

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE	PAGE OF PAGES
2. AMENDMENT/MODIFICATION NO. <b>PR-HQ-08-10055/0001</b>	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO. <b>PR-HQ-08-10055</b>	5. PROJECT NO. (If applicable)
6. ISSUED BY <b>Environmental Protection Agency Bid and Proposal Room, Ariel Rios Building (3802R) 1200 Pennsylvania Avenue, N.W. Washington, DC 20460</b>	CODE	7. ADMINISTERED BY (If other than item 6)	CODE
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)		(✓)	9A. AMENDMENT OF SOLICITATION NO. <b>PR-HQ-08-10055</b>
<b>To All Offerors/Bidders.</b>		✓	9B. DATED (SEE ITEM 11) <b>07/30/08</b>
CODE			10A. MODIFICATION OF CONTRACT/ORDER NO.
FACILITY CODE			10B. DATED (SEE ITEM 13)

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers  is extended,  is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:  
 (a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

**12. ACCOUNTING AND APPROPRIATION DATA (If required)**

**13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

(✓)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor  is not,  is required to sign this document and return \_\_\_\_\_ copies to the issuing office.

**14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)**

The purpose of this amendment is to respond to technical questions and revise the RFP. We have attempted to highlight changes in red; however offerors should read the amendment thoroughly as we cannot guarantee that all changes are highlighted. The proposal due date is extended.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
		<b>DEBRA A. MILLER</b>	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
_____ (Signature of person authorized to sign)		_____ (Signature of Contracting Officer)	

**AMENDMENTS TO THE SOLICITATION**

1. Block 9 on the SF 33 form has been modified as follows:

Number of Copies: 6  
Proposal, Date Due: 10/17/08

2. The Section B clause entitled "LEVEL OF EFFORT--COST-REIMBURSEMENT TERM CONTRACT (EPAAR 1552.211-73) (APR 1984) DEVIATION" has been added. The text is as follows:

(a) The Contractor shall perform all work and provide all required reports within the level of effort specified below. The Government will order 124,576 direct labor hours for the base period which represents the Government's best estimate of the level of effort required to fulfill these requirements.

(b) Direct labor includes personnel such as engineers, scientists, draftsmen, technicians, statisticians, and programmers and not support personnel such as company management, typists, and key punch operators even though such support personnel are normally treated as direct labor by the Contractor. The level of effort specified in paragraph (a) includes Contractor, subcontractor, and consultant labor hours.

(c) If the Contractor provides less than 90 percent of the level of effort specified for the base period or any optional period ordered, an equitable downward adjustment of the fixed fee, if any, for that period will be made. The Government may require the Contractor to provide additional effort up to 110 percent of the level of effort for any period until the estimated cost for that period has been reached. However, this additional effort shall not result in any increase in the fixed fee, if any. If this is a cost-plus-incentive-fee (CPIF) contract, the term "fee" in this paragraph means "base fee and incentive fee." If this is a cost-plus-award-fee (CPAF) contract, the term "fee" in this paragraph means "base fee and award fee."

(d) If the level of effort specified to be ordered during a given base or option period is not ordered during that period, that level of effort may not be accumulated and ordered during a subsequent period.

(e) These terms and conditions do not supersede the requirements of either the "Limitation of Cost" or "Limitation of Funds" clauses.

3. The Section B clause entitled "FIXED RATES FOR SERVICES--INDEFINITE DELIVERY/INDEFINITE QUANTITY CONTRACT (EPAAR 1552.216-73) (APR 1984) DEVIATION" has been modified. The text is as follows:

The following fixed rates shall apply for payment purposes for the duration of the contract.

Base Year									
CLIN	SOW Task	Labor Category	Estimated Direct Hours Per Monthly Unit	Fixed Hourly Rate	Total Price for Estimated Monthly Unit	Min Units Per Contract Year (Min Sample for Task 14)	Max Unit Per Contract Year (Max Sample for Task 14)	Total Min	Total Max
<u>0001</u>	1. Core Operations					1	12		
	1.a. Labor	Professional							
		Technical							
		Administrative							
	1.b. ODC								
<u>0002</u>	2.1. Dry Deposition Filterpack - w/operator					552	612		
	2.1.a. Labor	Professional							
		Technical							
		Administrative							
	2.1.b. ODC								
<u>0003</u>	2.2 Dry Deposition Filterpack - w/o operator					96	96		
	2.2.a. Labor	Professional							

		Technical							
		Administrative							
	2.2.b. ODC								
<u>0004</u>	3.1. Ozone Monitoring - w/operator					456	516		
	3.1.a. Labor	Professional							
		Technical							
		Administrative							
	3.1.b. ODC								
<u>0005</u>	3.2 Ozone Monitoring w/o operator					60	60		
	3.2.a. Labor	Professional							
		Technical							
		Administrative							
	3.2.b. ODC								
<u>0006</u>	4.1. Ozone monitoring AQS - w/operator					96	96		
	4.1.a. Labor	Professional							
		Technical							
		Administrative							
	4.1.b. ODC								

<u>0007</u>	4.2. Ozone monitoring AQS - w/o operator					36	36		
	4.2.a. Labor	Professional							
		Technical							
		Administrative							
	4.2.b. ODC								
<u>0008</u>	5.1. Meteorology - w/operator					552	612		
	5.1.a. Labor	Professional							
		Technical							
		Administrative							
	5.1.b. ODC								
<u>0009</u>	5.2 Meteorology w/o operator					96	96		
	5.2.a. Labor	Professional							
		Technical							
		Administrative							
	5.2.b. ODC								
<u>0010</u>	6.1 Trace gas NOy - w/operator					12	48		
	6.1.a. Labor	Professional							

		Technical							
		Administrative							
	6.1.b. ODC								
<u>0011</u>	6.2 Trace gas NOy - w/o operator					12	72		
	6.2.a. Labor	Professional							
		Technical							
		Administrative							
	6.2.b. ODC								
<u>0012</u>	7.1 Trace gas SO2 - w/operator					12	48		
	7.1.a Labor	Professional							
		Technical							
		Administrative							
	7.1.b. ODC								
<u>0013</u>	7.2 Trace gas SO2 w/o operator					12	72		
	7.2.a. Labor	Professional							
		Technical							
		Administrative							
	7.2.b. ODC								

<u>0014</u>	8.1 Trace gas CO - w/operator					12	48		
	8.1.a. Labor	Professional							
		Technical							
		Administrative							
	8.1.b. ODC								
<u>0015</u>	8.2 Trace gas CO - w/operator					12	72		
	8.2.a. Labor	Professional							
		Technical							
		Administrative							
	8.2.b. ODC								
<u>0016</u>	9.1 PM2.5 FRM mass - w/operator					0	0		
	9.1.a. Labor	Professional							
		Technical							
		Administrative							
	9.1.b. ODC								
<u>0017</u>	9.2 PM2.5 FRM mass - w/operator					0	0		
	9.2.a. Labor	Professional							

		Technical							
		Administrative							
	9.2.b. ODC								
<u>0018</u>	10.1 PM2.5 speciation w/operator					0	0		
	10.1.a. Labor	Professional							
		Technical							
		Administrative							
	10.1.b. ODC								
<u>0019</u>	10.2 PM2.5 speciation - w/o operator					0	0		
	10.2.a. Labor	Professional							
		Technical							
		Administrative							
	10.2.b. ODC								
<u>0020</u>	11.1 PM10-2.5 FRM mass - w/o operator					0	0		
	11.1.a. Labor	Professional							
		Technical							
		Administrative							
	11.1.b. ODC								

<u>0021</u>	11.2 PM10-2.5 FRM mass - w/o operator					0	0		
	11.2.a. Labor	Professional							
		Technical							
		Administrative							
	11.2.b. ODC								
<u>0022</u>	12.1 PM10-2.5 speciation - w/operator					0	0		
	12.1.a. Labor	Professional							
		Technical							
		Administrative							
	12.1.b. ODC								
<u>0023</u>	12.2 PM10-2.5 speciation - w/o operator					0	0		
	12.2.a. Labor	Professional							
		Technical							
		Administrative							
	12.2.b. ODC								
<u>0024</u>	13.1 Continuous PM2.5 mass - w/operator					0	0		
	13.1.a. Labor	Professional							

		Technical							
		Administrative							
	13.1.b. ODC								
<u>0025</u>	13.2 Continuous PM2.5 mass - w/o operator					0	0		
	13.2.a. Labor	Professional							
		Technical							
		Administrative							
	13.2.b. ODC								
<u>0026</u>	14 Filterpack Prep & Analysis					4244	4826		
	14.a. Filterpack prep & analysis ODC					3848	4368		
	14.b. Filterpack field samples ODC					193	219		
	14.c. Filterpack field blanks ODC					193	219		
<u>0027</u>	14 Artificial Preparation and audit sample					10	20		
	Artificial Preparation and audit sample ODC								

<u>0028</u>	15.1 Operation of NADP sampler - Collocated w/filterpack					144	240		
	15.1.a. Labor	Professional							
		Technical							
		Administrative							
	15.1.b. ODC								
<u>0029</u>	15.2 Operation of NADP sampler - Not collocated w/filterpack					36	120		
	15.2.a. Labor	Professional							
		Technical							
		Administrative							
	15.2.b. ODC								
<u>0030</u>	16.1 Operation of IMPROVE sampler - Collocated w/filterpack					24	60		
	16.1.a. Labor	Professional							
		Technical							
		Administrative							
	16.1.b. ODC								

<u>0031</u>	16.2 Operation of IMPROVE sampler - Not collocated w/filterpack					24	60		
	16.2. Labor	Professional							
		Technical							
		Administrative							
	16.2.b. ODC								
<u>0032</u>	17 Acquisition and Management of NPS data					240	300		
	17.a. Labor	Professional							
		Technical							
		Administrative							
	17.b. ODC								

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TO BE COMPLETED AT TIME OF AWARD. OPTION YEARS SHOULD FOLLOW SIMILAR MODEL. OPTION PERIOD 'MINIMUM' AND 'MAXIMUM' MAY BE FOUND IN 'TABLE 1: ASSUMED NUMBER OF UNITS FOR SOLICITATION' LOCATED IN ATTACHMENT 8.

Laboratory analytical costs shall be priced as an ODC based on a fixed unit cost that is inclusive of labor and other incidental costs. Internal laboratory quality assurance costs (e.g. method blanks, replicate runs, and end of run internal standards) shall be incorporated into the unit cost. We are looking for (2) unique unit costs. The unit bases for these analytical costs shall be 1) one filterpack assembly prepared, shipped, received and analyzed from the field and 2) one audit sample received and analyzed.

NOTE\*\* The table produced above is provided to offerors only as a model to assist in the preparation of their proposal. Labor categories should reflect those actual categories of labor and labor category levels the offeror intends to offer in their proposal.

The rate, or rates, set forth above cover all expenses, including report preparation, salaries, overhead, general and administrative expenses, and profit.

The Contractor shall voucher for only the time of the personnel whose services are applied directly to the work called for in individual Delivery Orders and accepted by the Project Officer. The Government shall pay the Contractor for the life of a delivery order at rates in effect when the delivery order was issued, even if performance under the delivery order crosses into another period. The Contractor shall maintain time and labor distribution records for all employees who work under the contract. These records must document time worked and work performed by each individual on all Delivery Orders.

4. The Section B clause entitled "ESTIMATED COST AND FIXED FEE (EP 52.216-190) (APR 1984)" has been added. The text is as follows:

- (a) The estimated cost of this contract is \_\_\_\_\_.
- (b) The fixed fee is \_\_\_\_\_.
- (c) The total estimated cost and fixed fee is \_\_\_\_\_.

5. The Section B clause entitled "LIMITATION OF FUNDS NOTICE (EP 52.232-100) (APR 1984)" has been added. The text is as follows:

(a) Pursuant to the Limitation of Funds clause, incremental funding in the amount of \_\_\_\_\_ is allotted to cover estimated cost. Funds in the amount of \_\_\_\_\_ are provided to cover the corresponding increment of fixed fee. The amount allotted for costs is estimated to cover the contractor's performance through \_\_\_\_\_.

(b) When the contract is fully funded as specified in the Estimated Cost and Fixed Fee Clause (EP 52.216-190), the Limitation of Cost clause shall become applicable.

6. The Section G clause entitled "PAYMENT OF FEE (EPAAR 1552.216-74) (MAY 1991)" has been added. The text is as follows:

(a) The term "fee" in this clause refers to either the fixed fee under a cost-plus-fixed-fee type contract, or the base fee under a cost-plus-award-fee type contract.

(b) The Government will make provisional fee payments on the basis of percentage of work completed. Percentage of work completed is the ratio of direct labor hours performed to the direct labor hours set forth in clause 1552.211-73, "Level of Effort--Cost-Reimbursement Term Contract."

7. The Section G clause entitled "GOVERNMENT PROPERTY (EPAAR 1552.245-73) (JUN 2003) DEVIATION" has been deleted.

8. The Section G clause entitled "52.245-1 -- Government Property" has been added. The text is as follows:

52.245-1 -- Government Property.

As prescribed in 45.107 (a), insert the following clause:

Government Property (June 2007)

(a) Definitions. As used in this clause—

"Acquisition cost" means the cost to acquire a tangible capital asset including the purchase price of the asset and costs necessary to prepare the asset for use. Costs necessary to prepare the asset for use include the cost of placing the asset in location and bringing the asset to a condition necessary for normal or expected use.

"Cannibalize" means to remove serviceable parts from one item of equipment in order to install them on another item of equipment.

"Contractor-acquired property" means property acquired, fabricated, or otherwise provided by the Contractor for performing a contract, and to which the Government has title.

