IT PROJECT REQUEST FORM

SUMMARY INFORMATION

1. SUBMITTING DIVISION/OFFICE:	DWM
2. SPONSOR(S):	John Coates
3. PROJECT NAME:	Repository for Electronic Data Deliverables (REDD) Database
4. PREPARED BY:	Clark Moore / Elizabeth Bartlett
5. FUNDING STATUS:	DWM Funding Available
6. FUNDING CONTACT:	Teresa Booeshaghi

REQUEST DETAILS

7. BUSINESS NEEDS AND OBJECTIVES (*attach additional pages if needed*):

Escalate Repository for Electronic Data Deliverables (REDD) to become a full development project with assigned project manager, business analyst, and coding staff. REDD currently houses nearly 2 million records from more than 8000 monitoring events conducted over the past year for the Solid Waste, Hazardous Waste, and Petroleum Restoration Programs.

This project may be classified as tactical because it allows for improved reporting of field and analytical data for DWM, and has the potential to accommodate monitoring data submittals for the Air and Water Divisions. This project is also strategic because it allows for data-driven site cleanups and decision making.

8. PROPOSED HIGH-LEVEL SCOPE OF WORK (*attach additional pages if needed*):

A generic data structure has been established to store field and analytical results uploaded through ADaPT. The next stage is to optimize the database structure and expand the repository to track monitoring site location and characteristics and develop web-based reporting to allow comprehensive presentation and analysis (e.g., trend evaluation, GIS mapping, etc.).

Please see the attached "REDD Development Status and Documentation" and "REDD Development Considerations" for additional information on past efforts and envisioned enhancements.

9. CONSTRAINTS:

The REDD database is currently designed to integrate with EDDs generated using the Florida ADaPT application, which was developed using MS Access. The ADaPT application is nearing end of life, so future REDD development may need to accommodate EDDs of varying specifications and format, depending on what application is chosen to replace ADaPT.

DEP has multiple databases that store laboratory data. Data structures should be as consistent as possible to allow combined reporting and/or future database consolidation.

10. INTERNAL PRIORITY:

High

APPROVAL SIGNATURES

SIGNATURE	DATE
IT Work Group Member	
Project Sponsor	
Division/Office Director	

INSTRUCTIONS FOR COMPLETING THE IT PROJECT REQUEST

Overview:

To initiate the project request review and approval process, please submit a completed and signed project request intake form to Rebecca.Northup@dep.state.fl.us in the OTIS Project Management Office. Once received, your request will be placed in a request queue and prioritized for subsequent high-level analysis, cost and effort estimates. For larger requests that require significant analysis effort, additional funding may be required to conduct this analysis. After analysis, the project request will then be reviewed for approval, and if approved, prioritized on the OTIS Work Plan by the DEP IT Governance Council.

Form Instructions:

Complete the sections on the form as indicated below:

1. Submitting Division(s) or Office(s): Identify the division or office that is submitting the request
2. Project Sponsor(s): Identify the individual who will serve as the project's sponsor. The project sponsor provides clear support for the project and typically provides the project funding.
3. Project Name: The unique name of the project as it is commonly known within the submitting office. Define any abbreviations used in the project name.
4. Preparer's Name and Contact Information: The name and contact information of the person who prepared the request. This individual may be called upon for additional information or clarification.
5. Funding Availability: Specify if funding is (or will be) available for the requested project.
6. Funding Contact: Provide the name of the program area funding contact.
7. Business Need & Objectives: Briefly describe the business need that is driving the request. Business needs should be considered in three categories: (1) **Strategic** – affecting the entire organization or key external stakeholders, (2) **Tactical** – affecting multiple business units, and (3) **Operational** – affecting specific business processes within a given functional area. Indicate if there is a legislative or federal mandate associated with the project.

   Identify the key business objectives that must be addressed by the proposed project. Business objectives can be strategic, tactical, or operational in nature and correspond to the business needs in the same categories. Examples of strategic objectives are: (a) lower operational costs, (b) improved customer service. Examples of tactical objectives are: (a) increased access to data for stakeholders in a specific functional area, (b) improved coordination of services between business units. Examples of operational objectives are: (a) greater efficiency in a specific business process, (b) decreased reliance on staff time to perform specific functions.

8. Proposed High-Level Scope of Work (SOW): Provide a brief, high-level description of project scope, both what is in scope and what is out of scope. If possible, include expected major milestones and deliverables. If approved, this high-level SOW will form the basis of the project plan.
9. Constraints: Identify any known factors that may limit the project execution. Since constraints impact schedules and resource needs, these should be identified as early in the project request process as possible. For example, if a rule change has occurred that requires a system modification to comply by a known date, this can impact the priority, the schedule, and/or the number of resources planned for the project. **Identify any significant dates by which the project, or specific milestones, must be complete.**

10. Internal Priority: Number each request in priority order (1=High) with respect to other projects currently being requested by your division/office.

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SUBMIT DATA

- ADaPT has a finite lifespan
  - ~3 year for Access 2016
  - Need to look for alternatives
- Not just used by DWM – also DEP labs
  - Need to coordinate program-wide
- *** Need testsite/sample location forms to enter/submit location info
- Need to set up data verification tables in REDD
  - Lookup tables for STORET, qualifiers, valid testsites, etc.
- FY16-17 ESSA project request for submittal of EDDs w/upload to OCULUS
  - PIN compatibility – CROMMER
  - Verify complete/correct before allowing upload to OCULUS/DocLog workflow entry
  - How to manage resubmittals?

