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## United States Environmental Protection Agency

### Statement of Work Determining Background Levels of Contaminants of Potential Concern in New York City

#### **PURPOSE:**

The purpose of this contract is to implement indoor sampling to collect settled and airborne dust samples for analysis to determine concentrations of 7 Chemicals Of Potential Concern (COPC): dioxin, lead, PAHs, ceramic fibers, fibrous glass, asbestos, and silica. Sampling will be conducted in 14 buildings known to not be affected by the airborne dusts and plume which emanated from "Ground Zero". ~~Building locations will be selected by the New York City Department of Health.~~

The contractor shall provide professional technical and field support services to the U.S. Environmental Protection Agency (EPA) under the provisions of the contract Statement of Work (SOW) and other applicable support functions, including equipment and supply purchases, maintenance and repair of equipment, as well as health & safety and environmental compliance activities outlined in this SOW. The contractor shall provide all trained personnel, materials and equipment to perform sampling/monitoring activities as described below or in Technical Direction Forms (TDFs) issued at any time during the duration of this contract.

#### **STATEMENT OF WORK:**

##### **TASK 1: Task Order Management:**

Sampling team management shall meet with the PO and other designated EPA representatives on an as needed basis, at agreed-upon times, to update EPA on the status of tasks and schedules for their completion and to address relevant administrative and technical issues.

The contractor shall submit all deliverables required under this contract through a cover letter identifying each document submitted. The contractor shall also maintain a copy of each deliverable and all field documentation submitted under this contract for 365 days.

The contractor shall review all deliverables prior to submission to EPA. The reviewer shall not have been significantly involved in the direct preparation of the deliverable being reviewed. The review shall assure that each deliverable is accurate and complete, technically sound, and free of clerical errors.

All contractor personnel performing field activities as per this contract shall have current OSHA basic 40 hour certification. The contractor shall implement a health and safety program in accordance with its Health and Safety Plan and all applicable Federal, state, and local laws and regulations and EPA site specific work rules. The contractor shall revise its Health and Safety plan as needed to assure that all requirements specified above are addressed.

#### **Deliverables**

Any environmental data collected for the agency must comply with EPA Order 5360.1 CHG 2, Policy and

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Program Requirements for the Mandatory Agency -wide Quality System. This document provides the requirements for the conduct of quality management practices, including Quality Assurance (QA) and Quality Control (QC) activities, for all environmental data collection and environmental technology programs performed by or for this Agency.

The contractor shall submit to the PO a Quality Assurance Project Plan (QAPP) and a Health and Safety Plan for this project. The contractor shall use the *EPA Requirements For Quality Assurance Project Plans EPA QA/R-5*, (EPA/240/B-01/003) March 2001 for the development of this QAPP.

#### **TASK 2: Field Implementation Support:**

The contractor shall perform all field activities utilizing the appropriate field sampling and analytical methods specified in Attachment 2.

- The contractor shall ensure that all personnel performing work under this task have received appropriate training.
- The contractor shall provide the sampling equipment necessary to perform the sampling outlined in this contract . Any purchased equipment will be returned to EPA at the conclusion of this contract.
- The contractor personnel shall be required to have the proper site Personal Protective Equipment (PPE) for performing the work.
- The contractor shall provide the supplies and consumables necessary to perform the sampling (e.g. sample wipes, filters etc.) and store them appropriately until use.
- The contractor shall transport portable air, microvac, and wipe sampling devices to sample locations, assemble the instruments, program the instruments, perform verifications (calibration when necessary), install filters and operate the instrument to begin the sampling. The contractor shall document all the necessary information regarding sampling activities, fill out all field logs, data sheets and chain of custody forms. The contractor shall use FORMS II lite for all sample and chain of custody documentation. The contractor shall remain at each site for the entire sampling event. Upon completion of the sampling event the contractor shall retrieve any stored information and/or data and record any additional required field information. The contractor shall remove and properly package and store the sample filter for transport, and disassemble the sampling instruments. The contractor shall properly package the samples for shipment/transport to the EPA Regional contract laboratory specified on chain-of-custody forms. The contractor will provide the appropriate electronic data and hard copy data forms to the on-site EPA representative daily.
- The contractor will visit a total of fourteen (14) buildings for this project.
- Fourteen (14) buildings will be sampled according to the table provided in Attachment 1.  
For each building, three units (2 residences and 1 common area) will be sampled.