"Contractor inventory" means—

(1) Any property acquired by and in the possession of a Contractor or subcontractor under a contract for which title is vested in the Government and which exceeds the amounts needed to complete full performance under the entire contract;

(2) Any property that the Government is obligated or has the option to take over under any type of contract, e.g., as a result either of any changes in the specifications or plans thereunder or of the termination of the contract (or subcontract thereunder), before completion of the work, for the convenience or at the option of the Government; and

(3) Government-furnished property that exceeds the amounts needed to complete full performance under the entire contract.

"Contractor's managerial personnel" means the Contractor's directors, officers, managers, superintendents, or equivalent representatives who have supervision or direction of-

(1) All or substantially all of the Contractor's business;

(2) All or substantially all of the Contractor's operation at any one plant or separate location; or

(3) A separate and complete major industrial operation.

"Demilitarization" means rendering a product unusable for, and not restorable to, the purpose for which it was designed or is customarily used.

"Discrepancies incident to shipment" means any differences (e.g., count or condition) between the items documented to have been shipped and items actually received.

"Equipment" means a tangible asset that is functionally complete for its intended purpose, durable, nonexpendable, and needed for the performance of a contract. Equipment is not intended for sale, and does not ordinarily lose its identity or become a component part of another article when put into use.

"Government-furnished property" means property in the possession of, or directly acquired by, the Government and subsequently furnished to the Contractor for performance of a contract.

"Government property" means all property owned or leased by the Government. Government property includes both Government-furnished and Contractor-acquired property.

"Material" means property that may be consumed or expended during the performance of a contract, component parts of a higher assembly, or items that lose their individual identity through incorporation into an end-item. Material does not include equipment, special tooling and special test equipment.

"Nonseverable" means property that cannot be removed after construction or installation without substantial loss of value or damage to the installed property or to the premises where installed.

"Plant equipment" as used in this part, means personal property of a capital nature (including equipment, machine tools, test equipment, furniture, vehicles, and accessory and auxiliary items) for use in manufacturing supplies, in performing services, or for any administrative or general plant purpose. It does not include special tooling or special test equipment.

"Precious metals" means silver, gold, platinum, palladium, iridium, osmium, rhodium, and ruthenium.

"Property" means all tangible property, both real and personal.

"Property Administrator" means an authorized representative of the Contracting

Officer appointed in accordance with agency procedures, responsible for administering the contract requirements and obligations relating to Government property in the possession of a Contractor.

"Provide" means to furnish, as in Government-furnished property, or to acquire, as in contractor-acquired property.

"Real property" means land and rights in land, ground improvements, utility distribution systems, and buildings and other structures. It does not include foundations and other work necessary for installing special tooling, special test equipment, or plant equipment.

"Sensitive property" means property potentially dangerous to the public safety or security if stolen, lost, or misplaced, or that shall be subject to exceptional physical security, protection, control, and accountability. Examples include weapons, ammunition, explosives, controlled substances, radioactive materials, hazardous materials or wastes, or precious metals.

"Surplus property" means excess personal property not required by any Federal agency as determined by the Administrator of the General Services Administration (GSA).

(b) Property management.

(1) The Contractor shall have a system to manage (control, use, preserve, protect, repair and maintain) Government property in its possession. The system shall be adequate to satisfy the requirements of this clause. In doing so, the Contractor shall initiate and maintain the processes, systems, procedures, records, and methodologies necessary for effective control of Government property, consistent with voluntary consensus standards and/or industry-leading practices and standards for Government property management except where inconsistent with law or regulation. During the period of performance, the Contractor shall disclose any significant changes to their property management system to the Property Administrator prior to implementation.

(2) The Contractor's responsibility extends from the initial acquisition and receipt of property, through stewardship, custody, and use until formally relieved of responsibility by authorized means, including delivery, consumption, expending, disposition, or via a completed investigation, evaluation, and final determination for lost, damaged, destroyed, or stolen property. This requirement applies to all Government property under the Contractor's accountability, stewardship, possession or control, including its vendors or subcontractors (see paragraph (f)(1)(v) of this clause).

(3) The Contractor shall include the requirements of this clause in all subcontracts under which Government property is acquired or furnished for subcontract performance.

(c) Use of Government property. The Contractor shall use Government property, either furnished or acquired under this contract, only for performing this contract, unless otherwise provided for in this contract or approved by the Contracting Officer. The Contractor shall not modify, cannibalize, or make alterations to Government property unless this contract specifically identifies the modifications, alterations or improvements as work to be

performed.

(d) Government-furnished property.

(1) The Government shall deliver to the Contractor the Government-furnished property described in this contract. The Government shall furnish related data and information needed for the intended use of the property. The warranties of suitability of use and timely delivery of Government-furnished property do not apply to property acquired or fabricated by the Contractor as contractor-acquired property and subsequently transferred to another contract with this Contractor.

(2) The delivery and/or performance dates specified in this contract are based upon the expectation that the Government-furnished property will be suitable for contract performance and will be delivered to the Contractor by the dates stated in the contract.

(i) If the property is not delivered to the Contractor by the dates stated in the contract, the Contracting Officer shall, upon the Contractor's timely written request, consider an equitable adjustment to the contract.

(ii) In the event property is received by the Contractor, or for Government-furnished property after receipt and installation, in a condition not suitable for its intended use, the Contracting Officer shall, upon the Contractor's timely written request, advise the Contractor on a course of action to remedy the problem. Such action may include repairing, replacing, modifying, returning, or otherwise disposing of the property at the Government's expense. Upon completion of the required action(s), the Contracting Officer shall consider an equitable adjustment to the contract (see also paragraph (f) (1) (ii) (A) of this clause).

(iii) The Government may, at its option, furnish property in an "as-is" condition. The Contractor will be given the opportunity to inspect such property prior to the property being provided. In such cases, the Government makes no warranty with respect to the serviceability and/or suitability of the property for contract performance. Any repairs, replacement, and/or refurbishment shall be at the Contractor's expense.

(3) (i) The Contracting Officer may by written notice, at any time—

(A) Increase or decrease the amount of Government-furnished property under this contract;

(B) Substitute other Government-furnished property for the property previously furnished, to be furnished, or to be acquired by the Contractor for the Government under this contract; or

(C) Withdraw authority to use property.

(ii) Upon completion of any action(s) under paragraph (d) (3) (i) of this clause, and the Contractor's timely written request, the Contracting Officer shall consider an equitable adjustment to the contract.

(e) Title to Government property.

(1) The Government shall retain title to all Government-furnished property. Title to Government property shall not be affected by its incorporation into or attachment to any property not owned by the Government, nor shall Government property become a fixture or lose its identity as personal property by being attached to any real property.

(2) Fixed-price contracts.

(i) All Government-furnished property and all property acquired by the Contractor, title to which vests in the Government under this paragraph (collectively referred to as "Government property"), are subject to the provisions of this clause.

(ii) Title to each item of equipment, special test equipment and special tooling acquired by the Contractor for the Government under this contract shall pass to and vest in the Government when its use in performing this contract commences or when the Government has paid for it, whichever is earlier, whether or not title previously vested in the Government.

(iii) If this contract contains a provision directing the Contractor to purchase material for which the Government will reimburse the Contractor as a direct item of cost under this contract—

(A) Title to material purchased from a vendor shall pass to and vest in the Government upon the vendor's delivery of such material; and

(B) Title to all other material shall pass to and vest in the Government upon—

(1) Issuance of the material for use in contract performance;

(2) Commencement of processing of the material or its use in contract performance; or

(3) Reimbursement of the cost of the material by the Government, whichever occurs first.

(3) Title under Cost-Reimbursement or Time-and-Material Contracts or Cost-Reimbursable contract line items under Fixed-Price contracts.

(i) Title to all property purchased by the Contractor for which the Contractor is entitled to be reimbursed as a direct item of cost under this contract shall pass to and vest in the Government upon the vendor's delivery of such property.

(ii) Title to all other property, the cost of which is reimbursable to the Contractor, shall pass to and vest in the Government upon—

(A) Issuance of the property for use in contract performance;

(B) Commencement of processing of the property for use in contract performance; or

(C) Reimbursement of the cost of the property by the Government, whichever occurs first.

(iii) All Government-furnished property and all property acquired by the Contractor, title to which vests in the Government under this paragraph (e)(3)(iii) (collectively referred to as "Government property"), are subject to the provisions of this clause.

(f) Contractor plans and systems.

(1) Contractors shall establish and implement property management plans, systems, and procedures at the contract, program, site or entity level to enable the following outcomes:

(i) Acquisition of Property. The Contractor shall document that all property was acquired consistent with its engineering, production planning, and material control operations.

(ii) Receipt of Government Property. The Contractor shall receive Government property (document the receipt), record the information necessary to meet the record requirements of paragraph (f)(1)(iii)(A)(1) through (5) of this clause, identify as Government owned in a manner appropriate to the type of property (e.g., stamp, tag, mark, or other identification), and manage any discrepancies incident to shipment.

(A) Government-furnished property. The Contractor shall furnish a written statement to the Property Administrator containing all relevant facts, such as cause or condition and a recommended course(s) of action, if overages, shortages, or damages and/or other discrepancies are discovered upon receipt of Government-furnished property.

(B) Contractor-acquired property. The Contractor shall take all actions necessary to adjust for overages, shortages, damage and/or other discrepancies discovered upon receipt, in shipment of Contractor-acquired property from a vendor or supplier, so as to ensure the proper allocability and allowability of associated costs.

(iii) Records of Government property. The Contractor shall create and maintain records of all Government property accountable to the contract, including Government-furnished and Contractor-acquired property.

(A) Property records shall enable a complete, current, auditable record of all transactions and shall, unless otherwise approved by the Property Administrator, contain the following:

(1) The name, part number and description, manufacturer, model number, and National Stock Number (if needed for additional item identification tracking and/or disposition).

(2) Quantity received (or fabricated), issued, and balance-on-hand.

(3) Unit acquisition cost.

(4) Unique-item identifier or equivalent (if available and necessary for individual item tracking).

- (5) Unit of measure.
- (6) Accountable contract number or equivalent code designation.
- (7) Location.
- (8) Disposition.
- (9) Posting reference and date of transaction.
- (10) Date placed in service.

(B) Use of a Receipt and Issue System for Government Material. When approved by the Property Administrator, the Contractor may maintain, in lieu of formal property records, a file of appropriately cross-referenced documents evidencing receipt, issue, and use of material that is issued for immediate consumption.

(iv) Physical inventory. The Contractor shall periodically perform, record, and disclose physical inventory results. A final physical inventory shall be performed upon contract completion or termination. The Property Administrator may waive this final inventory requirement, depending on the circumstances (e.g., overall reliability of the Contractor's system or the property is to be transferred to a follow-on contract).

(v) Subcontractor control.

(A) The Contractor shall award subcontracts that clearly identify assets to be provided and shall ensure appropriate flow down of contract terms and conditions (e.g., extent of liability for loss, damage, destruction or theft of Government property).

(B) The Contractor shall assure its subcontracts are properly administered and reviews are periodically performed to determine the adequacy of the subcontractor's property management system.

(vi) Reports. The Contractor shall have a process to create and provide reports of discrepancies; loss, damage, destruction, or theft; physical inventory results; audits and self-assessments; corrective actions; and other property related reports as directed by the Contracting Officer.

(A) Loss, damage, destruction, or theft. Unless otherwise directed by the Property Administrator, the Contractor shall investigate and promptly furnish a written narrative of all incidents of loss, damage, destruction, or theft to the property administrator as soon as the facts become known or when requested by the Government.

(B) Such reports shall, at a minimum, contain the following information:

- (1) Date of incident (if known).
- (2) The name, commercial description, manufacturer, model number, and National Stock Number (if applicable).

- (3) Quantity.
  - (4) Unique Item Identifier (if available).
  - (5) Accountable Contract number.
  - (6) A statement indicating current or future need.
  - (7) Acquisition cost, or if applicable, estimated scrap proceeds, estimated repair or replacement costs.
  - (8) All known interests in commingled property of which the Government property is a part.
  - (9) Cause and corrective action taken or to be taken to prevent recurrence.
  - (10) A statement that the Government will receive any reimbursement covering the loss, damage, destruction, or theft, in the event the Contractor was or will be reimbursed or compensated.
  - (11) Copies of all supporting documentation.
  - (12) Last known location.
  - (13) A statement that the property did or did not contain sensitive or hazardous material, and if so, that the appropriate agencies were notified.
- (vii) Relief of stewardship responsibility. Unless the contract provides otherwise, the Contractor shall be relieved of stewardship responsibility for Government property when such property is—
- (A) Consumed or expended, reasonably and properly, or otherwise accounted for, in the performance of the contract, including reasonable inventory adjustments of material as determined by the Property Administrator; or a Property Administrator granted relief of responsibility for loss, damage, destruction or theft of Government property;
  - (B) Delivered or shipped from the Contractor's plant, under Government instructions, except when shipment is to a subcontractor or other location of the Contractor; or
  - (C) Disposed of in accordance with paragraphs (j) and (k) of this clause.
- (viii) Utilizing Government property.
- (A) The Contractor shall utilize, consume, move, and store Government Property only as authorized under this contract. The Contractor shall promptly disclose and report Government property in its possession that is excess to contract performance.
  - (B) Unless otherwise authorized in this contract or by the Property Administrator the Contractor shall not commingle Government property with property not owned by the Government.

(ix) Maintenance. The Contractor shall properly maintain Government property. The Contractor's maintenance program shall enable the identification, disclosure, and performance of normal and routine preventative maintenance and repair. The Contractor shall disclose and report to the Property Administrator the need for replacement and/or capital rehabilitation.

(x) Property closeout. The Contractor shall promptly perform and report to the Property Administrator contract property closeout, to include reporting, investigating and securing closure of all loss, damage, destruction, or theft cases; physically inventorying all property upon termination or completion of this contract; and disposing of items at the time they are determined to be excess to contractual needs.

