Meeting the EPA Region 2 EDD

A Contractor's Perspective

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CDM

Points for Discussion

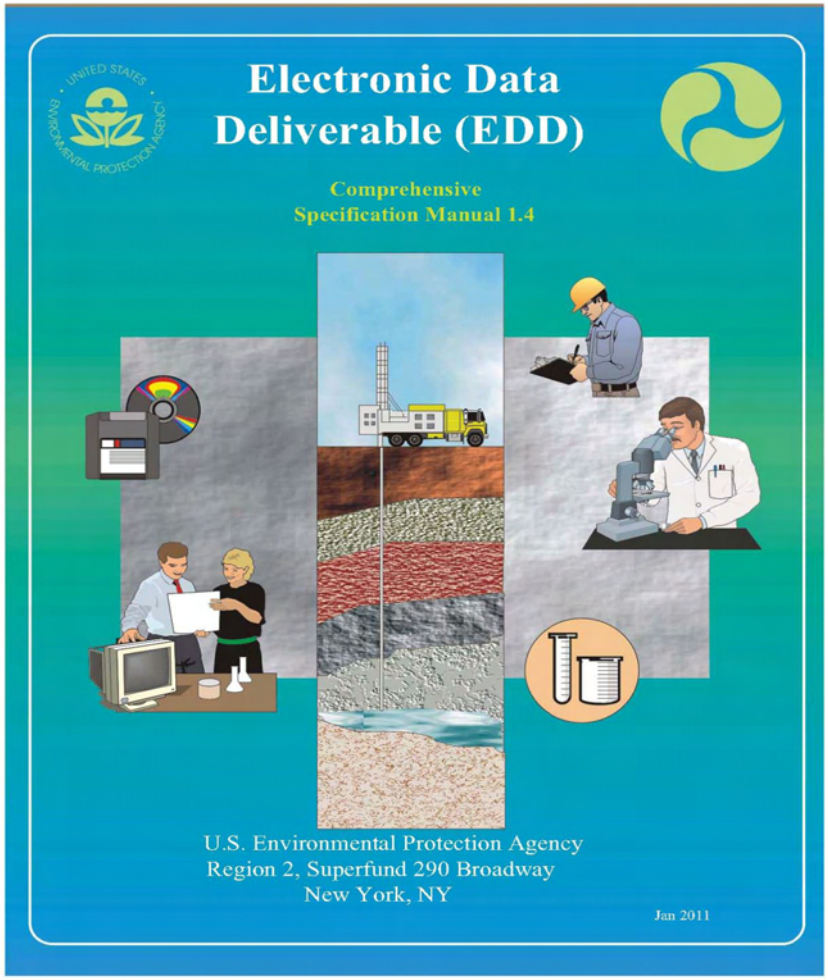
- Working with EDD while planning and executing project work
- Working with laboratories and other subcontractors to aid your process
- EDD preparation and processing: some common challenges and errors you may encounter

PLANNING TO MEET THE EDD

Guidance Documents

Documentation for version 2 shown here

Note:
Please call in 866-299-3188
code # 2126374358



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

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EDD Items to Keep in Mind During Planning

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

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

Initial Set

- Base Map – in .dxf format
- Data Provider – point of contact
- Site – general information about the site
- Location – information about sampling locations

Chemistry Set

- Sample – information on sample collection
- Sample Parameters (added in version 3)
- Test Result with QC – analytical test results including QC
- Test Batch – information on sample/test relationship

Geology Set

- Drilling Activity
- Lithology
- Well – monitoring well information
- Well Construction – well construction details
- Geology Sample Data
- Water Table Data – collected during drilling
- Down Hole Point – down-hole logging data
- Soil Gas Survey
- Water Level
- Extraction/Injection Well information

