WORK ORDER FOR PROFESSIONAL SERVICES

TO:

TRC Environmental Corporation

6312 NW 18th Drive, Suite 100

Gainesville, FL 32653 Phone: 352.378.0332 DATE: Jun 1, 2017

The City of Doral authorizes the firm of TRC Environmental Corporation to provide professional services for air quality survey for the City of Doral. The work should be performed as described on the attached Proposal TRC #273424.9990.0000 submitted by your firm dated Tuesday, March 6, 2017

SCOPE OF SERVICES AND SCEHDULE:

The scope of the project will be as described in the attached proposal from TRC Environmental Corporation. The schedule requires the work to be performed within 120 calendar days. All limitations of time set forth in this Work Order are of the essence. The performance of services associated with this Work Order will be executed on a time and materials basis with a not to exceed amount of \$14,973.00. If you fail to begin work subsequent to the execution of this Work Order, the City of Doral will be entitled to disqualify the Proposal, and revoke the award.

Work Order is not binding until the City of Doral agrees and approves this Work Order.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and date first above written, in three (3) counterparts, each of which shall, without proof or accounting for the other counterpart be deemed an original Contract.

CONSULTANT: TRC Environmental Corporation		WITNESSES:	SEAL:	
BY: NAME: TITLE:	Jonathan Bowser Sr. Scientist/Office Manager		1 2	
OWNER: BY: NAME: TITLE:	City of Doral Edward Rojas City Manager	BY: NAME: TITLE:	AUTHENTICATION: Connie Diaz City Clerk	7
LEGAL SUF	O AS TO FORM AND FFICIENCY FOR THE SOLE USE TY OF DORAL:			
BY: NAME: TITLE:	WEISS, SEROTA, HELFMAN, COLE, & BIERMAN, PL City Attorney			



6312 NW 18th Drive Suite 100 Gainesville, FL 32653

352 378 0332 FROM 352 378 0351 FAX

www.TRCsolutions.com

Submitted via e-mail Dulce.Pantaleon@cityofdoral.com

March 6, 2017

Ms. Dulce Pantaleon, MPA General Service Administrator Public Works Department City of Doral 8401 Northwest 53rd Terrace Doral, FL 33166 305.593.6740 Ext. 6010

Re: TRC Proposal Number 273424.9990.0000

Dear Ms. Pantaleon:

TRC is pleased to provide this proposal for conducting a preliminary ambient air quality survey for the City of Doral. The purpose of this study is to collect and analyze ambient air samples in order to quantify reduced sulfur and other compounds that are potentially causing the odors associated with the Medley landfill and Covanta's nearby waste to energy facility. A hybrid of EPA's Compendium Method TO-15 is being proposed, as it will allow for quantification of both reduced sulfur gases and volatile organic compounds from a single sample. Upon completion of the proposed sampling program, TRC will review the results and provide a recommendation as to whether a more comprehensive study should be conducted.

The following sections summarize the proposed scope of work (SOW), costing, schedule, personnel qualifications and assumptions.

Background/Problem

Residents of the City of Doral (Doral) have expressed concern with odors that are potentially emanating from the near-by Medley Landfill and Covanta-Dade Renewable Energy (WTE) facility. In 2009, Doral established an Odor Control Hotline to allow citizens to report odors at the time of their occurrence. Recent odor studies and environmental compliance audits suggest the Medley landfill and WTE facility are in compliance with applicable regulations. Citizens continue to observe strong odors and as a result, Doral is considering conducting an ambient air monitoring study to quantify concentrations of odor-causing pollutants.

Scope of Work

At the request of Doral, Mr. Jonathan Bowser, Manager of TRC's Ambient Monitoring Practice, visited the city and provided suggestions for developing an ambient air sampling program. As a result of that meeting and previous conversations with Doral, TRC proposes a one-month preliminary study to measure concentrations of Reduced Sulfur Compounds (RSCs) and Volatile Organic Compounds (VOCs) that may be causing odors in the area of the landfill and WTE facility.

