

December 23, 2011

Mr. Merlin D. Russell, Jr. Florida Department of Environmental Protection Hazardous Waste Regulation Section 2600 Blair Stone Road MS 4560 Tallahassee, FL 32399-2400

RE: Sediment Sampling and Analysis Plan 8<sup>th</sup> Avenue Property Stormwater Retention Pond EQ Florida, Inc., Tampa, Hillsborough County, FL

Dear Mr. Russell:

EQ Florida, Inc. retained Kleinfelder to prepare this sediment sampling and analysis plan for the abovereferenced facility. It includes a description of the sediment sampling activities and the laboratory analysis proposed to be completed within the new "wet" stormwater retention pond located on the 8<sup>th</sup> Avenue property at the EQ facility.

We are requesting your approval of the proposed activities prior to completion. Should you have questions or require additional information, please do not hesitate to contact me at (813) 887-3900 or via e-mail at <u>cpoole@kleinfelder.com</u>.

Sincerely, **KLEINFELDER** 

Christopher B. Poole, PG, CPG Associate, Program Manager

JDR/CBP/at Attachment cc: Stuart Stapleton, EQ Florida, Inc. Project File



# SEDIMENT SAMPLING AND ANALYSIS PLAN

# 8<sup>th</sup> Avenue Property Stormwater Retention Pond EQ Florida, Inc., Tampa, Hillsborough County, Florida

Project 122708 TAM11R028 December 23, 2011

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A Report Prepared for:

Mr. Stuart Stapleton, CHMM EQ Florida, Inc. 7202 East 8th Avenue Tampa, FL 33619

#### SEDIMENT SAMPLING AND ANALYSIS PLAN 8<sup>TH</sup> AVENUE PROPERTY STORMWATER RETENTION POND EQ FLORIDA, INC., TAMPA, HILLSBOROUGH COUNTY, FLORIDA

Project 122708 TAM11R028 December 23, 2011

Prepared by:

FOR

Jesse D. Reade Environmental Scientist

Christopher B. Poole, PG, CPG Associate, Program Manager



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Figure	2	Site	Plar

Site Plan Sediment Sample Location Map Figure 3



# **1.0INTRODUCTION**

EQ Florida, Inc. is a division of EQ Holding Company (EQ) of Wayne, Michigan. EQ owns and operates a permitted solid waste processing facility (Florida Department of Environmental Protection [FDEP] ID #SWD/29/44633) in combination with a hazardous waste treatment and storage facility (US Environmental Protection Agency [EPA] ID #FLD981932494). The existing facility is approximately 4.53-acres in size and is located on two contiguous properties: 2002 North Orient Road (hereinafter referred to as the "Orient Road property") and 7202 East 8<sup>th</sup> Avenue (hereinafter referred to as the "8<sup>th</sup> Avenue property") in Tampa, Florida. Figure 1 is a site location map and Figure 2 is a site plan which presents the layout of the facility and identifies key site areas and features.

In addition to being a permitted solid waste operation, the EQ facility is also registered as a hazardous waste treatment and storage facility (TSDF), a 10-day hazardous waste transfer facility, a used oil and filter collection facility, and a universal waste and mercury containing lamps and devices storage facility. The hazardous waste operations are conducted at the facility in accordance with FDEP hazardous waste operating permit # 34875-HO-009.

A new "wet" stormwater retention pond was designed and constructed during 2010 in the northwest corner of the 8th Avenue property to support the expansion of the solid waste processing building located here. It is our understanding that sediment sampling in this pond is being requested under the provisions of the facility's hazardous waste operating permit. We have prepared a scope of services to complete this task which is discussed further herein.



### 2.0 SAMPLING & ANALYSIS PLAN

This section describes the sampling methodology, handling procedures, laboratory analytical methods, and quality assurance (QA)/quality control (QC) procedures to be used during the sediment sampling activities discussed herein.

#### 2.1 SAMPLING PROCESS DESIGN

Sediment sampling activities will be completed in the new "wet" stormwater retention pond on the 8th Avenue property. Specifically, up to six (6) sediment samples and one (1) QA/QC sediment sample will be collected over the course of one day's activities following the methods discussed below. The samples will be collected in a grid configuration within the stormwater retention pond (see Figure 3).

#### 2.2 SAMPLING METHODS

A Kleinfelder staff scientist will access the stormwater pond and collect sediment samples across the base of the pond from depths of approximately 0 to 12 inches using a hand coring sediment probe. The sediment samples will be placed directly into laboratory supplied glass bottles. The sediment sampling locations will be staked and located in the field using a handheld global positioning system (GPS) unit. All sampling equipment will be properly decontaminated prior to the initiation of sampling activities and between sampling locations. These sampling activities will be performed and photo-documented by the staff scientist.