All work shall be completed in accordance with the Statement of Work, QAPP and all referenced sampling methods, analytical methods, SOPs and guidance attached to the QAPP. No deviations from the Statement of Work, QAPP or SOPs including referenced methods, instructions, or other procedures specified, shall be made without prior receipt of alternate technical direction issued in accordance with the contract.

The contractor may be required to attend meetings or conference calls with the PO for planning and coordinating field activities.

The contractor shall perform field QA/QC related activities associated with this task, such as testing and calibration of samplers and ancillary equipment, calibrations, collocations, collection of field blanks, trip blanks, field duplicates, review of field data, entry of data into logbooks/field data sheets, preparation of chain-of-custody reports and deliverables.

The above field activities will be performed at 14 buildings in New York City

The Contractor shall record, organize, label, and file records pertaining to the contract.

All laboratory services for this sampling event will be provided by an EPA contracted lab. The names and addresses of each lab will be provided to the sampling contractor upon issuance of a delivery order.

### **Documentation**

#### **SOPs and Guidelines Available to the Contractor**

For the performance of field support operations as defined in this contract, activities are to be accomplished using the methods specified in Attachement 2.

### **Deliverables**

The contractor shall submit interim and/or final deliverables as specified below the project.

All appropriate data, original field forms/data sheets, and chain of custody forms shall be completed in accordance with the instructions contained in the project SOPs and provided to the on-site EPA representative. Copies of necessary sampling documentation shall shipped via overnight delivery service to the contracted laboratory facility specified on chain-of-custody forms via FORMs II Lite. A field package consisting of field sheets, field notes (copy), and chain-of-custody forms (copy) shall be delivered to the PO. The contractor must sign and date all field sheets, field logbooks and chain-of-custody forms.

On a weekly basis, every Wednesday, the contractor shall submit to the PO via email a field status report, indicating the work completed during the prior week. In addition, the report should note any problems found with implementation, equipment, or supplies during the week.

### **TASK 3: QA/QC Support and Other Related Activities:**

The contractor shall perform the following QA/QC support and other related activities:

SOPs -The contractor shall review and submit all SOPs, guidance documents and protocols used

by the contractor for the performance of work specified in this contract prior to commencing field sampling activities.

Field Data Verification - The contractor will review all field documentation, COC forms, sample labels and any additional field information for accuracy at the end of each days sampling activities and prior to the shipment of samples to the contract laboratory.

#### **TASK 4: Training:**

The contractor shall ensure that all employees performing work under this contract have been provided any and all health & safety training required by law or regulation, or EPA regional policy.

EPA requires that all personnel performing field work under this contract receive specific training covering all aspects of the field work, including equipment operation and maintenance.

The contractor shall document and maintain records of all appropriate field and health and safety training for all employees performing work under this contract

#### **TASK 6: Monitoring Site Reconnaissance:**

Measure and record any obstructions and the distances and heights of any objects, including collocated samplers, that extend at least as high as the sample inlet and are within 1 m of the sample inlet; record descriptions of the obstructions.

Note any occurrences or circumstances that may or could effect air or wipe samples (e.g., construction, renovation, nearness to gas combustion(cooking)).

#### **Deliverables**

The Contractor shall make site observation notes in the comments section provided on the COC form and in the daily field sampling log.

### **Reporting and Communication Requirements**

The following reports shall be prepared by the contractor and distributed to the designated recipients in accordance with each specified requirement. Times are specified in the calendar periods. Reports submitted under this contract shall cite the contract number in addition to identifying the Environmental Protection Agency (EPA) as the sponsoring agency.

#### **Technical Reports**

Documents/reports required in the performance of contract activities shall be submitted by the contractor to the Project Officer (i.e. Productivity Reports, QA/QC Reports, Weekly Project Status Reports..etc)

#### **Health and Safety Plans**

The contractor shall prepare a project specific Health and Safety Program Plan that complies with State and Federal Requirements. A copy of the Health and Safety Plan shall be submitted to the Project Officer within ten (10) days following contract award.

Health and Safety Plans shall be prepared in accordance with Federal Register, "Safety and Health Program" 40 CFR 1910.120(b), and with Washington State General Occupational Health Standards, WAC 296-62-3010, Safety and Health Program.

#### **Contractor Communication**

Upon approval of the Task Order Statement of Work, the Contractor shall maintain at least weekly communication with the PO regarding the status of the work on this Task Assignment.