Specifically, TRC proposes to:

- Collect six (6) sets of evacuated canister samples (24 hours in duration) at two locations in the vicinity of the landfill and WTE facility following EPA Compendium Method TO-15. The canisters will be analyzed for the complete list of TO-15 compounds as well as reduced sulfur compounds (hydrogen sulfide (H₂S), methyl mercaptan (MeSH) and ethyl mercaptan (EtSH), etc.). Specially treated canisters will be used to preserve reduced sulfur compounds,
- Provide two (2) canisters for collecting grab samples during odor events,
- Visit Doral to select final routine sampling locations,
- Train a Doral employee to deploy canisters, complete chain of custody forms and ship samples to TRC's contract laboratory,
- Review analytical data and provide a summary of results along with a recommendation to the city for future monitoring, if deemed necessary.

Field Survey/Site Selection

Typically, prior to establishing an air monitoring program, TRC conducts a site survey to ensure that sampling locations meet the siting and installation requirements for the methods being conducted. Since Mr. Bowser is familiar with and has already visited the City of Doral and identified candidate sampling locations, this task will be performed along with training for a Doral employee.

Monitoring Plan/QAPP

Before any air quality monitoring and/or sampling takes place TRC typically:

- Develops an Air Monitoring Plan (AMP) for submittal to the client
- Prepares a Quality Assurance Project Plan (QAPP) that complies with US Environmental Protection Agency (USEPA) and State/Local Agency requirements.

The AMP outlines provisions for the collection of ambient air samples and analysis in accordance with USEPA sampling and analytical methods. Reporting frequency and contents of data reports to be sent to the client are also summarized in an AMP. Due to budget constraints, costs associated with preparing an AMP and/or QAPP are not included in this proposal. TRC will perform all sampling following established procedures, guidelines and best practices, as described in the methods proposed and EPA's quality assurance requirements.

If the results of the preliminary monitoring program indicate a more rigorous air sampling



program is warranted, both an AMP and QAPP will be prepared.

Mobilization/Installation

TRC will begin mobilizing sampling equipment as soon as authorization is received. Mobilization and Installation will include:

- Coordination with analytical laboratory for canister delivery,
- Installation of sampling stations at secure locations for canister deployment, and
- Training of city staff to collect routine and/or odor triggered samples.

Routine Operations

Routine sampling operations will be carried out by Doral city staff. TRC will provide detailed training and Standard Operating Procedures (SOPs) to local staff responsible for commencing and recovering canister samples.

Sampling will be conducted at two locations every six days in accordance will the USEPA's sampling calendar. TRC will provide local staff with two (2) additional canisters in the event that strong odors are observed on a day that is not identified in the sampling calendar. Odor triggered sampling events will be collected as "grab samples," rather than being integrated over 24-hours. All samples will be shipped Federal Express Ground (2-day delivery) to Enthalpy Analytical in Durham, NC for analysis.

Data Management and Reporting

Laboratory personnel will verify analytical data at the time of analysis and reporting and through subsequent reviews of the raw data for any non-conformances with the requirements of analytical methods. Laboratory personnel will make a systematic effort to identify any outliers or errors before the data are reported. Outliers identified during data verification will be investigated and corrected; outliers that cannot be attributed to errors in analysis, transcription, or calculation will be clearly identified in the case narrative section of the analytical data package.

Data generated by the laboratory will be initially reviewed by the laboratory QA manager before data packages are forwarded to TRC's data manager. The data manager will verify that the data package is complete and contains all requested analyses, QC results, and raw data. The TRC data manager will identify any missing information and will contact the laboratory project manager to obtain this information. All QA/QC data will be compared to the data quality objectives and numerical control limits listed within laboratory SOPs. Any outliers will be identified and impacts on data quality and utility described.

A single final report will be issued at the completion of this study. A draft of the report will be provided to Doral within 15 business days after receiving the last set of sample results.

- Recapitulation of sampling events and any sampling issues,
- Summary of local meteorological conditions during sampling events (data from the Miami International Airport (MIA) will be used),
- Summary of 24-Hour Time Weighted Average (TWA) and grab sample concentrations for VOCs and RSCs,



• Analysis of data and professional recommendations for an enhanced ambient monitoring program, if determined to be necessary.