REVIEW DATA

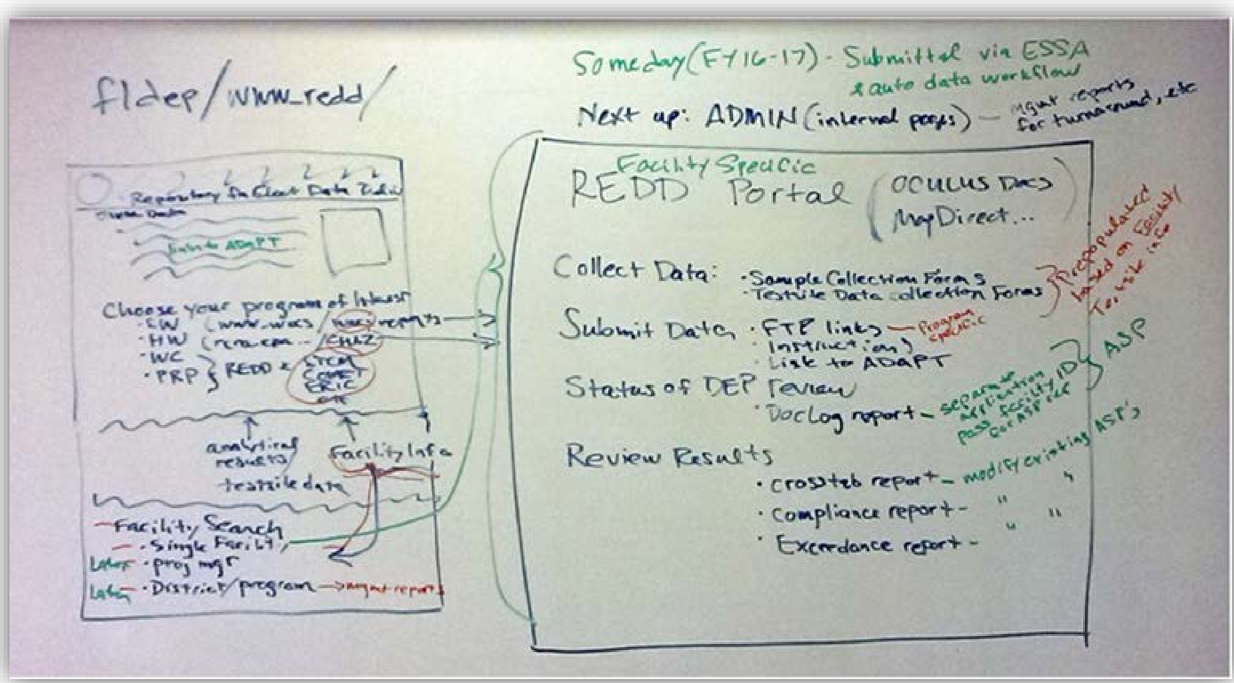
- Complete PRP DocLog/OCULUS link
- Create workflow for WCP
- Complete creation of OCULUS document review process
  - Automate re-indexing when DocLog workflow complete

UPLOAD DATA

- Build tables in REDD to accommodate sample types and locations for all programs
- Data verification tables
  - See "Submit Data"

REPORT DATA

- Rough (initial) mockup of REDD PHP Portal



Requirement to Sample/ Monitor	Submit Data	Review Data	Upload Data	Report Data
Solid Waste	• ADaPT EDD – Email/FTP/CD • Propose ESSA Capability FY2016-17	• ADaPT to review • Track w/DocLog	• <Export to FDEP database> • REDD → WACS o Testsites manually entered into WACS	Solid Waste and Hazardous Waste have similar reports: • DocLog ASPs – Track and review https://fldeploc.dep.state.fl.us/rcra_epa/DocLog/gwmrReport_02.asp • Completeness and Compliance ASP reports w/upload notification and validation • ASP reports to search for results/reports by facility Testsite Inventory Report Monitoring Testsite Results Regulatory Comparison • MapDirect GIS layer for testsites (SW only)
Haz Waste	• Mostly CD • Propose ESSA Capability FY2016-17	• ADaPT to review • Track w/DocLog	• <Export to FDEP database> • REDD → WACS o Testsites manually entered into WACS	
PRP	• FTP → OCULUS • Requirement for ATC o Check on non-program – Optional • Propose ESSA Capability FY2016-17	• ADaPT to Review • Tracking w/spreadsheets o Finalize DocLog updates • OCULUS Component o Store EDD pending review in Document_Review profile	• <Export to FDEP database> • REDD (monitoring results only) o Need REDD tables for testsite data	• DocLog ASPs • PHP report links under development by AMS (OTIS) staff
WCP & DBS	• FTP → OCULUS (optional w/o Field EDD) • Propose ESSA Capability FY2016-17	• Adapt EDDs not being reviewed • Implement DocLog and OCULUS updates similar to PRP	• Need new process to review and upload data to REDD	• Needs everything (no current process)
WCP Contractors	• GIS Tables for contractors required – via email or FTP o Need to transition fully into ADaPT/REDD • Propose ESSA Capability FY2016-17	• Manually processed through GIS Checker • Implement DocLog and OCULUS updates similar to PRP	• Manually load data into HWCField via load script o Need to transition to REDD process	• Can no longer report

REDD Development Status and Documentation

Continue development of Repository for Electronic Data Deliverables (REDD). A data repository has been established for all program analytical results. The next stage is to expand the repository to track monitoring site location and characteristics and develop web-based reporting to allow comprehensive presentation and analysis (e.g., trend evaluation, GIS mapping, etc.).

This project would be classified as tactical because it allows for improved reporting of field and analytical data for all DWM program areas, and has the potential to accommodate laboratory data submittals for the Air and Water Divisions. This project may also be classified as operational because it will result in more efficient reporting/evaluation of analytical results.

In the near term, create or specify a repository for ADaPT EDD and other monitoring data for PRP. We also need to further develop a consolidated Oracle-based data management system for all DWM program areas that includes a flexible import process for field and analytical data received as ADaPT EDDs and other formats with flexibility to support UIC or other groundwater and soil sampling ADaPT data imports needed for the Department.

The analytical results table is in production. Attached at the end of this form please find the most recent requirements summary for adding testsite inventory tracking capability.

The proposed unified Division workflow for the receipt of ADaPT EDDs/ (electronic data deliverables) incorporate the following applications, web reports and scripts.

ESSA
OCULUS
eDocument Log
ADaPT Processing and ftp
Scripts to upload data to REDD (and for HW and SW WACS).
REDD email notification
WACS email notification
PHP reports.

Solid and Hazardous Waste programs have been using ADaPT for 7 years. We want to improve upon and extend the work that SW and HW have developed with the eDocument Log, OCULUS, REDD, WACS, ASP PHP reports and automated email notifications to be consistently implemented across the entire Division using REDD (Repository of Electronic Data Deliverables). Currently REDD contains only a large table of ADaPT exported data with over 2 million records with improvements to the process.