#### **Inherently Government Functions**

The contractor shall not perform any inherently government functions (IGF) under this Task Assignment. If during the course of developing the plan of work, through receipt of technical direction, or in carrying out the assignment, any portion of the effort is considered to possibly be an IGF, the Contractor must immediately notify the Project Officer and the Contracting Officer.

#### **Occupational Health and Safety**

Facility site visits conducted under this Task Assignment which involves on-site inspections or sampling must be conducted in full compliance with the Department of Labor Occupational Safety and Health Administration rules under 29 CFR Part 1910 and EPA Order 1440 (Occupational Health and Safety Manual).

#### **Documents**

Documents shall be prepared using WordPerfect (versions 6.1 or later) of a comparable system. Electronic media materials delivered to the Agency shall be on 1.44" disks, unless specified otherwise. All written deliverable shall, to the extent possible, be double-sided copies, and shall be delivered in reusable/recyclable envelopes.

Upon issuance of written direction the contractor shall submit for inspection copies of all work in progress at any time under this contract. The contractor shall develop and maintain files.

#### **Technical Direction**

Technical direction includes:

- (1) Direction to the contractor which assists the contractor in accomplishing the Statement of Work.
- (2) Comments on and approval/acceptance of reports or other deliverable.

Technical direction will be issued in writing or confirmed in writing within three (3) calendar days after oral issuance. The technical direction memorandum will be provided to the Contractor and copies will be forwarded to the Contracting Officer and Project Officer. If the Contractor has not received written confirmation within three (3) calendar days of an oral issuance, the Contractor must notify the Project Officer.

#### **Conflict of Interest**

The Contractor must adhere to the following requirements:

(1) upon receipt of contract or similar tasking document, and prior to commencement of any work, notify both the CO and PO of any actual or potential organizational or personal conflicts of interest.

(2) provide a written certification, within three (3) days of receipt of a Task Assignment, or similar tasking document, that states that:

a) either all actual or potential organizational conflicts of interest have been reported to the CO or that no actual or potential organizational conflicts or interest exist;

b) all personnel who perform work under this contract or relating to the contract have been informed of their obligation to report personal and organizational conflicts of interest to the CO; and

c) the Contractor recognizes its continuing obligation to identify and report any actual or potential conflicts of interest arising during performance of this Task Order.

(3) if an actual or potential organization conflict of interest is identified during performance under this contract, the contractor shall immediately make a full disclosure in writing to the CO. The disclosure shall include a description of action which the contractor has taken or proposes to take, after consultation with the CO, to avoid, mitigate or neutralize the actual or potential conflict of interest.

**A Conflict of Interest shall be certified by site when TDFs are issued.**

## ATTACHMENT 1

| WTC Indoor Air Sampling Matrix Background Study<br>Samples Numbers Shown are Per Unit                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |      |         |      |        |            |                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------|---------|------|--------|------------|-----------------|
| Wipe Samples                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Asbestos/<br>MMVF | Lead | Dioxins | PAHs | Silica | Total Dust | Total # Samples |
| Ceilings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1                 | 0    | 0       | 0    | 0      | TBD        | 1               |
| Walls                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1                 | 1    | 1       | 1    | 1      |            | 5               |
| Bare floor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1                 | 1    | 1       | 1    | 1      |            | 5               |
| Counter tops or<br>furniture (table tops)                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1                 | 1    | 1       | 1    | 1      |            | 5               |
| Total Wipe<br>Samples/parameter                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 4                 | 3    | 3       | 3    | 3      |            | 16              |
| Micro-vacuum<br>Samples                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Asbestos/<br>MMVF | Lead | Dioxins | PAHs | Silica | Total Dust | Total # Samples |
| Carpets or Drapery                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 3                 | 3    | 0       | 0    | 0      | TBD        | 6               |
| Fabric Furniture<br>(couch or chair)                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 3                 | 3    | 0       | 0    | 0      |            | 6               |
| Total Micro-vacuum<br>Samples/parameter                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 6                 | 6    | 0       | 0    | 0      |            | 12              |
| 3 micro vacuum samples per location                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |      |         |      |        |            |                 |
| Indoor Air Samples                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Asbestos/<br>MMVF | Lead | Dioxins | PAHs | Silica | Total Dust | Total # Samples |
| Main Living<br>Space(living rooms)                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 2                 | 1    | 0       | 0    | 1      | TBD        | 4               |
| <p>NOTES      TBD - To be determined</p> <p>             MMVF - Man Made Vitreous Fibers</p> <p>             This table does not include the 10% Quality Control samples.</p> <p style="text-align: center;"><b>Total Number Of Samples</b></p> <p>Samples will be collected from 14 buildings, 3 units within each building (2 residences and 1 common area).</p> <p>14 buildings x 3 units per building = 42 units</p> <p>32 samples/unit x 42 units = 1344 samples + 134 QC samples = 1478 samples</p> |                   |      |         |      |        |            |                 |