(2) The Contractor shall establish and maintain Government accounting source data, as may be required by this contract, particularly in the areas of recognition of acquisitions and dispositions of material and equipment.

(3) The Contractor shall establish and maintain procedures necessary to assess its property management system effectiveness, and shall perform periodic internal reviews and audits. Significant findings and/or results of such reviews and audits pertaining to Government property shall be made available to the Property Administrator.

(g) Systems analysis.

(1) The Government shall have access to the contractor's premises and all Government property, at reasonable times, for the purposes of reviewing, inspecting and evaluating the Contractor's property management plan, systems, procedures, records, and supporting documentation that pertains to Government property.

(2) Records of Government property shall be readily available to authorized Government personnel and shall be safeguarded from tampering or destruction.

(3) Should it be determined by the Government that the Contractor's property management practices are inadequate or not acceptable for the effective management and/or control of Government property under this contract, and/or present an undue risk to the Government, the Contractor shall immediately take all necessary corrective actions as directed by the Property Administrator.

(4) The Contractor shall ensure Government access to subcontractor premises, and all Government property located at subcontractor premises, for the purposes of reviewing, inspecting and evaluating the subcontractor's property management plan, systems, procedures, records, and supporting documentation that pertains to Government property.

(h) Contractor Liability for Government Property.

(1) Unless otherwise provided for in the contract, the Contractor shall not be liable for loss, damage, destruction, or theft to the Government property furnished or acquired under this contract, except when any one of the following applies—

(i) The risk is covered by insurance or the Contractor is otherwise reimbursed (to the extent of such insurance or reimbursement). The allowability of insurance costs shall be determined in accordance with 31.205-19.

(ii) The loss, damage, destruction, or theft is the result of willful misconduct or lack of good faith on the part of the Contractor's managerial personnel. Contractor's managerial personnel, in this clause, means the Contractor's directors, officers, managers, superintendents, or equivalent representatives who have supervision or direction of all or substantially all of the Contractor's business; all or substantially all of the Contractor's operation at any one plant or separate location; or a separate and complete major industrial operation.

(iii) The Contracting Officer has, in writing, revoked the Government's assumption of risk for loss, damage, destruction, or theft, due to a determination under paragraph (g) of this clause that the Contractor's property management practices are inadequate, and/or present an undue risk to the Government, and the Contractor failed to take timely corrective action. If the Contractor can establish by clear and convincing evidence that the loss, damage, destruction, or theft of Government property occurred while the Contractor had adequate property management practices or the loss, damage, destruction, or theft of Government property did not result from the Contractor's failure to maintain adequate property management practices, the Contractor shall not be held liable.

(2) The Contractor shall take all reasonable actions necessary to protect the Government property from further loss, damage, destruction, or theft. The Contractor shall separate the damaged and undamaged Government property, place all the affected Government property in the best possible order, and take such other action as the Property Administrator directs.

(3) The Contractor shall do nothing to prejudice the Government's rights to recover against third parties for any loss, damage, destruction, or theft of Government property.

(4) Upon the request of the Contracting Officer, the Contractor shall, at the Government's expense, furnish to the Government all reasonable assistance and cooperation, including the prosecution of suit and the execution of instruments of assignment in favor of the Government in obtaining recovery.

(i) Equitable adjustment. Equitable adjustments under this clause shall be made in accordance with the procedures of the Changes clause. The right to an equitable adjustment shall be the Contractor's exclusive remedy and the Government shall not be liable to suit for breach of contract for the following:

(1) Any delay in delivery of Government-furnished property.

(2) Delivery of Government-furnished property in a condition not suitable for its intended use.

(3) An increase, decrease, or substitution of Government-furnished property.

(4) Failure to repair or replace Government property for which the Government is responsible.

(j) Contractor inventory disposal. Except as otherwise provided for in this contract, the Contractor shall not dispose of Contractor inventory until authorized to do so by the Plant Clearance Officer.

(1) Scrap to which the Government has obtained title under paragraph (e) of this clause.

(i) Contractor with an approved scrap procedure.

(A) The Contractor may dispose of scrap resulting from production or testing under this contract without Government approval. However, if the scrap requires demilitarization or is sensitive property, the Contractor shall submit the scrap on an inventory disposal schedule.

(B) For scrap from other than production or testing the Contractor may prepare scrap lists in lieu of inventory disposal schedules (provided such lists are consistent with the approved scrap procedures), except that inventory disposal schedules shall be submitted for scrap aircraft or aircraft parts and scrap that—

(1) Requires demilitarization;

(2) Is a classified item;

(3) Is generated from classified items;

(4) Contains hazardous materials or hazardous wastes;

(5) Contains precious metals; or

(6) Is dangerous to the public health, safety, or welfare.

(ii) Contractor without an approved scrap procedure. The Contractor shall submit an inventory disposal schedule for all scrap. The Contractor may not dispose of scrap resulting from production or testing under this contract without Government approval.

(2) Predisposal requirements.

(i) Once the Contractor determines that Contractor-acquired property is no longer needed for contract performance, the Contractor in the following order of priority—

(A) May contact the Contracting Officer if use of the property in the performance of other Government contracts is practical;

(B) May purchase the property at the acquisition cost;  
or

(C) Shall make reasonable efforts to return unused property to the appropriate supplier at fair market value (less, if applicable, a reasonable restocking fee that is consistent with the supplier's

customary practices).

(ii) The Contractor shall list, on Standard Form 1428, Inventory Disposal Schedule, property that was not used in the performance of other Government contracts under paragraph (j)(2)(i)(A) of this clause, property that was not purchased under paragraph (j)(2)(i)(B) of this clause, and property that could not be returned to a supplier under paragraph (j)(2)(i)(C) of this clause.

(3) Inventory disposal schedules.

(i) The Contractor shall use Standard Form 1428, Inventory Disposal Schedule, to identify-

(A) Government-furnished property that is no longer required for performance of this contract, provided the terms of another Government contract do not require the Government to furnish that property for performance of this contract;

(B) Contractor-acquired property, to which the Government has obtained title under paragraph (e) of this clause, which is no longer required for performance of that contract; and

(C) Termination inventory.

(ii) The Contractor may annotate inventory disposal schedules to identify property the Contractor wishes to purchase from the Government.

(iii) Unless the Plant Clearance Officer has agreed otherwise, or the contract requires electronic submission of inventory disposal schedules, the Contractor shall prepare separate inventory disposal schedules for-

(A) Special test equipment with commercial components;

(B) Special test equipment without commercial components;

(C) Printing equipment;

(D) Information technology (e.g., computers, computer components, peripheral equipment, and related equipment);

(E) Precious metals;

(F) Mononuclear hazardous materials or hazardous wastes; or

(G) Nuclear materials or nuclear wastes.

(iv) The Contractor shall describe the property in sufficient detail to permit an understanding of its intended use. Property with the same description, condition code, and reporting location may be grouped in a single line item.

(4) Submission requirements. The Contractor shall submit inventory disposal schedules to the Plant Clearance Officer no later than—

(i) 30-days following the Contractor's determination that a Government property item is no longer required for performance of this contract;

(ii) 60 days, or such longer period as may be approved by the Plant Clearance Officer, following completion of contract deliveries or performance; or

(iii) 120 days, or such longer period as may be approved by the Termination Contracting Officer following contract termination in whole or in part.

(5) Corrections. The Plant Clearance Officer may—

(i) Reject a schedule for cause (e.g., contains errors, determined to be inaccurate); and

(ii) Require the Contractor to correct an inventory disposal schedule.

(6) Postsubmission adjustments. The Contractor shall notify the Plant Clearance Officer at least 10 working days in advance of its intent to remove an item from an approved inventory disposal schedule. Upon approval of the Plant Clearance Officer, or upon expiration of the notice period, the Contractor may make the necessary adjustments to the inventory schedule.

(7) Storage.

(i) The Contractor shall store the property identified on an inventory disposal schedule pending receipt of disposal instructions. The Government's failure to furnish disposal instructions within 120 days following acceptance of an inventory disposal schedule may entitle the Contractor to an equitable adjustment for costs incurred to store such property on or after the 121st day.

(ii) The Contractor shall obtain the Plant Clearance Officer's approval to remove Government property from the premises where the property is currently located prior to receipt of final disposition instructions. If approval is granted, any costs incurred by the Contractor to transport or store the property shall not increase the price or fee of any Government contract. The storage facility shall be appropriate for assuring the property's physical safety and suitability for use. Approval does not relieve the Contractor of any liability for such property under this contract.

(8) Disposition instructions.

(i) If the Government does not furnish disposition instructions to the Contractor within 45 days following acceptance of a scrap list, the Contractor may dispose of the listed scrap in accordance with the Contractor's approved scrap procedures.

(ii) The Contractor shall prepare for shipment, deliver f.o.b. origin, or dispose of Contractor inventory as directed by the Plant

Clearance Officer. If not returned to the Government, the Contractor shall remove and destroy any markings identifying the property as U.S. Government-owned property prior to its disposal.

(iii) The Contracting Officer may require the Contractor to demilitarize the property prior to shipment or disposal. In such cases, the Contractor may be entitled to an equitable adjustment under paragraph (i) of this clause.

(9) Disposal proceeds. As directed by the Contracting Officer, the Contractor shall credit the net proceeds from the disposal of Contractor inventory to the contract, or to the Treasury of the United States as miscellaneous receipts.

(10) Subcontractor inventory disposal schedules. The Contractor shall require its Subcontractors to submit inventory disposal schedules to the Contractor in accordance with the requirements of paragraph (j)(4) of this clause.

(k) Abandonment of Government property.

(1) The Government shall not abandon sensitive Government property or termination inventory without the Contractor's written consent.

(2) The Government, upon notice to the Contractor, may abandon any nonsensitive Government property in place, at which time all obligations of the Government regarding such property shall cease.

(3) The Government has no obligation to restore or rehabilitate the Contractor's premises under any circumstances; however, if Government-furnished property is withdrawn or is unsuitable for the intended use, or if other Government property is substituted, then the equitable adjustment under paragraph (i) of this clause may properly include restoration or rehabilitation costs.

(l) Communication. All communications under this clause shall be in writing.

(m) Contracts outside the United States. If this contract is to be performed outside of the United States and its outlying areas, the words "Government" and "Government-furnished" (wherever they appear in this clause) shall be construed as "United States Government" and "United States Government-furnished," respectively.

9. The Section H clause entitled "OPTION TO EXTEND THE EFFECTIVE PERIOD OF THE CONTRACT-- INDEFINITE DELIVERY/INDEFINITE QUANTITY CONTRACT (EPAAR 1552.217-76) (APR 1984) DEVIATION" has been modified. The text is as follows:

(a) The Government has the option to extend the effective period of this contract for 4 additional period(s). If more than sixty (60) days remain in the contract effective period, the Government, without prior written notification, may exercise this option by issuing a contract modification. To unilaterally exercise this option within the last 60 days of the effective period, the Government must issue written notification of its intent to exercise the option prior to that last 60-day period. This preliminary notification does not commit the Government to exercising the option.

(b) If the options are exercised, the "Minimum and Maximum Contract Amount" clause will be modified to reflect new and separate maximum amounts:

<u>Period</u>	<u>Minimum</u>	<u>Maximum</u>
Option I	\$300,000.00	TBD
Option II	\$300,000.00	TBD
Option III	\$300,000.00	TBD
Option IV	\$300,000.00	TBD

(c) The "Effective Period of the Contract" clause will be modified as follows:

<u>Period</u>	<u>Start Date</u>	<u>End Date</u>
Option Period I	Award Date + 1 Years	Award Date + 2 Years
Option Period II	Award Date + 2 Years	Award Date + 3 Years
Option Period III	Award Date + 3 Years	Award Date + 4 Years
Option Period IV	Award Date + 4 <b>Years</b>	Award Date + 5 Years

FOR THE LOE PORTION OF THE CONTRACT THE FOLLOWING APPLIES:

(b) Paragraph (a) of the "Level of Effort" clause will be amended to reflect a new and separate level of effort as follows.

<u>Period</u>	<u>Level of Effort Hours</u>
Base	124,576
Option I	124,576
Option II	124,576
Option III	124,576
Option IV	124,576

(c) The "Estimated Cost and Fixed Fee" clause will be amended to reflect increased estimated costs and fixed fee for each option period as follows:

<u>Period</u>	<u>Estimated Cost</u>	<u>Fixed Fee</u>	<u>Total</u>
Base			
Option I			
Option II	Contract will contain information from winning proposal		
Option III			
Option IV			

( d) If this contract contains "not to exceed amounts" for elements of other direct costs (ODC), those amounts will be increased as follows:

<u>Period</u>	<u>Other Direct Costs</u>
Base	
Option I	
Option II	Contract will contain information from winning proposal
Option III	
Option IV	

(End of clause)

10. The Section J clause entitled "LIST OF ATTACHMENTS (EP 52.252-100) (APR 1984)" has been modified. The text is as follows:

Number	Attachment Title
1	Statement of Work
2	Government Furnished Equipment
3	Client Authorization Letter
4	NIH Past Performance Database
5	Invoice Preparation Instructions
6	Reports of Work
7	Minimum Standards for a Conflict of Interest Plan
8	Proposal Instructions
9	EPA Information Security Manual
10	Agency Network Security Policy
11	Database Schema
12	Data Dictionary
13	Source Code of the System Application
14	Service Contract Act Information

11. The Section L clause entitled "TYPE OF CONTRACT (FAR 52.216-1) (APR 1984) DEVIATION" has been modified. The text is as follows:

The Government contemplates award of a Hybrid Fixed-Rate Indefinite Delivery/Indefinite Quantity (ID/IQ) & Level of Effort - Cost Reimbursement contract resulting from this solicitation. Tasks 1 to 17 will be performed under the Fixed-Rate Indefinite Delivery/Indefinite Quantity section of the contract. Task 18 will be performed under the Level of Effort - Cost Reimbursement section of the contract.