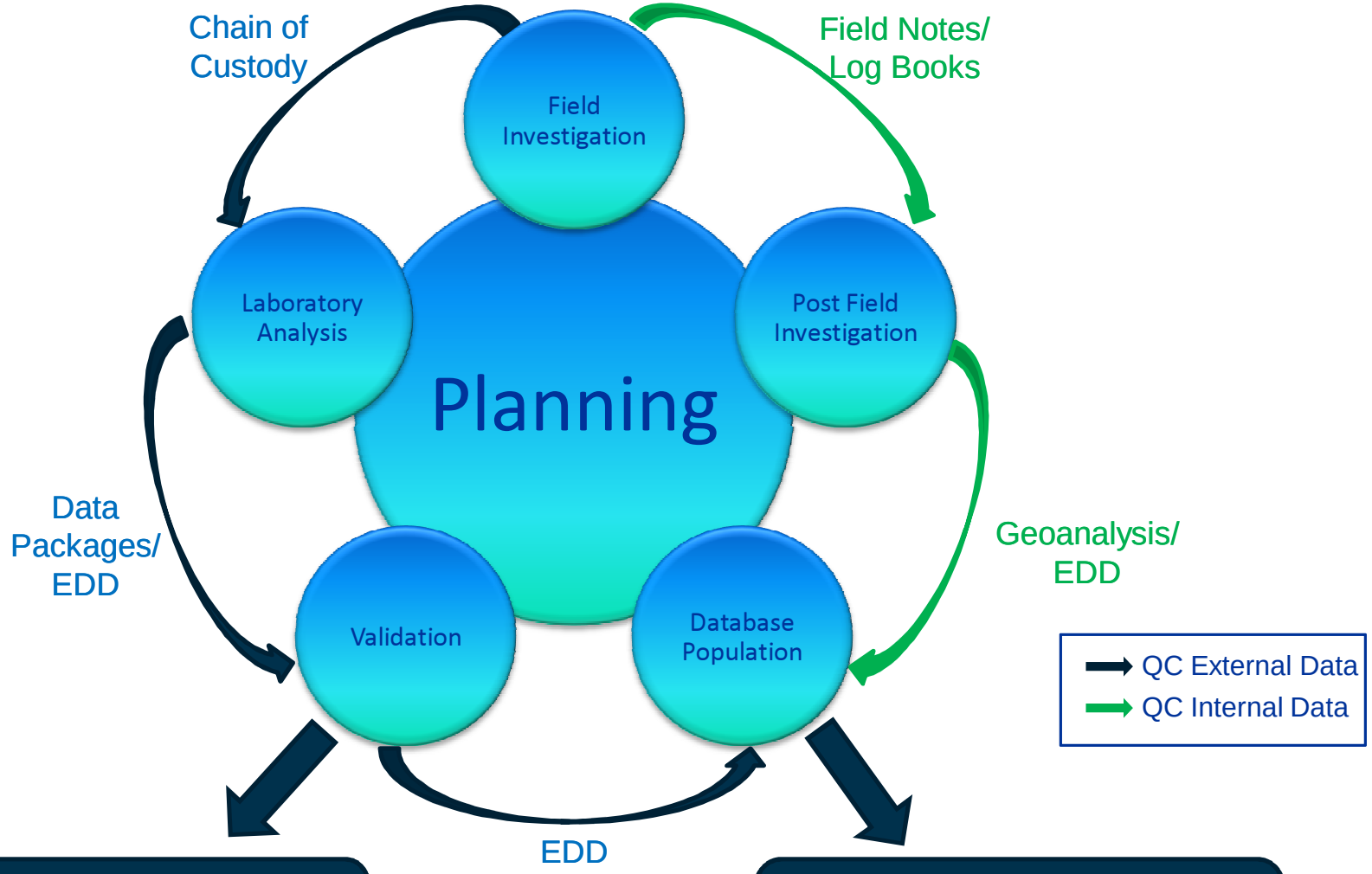
Vapor Intrusion

- Building Address
- Building
- Task Parameters
- Samples
- Test Results
- Batch Data

Planning and Collecting

GATHERING THE DATA TO MEET THE REGION 2 EDD REQUIREMENT

Data Flow Chart



From Planning

- Background information
  - Site information
  - Historical data
- Basic planning information
  - GIS – location data, coordinates, and dxf submittal
  - Well and boring locations
  - Sampling locations
  - Sample identification
  - Analytical requirements

From The Field

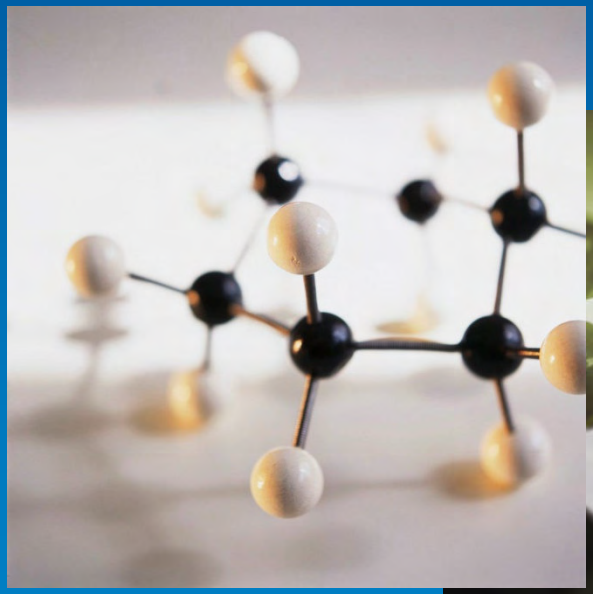
- Field work
  - Sample information – chains of custody
  - Well construction and boring data – boring logs
  - Water level – field logs
  - Field measurements – purge data
- Post field investigation – field data consolidation
  - Trip reports – incorporate EDD templates
  - Geology software – electronic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

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 info
  - New water level data

From Analytical Work

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



If you are not thinking about the EDD

They are not thinking about the EDD

HELPING YOUR SUBCONTRACTORS HELP YOU

Subcontract Laboratory

- Ensure the laboratory is familiar with EPA Region 2 requirements
  - Do their valid values match the Region's?
    - Method codes and QC naming conventions (spikes, duplicates and surrogates)
    - Pay attention to the CAS numbers for "odd" analytes/compounds
      - Nitrate/nitrite
      - Total organic carbon
      - And so on (total PAH)
- Best case have them provide the chemistry deliverable
  - For this you may need to provide additional information such as the location associated with the sample
- If you have particular analytical deliverable requirements review them against the Region EDD to ensure compliance

