Purchase Request for Analytical laboratory services related to micro-gravimetric analysis of PM2.5 and PM10 filters and spectral analysis of Pb-TSP filters using an approved EPA-designated methods.

I. Background and Purpose

The Oklahoma Department of Central Services (DCS), on behalf of the Oklahoma Department of Environmental Quality (DEQ), is soliciting bids from qualified analytical laboratories for LABORATORY ANALYSIS OF 47mm PM2.5/PM10 FILTERS and 8"x10" LEAD-TSP FILTERS. This program requires preparation, transportation, and pre-analysis and/or post-analysis of the filters used to capture the particulate samples. The selected contractor shall function as a contract laboratory to conduct micro-gravimetric analysis of PM2.5 and PM10 47mm filters and spectral analysis of Pb-TSP 8"x10" filters using FRM/FEM methods approved by the US EPA. The contractor proposal shall include conformance with EPA's regulatory requirements (40CFR 50, Appendix L) and EPA's Quality Assurance Handbook for Air Pollution Measurement Systems, Vol. II, Ambient Air Specific Methods, EPA-454/B-08-003 Dec08.

The purpose of this program is to provide analysis of PM2.5, PM10, and Pb-TSP for the monitor network described below for the next 3 Fiscal Years. The Oklahoma Fiscal Year is from July to June (FY12 is 7/1/2011 to 6/30/2012)

The current network of PM2.5 samplers consists of 1 sampler that operates daily, 3 samplers that run every third day, and 1 samplers that run every sixth day.

The current network of PM10 samplers consists of 1 sampler that operates every third day, and 2 samplers that run every sixth day. We anticipate adding 3 samplers running every 6^{th} day during FY13. We currently operate 1 sampler operating every day which will be discontinued at the end of FY12. It is possible that this sampler could be extended into subsequent years, however.

The current network of Pb-TSP samplers consists of 1 sampler that operates every sixth day, and 1 sampler that runs every twelfth day. We anticipate adding 1 sampler running every sixth day in the next year.

No other changes to our current network are anticipated during the contract period, but it is possible that unforeseen circumstances could result in additions or deletions to these networks.

The following table summarizes our expected number of sample filters to be analyzed during the next 3 fiscal years.

Pollutant	Sample Freq.	--------# of Samples---------- FY12	FY13	FY14	Media
PM2.5	Daily	366	365	365	47mm
PM2.5	3rd Day	366	366	363	47mm
PM2.5	6th Day	122	122	121	47mm
PM10	Daily	183	0	0	47mm
PM10	3rd Day	122	122	122	47mm
PM10	6th Day	122	122	305	47mm
	TOTAL:	**1281**	**1097**	**1276**	
Pb-TSP	6th Day	122	92	183	8"x10"

In addition to these sample filters, we also need spare filters for each 47mm pre-weighed filter shipment. (This does not apply to the Pb-TSP program) This is approximately :

FY12	FY13	FY14	Filter
78	78	78	Pre-weighed 47mm PM2.5 spares
26	52	52	Pre-weighed 47mm PM10 spares

Spares were computed as 3 per shipment for PM2.5 and 1 per shipment increasing to 2 for PM10 analysis. These will be substituted for a contaminated sample filter(s) as necessary or used to perform a make-up sample(s).

Field/Trip, lab and lot blanks must also be analyzed. Blanks needed can be estimated as follows: (These are estimations, actual needs could vary +/- 10%)

Type	Sample Frequency	#filters
47mm F/T Blanks	Daily	108
47mm F/T Blanks	3rd Day	160
47mm F/T Blanks	6th Day	27

Type	Frequency	#filters
8"x10" F/T Blanks	2 per quarter per sampler	16
47mm Lab Blanks	12 per year per sampler	120
8"x10" Lab Blanks	N/A	
47mm Lot Blanks	2 per year per sampler	20
8"x10" Lot Blanks	1 per year	1

This purchase request (PR) solicits cost and work proposals from persons interested in performing the tasks outlined herein.

II Scope of Work to be Performed

The project involves a number of tasks, some of which are interdependent and others that may stand-alone. If deemed necessary by the Monitoring Section Manager, the contractor shall attend an initial meeting with DEQ staff at the DEQ Central Office in Oklahoma City, OK to confirm the details of the scope of work and the schedule submitted by the contractor with their proposal for completion of the various tasks. This schedule shall describe the most efficient process and procedures for implementation of the project.