Demobilization

At the end of the one month study program, a Doral employee will return any equipment provided by TRC. Doral will provide all relevant field sampling forms and notes to TRC. This information will be required to validate and analyze the complete data set.

Project Team

Mr. Jonathan Bowser will serve as TRC's Project Manager and will be responsible for ensuring that all tasks are completed in an efficient and effective manner following all applicable regulations and guidance documents. Mr. Bowser has a M.S. in Environmental Engineering and over 30 years of experience conducting air quality and meteorological monitoring programs in all 50 states and many U.S. territories as well as internationally. Data management and reporting will be performed by Ms. Melita Lihzis. Ms. Lihzis holds a B.S. in Chemistry and serves as the data manager for TRC's ambient monitoring projects. She has 10 years of air quality monitoring experience.

Together, Mr. Bowser and Ms. Lihzis will perform the review and analysis of data generated from this sampling program.

Schedule

Following (Table 1) is a proposed schedule for the Doral monitoring program. This schedule assumes TRC receives authorization to proceed on or before March 17th, 2017.

Table 1. Schedule

ACTIVITY	DATE (2017)	
Authorization to Proceed	On or before March 17	
Site Selection and Training	March 30 and 31	
Begin Sample Collection	April 1 st	
Subsequent Sample Days	April 7 th , 13 th , 19 th and 25 th	
Final Sample Collection	May 1 st	
Grab Samples	Between April 1st and May 1st	
Report Submitted to City or Doral	On or before June 7 th	

Costing and Assumptions

TRC proposes to conduct the sampling program described in this proposal for a firm fixed price of \$14,973 (fourteen thousand, nine hundred and seventy three dollars). This cost estimate is based on the following assumptions:

• TRC will:

- o Select sampling locations,
- o Train City of Doral employee to deploy, collect and ship samples,
- o Contract an accredited laboratory to perform analyses.



- o Review data on a timely manner,
- Provide a summary report with recommendations for additional sampling, if determined to be necessary, following analysis of data from all sampling events.
- Provide technical support to Doral employee via telephone, email or text messaging.

• The City of Doral will:

- o Provide an employee who will be responsible for deploying, collecting and shipping canister samples,
- o Provide transportation for Mr. Bowser during the training and sampler site selection,
- Ship samples, the day of collection, to TRC's selected laboratory using TRC's FedEx account,
- o Provide security fencing, if necessary, at the sampler locations,
- Communicate with TRC following each sample period, complete sample chain of custody form and maintain a logbook of activities and observations during the duration of the study.

Terms and Conditions

The cost presented in this proposal is valid for 30 days from the date on the cover page (March 6, 2017). You may engage our services by issuing a Work Authorization that references TRC Proposal Number 273424.9990.0000. This proposal defines a technical approach that represents intellectual property that is confidential to TRC Environmental Corporation (TRC). Accordingly, the information in this proposal shall not be disclosed outside the customer's organization and shall not be duplicated, used or disclosed - in whole or in part - for any purpose other than to evaluate this proposal. Should a contract be awarded to TRC as a result of, or in connection with, the submission of this proposal, The City of Doral shall have the right to duplicate, use or disclose the information to the extent provided in the resulting contract. This restriction does not limit the City of Doral's right to use information contained in this document if it is obtained from another source without restrictions.



TRC appreciates this opportunity to provide Doral with a proposal for conducting air quality monitoring within the city. We are looking forward to working with you by providing our ambient air quality monitoring services. If you have any questions regarding this proposal, please contact me at (352) 260-1162 or jbowser@trcsolutions.com.

Sincerely,

Jonathan Bowser

A Bruse

Manager, Air Quality and Meteorological Monitoring

Air Measurements – Gainesville Office 6312 NW 18th Drive, Suite 100 Gainesville, Florida 32653 (352) 260-1162 Cellular (preferred) (352) 378-0332 Office

Email: jbowser@trcsolutions.com

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