California Integrated Water Quality System (CIWQS) and Electronic Self Monitoring Reports (eSMR)
What we will cover today

- Brief Introduction to CI WQS
- eSMR
- Using the Report Builder Module
  - Numeric requirements, converting data, data submission, etc.
- Walkthrough of data conversion tool
What is CI WQS?

- Web access to:
  - Locations (facilities) of interest
  - Associated people and organizations
  - Orders (e.g., permits), including requirements and limits
  - Inspection scheduling and results tracking
  - Violation management
  - Enforcement Action development and tracking
  - Penalties and invoices
- Allows Dischargers to electronically submit *self monitoring reports*
- Share data with the State financial system (AFBS) and USEPA IDEF/PCS
- Desktop-based and Web-Based GIS module
- Integrates functionality of existing SWRCB systems and adds new functionality
- Dischargers will initially have access to only eSMR module
CI WQS

• “Integrated”
  - CI WQS integrates
    • Permit requirements with
    • The “place” with
    • The “people” with
    • The SMR (self monitoring report)
  - CI WQS does not automatically issue a notice of violation and fine
    • All “allegations” must be reviewed by Board staff
CIWQS Help Center

• SWRCB has created the CIWQS Help Center
  - Web Site
  - Phone Support
  - Outreach Materials and Training

• [http://www.waterboards.ca.gov/ciwqs/index.html](http://www.waterboards.ca.gov/ciwqs/index.html)

• 1-866-79-CIWQS (M-F, 8-5)

• Help Center is also Processing DMR’s

• List Server available at -
  [http://www.waterboards.ca.gov/lyrisforms/swrcb_subscribe.html](http://www.waterboards.ca.gov/lyrisforms/swrcb_subscribe.html)
What is eSMR?

• Electronically submit SMR
• Based on permit requirements loaded into CI WQS
• Provides an “error check” to pre-determine potential non-compliance
• Includes security: only authorized users can view/enter data
Using CIWQS

- Dischargers will see two modules on their Main Page
  - Submit/Review a Self Monitoring Report (SMR)
  - View/Change My Personal Information
Select Facility

Select the facility for which you are submitting this Self Monitoring Report

<table>
<thead>
<tr>
<th>Facility</th>
<th>Facility Physical Address</th>
<th>Responsible Agency Name</th>
<th>Case Worker Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>So and so Treatment Plant</td>
<td>999 Industrial Park Way, Somewhere, CA 00000-0000</td>
<td>Discharger ABC</td>
<td>John Doe</td>
</tr>
</tbody>
</table>
Select Order

California Integrated Water Quality System (CIWQS) - Microsoft Internet Explorer

Logged in as: Gustavo Lopez
Module: Submit/Review a Self Monitoring Report (SMR)

Select the order that details the requirements for this Self Monitoring Report

- Show Effective
- Show All

<table>
<thead>
<tr>
<th>Order Number</th>
<th>Program</th>
<th>Effective Dates</th>
<th>View all Requirements for this Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>R2-WIP-123</td>
<td>NPDES</td>
<td>02/01/2004 - 01/31/2009</td>
<td></td>
</tr>
<tr>
<td>R1-QPD-083</td>
<td>NPDES</td>
<td>02/01/2004 - 01/31/2009</td>
<td></td>
</tr>
<tr>
<td>R4-RSM-492</td>
<td>NPDES</td>
<td>02/01/2004 - 01/31/2009</td>
<td></td>
</tr>
</tbody>
</table>
Select Report Screen

- You can view submitted, past-due, current, and future reports

<table>
<thead>
<tr>
<th>Due Date</th>
<th>Report Name</th>
<th>Reporting Period</th>
<th>Status</th>
<th>Date Submitted</th>
<th>Archived Reports</th>
<th>Submission Withdrawal</th>
</tr>
</thead>
</table>
Report Builder Screen

- **View Requirements**
  - Report of requirements to be reported on in this SMR
- **No Discharge**
  - Report locations without discharge during reporting period
- **Narrative**
  - Report compliance for narrative requirements (yes, no, n/a)
- **Pre-Calculated, CDF, EDF, Raw Data**
  - Report compliance for limit/monitoring requirements
- **Data Summary**
  - View all of your data before submission
- **File Attachments**
  - Attach supporting information to submission
- **Error Check**
  - Check for potential errors and non-compliance in submission
- **Cover Letter**
  - Prepare submission cover letter, certify/sign, and submit
Reporting Your Requirements

• Narrative
  – Narrative tab

• Numeric
  – Pre-calculated tab
  – Raw Data tab
  – EDF/CDF tab
Numeric Requirements

• In most cases, CI WQS can run calculations and determine compliance based on sample data.

• In some cases, the limit is not a fixed number (e.g., dependant on pH, temperature, or an external factor) and the limit must be reported, as well as the result (use the “pre-calculated” screen).