## ATTACHMENT 2

## WTC Indoor Air Monitoring - Sampling and Analytical Procedures

| Media                                    | Sampling Points                                                                                                                 | Analytical Parameters | Sampling Method Proposed                                                                  | Sampling Vulnerability/Practicality                                                                                             | Analytical Method Proposed                   |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| Settled Dust<br>Dust<br>Soft Surfaces    | Carpets, fabric furniture or drapery in areas of activity (living rooms, family rooms)                                          | Asbestos              | ASTM D 5755-95                                                                            | This is a micro vacuuming method. Three collocated samples will be collected from each location.                                | ASTM D 5755-95                               |
|                                          |                                                                                                                                 | Lead                  | ASTM E 1973-99                                                                            | This is a micro vacuuming method. Three collocated samples will be collected from each location.                                | SW-846 6010B                                 |
| Settled Dust<br>Non-porous Hard Surfaces | Horizontal surfaces of tables or counters and bare floors, ceilings and walls in areas of activity (living rooms, family rooms) | Asbestos              | ASTM D 6480-99                                                                            | Wipe Samples                                                                                                                    | ASTM D 6480-99 (wipe)                        |
|                                          |                                                                                                                                 | Lead                  | ASTM E 1728                                                                               | Wipe Samples                                                                                                                    | SW-846 6010B                                 |
|                                          |                                                                                                                                 | Dioxins               | ASTM D 6661-01                                                                            | Wipe Samples                                                                                                                    | ASTM 6661-01/SW-846 8290                     |
|                                          |                                                                                                                                 | PAHs                  | ASTM D 6661-01                                                                            | Wipe Samples                                                                                                                    | ASTM 6661-01/SW-846 8270C                    |
|                                          |                                                                                                                                 | Silica                | ASTM E 1728**                                                                             | Wipe Samples                                                                                                                    | NIOSH 7500 (XRD)                             |
|                                          |                                                                                                                                 | MMVF                  | ASTM D 6480-99                                                                            | Samples will be combined with the asbestos sampling.                                                                            | EMSL MSD.0300                                |
|                                          |                                                                                                                                 |                       |                                                                                           |                                                                                                                                 |                                              |
| Indoor Air                               | Areas of known activity (living rooms, family rooms)                                                                            | Asbestos              | NIOSH 7400                                                                                | Air pump operated at 10L/min for 8 hours to achieve the COPC wkgroup detection limits                                           | PCM NIOSH 7400 followed by TEM AHERA method. |
|                                          |                                                                                                                                 | Lead                  | NIOSH 7300                                                                                | Air pump operated at 10L/min for 8 hours to achieve the COPC wkgroup detection limits                                           | SW-846 6010B                                 |
|                                          |                                                                                                                                 | PAHs                  | TBD Pending sample volume requirements and to account for break through on the cassettes. | Pilot clean-up study only                                                                                                       | SW-846 8270                                  |
|                                          |                                                                                                                                 | Dioxins               | TBD Pending sample volume requirements and to account for break through on the cassettes. | Pilot clean-up study only. Availability of sample cassettes for dioxins analysis is questionable. Apparently the supply is low. | SW-846 8290                                  |
|                                          |                                                                                                                                 | Silica                | NIOSH 7500                                                                                | Air pump operated at 2.5L/min for 8 hours to achieve the COPC wkgroup detection limits                                          | NIOSH 7500 (XRD)                             |
|                                          |                                                                                                                                 | MMVF                  | NIOSH 7400                                                                                | Assumed that it behaves the same as asbestos, samples will be combined with the asbestos sampling.                              | EMSL MSD.0300                                |
|                                          |                                                                                                                                 |                       |                                                                                           |                                                                                                                                 |                                              |

NOTE: All samples (cassettes and wipes) will be preweighed by the laboratory or supplier prior to sample collection. After sample collection and upon receipt of the samples by the laboratory, the laboratory will weigh the sample wipe or cassette prior to performing the analysis. **This may change depending upon the availability of preweighed materials. May collect samples for total dust.**

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Silica will be collected as a dust samples as is Lead. This was decided since pulverized silica would be particulate like and not fiber like as with asbestos and MMVF.

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