

## QUICK REFERENCE GUIDE TO THE BEACH MONITORING ACCESS© DATABASE

### **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 file, 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](http://www.microsoft.com)) and install it on each computer that you wish to run the file.

### **Detailed instruction for the setup and delivery of specific Monitoring data elements can be found in the Beach Monitoring Data User Guide.**

This document includes the mandatory codes that must be submitted for columns such as Sampled Matrix Name and Relative Depth Indicator Code. It also describes the business rules used to validate the data. Additionally, <http://www.epa.gov/storet/descript.html> describes the concepts behind the decomposition of the monitoring data

### **Use of Local STORET**

Please note, this database has been provided to create XML data for eventual inclusion in a copy of the STORET database. Users in need of a more permanent solution should consider using the free, local version of STORET to upload their data. See <http://www.epa.gov/storet/> for more information.

### **Choosing the Data to be Sent to EPA**

The Trip, Station Visit, Field Activity, and Result tables contain the column SEND\_TO\_EPA

- If the SEND\_TO\_EPA column contains a 'Y', the record will be included in the XML file. If the record is marked 'N', then the XML document will not contain the information in the record.
- Mark the SEND\_TO\_EPA column 'N' if the information has already been submitted and does not need to be updated.
- Marking records as sent prevents duplication and will help ensure proper XML document formation.

### **Relationships & How to Use the Assign Tables**

Users must ensure the correct relationships exist between the data:

- Columns that are labeled beginning with "FK\_" are columns that use the identifiers established in other tables to associate two pieces of data.
- For example, the identifier, or "key", established in the Trip table is used in the Station Visit table to relate many station visits to one trip.

- To visualize the relationships between the tables, select Tools -> Relationships from the menu or open the Report on relationships.

### **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, or the Form labeled BEACH MONITORING DATA.
- **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 in any order. 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. Ensure the IDs match the FK\_IDs to align the data appropriately.
- **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:

- Run the macro named "Generate Beach Monitoring XML"
- Enter an appropriate name and location for the destination file.
- Click the 'Save' Button.
- The XML document will be saved in the specified path.

**Note:** The XML creation script (modGenerateXML) will not work if the existing table or column names are changed. 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 of the existing columns.