• In some cases, it is not feasible for CI WQS to compute the “summary” value based on raw data (use the “pre-calculated” screen).
Pre-Calculated Screen

Enter calculated values for each of the line items listed under each monitoring location.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Bound</th>
<th>Limit</th>
<th>Units</th>
<th>Result</th>
<th>Units</th>
<th>Comments</th>
<th>Requirement Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia, Total</td>
<td>&lt;=</td>
<td></td>
<td>mg/l</td>
<td></td>
<td>mg/l</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Options for Entering Numeric Data

• Raw Data Screen
• CI WQS Data Format (CDF)
• Electronic Deliverable Format (EDF)
• Combination
## Report Builder – Raw Data

Enter measured sample values for each of the line items listed under each monitoring location.

**Select a sampling event datetime:** 2/1/2004 at 03:00:00  or  **Create New**

**Monitoring Location:** M1

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Minimum Sampling Frequency</th>
<th>Sample Type</th>
<th>Sample Medium</th>
<th>Result</th>
<th>Units</th>
<th>Analytical Method</th>
<th>Method Detection Limit (Optional)</th>
<th>Non-Detect?</th>
<th>Minimum Level (Optional)</th>
<th>Sample Analysis Data (Optional)</th>
<th>Sample Analysis Time (Optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>Daily</td>
<td>Grab</td>
<td>Soil</td>
<td></td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead</td>
<td>Daily</td>
<td>Grab</td>
<td>Fish Tissue</td>
<td></td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zinc</td>
<td>Daily</td>
<td>Grab</td>
<td>Water</td>
<td></td>
<td>mg/L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Save**
CIWQS Required Data Fields

- Monitoring location
- Scenario (if applicable)
  - A Scenario ID is applicable only if the NPDES Permit specifies a scenario in which samples are to be taken or analyzed.
  - Examples of Scenario IDs are “Dilution <20:1” and “Dilution >=20:1”
- Sample collection date
- Sample collection time
- Sample medium
- Analytical method
- Sample analysis date
- Parameter concentration (if applicable)
  - Dissolved, Total Recoverable, Total
CIWQS Required Data Fields

• Parameter
• Analytical result
• Analytical result qualifier (= or <)
• Analytical Method Detection Limit (MDL)
• Minimum Level (ML) (if detected, but not quantified)
  - If the parameter is detected but not quantified (DNQ), choose “=” in the Analytical Result Qualifier section and enter the minimum level (ML) in the Minimum Level (ML) section.
  - If the sample result is non-detect (ND), enter the method detection limit (MDL) and choose “<” in the Analytical Result Qualifier section.
• Units
CIWQS Data Format Benefits

- For those that want an easy way to convert Excel files to a format that CIWQS accepts
- Excel-based tool
- Only has the 14 required fields required by CIWQS
- Create a ZIP file with a general information file (.txt) and a comma-separated values (.CSV) file
- Dischargers can create a template
- Still uses EDF format (fields/columns and valid values)
- We’ll do a demonstration at the end of this presentation
The Electronic Deliverable Format

- Developed by Arsenault Legg, inc.
- Originally for the Corps of Engineers
- Used by SWRCB for GeoTracker (UST)
- ASCII-based format, compressed with ZIP
- Free tools are available from Arsenault Legg to import from certain other formats and validate data
- Requires the use of pre-defined “code” values
- Some LIMS include EDF export capability (check with your vendor)
Sample data can be uploaded through the raw data entry screen or as an EDF or CDF file or a combination of all three formats.

Multiple EDF or CDF files may be uploaded for each SMR submission.

If you want, you can authorize your lab to upload EDF or CDF files on your behalf. You will still be able to review the data before certification and submission.
### Sample Data Summary Screen

#### Main Menu | Online Help | Log out

Logged in as: Guadalupe Lopez

**Module:** Sample Data Summary - Water Board Data

**View Requirements | Run Discharge | Narrative | Pre-Calculated | EOF | Data Summary | File Attachments**

This page displays a summary of the sample data that you have submitted through the application.

<table>
<thead>
<tr>
<th>Monitoring Location</th>
<th>Parameter</th>
<th>Min/Max Chronology</th>
<th>Sample Type</th>
<th>Sample Medium</th>
<th>Result</th>
<th>Units</th>
<th>Analytical Method</th>
<th>Detection Limit</th>
<th>Notes</th>
<th>Minimum Value</th>
<th>Sample Date</th>
<th>Sample Time</th>
<th>Sample Analysis Date</th>
<th>Sample Analysis Time</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD</td>
<td>COPPER, DISSOLVED</td>
<td>Daily</td>
<td>Soil</td>
<td>0.025 m.g.</td>
<td>25-05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>02/23/2004</td>
<td>01:24:00PM</td>
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</tr>
</tbody>
</table>

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**URL:** http://carmel.water.ca.gov - California Integrated Water Quality System (CIWQS) - Microsoft Internet Explorer
Be Prepared – Think Ahead

• Your monitoring points will receive identifiers:
  - Influent (M-INF or M-INFA, M-INFB...)
  - Effluent (M-001, M-002... or M-001A, M-001B...)
  - Internal (M-INT or M-INTA, M-INTB...)
  - Surface Water (R-001, R-002...)
  - Upstream Surface Water (R-001U, R-002U...)
  - Downstream Surface Water (R-001D, R-002D...)

• Inform your lab and make the changes within your process and records!

• Your requirements will match your Monitoring and Reporting Program (MRP)
  - Check the CIWQS web site for policy statements regarding DNQ, continuous monitoring, code values, etc.