The contractor shall function as a contract laboratory to conduct micro-gravimetric analysis of 47mm PM2.5 and PM10 filters. It shall also conduct spectral analysis of 8"x10" Pb-TSP filters. Such analyses shall NOT be subcontracted (unless necessitated by specific circumstances, and then only with the approval of DEQ/AQD) (See Item 5 under Additional Considerations). For 47mm filters, this process includes pre-weight and post-weight of filters using a microbalance capable of ± 1µg readability and repeatability, conditioning and equilibrating of filters, software development, archiving of filters, and calculation of particulate concentrations. For spectral analysis of Pb-TSP samples, the approved FRM/FEM technique employed will determine what equipment is required. All filter handling and analytical procedures as well as associated QA/QC measures shall be conducted by the contractor in accordance with EPA's regulatory requirements (40 CFR 50, Appendix L) and Section 2.12 of EPA's Quality Assurance Handbook for Air Pollution Measurement Systems, Vol. II, Ambient Air Specific Methods, EPA/600/R-94/038b.

III. Deliverables. All procedures must conform to the requirements of EPA-454/B-08-03 Dec08. These procedures are summarized below, but the more detailed guidance contained in this document must be followed. Full compliance is essential.

A. 47mm PM2.5 and PM10 Filters. For this contract, all PM-10 filters will be processed, shipped and handled using the more stringent PM2.5 filter handling procedures to avoid confusion.

Task 1. Upon receipt (from EPA or DEQ/AQD) by the contractor, filters shall be inspected, properly identified, and conditioned prior to determination of tare weights. An evaluation of filter mass stability shall also occur prior to determination of tare weights. A period of no more than **5** working days shall expire between the time filters are pre-weighed, and the time they are shipped to DEQ/AQD.

Task 2. Filters shall be tared, and applicable quality assurance (QA) procedures performed.

Task 3. Processed filters shall be loaded into uniquely identified packages, packaged in accordance with EPA requirements, and sent to DEQ/AQD in a quantity based on the number of samplers and sampling frequency used by the DEQ. The

contractor, at a minimum, shall make filter shipments biweekly. Chain of custody documentation will be provided and maintained by the contractor.

Task 4. For transport of exposed filters, the contractor shall provide special shipping containers with an appropriate cooling medium, which demonstrates compliance with the EPA requirements. Minimum/maximum digital thermometers provided by the contractor shall be included in sample shipments for temperature monitoring. Initial expenses for acquisition of shipping containers, minimum/maximum thermometers, and the cooling medium may be included in the first contract year cost per sample calculation.

Task 5. Upon receipt at the contract laboratory, exposed filters shall be logged-in and placed in an appropriate conditioning environment within a reasonable time frame and as specified in the EPA requirements.

Task 6. Determination of gross weight and performance of appropriate QA procedures, including analysis of laboratory filter blanks, lot blanks, and field blanks shall occur at prescribed times as specified in the EPA requirements.

Task 7. The contract laboratory shall archive all exposed filter elements under conditions specified in the EPA requirements, for a minimum of one year. The contract laboratory may dispose of (i.e. discard in an appropriate manner) exposed filter elements that have been archived for at least one full year on December 31st. The contractor shall contact DEQ/AQD prior to filter disposal to determine if continued storage, additional analysis, or shipping to another facility is required for specific samples. If continued storage is not needed, samples may be disposed of by the contract laboratory.

Task 8. The contract laboratory shall commit to a sample turnaround time of five working days. For example, after the contract laboratory receives samples, samples must be logged, conditioned, weighed, and results calculated within five working days.

Task 9. At a minimum, analytical results (calculated PM2.5 values) and appropriate QA/QC results shall be reported electronically (on diskette, via e-mail, or on secure ftp site) by the contractor to the DEQ/AQD Monitoring Section in US EPA Air Quality System (AQS) format on a monthly basis for the previous month's data. For example, on or before the last normal working day of June (2008), the DEQ/AQD should receive the data for the previous month of May (2008). Threshold of action limits are as follows: Contractor should notify a designated DEQ/AQD representative by e-mail immediately when a daily concentration of 35 micrograms/cubic meter or greater are observed on a PM2.5 filter or 150 micrograms/cubic meter or greater are observed on a PM10 filter. Each monthly report will include (for the year under consideration):

(1) 1^{st} – 4^{th} daily maximum values,
(2) 98^{th} percentile annual value, and
(3) annual mean concentration.

For example, the monthly report for August 2008 will include these three summary values for the period January – August 2008. These shall be provided for each site using

the calculations specified in CFR 40 Part 50, Appendix N (including rounding procedures).