#### 2.3 SAMPLE HANDLING & CUSTODY

All collected samples will be placed directly into laboratory-prepared containers and placed in a cooler on ice. Upon completion of the sampling event, a chain of custody will be completed for the samples to document the desired analytical procedures, analysis time (normal turnaround time of 10 work days) and custody record. The chain-of-custody will be placed in the sample cooler and follow the samples through the laboratory analytical process. The sample cooler will be sealed with a custody seal when field work is completed and prior to submitting to the contract environmental laboratory. The samples will be properly packaged, preserved, and transferred to a Florida Department of Health (FDOH)-certified laboratory for analysis under standard chain-of-custody protocol.



# 2.4 LABORATORY ANALYTICAL METHODS & DATA MANAGEMENT

The analytical parameters for the sediment samples will be consistent with those indicated in the *Final Street Sweeping and Sediment Guidance*, dated May 3, 2004, provided to Kleinfelder by EQ. It is our understanding that this guidance document was received by EQ from FDEP. Specifically, the collected sediment samples will be analyzed as summarized in the table below:

Chemicals of Concern (COCs)	EPA Method				
Total Metals (mg/kg)					
Arsenic (As)	200.7				
Barium (Ba)	200.7				
Chromium (Cr)	200.7				
Copper (Cu)	200.7				
Lead (Pb)	200.7				
Leachable Parameters (mg/L)					
Aluminum (AI) by SPLP	200.7				
Arsenic (As) by SPLP	200.7				
Iron (Fe) by SPLP	200.7				
Lead (Pb) by SPLP	200.7				
4,4-Dichlorodiphenyltrichloroethane (DDT)	8081				
Beta-Hexachlorocyclohexane (β-HCH)	8081				
NOTES:					

EPA Method – SW-846 Method Designation mg/kg – milligram per kilogram mg/L – milligram per liter SPLP – Synthetic Precipitation Leaching Procedure

The laboratory analytical results for the sediment samples will be reported in standard turnaround time (10 business days). The laboratory analytical data will be transmitted by the project laboratory in both hardcopy and electronic disk deliverable (EDD) format. The EDD will be formatted to allow direct import into Kleinfelder's enterprise data management system Earthsoft EQuIS 5. Once the data is imported into EQuIS, a tabular data report will be generated and checked against the hardcopy data package to ensure data integrity and completeness.

#### 2.5 INSTRUMENT/EQUIPMENT CALIBRATION & FREQUENCY

All laboratory instrumentation and equipment used to analyze the collected sediment samples will be maintained in accordance with the provisions of the EPA SW-846 methods and the project laboratory's internal standard operating procedures (SOPs). Laboratory instrument calibration frequency will be consistent with the EPA SW-846 method requirements.



# 2.6 DATA QUALITY OBJECTIVES

The primary objective of the sediment sampling activities discussed herein is to obtain valid, defensible data to be used to determine the potential presence of targeted COCs in the new "wet" stormwater retention pond on the 8th Avenue property. The project laboratory chosen to perform analysis of the collected sediment samples will be certified by the FDOH. To ensure data quality, one (1) blind duplicate QA/QC sediment sample will be collected for laboratory analysis. In addition, the EPA SW-846 analytical methods require that specific laboratory QA/QC measures be taken during sample analysis (e.g., calibration blanks, method blanks, control samples, spiked blanks, etc.).



# 3.0 REPORTING

Following completion of the sediment sampling and laboratory analysis activities, Kleinfelder will prepare a letter-style summary report documenting these activities. Specifically, the report will contain:

- A brief description of the development and construction history of the new "wet" stormwater pond;
- Methodologies used to complete sediment sampling activities at the site;
- Field notes, logs and photo-documentation of the activities completed;
- A vicinity map showing the site location and a site plan showing the sediment sampling locations;
- Results of the laboratory analytical testing performed; and
- Findings of the activities conducted.

This report will be transmitted in both hardcopy and electronic format.



### **4.0 LIMITATIONS**

The work will be performed in a manner consistent with that level of care and skill ordinarily exercised by other members of Kleinfelder's profession practicing in the same locality, under similar conditions and at the date the services are provided. Our conclusions, opinions, and recommendations will be based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. Kleinfelder makes no other representation, guarantee, or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.



# **FIGURES**