We need to develop REDD into a complete database that integrates well with WACS, STCM, and ERIC. We are also proposing that a public internet-based portal page be developed for use labs and consultants to submit ADaPT EDDs; used by FDEP, delegated staff and private consultants to track the submittal and the processing of ADaPT EDDs; links to web based reports used by project managers and site managers to review groundwater, soil and air data.

Across the Division of Waste Management each program accepts ADaPT EDD (and depending upon the program accompanying associated Environmental Monitoring Reports) via either mail, email or ftp.

Some programs review and database the ADaPT data, others do not.

REDD Development Status and Documentation

Program	ADaPT Data Submittal	Correspondence	Database
HW - Hazardous Waste	Project Manager receives CD via snail mail	PM email or AdaPT.EDDs.and.Reports@dep.state.fl.us	Yes
PR - Petroleum Restoration	ftp://ftp.dep.state.fl.us/pub/incoming/OCULUS/PR_ADaPT/	PRP.ADaPT@dep.state.fl.us	Yes
SW - Solid Waste	AdaPT.EDDs.and.Reports@dep.state.fl.us or ftp://ftp.dep.state.fl.us/pub/WACS-ADaPT/EDDS_and_Reports	AdaPT.EDDs.and.Reports@dep.state.fl.us	Yes
WC - Waste Cleanup	ftp://ftp.dep.state.fl.us/pub/incoming/OCULUS/WC_ADaPT/	john.sykes@dep.state.fl.u s or Melanie.Sanders@dep.state.fl.us	No

For the PR and WC programs all ADaPT files are submitted via anonymous ftp. It is unknown who submits the files, who to contact when there are issues to resolve. Files are auto-inserted into OCULUS. For Solid Waste and Hazardous Waste files are usually emailed to a shared mailbox and manually inserted into OCULUS. Note: for HW and SW, ADaPT zip files and accompanying Monitoring Reports may be submitted via email or ftp, if via ftp we ask that an email indicating the submittal is also sent.

We want to unify how data is submitted to DWM by using the ESSA (business portable) for all programs to submit data. This is a separate OTIS project with its own SOW. Briefly a consultant, lab, county or site owner submitting ADaPT EDDs and corresponding Environmental Site Monitoring Reports would;

1. Log into the portal (a database report is generated identifying the submitter)
2. Identify the Program Area
3. Identify the facility
4. Identify the sampling event date (and possibly identify bureaucratic reason for monitoring)
5. Submit files through the web page via ftp that are uploaded to OCULUS
6. If this data has been previously submitted; the file submittal will not be allowed and they will be required to contact program area specific personnel preferably by a shared email mailbox.
7. Once a new sample event is confirmed by ESSA a new record is generated on the e-Document Log (an Oracle application that tracks the receipt and workflow for the processing of ADaPT EDDs. An email is sent to appropriate staff containing a link to this specific sampling event work-flow.

Currently only the Solid Waste and Hazardous Waste programs are using the eDoc Log. We are modifying the e-Document log to accommodate the PR and eventually the WC programs. We have developed an ASP report that FDEP and delegated staff can use to review the receipt and workflow for the processing of all ADaPT data. Depending upon the program when a new sample event (specific date of sampling for a specific facility) is created on the eDoc Log, an automated email is generated that includes a link to the workflow for that specific sampling event. Site supervisors, Project Managers, Compliance and Enforcement staff

Program	Proposed Email Recipients
HW	Bryan Baker's Tallahassee group, (already functioning)
PR	Site Supervisor(s), lookup from STCM
SW	Limited Tallahassee staff and specific District (and delegated county staff) depending upon the District location of the Solid waste facility. (already functioning)
WC	Project Manager(s) lookup from ERIC

REDD Development Status and Documentation

When ADaPT data is uploaded to REDD, emails are generated and emailed to permanent staff who oversee the processes (Karen Demirpolat, Clark Moore and Tayo Olayiwola). Emails are also sent to the person who uploaded the data to REDD using the ADaPT software. Currently this is a limited set of people in the Petroleum Restoration program. REDD email notifications fall into one of several categories with the appropriate ADaPT Export file status. The file status is based on a combination of all the individual Record valid data checks. The valid record check is a multiplier of all the individual specific data field validation checks. Individual data field validation is discussed later on.

REDD_File_Status	Description
R	RECEIVED: EDD has been received and loaded into the Repository, no validations have yet been performed.
F	FAILED: EDD has been received and loaded into the Repository however Validation has Failed.
V	FULL VALIDATION: EDD has been received and loaded into the Repository and all records have been successfully validated.
PV	PARTIAL VALIDATION: EDD has been received and loaded into the Repository and SOME records have been successfully validated, however some records failed validation.
E	FULL EXPORT: EDD has been received, loaded into the Repository, all records were successfully validated and all records were exported to the destination schema.
PE	PARTIAL EXPORT: EDD has been received, loaded into the Repository, SOME records were successfully validated and SOME records were exported to the destination schema.

Solid Waste and Hazardous Waste data uploaded to REDD is subsequently Exported to the WACS Oracle database. An augmented data verification is performed during this Export process which also includes Facility and Testsite association verification.

Possible REDD ADaPT EDD Emails regarding outcome of Upload to REDD process.
Validated:
Partial Validation:
Received Duplicate Data:
Exported:
Partial Export:
FAILURE: Invalid file name for EDD Production Repository Upload of File ADAPT20160307123028.csv

ADaPT export files that are uploaded to REDD may have a Fail status for several reasons,

1. if the Failure is due to complete "New Data?" verification = N for all records then an email indicating "Received Duplicate Data: Production Repository Upload for File ADAPTPR20160311104710.csv" is generated. In the body of the email the offending ADaPT lab EDD and Field EDD filenames are listed. PRP receives a number of these emails, once they start using ESSA along with the eDocument Log to trach the receipt of ADaPT EDDS; duplicate file submittals will be identified and eliminated.

2. In the event the Program Area is not recognized the upload process is halted and we receive an email similar to the following. "FAILURE: Invalid file name for EDD Production Repository Upload of File ADAPT20160307123028.csv". When the program area is NOT recognized the ftp site receives a file ADaPTYYYYMMDDHHMMSS.csv and ADaPTYYYYMMDDHHMMSS.md5. The first line of the csv file contains the following information;

3. EMAIL>Loury.Migliorelli@dep.state.fl.us</EMAIL><LAB EDD>8501972}{02-09-2016}{PRldd.txt</LAB EDD><FIELD EDD>8501972}{02-09-2016}{PRfdd.txt</FIELD EDD>

If we could include this first line from the ADaPTYYYYMMDDHHMMSS.csv file it would help greatly in identify9ng what files Adapt EDDs need correcting.
The alternative process is through an arduous process of eliminating what files are actually uploaded. I believe this would greatly help in the efficiency of identifying and correcting failed uploads.

