eSMR Re-Design

DISCHARGER SUBMISSION
Task Order 2
Version 1.0

Request Date: January 7, 2008
Module:

☐	General/Other	☐	Administration and Security	☐	Places
☐	Parties	☐	Regulatory Measures	☐	Inspections
☐	Allegations and Violations	☐	Enforcement	☐	Invoices and Payments
☒	Self Monitoring Reports	☐	Compliance Checks	☐	GeoWBS

Description:

These functions allow dischargers to submit electronic data into CIWQS. CIWQS currently has this functionality but it was not implemented with correct functionality. Currently, there are missing drop-down values, poor work flow, and missing functionality. These inconsistencies are not allowing the dischargers to submit their Self-Monitoring Reports electronically.

Level of Effort Estimate:

Hours	Rate	Total Hours	Total Estimated Cost
TBD	TBD	TBD	TBD

		Date
☒	Approved by CIWQS Executive Team	11/16/2007
☐	Approved Requirements	
☐	Approved Design	
☐	Approved Technical Approach	
☐	Tested and Approved Test Environment Implementation	
☐	Tested and Approved Production Environment Implementation	
☐	Task Order Complete	

Change Record

Date	Author	Version	Change Reference
1/7/08	Ron Robinette	1.0	No previous document.

Current Functionality:

Business Requirements (Desired Functionality):
The following major business functional requirements have been identified during the information collection associated with this task order. The columns are defined as follows:

- ➢ Requirement type:
    - ■ Functional: A capability the application must be able to perform
    - ■ Report/Query: The ability to produce a formatted electronic and/or hard copy report or an online query of the information
    - ■ Interface: The ability to communicate with another application or system
    - ■ Security: A system feature that contributes to securing the application as required by SWRCB security policy
    - ■ Architecture: An attribute of the technical architecture, platform, and/or development tool set must be complied with
    - ■ Implementation: An aspect of the implementation process that must be completed

- ➢ Functional area – This column describes the portion of the eSMR process that is the focus of the requirement. "General" refers to requirements that apply to the program as a whole or are not applied to a particular area.
- ➢ Requirement – This column provides a narrative description of each requirement
- ➢ Source – This column notes where the information that led to the requirement was captured

Requirement Type	Functional Area	Requirement	Source
Functional	Data Summary	DNQ results -- the Data Summary does not display DNQ as the result when the estimated concentration is in the DNQ range. As a side note, the discharger should not have to indicate that a result is DNQ. The discharger should upload the result value, MDL, RML and ML, and the CIWQS database should determine whether the result value is in the DNQ range, then display DNQ as the result, along with the estimated concentration.	eSMR User Group
Functional	Data Summary	ML and RML values -- the Data Summary does not have a column to display both ML and RML values as required by the permits. It only has a column for ML. However, the permits require that both ML and RML (ML * dilution/concentration factor) be reported, and that RML is used as the upper limit of the DNQ range.	eSMR User Group
Functional	Data Summary	Minimum Sampling Frequency column -- inaccurately displays "1/Day" for all results uploaded through CDF/EDF. Needs to display the proper minimum	eSMR User Group

Requirement Type	Functional Area	Requirement	Source
		sampling frequency from the permit requirements (1/month, 1/quarter, etc.). This also needs to work correctly for data that is submitted more frequently than required.	
Functional	Data Summary	Sample Type column -- inaccurately displays "Single" for all results uploaded through CDF/EDF. Needs to display proper sample type (24-hr Composite, Grab, Continuous, etc.) from the permit requirements.	eSMR User Group
Functional	Data Summary	Result Column -- inaccurately displays the "estimated concentration" in the Result Column when a result is in the DNQ range. The result is either ND, DNQ or a quantified number. The estimated concentration underlying DNQ is not the result, and technically should not be in the Result column (even though it may be stored in the Result field in the database). It may be convenient from a programming point of view to keep the "estimated concentration" in the Result column, and have DNQ in a separate column. However, it is necessary to make it obvious that DNQ is the result, and the "estimated concentration" is not the result. Therefore, the column with DNQ should be immediately adjacent to the Result column, and the column headings should be changed to more accurately reflect the data found in those columns.	eSMR User Group
Functional	Error Check	Does not recognize weekly results taken at the end of the previous month	eSMR User Group
Functional	Error Check	Does not recognize DNQ results in compliance calculations	eSMR User Group
Functional	Error Check	Does not switch from Average to Median when ND or DNQ results are present in the data set (as specified by the permits)	eSMR User Group
Functional	All	Frame header information	eSMR User Group
Functional	Data Summary	No discharge calendar to allow choice of discharge days	eSMR User Group
Functional	Data Summary	Don't allow duplicate samples (same parameter/time, etc.)	eSMR User Group
Functional	Data Summary	NO Ability to edit submission on data summary screen	eSMR User Group
Functional	Data Summary	Data summary screen should be sortable and able to export to Excel	eSMR User Group
Functional	Error Check	Error check should check: report is on time, exceedances, enough sampling o Better description of errors, offered explanation of where error occurred, make it easier to	eSMR User Group

Requirement Type	Functional Area	Requirement	Source
		decipher and correct ○ Multiple error from same constituent, doesn't specify what limitation is in non-compliance ○ Overlapping weeks ○ (Don action item)**Accelerated testing, now testing weekly instead of monthly ▪ Narratives?, ability to describe a record as an accelerated data point ○ sample semi-annual req's ahead of time ○ Detail the business rules contained in the error checker	
Report/Query		Discharger should get a "feedback" report to tell them what happens to violations ○ Status of report review by case worker ○ Agreement or not agreement, which ones actually turned into violations	eSMR User Group
Implementation		Protocol of case worker ▪ What they are required to do	eSMR User Group

Technical Requirements:
1. The system must implement the correct data mapping and usage of EDM.
2. The system must make clear distinction between database objects and avoid creating unnecessary duplicate records.
3. The developers must work with the DIT data modelers and DBAs to develop any necessary changes to the EDM and CIWQS database to support SMR functionality.
4. Coding should not start until the technical approach is documented and approved by DIT.

Design:
To Be Determined.

Technical Approach:
To Be Determined.
This section should include:
1. Data Mapping
2. Data Maintenance Rules (page rules to insert, update, delete)
3. Data Structure Impact
4. Pages Modified
5. Design Mock up