12. The Section L clause entitled "PAST PERFORMANCE INFORMATION (EPAAR 1552.215-75) (OCT 2000)" has been modified. The text is as follows:

(a) Offerors shall submit the information requested below as part of their proposal for both the offeror and any proposed subcontractors for subcontracts expected to exceed \$500,000 in the base period or in any subsequent option year. The information may be submitted prior to other parts of the proposal in order to assist the Government in reducing the evaluation period.

(b) Offerors shall submit a list of at least five contracts or subcontracts completed in the last three years, and all contracts and subcontracts currently in process, which are similar in nature to this requirement.

(1) The contracts and subcontracts listed may include those entered into with Federal, State and local governments, and commercial businesses, which are of similar scope, magnitude, relevance, and complexity to the requirement which is described in the RFP. Include the following information for each contract and subcontract listed:

- (a) Name of contracting activity.
- (b) Contract number.
- (c) Contract title.

- (d) Contract type.
- (e) Brief description of contract or subcontract and relevance to this requirement.
- (f) Total contract value.
- (g) Period of performance.
- (h) Contracting officer, telephone number, and E-mail address (if available).
- (i) Program manager/project officer, telephone number, and E-mail address (if available).
- (j) Administrative Contracting officer, if different from (h) above, telephone number, and E-mail address (if available).
- (k) List of subcontractors (if applicable).
- (l) Compliance with subcontracting plan goals for small disadvantaged business concerns, monetary targets for small disadvantaged business participation, and the notifications submitted under FAR 19.1202-4 (b), if applicable.

(c) Offerors should not provide general information on their performance on the identified contracts and subcontracts. General performance information will be obtained from the references.

(1) Offerors may provide information on problems encountered and corrective actions taken on the identified contracts and subcontracts.

(2) References that may be contacted by the Government include the contracting officer, program manager/project officer, or the administrative contracting officer identified above.

(3) If no response is received from a reference, the Government will make an attempt to contact another reference identified by the offeror, to contact a reference not identified by the offeror, or to complete the evaluation with those references who responded. The Government shall consider the information provided by the references, and may also consider information obtained from other sources, when evaluating an offeror's past performance.

(4) Attempts to obtain responses from references will generally not go beyond two telephonic messages and/or written requests from the Government, unless otherwise stated in the solicitation. The Government is not obligated to contact all of the references identified by the offeror.

(d) If negative feedback is received from an offeror's reference, the Government will compare the negative response to the responses from the offeror's other references to note differences. A score will be assigned appropriately to the offeror based on the information. The offeror will be given the opportunity to address adverse past performance information obtained from references on which the offeror has not had a previous opportunity to comment, if that information makes a difference in the Government's decision to include the offeror in or exclude the offeror from the competitive range. Any past performance deficiency or significant weakness will be discussed with offerors in the competitive range during discussions.

(e) Offerors must send Client Authorization Letters (see Section J of the solicitation) to each reference listed in their proposal to assist in the timely processing of the past performance evaluation. Offerors are encouraged to consolidate requests whenever possible (i.e., if the same reference has several contracts, send that reference a single notice citing all applicable

contracts). Offerors may send Client Authorization Letters electronically to references with copies forwarded to the contracting officer.

(1) If an offeror has no relevant past performance history, an offeror must affirmatively state that it possesses no relevant past performance history.

(2) Client Authorization Letters should be mailed or E-mailed to individual references no later than five (5) working days after proposal submission. The offeror should forward a copy of the Client Authorization Letter to the contracting officer simultaneously with mailing to references.

(f) Each offeror may describe any quality awards or certifications that indicate the offeror possesses a high-quality process for developing and producing the product or service required. Such awards or certifications include, for example, the Malcolm Baldrige Quality Award, other Government quality awards, and private sector awards or certifications.

(1) Identify the segment of the company (one division or the entire company) which received the award or certification.

(2) Describe when the award or certification was bestowed. If the award or certification is over three years old, present evidence that the qualifications still apply.

(g) Past performance information will be used for both responsibility determinations and as an evaluation factor for award. The Past Performance Questionnaire identified in section J will be used to collect information on an offeror's performance under existing and prior contracts/subcontracts for products or services similar in scope, magnitude, relevance, and complexity to this requirement in order to evaluate offerors consistent with the past performance evaluation factor set forth in section M. References other than those identified by the offeror may be contacted by the Government and used in the evaluation of the offeror's past performance.

(h) Any information collected concerning an offeror's past performance will be maintained in the official contract file.

(i) In accordance with FAR 15.305 (a) (2) (iv), offerors with no relevant past performance history, or for whom information on past performance is not available, will be evaluated neither favorably nor unfavorably on past performance.

13. The Section L clause entitled "EVALUATION OF OTHER DIRECT COSTS (EP 52.215-130) (APR 1984)" has been modified. The text is as follows:

For evaluation purposes, offerors shall propose the following amounts:

**A. Tasks 1 through 17**

Period	ODC Min	ODC Max
Base Period	TBD	TBD
Option Period I	TBD	TBD
Option Period II	TBD	TBD
Option Period III	TBD	TBD
Option Period IV	TBD	TBD

The EPA is providing no specific ODC number for Tasks 1 thru 17. ODCs may include repairs, supplies, courier, expendables, travel, etc.

Laboratory analytical costs shall be priced as an ODC based on a fixed unit cost that is inclusive of labor and other incidental costs. Internal laboratory quality assurance costs (e.g. method blanks, replicate runs, and end of run internal standards) shall be incorporated into the unit cost. We are looking for (2) unique unit costs. The unit bases for these analytical costs shall be 1) one filterpack assembly prepared, shipped, received and analyzed from the field and 2) one audit sample received and analyzed.

**B. Task 18**

Costs of land leases and utilities are tasked solely through the Level of Effort portion of the contract.

Estimated cost of land leases per year - \$55,000 (does not need an escalation factor applied per year)

Estimated cost of utilities for the sites per year - \$35,000 (does not need an escalation factor applied per year). Utilities include electrical power, telemetry and communications to the site.

14. The Section L clause entitled "SUBCONTRACTING PROGRAM PLAN FOR UTILIZATION OF SMALL BUSINESS AND SMALL DISADVANTAGED BUSINESS CONCERNS (EP 52.219-125) (AUG 1984)" has been modified. The text is as follows:

As part of the initial offer, offerors shall submit a subcontracting plan as called for by FAR 52.219-9.

Below are the U.S. EPA Environmental Protection Agency (EPA) goals for Fiscal Years (FY) 2008/2009.

Estimated Obligations	Negotiated	
	Dollar Value	Goal
DIRECT		
Small Business	\$477.6 M	39.8%
8(a) Businesses	90 M	*7.5%
Non 8(a) Small Disadvantaged Businesses	36 M	*3.0%

Women-Owned Businesses	60 M	5.0%
HUBZone Businesses	36 M	3.0%
Service Disabled Veteran Small Businesses	36 M	3.0%
<b>SUBCONTRACT</b>	<b>Dollar Value</b>	<b>Goal</b>
Small Business	100 M	50.0%
Small Disadvantaged Businesses	40 M	20.0%
Women-Owned Businesses	15 M	7.5%
HUBZones	60 M	3.0%
Services Disabled Veteran Small Businesses	60 M	3.0%
<b>NOTE:</b> Subcontracting goals are subject to increase in individual solicitations in an effort to meet overall Agency goals		

**NOTE:**

Subcontracting goals are subject to increase in individual solicitations in an effort to meet overall Agency goals.

\*Since 8(a)s are SDBs, EPA, in essence, has an SDB goal of 10.5%

<http://www.epa.gov/osdbu/goals.htm>

15. The attachment entitled "STATEMENT OF WORK" has been modified. The text is as follows:

### **CASTNET IV Statement of Work (SOW)**

#### **Project Background**

The Clean Air Status and Trends Network (CASTNET) is a long-term environmental monitoring network that measures changes in ambient air quality and assesses atmospheric deposition over broad geographic regions of the U.S. Operating since 1987, CASTNET has evolved into a robust regional monitoring program which currently consists of 84 monitoring stations nationwide. The

Environmental Protection Agency (EPA) operates a majority of the CASTNET monitoring stations. In cooperation with the EPA, the National Park Service (NPS) currently operates 25 stations. Table 1 and Figure 1 list and provide the location of the EPA operated CASTNET sites as of October 2007. The primary monitoring objectives of CASTNET are to:

- Provide atmospheric data on atmospheric deposition, rural ground level ozone and other forms of atmospheric pollution;
- Monitor the status and trends in regional air quality and atmospheric deposition;
- Assess and report on geographic patterns and long-term, temporal trends in ambient air pollution and atmospheric deposition;
- Improve our understanding of PM and ozone formation;
- Validate and improve atmospheric models;
- Provide data for health-based research and epidemiology studies;
- Assess the effectiveness of EPA's emission reduction programs and
- Support science and ecosystem studies.

Each CASTNET dry deposition site measures weekly average concentrations of sulfate ( $\text{SO}_{42-}$ ), nitrate ( $\text{NO}_3-$ ), ammonium ( $\text{NH}_4+$ ), sulfur dioxide ( $\text{SO}_2$ ), nitric acid ( $\text{HNO}_3$ ), chloride ( $\text{Cl}^-$ ) and the base cations ( $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Mg}^{2+}$  &  $\text{Ca}^{2+}$ ) using a 3-stage filterpack. In addition, each site measures hourly meteorological conditions required for calculating dry deposition rates, most sites measure average hourly ambient ozone levels and select sites measure hourly trace-level reactive odd nitrogen ( $\text{NO}_y$ ), nitric oxide ( $\text{NO}$ ), sulfur dioxide ( $\text{SO}_2$ ) and carbon monoxide ( $\text{CO}$ ). Table 2 is a list of pollutant monitoring and meteorological measurement systems deployed at a typical EPA CASTNET dry deposition site.

Dry deposition is calculated in the Network as a product of measured ambient air concentration values and inferentially-derived deposition velocities. Historically, the Multi-layer Model (MLM) has been used to estimate deposition velocities, accounting for stomatal and boundary layer resistance to deposition at multiple levels in a canopy. A new, more accurate model, the Multi-layer Biogeochemical Model (MLBC) is currently under development by EPA. This model is built on the MLM but also accounts for plant photosynthesis and respiration in estimating deposition velocities.

CASTNET, a long-term regional monitoring program, is critical for characterizing trends in deposition levels and identifying relationships among emissions, atmospheric loadings, ecological effects and human health. The EPA under several different mandates as well as other government agencies and the scientific community rely on the data and information from CASTNET, used in conjunction with information from other national monitoring networks (e.g., the National Atmospheric Deposition Program/National Trends Network (NADP/NTN) and Interagency Monitoring of Protected Visual Environments (IMPROVE)), to evaluate the effectiveness of air pollution control strategies for regional areas and assess chemical changes in

the atmosphere. CASTNET tracks real-world environmental results over time and space as emission reductions take place. Since atmospheric changes occur very slowly and trends are often obscured by the wide variability of measurements and climate, numerous years of continuous and consistent data are required to overcome this variability.

The EPA's Office of Atmospheric Programs administers CASTNET and is committed to regional atmospheric monitoring to assess long-term environmental trends. The Clean Air Markets Division (CAMD), Office of Atmospheric Programs (OAP), is the lead in providing support and technical direction for CASTNET. Additional background information, current standard operating procedures (SOPs), and the CASTNET Quality Assurance Project Plan (QAPP) are available at <http://www.epa.gov/castnet>.

### **Task 1: Core Operations of the CASTNET Program**

The following sections describe the specific requirements for the Task 1 or the Core operations of the Network. In addition to these specific requirements, the Contractor shall implement the transition plan as outlined in their technical proposal. Management and costs of the site utilities, telemetry (e.g., phone or internet service) and the site land lease shall be included as a Level of Effort task and shall not be included in costs of this task.

#### **1.1 Data Management and Analysis**

The Contractor shall be responsible for storage and reporting of all information described in this Statement of Work, and shall maintain an archive of historical operations, deposition and air quality data acquired during previous contract periods.

The Contractor shall be responsible for acquiring, installing and running the MLM and/or MLBC, as specified in technical direction by the Contract Officer Representative (COR), using appropriate model inputs. The EPA shall supply the Contractor with the most recent compiled modeling programs. The Contractor shall be responsible for producing and maintaining input files required by the model programs and for loading model output files into the database through documented scripts and procedures. All software, scripts and documentation developed under this contract shall be available to the EPA and delivered upon request.

##### **1.1.1 Data Management & Storage**

To manage and report this information efficiently and accurately while continuing to acquire data from on-going operations, the Contractor shall manage a relational database in a development/testing/production environment. The database management system (DBMS) that the Contractor uses shall be capable of:

- Providing data security in compliance with the EPA requirements for external data systems;
- Efficiently managing a database of approximately 30 gigabytes in size;
- Efficiently managing a database having over 100 tables, with some tables having approximately 100 million records and
- Providing system-level user access and data integrity constraints.

The EPA currently uses the Oracle® Enterprise Database 10g Release 2(10.2.0.1.0) DBMS in a Solaris 10 environment. The EPA anticipates that this platform will be used throughout the life of this contract, although upgrades to the DBMS and operating system are likely. A description of the CASTNET schema is included in Attachment 1. Upon award of the contract the EPA shall deliver to the Contractor a complete and functional archive of the current contractor's Microsoft SQLServer database and Visual Basic data management application, and a complete and functional export of the EPA's Oracle schema.