These issues can occur when the ADaPT Project valid values is out of date.
The program area is identified using this table.

For the Solid and Hazardous Waste programs FDEP staff are already notified by email when data is uploaded to WACS. These emails include links to

a. ADaPT EDDs in OCULUS
b. WACS Compliance/Exceedance ASP report
c. WACS completeness ASP report

For the Petroleum Restoration program and the Waste Cleanup program we would like email notifications sent out to Site Supervisors (STCM) and Project Managers (ERIC) when ADaPT data is uploaded to REDD. WE would include links to;

a. ADaPT EDDs in OCULUS
b. REDD Compliance/Exceedance ASP report (including trend analysis)
c. REDD completeness ASP report

Brady Schmidt is currently developing PHP reports for REDD based on the existing WACS ASP reports mentioned above.

Brady,

To recap our phone conversation; the Compliance report looks good. In my opinion, to mimic earlier reports if you made the headings that are sortable look like hyperlinks, the sort option would be more obvious. Maybe this is no longer popular, of course I certainly am not aware of web page/report trends.

I noticed that the exceedance/compliance report shows results but does not apply any criteria. You mentioned that there was no way to select criteria. since the WACS report used the Testsite Inventory "Water Classification Code" to determine what criteria to apply. I believe in WACS the criteria are applied as follows.

Water Classification	Source	Criteria
G-II	4	Groundwater - CTLs: 62-777, F.A.C. (04/17/2005)
WS-IIIF	5	Surfacewater, Fresh - CTLs: 62-777, F.A.C. (04/17/2005)
SW-IIIM	6	Surfacewater, Marine - CTLs: 62-777, F.A.C. (04/17/2005)
Leachate	3	RCRA - TCLP Violation Limits: 40CFR261.24 rev. (07/01/1999)
Gas Condensate	3	RCRA - TCLP Violation Limits: 40CFR261.24 rev. (07/01/1999)

REDD Development Status and Documentation

For the proposed REDD Testsite Inventory we should change “Water Classification” to “Matrix Classification”. We can create codes for the six 62-777, F.A.C. Table II Soil Cleanup Target Levels (SCTLs). Especially for WC and PR we can then assign the appropriate SCTLs for each Facility/Site. In REDD I would also like to add column to the new REDD Matrix Classification Codes that would include the appropriate Water/Soil Criteria to apply.

For now, without a Monitoring Testsite Inventory in REDD the best we can do (which I think is worth developing) is to apply Criteria by Sample Matrix.

Matrix	Source	Criteria
W	4	Groundwater - CTLs: 62-777, F.A.C. (04/17/2005)
S	8	Direct Exposure - Residential - SCTLs: 62-777, F.A.C. (04/17/2005)

Most of the infrastructure for this report will have been developed, we only have to further differentiate the criteria to apply once the Testsite Inventory, matrix classification and other tables are created in REDD. Please let me know if you would like to discuss what I have proposed any further.

Thank you.
Clark Moore.

The WACS ASP and corresponding REDD PHP reports are briefly described.

The “Completeness report consists of a table that shows the results along with both Lab and FDEP (ADaPT_ assigned qualifiers for all reported analytes for all Monitoring Sites and Dates sampled. For the WACS Solid Waste Completeness report the WACS type Report field is used to match reported analytes to pre-defined (by 62-701 F.A.C) Analytes lists. All Analytes for the specific template are listed and any analytes not reported have null entries. Any additional analytes not found in the template are reported with the phrase “No Match”.

The “compliance”/” Exceedance” report which applies site specific criteria shows any results above the specific applied criteria or any results with lab or FDEP (ADaPT) assigned data QC qualifiers that have the potential to affect the quality of the data. We would like to add the addition of a link for any analyte listed in the compliance/exceedance report to show in a table all historic data for the specific Monitoring Testsite and analyte of interest. If possible for the PHP report, we would like to use a graphic application such as J-query to also show the results graphed. This link needs to be added to the WACS ASP report, WACS contains 24 years’ worth of Solid Waste Data, Redd contains only one year of data.

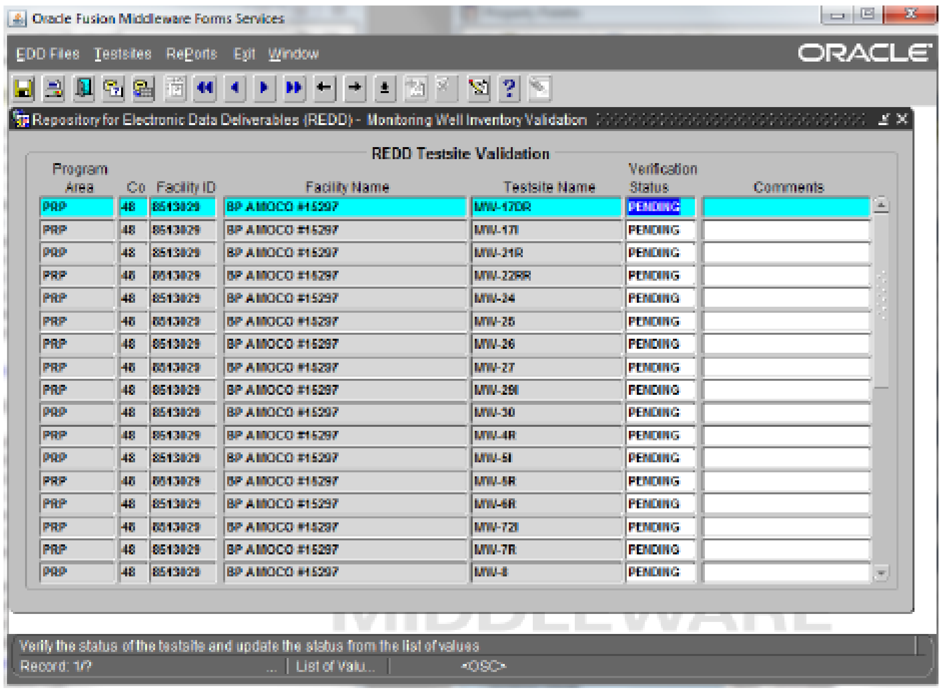
When ADaPT EDD Export Files are loaded into REDD, file information is loaded into table REDD.ADAPT_EDD_FILES and all records within the file are loaded into REDD.ADAPT_EDD_RECORDS. If the program area is identified as SW or HW then a database procedure stored in WACS is called and validates the records within the file and if validation is successful then another WACS database procedure is called and data is uploaded into the designated WACS tables.