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
  - Use 3rd party software to gather data electronically
    - Import/Exports from GPS systems
    - Import/Exports from Gint or Rockworks
    - Import/Exports from project databases

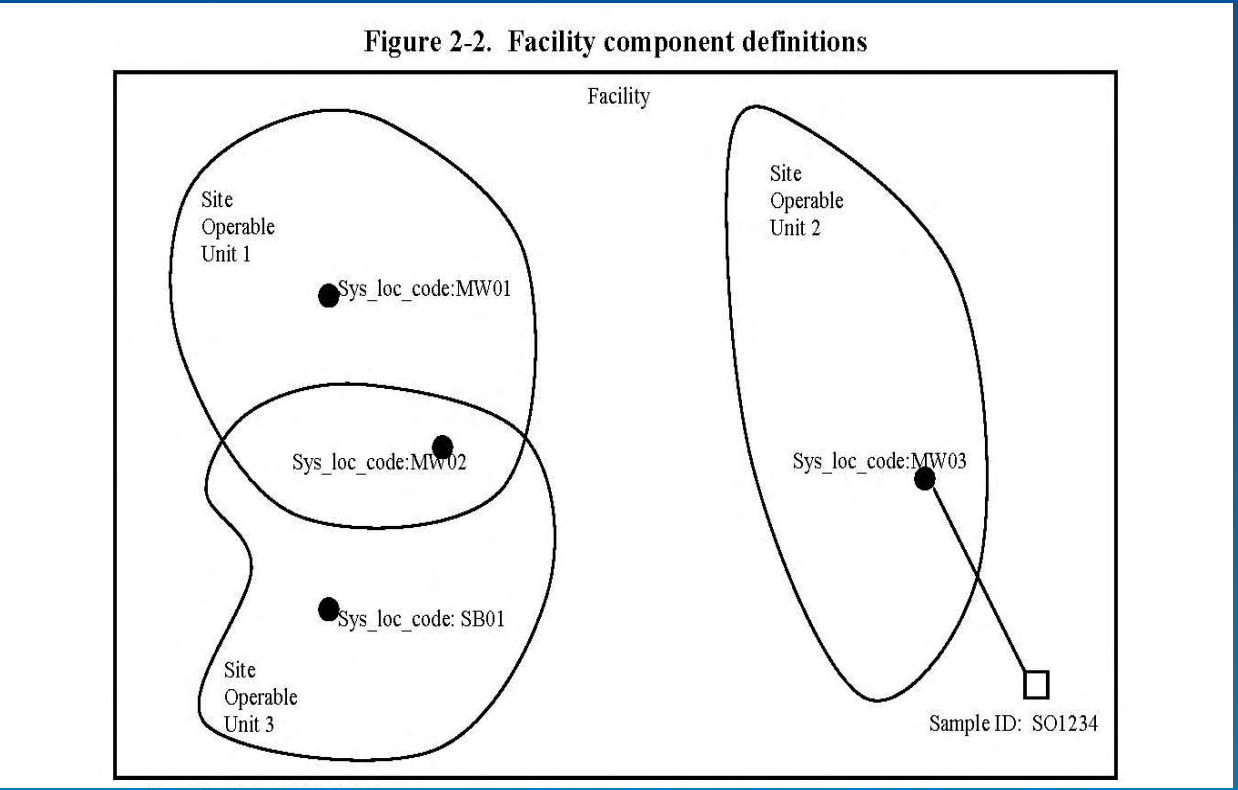
O&M Subcontractors

- Ensure they are familiar with the EPA Region 2 requirements
- The 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
- Keep the EDD requirements in mind when setting up O&M work

EDD Preparation and Processing

EDD COMMON CHALLENGES

Site Relationship Logic



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

Sample Naming Convention

- Sample Identification
  - Every sample must be uniquely identified for facility
    - Misplaced spaces, dashes, and leading “0” will impact your day
    - Subsequent rounds of samples must have unique sample ID
  - Keep the sample IDs simple
    - The EDDs collect a great deal of sample information so:
      - Minimize the need to include the sample date
      - Minimize the need to include the sample depth
    - The longer the sample ID the greater the chance for transcription error
    - The laboratory may need to truncate your sample ID due to system restrictions

Challenging Analytical Data

- Grain size and other geophysical data
  - Many geophysical laboratories cannot produce EDDs
  - The valid values and reporting formats may differ from the Region's
- 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

Challenging Analytical Data continued

- Radiological (RAD) data
  - Radiological laboratories are generally set up to meet DOE requirements
  - There is a great deal of 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

Other EDD Items to Watch out for

- Historical Data
  - 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

QUESTIONS, COMMENTS, OR DISCUSSION