The Contractor shall be responsible for managing all information described in this Statement of Work, including the data management activities required for data collection, processing, validation, storage, documentation and reporting. The types of data include, but are not limited to:

- All continuous measurements, observations and equipment status monitoring generated by the Network. All continuous data and equipment status monitoring shall be stored in the database as hourly averages. All observations made by the field operators shall be acquired either electronically (e.g., email or Web site) or through data transcription from hard copy forms sent in by the site operator.
- Results of laboratory analyses, including those types for routine samples, routine quality assurance samples, samples for method development or special studies, internal and external laboratory audits, internal and external system audits, and inter-laboratory comparisons. All laboratory results shall include identification in the database by type of sample.
- Site status and location data: including latitude, longitude, elevation, FIPS codes, nearby NADP sites, political address (e.g., country, state, and county), conditions and surroundings within 1 km, history of instrumentation of the site, site contacts, and site operators and their contact information.
- Site photos and maps. All site photos shall be stored as binary objects in the database or as references to electronic images. The referenced electronic image shall be considered part of the database.

- Measurements and criteria from field calibrations and audits.
- Model results.
- Inter-network comparisons and other special studies. All sampling and analysis data from inter-network comparisons and other special studies shall be identified, documented and stored in the database.
- Quality assurance information from routine and non-routine sources. Data from routine and non-routine quality assurance measurements shall be identified, documented and stored in the database.
- The National Park Service's (NPS's) CASTNET data. The Contractor shall import and manage all available data acquired by the NPS for the operation of their CASTNET sites for all types of data listed above. The NPS or their designee will deliver data electronically to the Contractor in a format agreeable to all parties.
- External data sources. The Contractor shall be responsible for acquiring and managing final data products from NADP/NTN wet deposition database, and IMPROVE aerosol data. These external data products shall be used for estimating total (wet + dry) deposition and network-intercomparisons, respectively.

The Contractor shall maintain a data dictionary of all objects within the database, including tables, columns, constraints, and data validation codes. The Contractor shall use established good data practices to ensure that database objects and applications developed by the Contractor have been properly tested and documented before use in the production environment. The Contractor shall ensure that all electronic data acquisitions and transfers into and from the database are accurate and complete by checksum comparisons, or equivalent methods.

### **1.1.2 Data Reporting**

The Contractor shall deliver data to the EPA for loading into the EPA database with a minimum amount of human intervention. The Contractor shall transfer data to the EPA with an electronic agent (e.g., Oracle® Corporation's SQL\*Net™), or by creating and delivering electronic data on a routine basis that are compatible with the EPA's DBMS. If the Contractor requires connection to the EPA servers for data transfers, the Contractor must conform to requirements for access to the EPA servers described at <http://yosemite.epa.gov/OEI/webguide.nsf/started/getserv> , and shall have sufficient Internet bandwidth to efficiently transfer data.

All data collected utilizing 40 CFR Part 58 requirements shall be submitted to the AQS database utilizing AQS protocol. AQS manuals and guides may be reviewed at <http://www.epa.gov/ttn/airs/airsaqs/manuals/manuals.htm>. All ozone data and continuous PM<sub>2.5</sub> mass data shall be automatically polled and uploaded to the AirNow webpage within 1-hour after

a data collection hour is complete.

All data acquired through this contract shall be available to the EPA on a routine schedule, or in response *to ad hoc* data requests from the COR. The EPA Project Officer shall determine the timing and content of deliveries pursuant to the contract Technical Direction Clause. An electronic replica of the database and all supporting applications shall be delivered to the EPA annually. Data deliveries shall include but not be limited to validated primary measurements from continuous monitors, sampling information, analytical results, laboratory quality assurance data, inter-laboratory comparisons, model results, time aggregations, data from special studies, and documentation for all database objects. Documentation of all database objects shall be included within the database, and shall be clear and succinct with a minimum of jargon. Preference will be given to those offers that are able to deliver or make available to the EPA screened continuous field data within 24-hours of data acquisition, either through secured Web query forms or uploading to the EPA servers.

### **1.1.3 Data Archiving**

The Contractor shall maintain historical archives of CASTNET data from its inception, including primary measurements from continuous monitors, sampling information, analytical results, laboratory quality assurance data, inter-laboratory comparisons, model results, site locations and configurations, data from special studies, and data from other organizations used in the CASTNET program.

### **1.1.4 Data Security and Disaster Recovery**

The Contractor shall provide for data security and deliver a detailed disaster recovery plan to the COR within 90-calendar days of contract award. The disaster recovery plan shall include all elements of good data management practices, including an effective backup strategy; off-site storage of database backup files, critical software and electronic documents; and an effective data restoration plan that provides for a minimum of data loss in the event of a disaster.

### **1.1.5 Data Analysis**

The Contractor shall be capable of performing complex statistical analyses (e.g., principal component, cluster and time series analyses) using a robust statistical analysis package (e.g., SAS, S-plus, and R).

The Contractor shall be capable of performing basic geographic and geostatistical analyses such as calculating geographic means and creating interpolations of geographic data sets using Inverse Distance Weighted, Kriging and Co-Variant Kriging algorithms; and producing publication-quality maps from these analyses.

### **1.1.6 Data validation**

The Contractor shall screen and validate data from continuous field measurements for reasonableness using historical criteria, physical constraints, equipment status or other established and documented criteria. All data shall be screened for data anomalies by applying screening checks for physical maximum, minimum, reasonable boundaries, rate of change, allowable characters or other documented criteria. Any changes to raw data shall be recorded in the database and identified with a data validity code that identifies the circumstance or criteria by which the determination was made that the data is anomalous. All data entered by human data entry shall be validated either by independent double entry or statistically defensible means to document a minimum of 99.99 percent data accuracy. The Contractor shall screen, validate, code and submit all data collected in compliance with 40 CFR Part 58 to the EPA Air Quality System (AQS) database.

### **1.1.7 Model operation**

The Contractor shall be responsible for acquiring, installing and running the MLM and/or MLBC, as specified in technical direction by the COR, using appropriate model inputs. The EPA shall supply the Contractor with source code and executables compiled under MS-Windows for the most recent modeling programs. The Contractor shall be responsible for producing and maintaining input files required by the model programs and for loading model output files into the database through documented scripts and procedures. All software, scripts and documentation developed under this contract shall be available to EPA and delivered upon request.

## **1.2 Quality Assurance**

Quality Assurance (QA) includes, but is not limited to, those activities conducted by and for the Contractor's management that assure and evaluate the effectiveness and appropriateness of all monitoring-related processes that might affect the quality of data delivered to the EPA under the contract. Typically, QA activities shall ensure that the Quality Control (QC) functions are carried out as designed into the operational functions of the work. The Contractor shall periodically evaluate the timeliness, effectiveness, and appropriateness of the QC activities, as outlined and specified in the EPA QA guidance referenced below.

The Quality Management Plan (QMP) and Quality Assurance Project Plan (QAPP) are critical planning documents for any environmental data operation. The corporate QMP defines an organization's QA-related policies, criteria for and areas of application, and definition of roles, responsibilities, and authorities.

The QAPP documents how environmental data operations are planned, implemented, and assessed during the life cycle of program, project, or task. The purpose of the QAPP is to define

in detail how specific QA and QC activities will be implemented during this project. Standard Operating Procedures (SOPs) document in detail the routine or repetitive administrative and technical activities to facilitate consistency and integrity of the product. SOPs facilitate activities that are managed under a QAPP.

The Contractor shall prepare a draft comprehensive QAPP, including all related manuals and SOPs, and deliver four printed copies to the EPA for comments within 90-calendar days of contract award. After receipt of the EPA comments, the Contractor shall revise the QAPP in accordance with EPA's comments within 30-calendar days and provide one copy of the plan to the EPA QA Officer for approval. Upon written approval by the EPA QA Officer, the Contractor shall deliver four printed copies and an electronic version of the revised QAPP to the EPA.

The QAPP and all associated documents shall conform to EPA general guidance and guidance for non-EPA organizations, as described at [http://www.epa.gov/quality/qa\\_docs.html](http://www.epa.gov/quality/qa_docs.html). The QAPP will include all of the elements describe in the "EPA Requirements for QA Project Plans", EPA QA/R-5 (EPA/240/B-01/003). The QAPP and SOPs shall be based, as applicable, on the "Quality Assurance Handbook for Air Pollution Measurement Systems", Volumes I, II, and IV. At a minimum, these documents shall provide sufficient detail of all aspects of the CASTNET operation to allow a user to perform the same activities and measurements and achieve similar results, and shall include the operational aspects of all sites within the CASTNET program regardless of operating agency. Method summaries and SOPs will be provided by the EPA for those equipment and procedures operated or performed by other agencies which differ from those of the Contractor.

The QA/QC program shall provide a uniform basis for sample handling, analysis, instrument and/or methods calibration and maintenance, equipment and method acceptance testing, performance evaluation, analytical data gathering, data processing and analysis, and reporting. In many instances where methodologies are available, specific QC procedures are incorporated into the method documentation.

The Contractor shall perform quality assurance activities independent of project management. The Contractor's quality assurance team shall prepare and deliver to the EPA four quarterly reports within 30-calendar days of the end of the calendar quarter for each year of the contract. The quarterly reports will briefly describe and summarize systematic data quality issues identified and remedial actions taken during the quarter. Systematic data quality issues are defined as procedures or equipment within the project that may be introducing unacceptable bias or uncertainty into the data. The Contractor's quality assurance team shall also prepare and deliver to the EPA an annual report summarizing the current quality state of the CASTNET program, as measured by the various quality control indicators.

### **1.3 Equipment Depot/Equipment Repair and Maintenance**

The Contractor shall purchase new equipment and parts for the on-going operation and enhancement of the network on behalf of the EPA. Equipment and parts shall be delivered to the Contractor's facility or installation sites. Prior to deploying equipment for service, the Contractor shall ensure that field equipment is operating properly by performing and documenting acceptance testing of all the equipment purchased by EPA delivered to the Contractor's facility. Acceptance tests shall include comparisons of instrument outputs to known, calibrated values and checks of zero, span, and drift, noise levels, response time, and detection limits. The Contractor shall notify the EPA COR and should return to the manufacturer any equipment that fails acceptance testing.

The Contractor shall ensure sufficient spare parts are on hand to meet or exceed the requirements of this contract and shall purchase spare parts on a periodic basis to ensure sufficient spare parts are available at all times. The Contractor shall be responsible for affixing property tags properly to all EPA-purchased equipment and parts.

The Contractor shall maintain and update a database inventory of all EPA capital equipment. The current equipment inventory is included in Attachment 2. At a minimum, the inventory database shall contain the following fields: equipment description, manufacturer name, model number, serial number, EPA property number, location, purchase price, month and year of purchase, current condition and disposition. For quality assurance purposes, the history of all ozone analyzers shall be traceable using this database. The Contractor shall provide a written report on equipment inventory to EPA annually, and upon request by the PO.

The Contractor shall be responsible for the maintenance and repair (including costs) of all instruments, shelters, and data acquisition systems. Maintenance and repair expenses shall be included in the relevant task pricing. The Contractor shall insure that all equipment is in good working condition, is conducive to a safe work environment and there is appropriate protection of the Network equipment. The equipment shall be Government Furnished Property (GFP) or Contractor Acquired Property (CAP). The EPA may require equipment to be upgraded as new techniques, instrumentation, and improved components become available, and may require the replacement of outdated equipment that has reached the end of its operating lifetime. New or replacement equipment shall be government furnished equipment.

#### **1.4 Data Acquisition System**

The Contractor shall use an automated data acquisition system.

#### **1.5 Training (site operators)**

The Contractor shall provide standard substantive, hands on training to each new site operator. Training topics shall include, but not be limited to, an overview of the CASTNET program,

equipment operation and maintenance, sampling procedures, safety, documentation and quality assurance. Particular emphasis shall be placed on training operators on instrument installation, equipment calibrations, maintenance, repairs, and sample change-out procedures. The Contractor shall evaluate operator performance in these activities, and provide adequate training until the site operator is proficient, in accordance with the data quality objectives.

## **1.6 Field Calibrations**

The Contractor shall visit each active CASTNET monitoring station at least twice per year to perform routine calibration and maintenance of all CASTNET field equipment. In preparing for site visits, the Contractor shall coordinate with site operators and notify the COR of all scheduled site visits no less than 2 weeks prior to monitoring site trips. Upon arrival at each monitoring site and before any adjustments are made to any instruments, the Contractor shall conduct and record complete performance checks on all air quality systems, meteorological instruments, and data acquisition systems.

The Contractor shall perform the field calibrations listed in Table 3 at each site using the specified method, or an equivalent or better method that meets the acceptance criteria listed in Table 3. The Contractor shall operate all data collection activities in accordance with the quality assurance documentation described in section 1.2 of this SOW.

## **1.7 Meetings and conferences**

The EPA COR may request the Contractor to attend and participate in conferences or meetings related to atmospheric deposition, air pollution or the operation of CASTNET. The government anticipates not more than 10 travel days annually for these requests.

## **1.8 Reporting**

The Contractor shall deliver to the EPA a monthly progress report summarizing the network operation and maintenance activity for the prior month. At a minimum, the monthly progress report shall describe: any significant events or changes to the network that would affect interpretations of results; site activity; quality assurance procedures; data management; monthly billing (in excel format); and any issues or limitations in using the data.

The Contractor shall deliver to the EPA an annual report summarizing the network for the prior calendar year. At a minimum, the annual report shall describe: the status of the network; any significant events or changes to the network that would affect interpretations of results; results and significant findings of the network; the quality of data produced by the program; any issues or limitations in using the data.

## **1.9 Third Party Audits**

The Contractor shall provide State and local agencies with access to CASTNET sites for the purpose of audits, installation of data loggers or installation and operation of additional monitoring equipment as space permits. The government anticipates no more than 10 sites will be visited by State or local agencies per year.

The Contractor shall provide third party auditors access to CASTNET sites as well as the Contractor's facility for the purpose of quality assurance audits and technical system audits. The government anticipates that third party auditors will visit each monitoring site and the Contractor's facility no more than once per year.