If the program area is identified as PRP then a different process takes place. Currently there are no testsite IDs in the export files to perform validation.

REDD Development Status and Documentation

Originally it was suggested that the inventory be built based on the data received from the ADaPT export files. As testsites are validated they will be entered into the permanent table REDD.PCT_MONITOR_WELL_TESTSITES. If the testsite is not found, then a record is inserted into the REDD temporary table REDD.ADAPT_EDD_TESTSITE_TEMP for validation with an initial status of PENDING.

The Designated user(s) would access the REDD testsite validation screen which displays all testsites in the REDD.ADAPT_EDD_TESTSITE_TEMP table.


Oracle Fusion Middleware Forms Services

EDD Files Testsites RePorts Exit Window ORACLE

Repository for Electronic Data Deliverables (REDD) - Monitoring Well Inventory Validation

REDD Testsite Validation

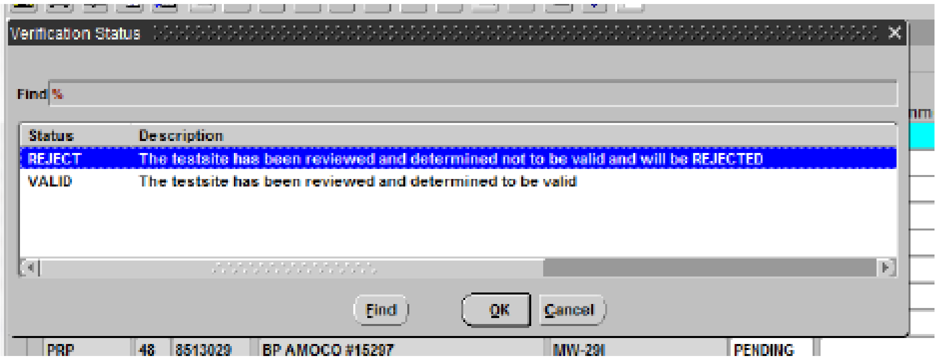
Program Area	Co	Facility ID	Facility Name	Testsite Name	Verification Status	Comments
PRP	48	8513029	BP AMOCO #15297	MW-17DR	PENDING	
PRP	48	8513029	BP AMOCO #15297	MW-17I	PENDING	
PRP	48	8513029	BP AMOCO #15297	MW-21R	PENDING	
PRP	48	8513029	BP AMOCO #15297	MW-22RR	PENDING	
PRP	48	8513029	BP AMOCO #15297	MW-24	PENDING	
PRP	48	8513029	BP AMOCO #15297	MW-25	PENDING	
PRP	48	8513029	BP AMOCO #15297	MW-26	PENDING	
PRP	48	8513029	BP AMOCO #15297	MW-27	PENDING	
PRP	48	8513029	BP AMOCO #15297	MW-29I	PENDING	
PRP	48	8513029	BP AMOCO #15297	MW-30	PENDING	
PRP	48	8513029	BP AMOCO #15297	MW-4R	PENDING	
PRP	48	8513029	BP AMOCO #15297	MW-5I	PENDING	
PRP	48	8513029	BP AMOCO #15297	MW-5R	PENDING	
PRP	48	8513029	BP AMOCO #15297	MW-6R	PENDING	
PRP	48	8513029	BP AMOCO #15297	MW-7I	PENDING	
PRP	48	8513029	BP AMOCO #15297	MW-7R	PENDING	
PRP	48	8513029	BP AMOCO #15297	MW-8	PENDING	

Verify the status of the testsite and update the status from the list of values

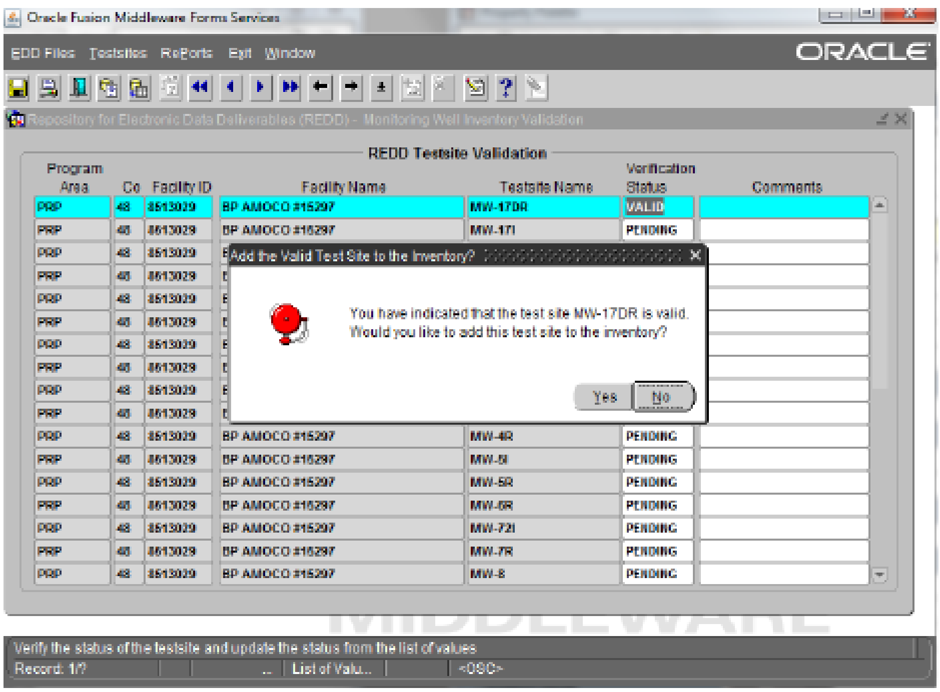
Record: 1/? ... | List of Valu... | <OSC>

The current plan is to have PRP consultants fill out fillable PDF forms for existing Monitoring Testsites for existing facility wells to submit to the department. The Monitoring well information can be automatically extracted and uploaded to a temporary REDD Monitoring Testsite table. FDEP and contracted Site supervisors can then verify each monitoring well in REDD and the well is moved to a permanent Monitoring Well Testsite Inventory Table. Wells will be checked for proper names, latt-longs and physical well construction details.