Task 10. DEQ/AQD will provide all required QC data connected with the samplers to the contractor, along with the corresponding samples. The contractor shall coordinate with DEQ/AQD to develop an appropriate format for transfer of sample filter data to the contractor via diskette or electronic transfer in a "csv" file format labeled by Attachment B. The contractor will be responsible for developing and maintaining a computer program and database capable of storing all required sample data, generating all required reports, and AQS submission files in AQS format. The vendor will be notified of any changes as soon as they become available.

Task 11. Contractor shall comply with strict chain of custody requirements consistent with Quality Assurance Guidance Document "Model QA Project Plan for the PM2.5 Ambient Air Monitoring Program at State and Local Air Monitoring Stations", EPA-454/R-98-005 Apr98.

Additional Considerations

Item 1. The contractor shall include shipping costs for tare (pre-weighed) filters and samples, as well as prepared shipping containers, as part of the cost proposal. The contractor shall provide paid return shipping labels for the use of DEQ/AQD and its authorized cooperating agencies to facilitate shipping of samples to the contractor's site. This may also be included in the cost per filter price.

Item 2. The contractor shall recondition and reweigh all unused filter elements that have exceeded the maximum of 30 days allowed between tare weight determination and exposure. If the contractor could have prevented the expiration of tared filters, then the contractor shall absorb the additional costs for shipping, handling, and re-taring the expired filter elements. If the expiration of tared filters is due to circumstances beyond the control of the contractor, then the additional costs for shipping, handling, and re-taring of each expired filter element shall be charged to DEQ/AQD at the rate of one-half of the cost per sample. Contractor will develop a working agreement with DEQ/AQD to keep the number of unused/expired filters to a minimum.

Item 3. Audits, replicate weighings, and field and laboratory blanks are required as part of the QA/QC procedures. The contractor shall conduce required audits and replicate weighings and prepare and certify necessary blanks as specified in the EPA requirements accordingly (QA 2.12 – Sec 7). Field blanks will be handled and charged to DEQ/AQD as routine samples.

Item 4. The contractor shall successfully participate in an EPA contract laboratory certification program, at such time as EPA establishes one. Any additional costs to the contractor resulting from this participation may be included in the cost per filter at the time of bid.

Item 5. The contractor shall provide for chemical speciation or other special analyses of filter elements upon DEQ/AQD request. The contractor or a reputable subcontractor chosen by the contractor shall perform these special analyses. The applicable cost per sample shall be bid separately between DEQ/AQD and the contractor as the need for special analyses arises.

Item 6. At the end of the contract period, the contractor shall, at the request of DEQ, ship any unused filter elements to a location of DEQ's choosing. The cost of the shipment will be borne by the DEQ.

B. 8" by 10" Pb-TSP Filters

Task 1. The contractor will receive the exposed Pb-TSP filters from the AQD monitoring section within 2 weeks of the end of each quarter. The filter for each scheduled run day will be folded into a protective heavy-weight sheet and enclosed in a sample envelope. All pertinent information needed to analyze and report the results, such as sample duration, flow, etc., will be written on this envelope by the site operator.

Task 2. Upon receipt at the contract laboratory, exposed filters shall be logged-in and placed in an appropriate conditioning environment within a reasonable time frame and as specified in the EPA requirements (QA 2.12 – Table 7.1).

Task 3. After receipt of these samples, the contractor will have 30 days to analyze and report results to the AQD monitoring section. This report will include the Air Quality System (AQS) formatted submission file for Lead, Avg. Temperature, and Avg. Pressure for each 24-hour sample.

Task 4. DEQ/AQD will provide all required QC data connected with the samplers to the contractor, along with the corresponding samples. The contractor shall coordinate with DEQ/AQD to develop an appropriate format for transfer of sample filter data to the contractor via diskette or electronic transfer in a "csv" file format labeled by Attachment B. The contractor will be responsible for developing and maintaining a computer program and database capable of storing all required sample data, generating all required reports, and AQS submission files in AQS format. The vendor will be notified of any changes as soon as they become available.

Task 5. Contractor shall comply with strict chain of custody requirements consistent with Quality Assurance Guidance Document "Model QA Project Plan for the PM2.5 Ambient Air Monitoring Program at State and Local Air Monitoring Stations" (SLAMS), Section 12.0.

Additional Considerations

Item 1. Audits, replicate analyses, and field and laboratory blanks are required as part of the QA/QC procedures. The contractor shall conduce required audits and replicate analyses and prepare and certify necessary blanks as specified in the EPA requirements accordingly (QA 2.12 – Sec 7). Field blanks will be handled and charged to DEQ/AQD as routine samples.

Item 2. The contractor shall successfully participate in an EPA contract laboratory certification program, at such time as EPA establishes one. Any additional costs to the contractor resulting from this participation may be included in the cost per filter at the time of bid.

