**Susitna-Watana Hydroelectric Project**

**2013 Focus Area Methyl Mercury Study**

**Data Dictionary**

Focus Area methyl mercury water quality samples were collected continuously for a four week period at monitoring sites along the Susitna River in July through August 2013. This document describes the standard abbreviations used in the MS Excel database used to assemble tables and graphs and to report values. Further, it describes the nomenclature for labeling sample bottles and identifying sample locations. The focus area methyl mercury water quality data, formatted per AEA project data guidelines (April 2013), is described in the following sections. Each section corresponds to the column heading in the Excel database.

# CLIENT\_ID

Gives the name of the client for which the lab data is being analyzed.

### Lab\_Name

Gives the name of the lab analyzing the data.

### PROJECT\_ID

This field reports the name of the project that corresponds to the analyzed results.

### SGS\_SDG

This field gives the SGS SDG number that the Brooks and Rand MeHg analyses correspond to.

###  Work Order

This field gives the word order number corresponding to the samples analyzed.

### Sample Tag

This field gives the sample number corresponding to each work order number.

# GPS\_Coord\_LB\_Latitude

This field gives the global positioning system (GPS) latitude (WGS 84) for the transect end point location where samples were collected. Coordinates were taken with a handheld Garmin GPS unit from the left bank (LB).

# GPS\_Coord\_LB\_Longitude

This field gives the global positioning system (GPS) longitude (WGS 84) for the transect end point location where samples were collected. Coordinates were taken with a handheld Garmin GPS unit from the left bank (LB).

# GPS\_Coord\_RB\_Latitude

This field gives the global positioning system (GPS) latitude (WGS 84) for the transect end point location where samples were collected. Coordinates were taken with a handheld Garmin GPS unit from the right bank (RB).

# GPS\_Coord\_RB\_Longitude

This field gives the global positioning system (GPS) longitude (WGS 84) for the transect end point location where samples were collected. Coordinates were taken with a handheld Garmin GPS unit from the right bank (RB).

# GPS\_Coord\_PT\_Latitude

This field gives the global position system (GPS) latitude (WGS 84) for the point sample location. Coordinates were taken with a handheld Garmin GPS unit at the location of the point sample.

# GPS\_Coord\_PT\_Longitude

This field gives the global position system (GPS) longitude (WGS 84) for the point sample location. Coordinates were taken with a handheld Garmin GPS unit at the location of the point sample.

# Lab\_ ID

This field reports the sample ID number given to each sample analyzed by Brooks and Rand.

# Collection\_Date

This field indicates the date that the sample was collected.

### Collection Time

This field indicates the time that the sample was collected.

### Received Date

This is the date that the samples were received by Brooks and Rand from SGS.

# Matrix

This field describes the sample matrix. The focus area matrix was always water, denoted with a 1.

# Analyte

This field indicates the parameter for which the sample was analyzed for. Samples were analyzed for, Methylmercury.

### CAS\_Number

This field indicates the lab catalogue number.

#  Result

This field reports the results associated with the analysis of each constituent for each sample.

# Units

This field indicates the units of measure for each analyte.

#  Lab\_Qualifiers

This field reports the qualifier given to the result listed in column V by Brooks and Rand. Qualifiers given to data by the lab include: “J” which means the result is less than the reporting limit but greater than or equal to the MDL so the concentration is an approximate value, “U” which indicates the analyte was analyzed for but not detected, and “R” which indicates the result had been rejected.

#  RESULTFLAG\_POST\_QAQC\_VAL

This field reports the qualifier given to the result listed in column V by Tetra Tech. Qualifiers given to data by Tetra Tech include: “J” which means the result is less than the reporting limit but greater than or equal to the MDL so the concentration is an approximate value, “U” which indicates the analyte was analyzed for but not detected, “R” which indicates the result had been rejected, “UR” which indicates a non-detect, rejection, “J+” which indicates the result is an estimate and biased high, “JR” which indicates the result is an estimate and has been rejected, and “J-“ which indicates the result is an estimate and biased low.

# RESULTFLAG\_COMMENTS

This field gives the reasoning behind Tetra Tech’s result flag qualifications.

# MDL

This field reports the minimum detection limit for the associated sample and analysis.

# MRL

This field reports the minimum reporting limit for the associated sample and analysis.

### Dilution\_Factor

This field gives the number of dilutions the lab performed in order to correctly analyze the sample.

###  AB. Analysis\_ Date

This field gives the date the samples were analyzed by the lab.

###  AC. Analysis\_Time

This field indicates the time that the samples were analyzed.

###  AD. Analysis\_ Sequence

This field gives the number of the sample for the order in which it was analyzed.

### AE. Analysis\_Method

This field gives the EPA method that the lab used to analyze the samples.

###  AF. Prep\_Date

This field indicates the date that the sample was prepped for analysis.

### AG. Prep\_Time

This field indicates the time that the sample was prepped for analysis.

### AH. Prep\_Batch

This field indicates the batch that the sample was prepped in.

###  AI. Prep\_Method

This field indicates the EPA method used to prep the sample for analysis.

### AJ. Basis

n/a

###  AK. Fraction

This field indicates the fraction of the sample that was analyzed, either total or dissolved.

###  AL. Spike\_Level

This field indicates if any laboratory spikes were performed in order to analyze the sample and if so what level.

###  AM. %\_ Recovery

This field indicates the percent of the spiked sample that was recovered by the lab during analysis.

###  AN. Upper\_Control\_Limit

This field indicates the upper control limit the lab used for analysis if any.

###  AO. Lower\_Control\_Limit

This field indicates the lower control limit the lab used for analysis if any.

###  AP. RPD

This field indicates the relative percent difference between duplicate and parent samples.

###  AQ. Upper\_RPD\_Limit

This is the upper limit of relative percent difference between parent and duplicate samples that the lab will allow for quality control procedures.

# AR. QC\_1\_Review

This field indicates the date and field personnel who reviewed the field forms on the day the sample was collected.

# AS. QC\_2\_Review

This field indicates the date and personnel who performed the data entry and data entry QC.

# AT. QC\_3\_Review

This field indicates the date and personnel who performed the senior review and QC on the data after data entry but before final submittal to AEA.