System Requirements

EPA has provided the accompanying Microsoft Access© database (BeachMonitoring.mdb) to provide participating States with an opportunity to convert their beach monitoring data into XML format. To use the XML creation capabilities of the database, you must have Microsoft Access 2000© (or a more recent version). You must also download Microsoft's MSXML 4.0 Service Pack 2 from the Microsoft website (www.microsoft.com) and install in on each computer that you wish to run the database.

Detailed instruction for the setup and delivery of Monitoring data can be found in the Beach Monitoring Data User Guide and the Beach

Monitoring Data Reference Guide. The Beach Monitoring Data User Guide contains instructions on using the Beach Monitoring database. The Beach Monitoring Data Reference Guide contains very detailed information about each column in the Beach Monitoring database. Additional information about WQX can be found on the EPA's WQX website: http://www.epa.gov/storet/wqx.html

Use of Exchange Network Node

Please note, this database has been provided to create XML data for submission to the WQX database. Users in need of a more permanent solution should consider uploading data through their states Exchange Network Node. See <u>http://www.exchangenetwork.net</u> for more information.

Choosing the Data to be Sent to EPA

Many tables in the Beach Monitoring database contain the column SEND_TO_EPA

- If the SEND_TO_EPA column contains a check in the checkbox, the record will be included in the XML file. If the record is not marked with a check in the checkbox, then the XML document will not contain the information in the record.
- Uncheck the SEND_TO_EPA column if the information has already been submitted and does not need to be updated.
- Marking records as sent reduces the size of submission files and reduces the amount of time required to process the data.

Data Relationships

Users must ensure the correct relationships exist between the data:

- Each table used to enter data has at least one column that ends with "_UID"
- One of those columns is the Unique Identifier for each row in that table and is Auto-numbered.

- The others are columns that use the Unique Identifiers established in other tables to associate two pieces of data.
- For example, the Unique Identifier, or "key", established in the ORGANZIATION table is used in the ORG_PHONE table to relate many phone numbers to one organization.

Entering Data

4 methods exist to enter data into the Access database

- Enter the data by hand using either the spreadsheet view provided by Access.
- Copy and paste data into the Access tables by copying the source data to the clipboard (the columns should line up exactly in the source file), opening the desired table, highlighting the entire row (right-click the arrow or star on the blank row at the bottom of the table), and selecting paste. This process may be done with multiple copied rows at the same time.
- Setup a Microsoft Excel file with individual worksheets for each table in the Access database. The columns in the Excel file should match the table column names. Once the spreadsheet is populated with data, you may choose File -> Get External Data -> Import to select the Excel file, the appropriate worksheet, and the existing table.
- **Import your data** as separately named tables in the Access file. You may then query columns from the new table(s) that match the desired table columns. Copy and paste the results of the query into the provided Access table.

Creating XML Documents

To convert the data into an XML document:

- Open the Generate Insert/Update XML form.
- Enter your information and select which data you would like to exclude (if any).
- Click Generate XML.
- Enter a name and location for the destination file.
- Click the 'Save' Button.
- The XML document will be saved in the specified path.

For more detailed information about creating XML documents, consult the *Beach Monitoring Data Users Guide*.

<u>Note:</u> The XML creation will not work if the existing table or column names are changed or removed. You may feel free to add more columns to the database if you like (e.g., to track internal tracking codes), however do not change the names or remove of the existing columns.