### **Task 2: Dry Deposition Filterpack**

Particles and selected gases shall be collected by passing air at controlled flow rates through a sequence of Teflon<sup>®</sup>, nylon, and base-impregnated filters. The Contractor shall perform filter pack sampling 10-meters above ground surface using a tilt-down tower. Filter pack flow shall be maintained with mass flow controllers at standard conditions of 25°C and 101.33 k Pascal (760 mmHg). Flow shall be maintained at 1.5 liters per minute (LPM) at sites having higher concentrations of analytes (generally sites in the Eastern U.S.) and 3.0 LPM at sites having lower concentrations (generally sites in the Western U.S.) or at other flow rates upon technical direction from the COR. Filter packs shall be replaced at each site every Tuesday at approximately 0900 hours by a site operator employed directly by the Contractor or as a subcontractor. SOPs and the CASTNET QAPP describing filterpack operations are available at <http://www.epa.gov/castnet>.

### **Task 3 : Ozone Monitoring (current CASTNET operating protocol)**

The Contractor shall operate ozone analyzers in accordance with the CASTNET QAPP and SOPs available at <http://www.epa.gov/castnet>. Inlets for the ozone analyzers shall be mounted at 10-meters above ground using a tilt-down tower. The CASTNET stations utilize a Thermo Electron Corporation Model 49-103/49C/49i-with onboard ozone generator/transfer standard. The ozone analyzers shall be automatically challenged daily with a calibration atmosphere of 0 ppm, and 0.400 ppm and 0.090 ppm (zero, span and precision check or Z/S/P). Ozone analyzers multi-point calibration checks shall be performed at least 1/6-months. The onboard ozone (generator) transfer standard shall be challenged with an EPA Quality Assurance Handbook compliant ozone transfer standard at least 1/6-months.

### **Task 4: Ozone (40 CFR Part 58 compliant)**

The Contractor shall operate an ozone analyzer in accordance with 40 CFR Part 58; the guidance in “Quality Assurance Handbook for Air Pollution Measurement Systems”, Volumes I, and II; “Technical Assistance Document Transfer Standards for Calibration of Air Monitoring Analyzers for Ozone” (EPA-600/4-79-056); and “Technical Assistance Document for the Calibration of Ambient Ozone Monitors” (EPA-600/4-79-057).

The onboard ozone generator will be utilized as the station ozone transfer standard.

The Contractor shall be responsible for submitting data to the AQS database.

**Task 5: Meteorology**

Wind speed, wind direction, relative humidity, solar radiation, precipitation, surface wetness, temperature and delta temperature measurements shall be made in accordance with the “Quality Assurance Handbook for Air Pollution Measurement Systems” Volume IV: Meteorological Measurements (EPA-454/D-06-001).

**Task 6: Trace gas NO<sub>y</sub>**

The Contractor shall operate a NO<sub>y</sub>/NO analyzer according to the manufactures manual and recommendation, the operation shall be consistent with 40 CFR Part 58, the “Quality Assurance Handbook for Air Pollution Measurement Systems”, Volumes I, and II and the “Technical Assistance Document (TAD) for Precursor Gas Measurements in the NCore Multi-pollutant Monitoring Network” (EPA-454/R-05-003) available at <http://www.epa.gov/ttn/amtic/pretecdoc.html>. The Contractor shall be responsible for submitting data to the AQS database.

**Task 7: Trace gas SO<sub>2</sub>**

The Contractor shall operate a trace gas SO<sub>2</sub> analyzer according to the manufactures manual and recommendation, the operation shall be consistent with 40 CFR Part 58, the “Quality Assurance Handbook for Air Pollution Measurement Systems”, Volumes I, and II and the “Technical Assistance Document (TAD) for Precursor Gas Measurements in the NCore Multi-pollutant Monitoring Network” (EPA-454/R-05-003) available at <http://www.epa.gov/ttn/amtic/pretecdoc.html>. The Contractor shall be responsible for submitting data to the AQS database.

**Task 8: Trace gas CO**

The Contractor shall operate a trace gas CO analyzer according to the manufacturer’s manual and

recommendation. The operation shall be consistent with 40 CFR Part 58, the “Quality Assurance Handbook for Air Pollution Measurement Systems”, Volumes I, and II and the “Technical Assistance Document (TAD) for Precursor Gas Measurements in the NCore Multi-pollutant Monitoring Network” (EPA-454/R-05-003) available at <http://www.epa.gov/ttn/amtic/pretecdoc.html>. The Contractor shall be responsible for submitting data to the AQS database.

**Task 9: PM<sub>2.5</sub> FRM mass**

The Contractor shall operate a PM<sub>2.5</sub> FRM mass sampler 24 hr. average every 3rd day according to the manufactures manual and recommendation. The operation shall be consistent with 40 CFR Part 58 and the “Quality Assurance Handbook for Air Pollution Measurement Systems”, Volumes I, and II. The Contractor shall be responsible for submitting data to the AQS database.

**Task 10: PM<sub>2.5</sub> speciation of organic and elemental carbon, major ions and trace metals**

The Contractor shall operate a PM<sub>2.5</sub> speciation sampler 24 hr. average every 3rd day according to the manufactures manual and recommendation. The operation shall be consistent with the Speciation Trends Network (STN) protocol, 40 CFR Part 58, the “Quality Assurance Handbook for Air Pollution Measurement Systems”, Volumes I, and II and in accordance with quality assurance documentation at <http://www.epa.gov/ttn/amtic/specqual.html>. The Contractor shall be responsible for submitting data to the AQS database.

**Task 11: PM<sub>10-2.5</sub> FRM mass**

The Contractor shall operate a PM<sub>10-2.5</sub> FRM mass sampler 24 hr. average every 3rd day according to the manufactures manual and recommendation. The operation shall be consistent with 40 CFR 58 and the “Quality Assurance Handbook for Air Pollution Measurement Systems”, Volumes I, and II. The Contractor shall be responsible for submitting data to the AQS database.

**Task 12: PM<sub>10-2.5</sub> speciation of organic and elemental carbon, major ions and trace metals**

The Contractor shall operate a PM<sub>10-2.5</sub> speciation sampler 24 hr. average every 3rd day according to the manufactures manual and recommendation. The operation shall be consistent with 40 CFR Part 58 and the “Quality Assurance Handbook for Air Pollution Measurement Systems”, Volumes I, and II. The Contractor shall be responsible for submitting data to the AQS database.

**Task 13: Continuous PM<sub>2.5</sub> mass**

The Contractor shall operate a continuous PM<sub>2.5</sub> mass sampler 1 hour reporting interval – utilizing Beta Attenuation Monitoring (BAM) according to the manufactures manual and

recommendation. The operation shall be consistent with 40 CFR Part 58 and the “Quality Assurance Handbook for Air Pollution Measurement Systems”, Volumes I, and II. The Contractor shall be responsible for submitting data to the AQS database.

#### **Task 14: Filterpack preparation and laboratory analysis**

The Contractor shall be responsible for providing sample preparation and analytical services for two types of samples: 1) sample filters, and 2) precipitation samples for inter-laboratory comparisons. The Contractor shall maintain the technical capability to perform the required analytical services and provide an acceptable level of personnel, equipment, and systems. The Contractor’s responsibilities shall include, but not be limited to, the following:

- Purchase, maintenance, and pre-sampling treatment of all required filter media;
- Appropriate shipping containers and shipment of all filter media to the field, including field blanks;
- Analysis of all samples, laboratory quality control samples, blanks, calibration standards, filter production-lot acceptance testing and performance evaluation samples;
- All sampling and analysis data entry;
- Purchase and maintenance of laboratory instruments and consumable supplies; and
- Storage and archival of all sample extracts and filter media.

#### **14.1 Interlaboratory Comparison Samples**

The Contractor shall analyze precipitation and natural water laboratory inter-comparison samples for anions ( $\text{SO}_{42-}$  and  $\text{NO}_{3-}$ ), base cations ( $\text{Na}^+$ ,  $\text{Ca}^{2+}$ ,  $\text{K}^+$ , and  $\text{Mg}^{2+}$ ), ammonium ( $\text{NH}_{4+}$ ), and pH using the methods specified in Table 4. Each sample shall be analyzed for the complete set of analytes. Inter-laboratory comparison studies are necessary for the documentation of laboratory performance and coordination of results with other North American monitoring networks, including IMPROVE, the Canadian Acid Precipitation Monitoring Network (CAPMoN), and NADP.

#### **14.2 Filter Pack Samples**

The Contractor shall analyze filter media for anions ( $\text{SO}_{42-}$  and  $\text{NO}_{3-}$ ), base cations ( $\text{Na}^+$ ,  $\text{Ca}^{2+}$ ,  $\text{K}^+$ , and  $\text{Mg}^{2+}$ ) and ammonium ( $\text{NH}_{4+}$ ). Each sample shall be analyzed for the complete set of analytes. The Contractor shall prepare the media and filter packs for deployment into the field, ship the filter packs to each site, receive and log the filter packs after sampling, disassemble the

filter packs, extract the filters, analyze the extracts, and report results.

#### **14.2.1 Filter Pack Preparation and Media Acceptance Testing**

The Contractor shall be responsible for the purchase and preparation of all filter media. Each three-stage filter pack shall contain a Teflon<sup>®</sup> filter, a nylon filter, and two base-impregnated cellulose Whatman<sup>®</sup> filters. The Contractor shall be responsible for impregnating the cellulose filter with potassium carbonate. Upon direction by the PO, the Contractor shall coordinate the purchase of filter media with other monitoring networks to ensure consistency in sample results.

The Contractor shall perform acceptance tests on all filters before assembly. Acceptance testing shall include the extraction and analysis of a sufficient number of filters from each type of filter box to determine with 95 percent confidence that analyte contamination for the box of filters does not exceed 2 times the method detection limit. Prior to loading of filters, each three-stage filter pack assembly shall be cleaned with deionized water, oven-dried, assembled and inspected for damage.

The Contractor shall ship filter packs to field sites for sampling. Filters shall not be used more than 30 calendar days after preparation. Laboratory blank samples shall be prepared as the filter packs are prepared. In addition, **5 percent of all field samples sent to the field shall be filter blank samples order** to evaluate the effects of preparation and shipping on sample media.

#### **14.2.2 Filter Extraction**

After sampling in the field, filter packs shall be shipped from the field sites and disassembled for extraction and analysis. The Contractor shall extract all filters using methods that produce extraction efficiencies comparable to historical CASTNET filter extraction methods. Sample extracts shall be stored at 4 degrees Celsius for at least 8 hours prior to analysis.

#### **14.2.3 Analysis of Filter Extracts**

The Contractor shall analyze filter extracts using the methods specified in Table 4 or an equivalent or better method which has been approved by the EPA.

### **14.3 Sample Handling, Custody, and Storage**

After field sampling is completed, samples shall be sent back to the laboratory where they shall be received, labeled, and inspected for damage. Samples shall be stored at 4°C before and after analysis. Extracts shall be stored for a minimum of two years after the collection of the sample. Samples shall be tracked and managed using an automated tracking system such as bar codes or optical character recognition.

#### **14.4 Data Acquisition and Management**

The Contractor shall use a laboratory information management system (LIMS) for automatic data acquisition, efficient sample tracking and laboratory data management to the fullest extent practicable. The Contractor shall use an automated data acquisition system or provide for and document a minimum 99.99 percent data accuracy of manually entered data for all laboratory data acquisition. All data entered by manual data entry shall be validated either by independent double entry or statistically defensible means to document the minimum data accuracy.

#### **14.5 Laboratory Quality Assurance**

In order to maintain an acceptable quality of data and to establish estimates of accuracy and precision, the Contractor shall have quality assurance procedures for laboratory analysis in place. The Contractor shall randomly replicate 5% of the samples within an analysis to assess precision.

The Contractor shall analyze the following quality control standards:

- A NIST-traceable Calibration Verification Standard produced by an independent lab shall be run after every 10 environmental samples and at the end of the batch to track instrument drift;
- A NIST-traceable reference standard produced by an independent lab shall be analyzed at the beginning and end of each run to assess accuracy;
- One method blank shall be analyzed with each extraction and
- For Ion Chromatography analyses, internal injection standards shall be prepared to assess shifts in retention time and sample injection volume.

Calibration curves shall be generated for all analyses, and all samples must fall within range of the calibration curve. Quality control standards, calibration curves, sample replicates, and filter blanks must meet the specified acceptance criteria (See Table 5). The Contractor shall document in the Quality Assurance Project Plan corrective actions for samples that do not meet these acceptance criteria. Quality assurance analyses shall be reported to the EPA quarterly using accepted laboratory methods for aggregating and calculating statistics.

To minimize the occurrence of instrument failure and system malfunctions, the Contractor shall be responsible for instrument calibration, inspection, testing, and maintenance including, but not limited to, lubrication of pumps, prevention of instrument leaks, and maintenance and replacement of valves and fittings.

#### **Task 15: Operation of NADP site**

National Atmospheric Deposition Program (NADP) is structured as a cooperative program that represents coordinated efforts of many interested individuals and organizations to operate monitoring sites, report data, and oversee research activities related to atmospheric deposition. For more information on NADP, visit: <http://nadp.sws.uiuc.edu>.

Each NADP site has a sponsoring agency and an operating agency. For some sites the sponsoring and operating agencies may be the same. Site sponsors and operating participants are responsible for ensuring that the equipment, facilities, materials, resources, and people are available to operate and maintain the site. Uniformity is essential to obtain data on how the chemical climate in the nation's ecological regions is changing over seasons, years, and even decades. This helps ensure the data are geographically representative and comparable from site to site and are an essential part of any long-term environmental monitoring network. Sites must conform to fixed site selection and installation criteria and follow standard procedures for collecting, handling, and measuring samples (NADP 2003). The EPA currently sponsors and provides operational support for several NADP network sites as well as supports a quality assurance program. The program provides information on the conditions of each site and helps determine if site equipment is functioning properly and samples collection and data provided by the site operators are in conformance with NADP standard operating procedures.