Task 3. The contract laboratory shall archive all exposed filter elements under conditions specified in the EPA requirements listed above, for a minimum of one year. The contract laboratory may dispose of (i.e. discard in an appropriate manner) exposed filter elements that have been archived for at least one full year on December 31st. The contractor shall contact DEQ/AQD prior to filter disposal to determine if continued storage, additional analysis, or shipping to another facility is required for specific samples. If continued storage is not needed, samples may be disposed of by the contract laboratory.

IV. Project times, Schedules and Terms.

The successful bidder will be subject to the terms of the bid submitted and the purchase order terms set forth below. A signed purchase order shall constitute the contract between The Oklahoma Department of Environmental Quality, herein referred to as DEQ, and the party to whom this bid is awarded, herein referred to as CONTRACTOR under the authority of Title 27A O.S. § 2-3-202. The following purchase order terms will be attached to the Purchase Order.

1. **Duration:** The Contract commences on July 1, 2010 and terminates one year from this date. In no case shall the duration of this contract exceed one (1) year, but is renewable on an annual basis at the option of DEQ/AQD for a period of up to 3 years, however, the duration may be less than one year if the DEQ acquires appropriate lab facilities and the ability to perform its own filter weighing during this time period. The effective date shall be the controlling and commencement date. This Contract is subject to termination upon thirty (30) days advance written notice by DEQ. This Contract is subject to termination upon thirty (30) days written noticed by the Contractor after the first six (6) months. All notices shall be provided as required in paragraph IV (7).

2. **Qualifications:** The contractor shall provide a description of the firm and its environmental consulting and analytical laboratory experience. To qualify, a bidder must have an existing facility in operation for micro-gravimetric analysis of PM2.5

and PM10 filters (i.e. filter conditioning capabilities and weighing room) from EPA designated Federal Reference Method (FRM) samplers. A bidder must have an existing facility in operation for spectral analysis of Pb-TSP filters using an EPA designated Federal Equivalent Method (FEM). A bidder must have an existing Quality Assurance Project Plan for the analysis of PM2.5/PM10 in ambient air which supports the air quality program of at least one state, local, or tribal air quality office. A bidder must have an existing Quality Assurance Project Plan for the analysis of Pb-TSP in ambient air which supports the air quality program of at least one state, local, or tribal air quality office.

3. **Payment:** The contractor/vendor shall be paid promptly after the vendor provides a properly completed invoice to the DEQ for work completed, as described in an agreed-upon timeline. In no case shall payments be paid more than once monthly. These monthly invoices are to cover expenses and services rendered during the previous month. The remaining balance shall be paid after the vendor provides a properly completed invoice to the DEQ after the DEQ acceptance of a final report and recommendation(s) for this study.

4. **Invoices:** The Contractor shall submit a properly executed invoice to the DEQ office of Financial and Human Resources within thirty (30) days of the end of the month the services were provided. The invoice must provide dates and hours of service provided, the services that were performed and by whom. Invoices are to be directed to:

   Oklahoma Department of Environmental Quality
   Financial & Human Resources
   P.O. Box 1677
   Oklahoma City, OK 73101-1677

5. **Duties of DEQ:** Upon CONTRACTOR's request, DEQ may provide such administrative assistance as DEQ deems necessary and reasonable for the performance of this Contract.

6. **Other Duties and Assurances:** CONTRACTOR shall be fully independent in performing the services and shall not act as an agent, employee, partner, or joint venturer of the DEQ. CONTRACTOR shall not be entitled to any benefits or other entitlements accruing to DEQ employees. CONTRACTOR agrees to hold the DEQ harmless from any claims, demands of other CONTRACTOR's agents, employees, or subcontractor(s) in the performance of this contract.

   CONTRACTOR shall comply with applicable federal and state worker's compensation and occupational disease status. If applicable, an "Application for Certificate of Non-Coverage" under the "Worker's Compensation Act" shall be attached hereto.

   CONTRACTOR must execute an affidavit attesting that no payment or donation has been made directly or indirectly to any elected or appointed official, officer, or

employee of the State of Oklahoma or its political subdivision, nor waived payment of any money or other thing of value to obtain this, or other agreements.

CONTRACTOR agrees that its responsibilities within this contract may not be assigned or delegated without the written approval of the DEQ. If approved by DEQ, subcontractor(s) services will be subject to the terms of this contract. The CONTRACTOR is liable for all actions of its subcontractor(s).

7. **Amendment:** This Contract may be modified, changed or amended only by an instrument in writing, signed and dated by the parties and appended hereto.

