need to apply appropriate valid values

If you are not thinking about the EDD
They are not thinking about the EDD

HELPING YOUR CONTRACTORS OR SUBCONTRACTORS HELP YOU

Subcontract Laboratory

- Ensure the laboratory is familiar with the EPA Region 2 requirements
 - Do their valid values match the regions
 - Method codes and QC naming conventions (spikes, duplicates and surrogates)
 - Pay particular attention to the CAS numbers for “odd” compounds
 - Nitrate/nitrite
 - Total organic carbon
 - And so on

Surveyors

- Ensure the surveyor is familiar with the EPA Region 2 requirements
 - Export your location/well IDs from existing GIS or other planning documents
 - Have the surveyor add to pre-populated location and well EDD if possible
 - At a minimum
 - Get them your location IDs
 - Ensure they provide the level of detail needed in an electronic format

O&M Subcontractors

- Ensure they are familiar with the EPA Region 2 requirements
- They may need to work directly with laboratories as well
- O&M data may be able to be submitted directly to Region 2
- If additional wells installed for extraction/injection
 - Provide them with the well IDs and EDD requirements
 - Ensure they gather the proper level of information and pass it onto you electronically

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QUESTIONS, COMMENTS, OR
DISCUSSION