The user would update the status from PENDING to either VALID or REJECT.

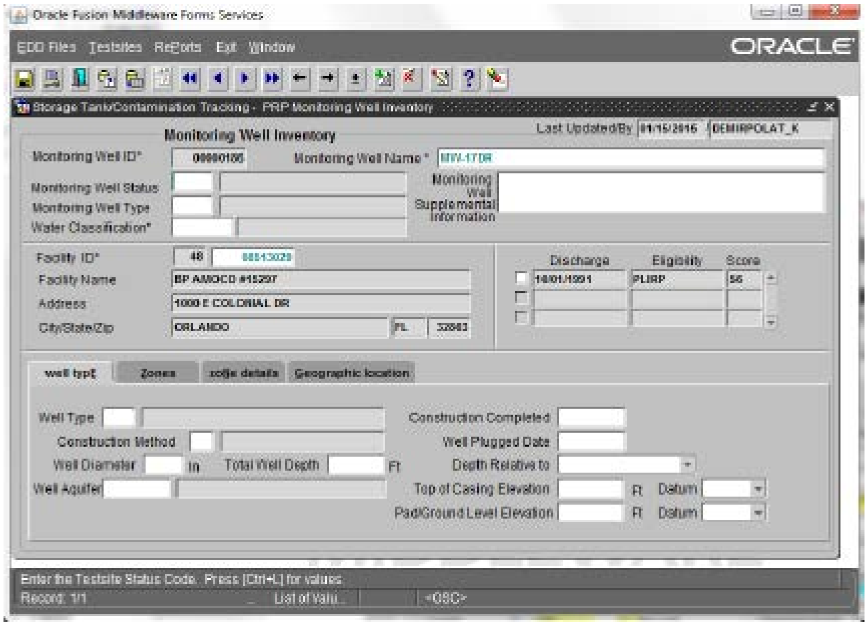


If the status is set to REJECT then the user will be required to document the reason in the comments field and that record will remain in the table so this process will not need to be repeated if additional data comes in on an EDD for the same testsite.
When the status is set to VALID and the user commits, they will receive a confirmation alert message

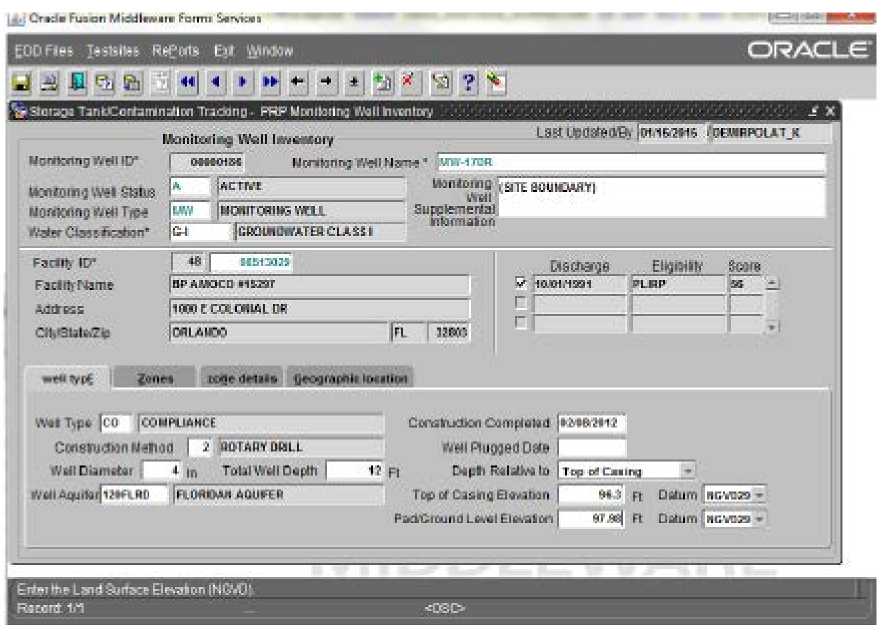


If they click the Yes button to confirm, then
- the testsite is assigned an ID in REDD.PCT_MONITOR_WELL_TESTSITES
- EDD records in REDD.ADAPT_EDD_RECORDS for the testsite are updated with the new ID in ADAPT_EDD_RECORDS table
- the REDD.ADAPT_EDD_FILES processing comments field is updated with a reference to the testsite validation
- the record is deleted from the REDD.ADAPT_EDD_TESTSITE_TEMP table
- Navigation is transferred to the data entry screen for the monitor well testsite to complete entry of the remaining fields.

When Navigation is set to the data entry screen, the new testsite is automatically queried and ready for the additional data entry to be performed. These screen shots and the table structure have been modeled after the WACS design. PRP staff need to determine whether this model fits their needs or identify what changes are needed.

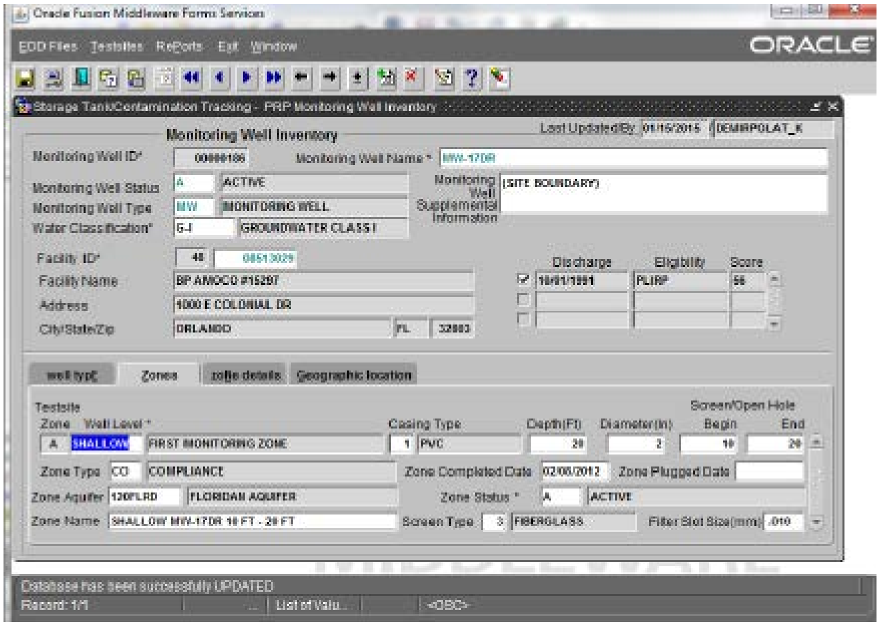


Additional data has been populated on the startup screen.