8. **Notice:** All notices or other communication shall be by letter, telephone or facsimile machine. All notices given by telephone or facsimile shall be confirmed in writing within ten (10) days of such notice. All written notices, excluding invoices, must be forwarded to one of the following applicable addresses by certified mail:

TO DEQ	TO CONTRACTOR
Department of Environmental Quality Administrative Services PO Box 1677 Oklahoma City, Ok 73101-1677	(address)

9. **Severability:** The provisions of this Contract are severable, and if any part or provision hereof shall be held void, it shall not be deemed to render any other provisions void or affect or impair the effectiveness of other parts or provisions.

10. **Audit:** All data generated, gathered, or referenced by the contractor in partial fulfillment of this project shall be submitted to and become the property of DEQ/AQD. Copies of all documents, reports, and other sources of information gathered or referenced by the contractor in partial fulfillment of this project shall be submitted to DEQ/AQD upon request. Further, DEQ/AQD maintains the right to conduct a site visit and inspect contractor laboratories and sample preparation facilities at any reasonable time during normal business hours. CONTRACTOR agrees to provide the DEQ with a copy of any audit by a state or federal agency that pertains to this contract.

    Upon initiation of this contract and annually thereafter, the contractor shall provide DEQ/AQD with all written information from the contract laboratory Quality Assurance Project Plan (QAPP) relevant to microgravimetric analysis of PM2.5 and PM10 filters; this information may include copies of standard operating procedures (SOPs). Copies of all documents, reports, and other sources of information gathered or referenced by the contractor in partial fulfillment of this project shall be submitted to DEQ/AQD upon request. Any proprietary information (including SOPs), which the contractor agrees to supply to DEQ/AQD, shall be clearly marked "CONFIDENTIAL" by the contractor prior to submittal in order for DEQ/AQD to handle such information in an appropriate manner.

11. **Records:** The CONTRACTOR agrees to maintain all supporting documentation and records for five (5) years in accordance with generally accepted audit standards. All information generated by virtue of this contract shall become the property of the State of Oklahoma and, unless agreed to otherwise in writing, shall be subject to public access.

12. **Governing Laws:** This Contract shall be governed by the laws of the State of Oklahoma, and exclusive jurisdiction and venue for all disputed matters shall be in The District Court of Oklahoma County, Oklahoma.

V. BID REQUIREMENTS

The bidder shall consider all relative costs in this proposal to be distributed on a cost per sample basis.

Costs incurred by the successful bidder for preparation of this bid, or any presentations to DEQ/AQD prior to award are not to be included as part of this proposal and are the sole responsibility of the bidder.

This is not an exclusive contract nor does it impose any obligation on DEQ/AQD to use the services of any particular successful bidders. The DEQ is only obligated for the costs of work actually authorized by the DEQ and accomplished by the contractor in conformance with the terms and conditions of the contract.

Those wishing to respond to this Invitation to Bid shall provide five copies and one original of the bid responses, along with supporting materials. The Bid response shall be prepared succinctly, providing a straightforward, concise description of the proposer's ability to meet the requirements of this Invitation to Bid. There should be no unnecessary attachments or exhibits. The Bid response should be printed two-sided on recycled paper, and shall not exceed fifteen pages in length including tables, charts, etc. This limit does not include appendices, which contain detailed project descriptions and detailed resumes of individuals to be assigned to this project.

Bid responses shall include sections addressing the organization, personnel, experience and capabilities, management plan, project scope and work plan, costs and references.

Bid responses shall include the following information:

1. Itemized schedule of professional service costs on a cost per filter basis for PM2.5, PM10, and Pb-TSP analyses. An estimate of the total cost for performance of work under this contract based on projected number of samples should be included. Identify hourly rates and how fees and costs are determined.

2. A Quality Assurance Project Plan (QAPP) which shows how the vendor intends to provide all deliverables. This QAPP must contain all information detailed in EPA-454/R98-05, April 1998, Model Quality Assurance Project Plan for the PM2.5 Ambient Air Monitoring Program at State and Local Air Monitoring Stations.

VI. CONTRACTOR EVALUATION AND SELECTION PROCESS

Bids shall be evaluated on the basis of the following criteria:

1. The Quality Assurance Project Plans submitted by each bidder will be reviewed to ensure that they meet the requirements as stated above.

2. For each qualified bidder, we will compute the expected monthly cost for services based upon the anticipated sample volume stated in section I.

The review of the Bids and determination of a recommendation for DCS approval will be accomplished by a committee of three persons who are familiar with the technical and administrative requirements of this project. Selection of the Bid shall be based on the qualified bidder with the lowest expected monthly cost computed.