### **15.1 Purpose**

The primary purpose of Task 15 is to provide for the operation and maintenance of EPA-sponsored NADP sites collocated with CASTNET sites (Table 6).

The site operator has primary responsibility for monitoring equipment operation and maintenance, physical maintenance of the site (e.g., maintaining NADP local siting criteria), weekly collection and measurement of samples, sample documentation, and submission of samples and documentation to the Central Analytical Laboratory (CAL). One or more observers may assist the site operator in these responsibilities. Excluding travel to the site, site operators generally spend about 2 hours performing the required weekly (every Tuesday) duties. Through their diligence to these duties, site operators are largely responsible for determining the quality of NADP data.

Site Operator responsibilities include:

- Travel to the field site and inspect the site and equipment every Tuesday.
- Collect the wet side bucket from the collector and the Belfort gage chart every Tuesday.
- Install a new Belfort gage chart and clean collector bucket for the next sample every Tuesday.
- Perform routine equipment maintenance or repairs as needed or prescribed.
- Transport the bucket and Belfort gage chart to the field laboratory.
- Weigh the bucket and transfer the sample it contains to a sample bottle.

- ~~For samples of 70 grams or more, remove a portion from the sample bottle to measure sample pH and conductivity.~~
- Read and interpret the event recorder and precipitation records on the Belfort gage chart to the CAL within 48 hours of sample collection.
- Perform occasional special maintenance or quality assurance tasks in cooperation with the CAL or other agencies.
- Contact the CAL with any questions about equipment or procedures.
- In addition, the NADP Program Office sponsors an annual Field Operations Training Course for new and existing site operators.

## 15.2 Site Operation Support

The Contractor shall be responsible maintaining six NADP sites as listed in Table 7.

The Contractor shall ensure that an available and trained site operator is performing the site operator duties as specified in the NADP Site Operation Manual (NADP 1999-01). This also includes identifying a designated back-up site operator for each site in the event the primary site operator is not available. In addition, shipping costs associated with sample and documentation transfer to the NADP Program Office will be considered for the EPA sponsored NADP sites both independent and collocated with CASTNET sites. ~~The Contractor shall allow for the possibility of one 2-day site visit if circumstances arise where travel to the site is necessary. NADP sites that are collocated with CASTNET sites are listed in Table 6.~~

## 15.3 NADP Siting Criteria Problems

The Contractor shall be responsible for resolving siting criteria issues, as practical, that are identified by the NADP Program Office's Quality Assurance Manager or the Work Assignment COR. The Contractor shall work with the site operator to resolve the issues and notify the EPA Work Assignment COR when the issue(s) have been resolved.

### Task 16: Operation of IMPROVE site

The Interagency Monitoring of Protected Visual Environments (IMPROVE) program is a cooperative air quality monitoring effort governed by a steering committee composed of representatives from Federal Agencies: the Environmental Protection Agency, the National Oceanic and Atmospheric Administration, and the four federal land managers – the National Park Service, the U.S. Forest Service, the U.S. Fish and Wildlife Service, and the Bureau of Land Management. In addition to the federal representatives the steering committee is comprised of regional organizations and state agencies and an associate member, the State of Arizona

Department of Environmental Quality. The IMPROVE monitoring program was established in 1985 to aid in the creation of federal and state implementation plans for the protection of visibility in Class I areas as stipulated by the 1977 Clean Air Act Amendments. The monitoring network consists of (as of January 2006) 110 IMPROVE aerosol visibility sites and over 50 IMPROVE Protocol aerosol sampler sites, 15 transmissometers, 44 nephelometers, and 12 film and digital camera systems, 52 Web camera systems, among other monitoring activities. Quality data collection begins with those who operate, service, and maintain monitoring instrumentation. Therefore, it is important to have trained site operators to ensure that the monitoring station is functioning properly and IMPROVE standard operating procedures (SOPs) are followed.

CASTNET operated eight visibility or IMPROVE protocol sites through a contract to provide a core set of sites in the Eastern source regions. The network support for these sites were transitioned to the IMPROVE program in 2001, however, EPA still provides support for site operations. These IMPROVE sites are now referred to as EPA Protocol sites. The IMPROVE program is anticipating a reduction in the number of sites due to decreases in supporting monitoring budgets. The reductions will likely occur over time but may begin in FY08 and affect some of the eight sites associated with this work assignment.

The primary purpose of Task 16 is to provide for the costs of site operators associated with maintaining eight IMPROVE monitoring sites. Eight sites currently receive funding for site operation by the EPA. These include six sites that are collocated with CASTNET sites and two independent IMPROVE sites at Sikes, LA and Livonia, IN (Table 8). In addition, occasional non-routine visits by the site operator, certain utilities, and the costs of land leases such as those for sites not collocated with CASTNET, shall be included in the total cost of maintaining these sites. The site operator has primary responsibility for monitoring equipment operation and overall site maintenance (e.g., ensuring adherence with IMPROVE siting criteria), weekly collection and measurement of samples, sample documentation, and handling (submission of samples and documentation to the central laboratory). One or more observers may assist the site operator in these responsibilities. Excluding travel to the site, site operators generally spend about 2 hours performing their weekly duties under normal operating conditions. Through their diligence to these duties, site operators are largely responsible for determining the quality of IMPROVE data.

The Contractor shall be responsible for providing the necessary site operator support and costs associated with maintaining eight IMPROVE monitoring stations (see Table 8). This support may include **other direct costs such as occasional non-routine visits and incidental supplies required by the site operator**. The Contractor shall ensure that an available and trained site operator is performing the site operator duties specified in the appropriate IMPROVE Site Operation Manuals. This also includes identifying a designated back-up site operator for each site in the event the primary site operator is not available. The Contractor shall also ensure the site operator calls the Contractor weekly on Tuesdays to report on site operation and sample

collection. The Contractor shall allow for the possibility of one or two site visits if circumstances arise where travel to the site is necessary.

### **Task 17: Acquisition and Management of NPS data**

The Contractor shall manage data and coordinate network activities for the CASTNET sites operated by the NPS.

### **Task 18: Infrastructure, Design, Testing, and Deployment Support**

In addition to the tasks described above, the Contractor shall provide: extraneous infrastructure costs for sites; design, testing and deployment of new monitoring methods and technology for use at CASTNET sites; conduct non-routine monitoring activities; special studies or analyses associated with CASTNET or other assessments of emission control programs; as directed in task orders issued by the EPA Contracting Officer (CO). Examples of these activities include:

- Management of the site utilities, telemetry (e.g., phone or internet service) and the site land leases;
- Operate or collaborate with (e.g., collect samples at, analyze samples for, or make CASTNET facilities available to) other integrated research monitoring programs, such as the NADP, IMPROVE or other monitoring networks approved by EPA;
- Deployment and operation of gaseous ammonia monitoring devices;
- Deployment and operation of denuder-filterpack monitoring devices;
- Deployment and operation of gaseous and particulate mercury monitoring equipment;
- Operate and maintain instruments for direct measurement of dry deposition or surface fluxes of ozone, sulfur dioxide, carbon dioxide, ammonia, nitric acid by relaxed eddy correlation or gradient methods;
- Assist in air quality or deposition model development and programming;
- Design and analysis of air quality databases and novel data acquisition systems;
- Acquire and submit air monitoring data to AQS;
- Select, evaluate and install equipment at candidate monitoring sites according to network requirements and criteria;
- Provide training and conduct workshops to State, Local, and Tribal personnel on air monitoring techniques and procedures;
- Install and operate soil monitoring equipment and institute procedures for critical loads assessments and validation;
- Prepare *ad hoc* summaries of data, associated data quality information, and statistical analyses of data for temporal or spatial trends.



**Table 1. List of Active EPA CASTNET Monitoring Stations (October 2007)**

SITE_ID	SITE_NAME	STATE	LATITUDE	LONGITUDE
ABT147	Abington	CT	41.8402	-72.0100
ALC188	Alabama-Coushatta	TX	30.4210	-94.4045
ALH157	Alhambra	IL	38.8690	-89.6228
ANA115	Ann Arbor	MI	42.4165	-83.9020
ARE128	Arendtsville	PA	39.9231	-77.3078
ASH135	Ashland	ME	46.6041	-68.4135
BEL116	Beltsville	MD	39.0284	-76.8172
BFT142	Beaufort	NC	34.8848	-76.6203
BVL130	Bondville	IL	40.0519	-88.3724
BWR139	Blackwater NWR	MD	38.4450	-76.1114
CAD150	Caddo Valley	AR	34.1795	-93.0988
CAT175	Claryville	NY	41.9422	-74.5520
CDR119	Cedar Creek	WV	38.8795	-80.8477
CDZ171	Cadiz	KY	36.7841	-87.8499
CHE185	Cherokee Nation	OK	35.7507	-94.6700
CKT136	Crockett	KY	37.9214	-83.0662
CND125	Candor	NC	35.2632	-79.8365
CNT169	Centennial	WY	41.3642	-106.2399
CON186	Converse Station	CA	34.1941	-116.9130
COW137	Coweeta	NC	35.0608	-83.4306
CTH110	Connecticut Hill	NY	42.4006	-76.6538
CVL151	Coffeerville	MS	34.0026	-89.7990
DCP114	Deer Creek	OH	39.6359	-83.2605
EGB181	Egbert	ON	44.2320	-79.7812
ESP127	Edgar Evins	TN	36.0388	-85.7331
GAS153	Georgia Station	GA	33.1787	-84.4052
GTH161	Gothic	CO	38.9564	-106.9858
HOW132	Howland	ME	45.2158	-68.7082
HOX148	Hoxeyville	MI	44.1809	-85.7390
HWF187	Huntington Wildlife Forest	NY	43.9731	-74.2232
IRL141	Indian River Lagoon	FL	27.8492	-80.4554
KEF112	Kane Exp. Forest	PA	41.5980	-78.7674
KNZ184	Konza Prairie	KS	39.1021	-96.6096
LRL117	Laurel Hill	PA	39.9878	-79.2515
LYK123	Lykens	OH	40.9173	-82.9982
MCK131	Mackville	KY	37.7046	-85.0485
MCK231	Mackville Collocated	KY	37.7046	-85.0485
MKG113	M.K. Goddard	PA	41.4271	-80.1451
OXF122	Oxford	OH	39.5327	-84.7286
PAL190	Palo Duro	TX	34.8803	-101.6649
PAR107	Parsons	WV	39.0905	-79.6617
PED108	Prince Edward	VA	37.1655	-78.3069
PND165	Pinedale	WY	42.9288	-109.7880

PNF126	Cranberry	NC	36.1058	-82.0454
PRK134	Perkinstown	WI	45.2066	-90.5969
PSU106	Penn State	PA	40.7208	-77.9319
QAK172	Quaker City	OH	39.9428	-81.3373
ROM206	Rocky Mtn NP Collocated	CO	40.2778	-105.5453
SAL133	Salamonie Reservoir	IN	40.8160	-85.6611
SAN189	Santee Sioux	NE	42.8292	-97.8540
SND152	Sand Mountain	AL	34.2888	-85.9698
SPD111	Speedwell	TN	36.4700	-83.8268
STK138	Stockton	IL	42.2869	-89.9997
SUM156	Sumatra	FL	30.1103	-84.9903
UVL124	Unionville	MI	43.6138	-83.3591
VIN140	Vincennes	IN	38.7408	-87.4853
VPI120	Horton Station	VA	37.3297	-80.5578
WSP144	Wash. Crossing	NJ	40.3125	-74.8729
WST109	Woodstock	NH	43.9450	-71.7008

**Figure 1. Map of Active EPA CASTNET Monitoring Stations (October 2007)**

GAS153  
ESP127  
EGB181  
DCP114  
CVL151  
CTH110  
COW137  
CON186  
CNT169  
CND125  
CKT136  
CHE185  
CDZ171  
CDR119  
CAD150  
BWR139  
BVL130  
BFT142  
ASH135  
ARE128  
ANA115  
ALH157  
ABT147  
WST109  
WSP144  
ALC188  
VPI120  
VIN140  
UVL124  
SUM156  
STK138  
SND152  
SAL133  
ROM206  
PSU106  
PRK134  
PNF126  
PND165  
OXF122  
MKG113  
MCK231  
MCK131  
LRL117  
KNZ184  
PAL190  
CAT175  
BEL116  
SAN189  
IRL141  
HWF187  
HOX148  
HOW132  
GTH161



**Table 2. List of pollutant monitoring and meteorological measurement systems deployed at a typical EPA CASTNET dry deposition site**

Field Equipment	Description	Application
Ozone Analyzer	Thermo Electron Corporation Model 49-103/49C/49i-with onboard ozone generator/transfer standard	Measures continuous ambient O <sub>3</sub> concentrations integrated over a hourly period
Wind Speed and Direction	Climatronics anemometer chopper wheel, R.M. Young Wind Monitor or F460 vane and translator, R.M. Young Wind Monitor	Input parameters to the Multi Layer Model
Temperature/Delta Temperature	Climatronics or R.M. Young temperature sensors	Input parameters to the Multi Layer Model
Relative Humidity	Climatronics model 100098, Rotronics MP-100F or Vaisala RH Sensor Model 102425 humidity temperature probe	Input parameter to the Multi Layer Model
Solar Radiation	LI-COR pyranometer, silicon photovoltaic sensor with R.M. Young or Climatronics translator	Input parameter to the Multi Layer Model
Surface Wetness	R.M. Young wetness sensor	Input parameter to the Multi Layer Model
Precipitation	Climatronics 8-inch heated tipping bucket rain gauge	Input parameter to the Multi Layer Model
3 Stage Filter Pack	Sequence of Filters: Teflon <sup>®</sup> , nylon, and potassium carbonate-impregnated Whatman <sup>®</sup>	Collects ambient concentrations of particulate SO <sub>42-</sub> , NO <sub>3-</sub> , NH <sub>4+</sub> , Ca <sup>2+</sup> , Mg <sup>2+</sup> , Na <sup>+</sup> , K <sup>+</sup> and gaseous SO <sub>2</sub> and HNO <sub>3</sub> integrated over weekly periods
Flow Control	Teledyne Hastings, Tylan Mass Flow Controllers or Mykrolis Mass Flow Controller, Model FC280SAV	Maintains constant sample flow
Data Acquisition	Odessa DSM-3260 and DSM 3260L (backup) or Campbell Scientific CR3000 or ESC Model 8816	Records data for select continuous measurement parameters