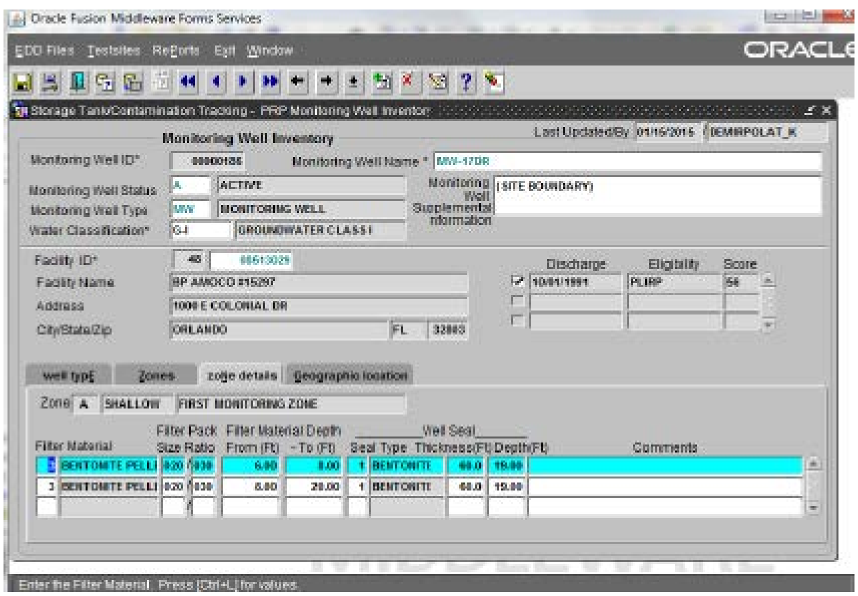


Additional data has been entered for the Zone.

REDD Development Status and Documentation

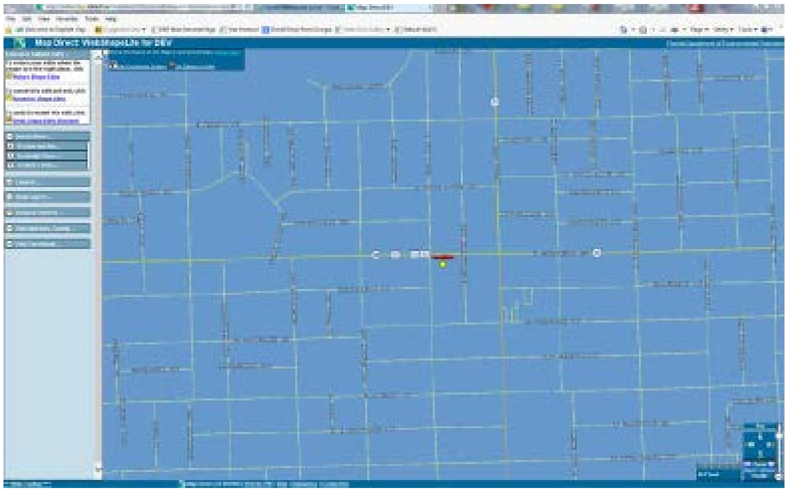


Additional data has been entered for the Zone Details

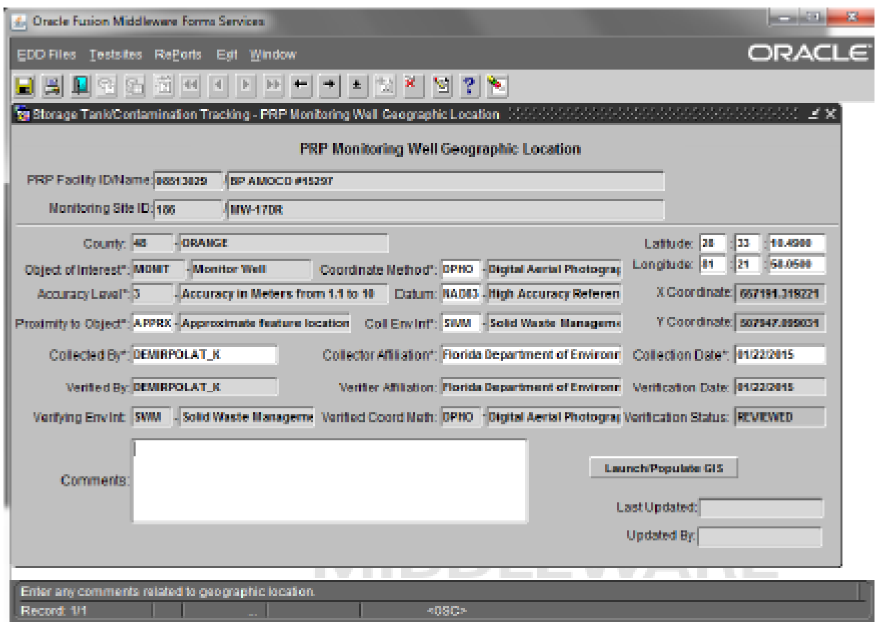


Navigating to the Geographic Location screen initially populates the lat/longs with the facility lat/longs pulled from STCM.

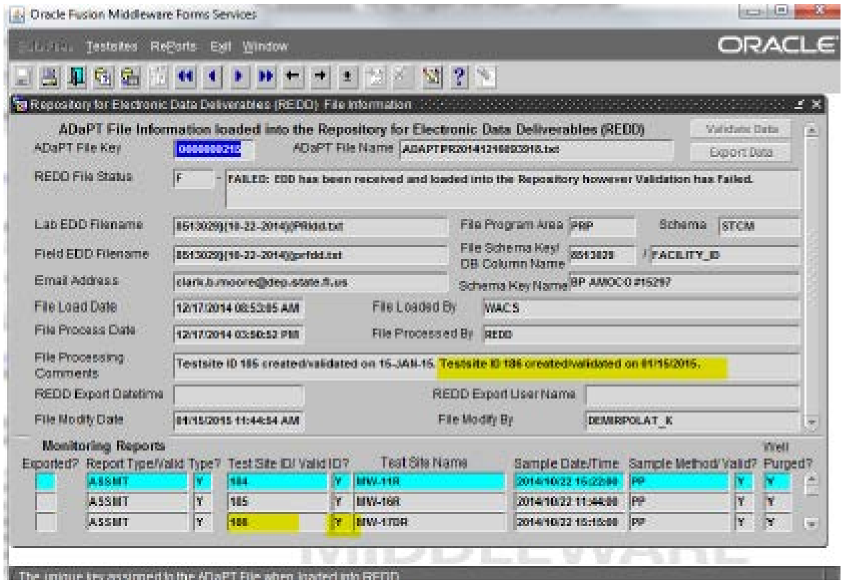
REDD Development Status and Documentation



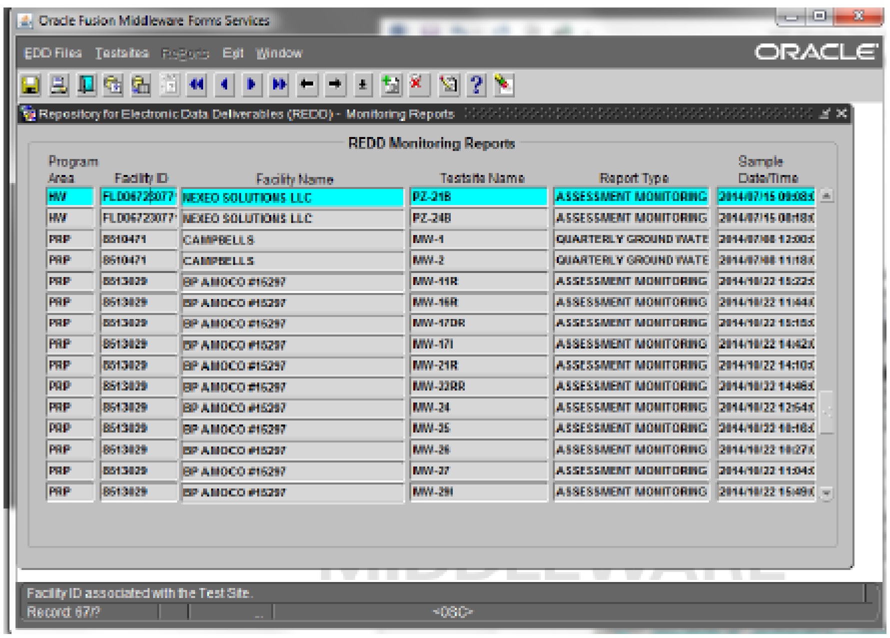
Clicking on the return from WebShapeLite returns navigation to the oracle form and clicking on the "Launch/Populate GIS" button will populate the coordinates and verification fields.



Screen shot showing updates to the File Processing Comments, Testsite ID and Testsite Valid Indicator for a testsite that was validated from the validation screen and added to the permanent table.



Screen shot showing a query screen displaying reports loaded into REDD



Constraints

Constraints depend upon some decision making.
When data is uploaded to REDD data is Validated, numerous checks are performed on specific data fields. currently for Solid and Hazardous Waste, Facility ID and Monitoring Testsite associations are also checked. We need to build the Monitoring Testsite Inventory into REDD for both Petroleum Cleanup and

various Waste Cleanup programs. The question is, do we want to validate Facility and Testsite IDs against WACS or REDD tables for Solid Waste and Hazardous Waste programs. For HW and SW I think it is most efficient to verify data against WACS and not have to copy data from WACS to REDD. The verification queries are merely run using different tables for SW and HW vs. PR and WC. This eliminates the issue of depending upon and further bogging down nightly table refresh processes. In the future if one would like all Monitoring Testsite information to reside in REDD, one would have to change all Monitoring Testsite related forms in WACS to access REDD tables. REDD table update permissions through Oracle forms would have to be granted to all WACS_Clerk and WACS_Admin user roles so that Tallahassee and District Solid Waste staff and Tallahassee Hazardous Waste staff could seamlessly maintain the HW and SW Facility Monitoring Testsite Inventory.

Additionally, the following WACS tables are used to verify data uploaded to REDD for HW, PR SW and WC. (I have successfully uploaded WC lab data to REDD without any field EDDs). We may consider verifying data for the upload to REDD using newly created REDD tables.

Data Validation	ADaPT (export)	WACS (import to WACS and REDD)
Facility/Testsite Valid? (SW & HW; add for PR and WC)	tblWacs_Svl_SolidWaste_Testsite_Inventory	WACS_SNAP.MONITOR_WELL_TESTSITES
Sample Type Valid?	tblWacs_Svl_Sample_Type_Codes	WACS_SNAP.WACS_SAMPLE_TYPE_CODES
Storet Valid?	TblWACS_STORET_Numbers	WACS_SNAP.STORET_NUMBER_CODES
Qualifier Valid?	tblSvlLabQualifiers and tblWacs_Svl_Field_Parameter_Qualifier_Code	WACS_SNAP.TEST_REMARK_TYPE_CODES
Report Type Valid?	tblWacs_Svl_Report_Type	WACS_SNAP.WACS_REPORT_TYPE_CODES

Which tables do we want to copy over to REDD?
Copying tables over from WACS to REDD means that we are dependent upon overtaxed nightly refreshes.
The STORET code table in WACS contains many historic STORET codes and STORET codes used by UIC. UIC uses STORET codes with multiple units for the same analyte and matrix. I suggest we import and maintain only ADaPT STORET codes in REDD. When STORET codes are added to ADaPT, they must then be added to both REDD and WACS. This is a bit intensive, but WACS is used by other programs that need their own STORET codes.
The other tables are quite static and could be copied from WACS to REDD.
an important verification that ADaPT rarely but still does miss is the "Qualifier verification?".
ADaPT looks at data qualifiers on an individual basis.
WACS verifies the Qualifiers based on their combination.
There are qualifier combinations that are occasionally reported that are NOT valid.