**Table 3. Field Calibration Acceptance Criteria**

Measurement	Method	Acceptance Criteria
Filter Pack Flow	Mass Flow Controller	± 2% of actual flow
Ozone UV absorbance <sup>1</sup>		± 15% span ± 10 ppb zero; 1/2-days level one <sup>2</sup>
		Linearity error < 5%; Multipoint calibration 0 and 4 upscale points <sup>2</sup>
Onboard Ozone Generator (Transfer standard)		±4% or ±4 ppb (whichever greater) RSD of six slopes # 3.7% Std. dev. of six intercepts #1.5% New slope = ±0.05 of previous <sup>2</sup>
Local primary standard		Difference # ±5 % (preferably ± 3%) <sup>2</sup> Regression slopes = 1.00 ± 0.03 and two intercepts are 0 ± 3 ppb <sup>2</sup>
Trace-level NO <sub>y</sub> chemiluminescence <sup>3</sup>		± 15% span ± 3 ppb zero; 1/2-days level one <sup>2</sup>
		Multipoint calibration 0 and 4 upscale points ± 2% of full scale of best-fit straight line <sup>2</sup>
Trace-level SO <sub>2</sub> pulsed fluorescence <sup>3</sup>		± 15% span ± 0.8 ppb zero; 1/2-days level one <sup>2</sup>
		Multipoint calibration 0 and 4 upscale points ± 2% of full scale of best fit straight line <sup>2</sup>
Trace-level CO NDIR-GFC <sup>3</sup>		± 15% span ± 0.05 ppm zero; 1/2-days level one <sup>2</sup>
		Multipoint calibration 0 and 4 upscale points
Wind Speed	Anemometer	± 0.2 m/sec of actual wind speed at speeds < 5
		± 5% of actual wind speed at speeds ≥ 5
Wind Direction	Wind Vane	± 3° C for each cardinal point
Relative Humidity	Thin film capacitor	± 10%
Solar Radiation	Pyranometer	± 5% of average solar radiation
Precipitation	Tipping Bucket Raingage	± 0.02 inches at 0.50 inches of precipitation
Surface Wetness	Conductivity Bridge	Full-scale response to test resistance
Temperature	Platinum RTD	± 0.3°C of actual temperature
Delta Temperature	Platinum RTD at 1 m and 10 m	± 0.3°C of actual temperature

<sup>1</sup>Ozone is measured at most CASTNET stations

<sup>2</sup>Quality Assurance Handbook Volume II: Part 1 (EPA-454/R-98-004)

<sup>3</sup>Gas trace-level measurements at select CASTNET stations, SOP available at <http://www.epa.gov/castnet>

**Table 4. Analytical Methods and Minimum Detection Limits for Filter Extracts**

Analyte	Filter Media	Method	Minimum Reporting Limits <sup>1</sup>	Method Detection Limit
Ca <sup>2+</sup>	Teflon <sup>®</sup>	EPA 6010B (ICP/AES)	0.006 mg/L	0.002 mg/L
Cl <sup>-</sup>	Teflon <sup>®</sup>	EPA 300.0 (IC)	0.02 mg/L	0.002 mg/L
K <sup>+</sup>	Teflon <sup>®</sup>	EPA 6010B (ICP/AES)	0.006 mg/L	0.002 mg/L
Mg <sup>2+</sup>	Teflon <sup>®</sup>	EPA 6010B (ICP/AES)	0.003 mg/L	0.001 mg/L
Na <sup>+</sup>	Teflon <sup>®</sup>	EPA 6010B (ICP/AES)	0.005 mg/L	0.002 mg/L
NH <sub>4</sub> <sup>+</sup>	Teflon <sup>®</sup>	EPA 350.1 (Automated Colorimetry)	0.020 mg/L	0.009 mg-N/L
NO <sub>3</sub> <sup>-</sup>	Teflon <sup>®</sup> , nylon, cellulose	EPA 300.0 (IC)	0.008 mg-N/L	0.003 mg/L
pH	(Precipitation only)	EPA 150.1 (pH meter)	0.01 units	0.01 units
SO <sub>4</sub> <sup>2-</sup>	Teflon <sup>®</sup> , nylon, cellulose	EPA 300.0 (IC)	0.040 mg/L	0.015 mg/L

<sup>1</sup>Determined as described in 40 CFR Part 136 Appendix B

**Table 5. Acceptance Criteria for Quality Control Samples**

<i>Quality Control Procedure</i>	<i>Acceptance Criteria</i>
Calibration curve (minimum 5 points) correlation coefficient	$\geq 0.995$
Calibration curve Y-intercept 95% Confidence Limit	< Reporting limits
Calibration curve responses	All samples must be within the standard calibration range.
Calibration Verification Standard	$\pm 10\%$ of true value for IC and ICP/AES analyses $\pm 10\%$ of true value for AC (NH <sub>4+</sub> ) analyses
Sample replicate	$\pm 20\%$ difference as compared to the initial sample run
Method blank	$\leq 2x$ reporting limits
Reference sample	$\pm 5\%$ of true value for IC analyses $\pm 10\%$ of true value for AC (NH <sub>4+</sub> ) analyses
Filter blank	$\leq 2x$ reporting limits

**Table 6. NADP Sites Collocated with CASTNET Sites**

<b>NADP Site ID</b>	<b>Site Name, State</b>	<b>Collocated CASTNET Site ID</b>
VA24	Prince Edward, VA	PED108
TN04	Speedwell, TN	SPD111
OH54	Deer Creek State Park, OH	DCP114
MI52	Ann Arbor, MI	ANA115
WV05	Cedar Creek State Park, WV	CDR119
OH15	Lykens, OH	LYK123
MI51	Unionville, MI	UVL124
PA00	Arendtsville, PA	ARE128
WI35	Perkinstown, WI	PRK134
NC06	Beaufort, NC	BFT142
CT15	Abington, CT	ABT147
FL23	Sumatra, FL	SUM156
IL46	Alhambra, IL	ALH157
CO10	Gothic, CO	GTH161
AZ98	Chiricahua, AZ	CHA467
VA13	Horton Station, VA	VPI120
<b>KY03</b>	<b>Mackville, KY</b>	<b>MCK131, MCK231</b>

**Table 7. NADP Sites Requiring Site Operation Support**

<b>NADP Site ID</b>	<b>Site Name, State</b>
NC45	Mt Mitchell, NC
CO94	Sugarloaf, CO
WA21	La Grande, WA
OR97	Hylsop Farm, OR
GA20	Bellville, GA
<b>NY52</b>	<b>Bennett Bridge, NY</b>

**Table 8. EPA IMPROVE Protocol Sites**

<b>Database ID*</b>	<b>IMPROVE ID</b>	<b>Site Name</b>	<b>State</b>
CTH510	COHI1	Connecticut Hill	NY
MKG513	MKGO1	M.K. Goddard	PA
ARE528	AREN1	Arendtville	PA
BVL530	BOND1	Bondville	IL
CDZ571	CADI1	Cadiz	KY
QAK572	QUCI1	Quaker City	OH
SIK570	SIKE1	Sikes	LA
LIV573	LIVO1	Livonia	IN

\* Site ID/designation based on CASTNET database.

16. The attachment entitled "GOVERNMENT FURNISHED EQUIPMENT" has been modified.

17. The attachment entitled "PROPOSAL INSTRUCTIONS" has been modified. The text is as follows:

## I. Technical proposal instructions

(1) An original and six (6) copies of the technical proposal shall be submitted as a separate part of the total proposal package. Omit all cost or pricing details from the technical proposal.

(2) Special technical proposal instructions:

You are advised to closely read the technical proposal instructions and technical evaluation criteria before preparing a technical proposal. Written proposals shall consist of seven sections which are each linked to the corresponding evaluation criteria detailed in Section M of this RFP.

### A. General Instructions:

In addition to the instructions in section L, "Instructions to Offerors", the following is provided. The written technical proposal shall be prepared using the following guidance:

1. **Length**--The maximum length of the technical proposals shall be limited to 200 double sided typewritten sheets of paper (400 numbered pages) on 8 ½" X 11" recycled paper, using no less than 12 point character size and no less than 1" all around for margins. Type size limits do not apply to tables and figures, provided they are clear and readable. **The following items are excluded from the above stated page limitation: letters of transmittal, commitment agreements, cover page, table of contents, dividers, Quality Management Plan, Property Management Plan and Past Performance Questionnaires.** Resumes **are** excluded from the above stated page limitation. If foldout pages are used, they shall not exceed 11" x 17". Each foldout shall count as two (2) pages toward the page count of the appropriate volume. Foldouts do not need to be double sided. Offerors are strongly urged to be as succinct, clear and concise as possible in writing the proposal and adhering to the recommended page limitation. EPA will not evaluate or consider materials beyond the page limitation specified herein.

2. **Organization**--Offerors are advised to supply all information in the sequence and format specified below. The Offeror's proposal and supporting documentation must provide a sufficient basis for a thorough evaluation of the proposal and provide the information needed to evaluate the proposal in accordance with the evaluation factors set forth in Section M. Proposals must be placed in 3-ring binders with dividers clearly indicating the following sections:

1. Technical Approach
2. Past Performance
3. Proposed Key Personnel
4. Proposed Quality Management Plan
5. Facilities and Equipment
6. Quality Assurance Approach
7. Small Business and Small Disadvantaged Business Utilization Subcontracting Plan

**B. Required sections of the written technical proposal:**

**1. Technical Approach**-- The technical approach must express how the Offeror proposes to comply with each task in the Statement Of Work (SOW) and provide a full explanation of the techniques and procedures proposed. Offerors shall demonstrate their technical understanding, knowledge, capability and approach to planning, organizing and performing contract activities presented in the SOW. Offerors shall describe their ability to provide high quality products and services similar to those described in the SOW. Proposals shall be appropriate, detailed, complete, and fully demonstrate the Offeror's understanding of the requirements of the SOW and the methodology and approach to accomplishing the SOW. Stating that the Offeror understands and will comply with the SOW or using such phrases as, "standard procedures will be employed" and "well-known techniques will be used" will be deemed insufficient.

**2. Past Performance**--The Offeror shall provide the information set forth in section L, the provision entitled "PAST PERFORMANCE INFORMATION". Offerors shall ensure completed questionnaires are submitted electronically to the Contracting Officer (CO), Debra Miller, at [miller.debbie@epa.gov](mailto:miller.debbie@epa.gov). Mailed submittals are acceptable and the address is located in section G.5, Contract Administration Representatives.

**3. Key Personnel**-- The proposed Key personnel shall possess the appropriate technical and project management knowledge and expertise on the requirements and tasks described in the SOW. Offerors shall demonstrate relevant accomplishments, education, experience, availability and organization of key personnel (including subcontractors and consultants) for the tasks proposed under the contract, including but not limited to ambient air monitoring, modeling atmospheric deposition, database management, quality assurance and publications.

**Key Personnel Resumes**--Resumes for all Key personnel proposed for both prime and subcontractors are required. Resumes shall be uniform in format. The resumes shall contain specific information in both narrative and itemized formats concerning the qualifications of the proposed key personnel and their percentage of time available to support this requirement. All resumes shall be signed by the individual and a corporate official certifying the accuracy of the information contained therein.

All resumes for proposed key personnel must provide, at a minimum, the following information:

--Degrees held by each individual and/or other pertinent education. Include date(s), degree(s), and respective college or university education in which the degree(s) were received.

--Names, years of experience, training, unique qualifications, positions held (beginning with the present position and working backwards), and tenure with the firm. If the individual is proposed as a new hire, signed

Commitment Agreements between the individual and Offeror should be included in the technical proposal and will **NOT** count against the page limit.

**4. Proposed Quality Management Plan**--Offerors shall provide their (and their subcontractors) quality management plans (QMPs).

**5. Facilities and Equipment**--Offerors shall describe the equipment they will provide to supplement government furnished equipment (GFE) listed in the RFP.

**6. Quality Assurance Approach** -Offerors shall describe in detail its proposed approach to achieving and maintaining the Data Quality Objectives of the CASTNET program.

Quality Assurance and Quality Control procedures shall conform to all EPA requirements and general guidance.

**7. Small Business and Small Disadvantaged Business Utilization Subcontracting Plan** - Under this factor, the offeror will be evaluated in accordance with Clause M., EPAAR 1552.219-74 Small disadvantaged business participation evaluation factor.

## **II. COST PROPOSAL**

An original and two copies of the cost proposal are required. To expedite review of your proposal, you are requested to submit a computer disk containing the financial information required below (less financial statements) if this information is available using a commercial spreadsheet program on a personal computer. Please indicate the software program used to create this information (Excel is preferred). Offerors should include the formulas and factors used in calculating the financial information. Although submission of the computer disk will expedite review, failure to submit the disk will not affect consideration of your proposal.

The price proposal will represent the offeror's understanding of the RFP's requirements and the offeror's ability to perform efficiently. The evaluation will be based on the price reasonableness, realism, and completeness of the price proposal. Since no work will be assigned until task orders are issued, the basic contract that will result from this solicitation will be considered a fixed rate, indefinite delivery/indefinite quantity (FR-ID/IQ) type contract.

## **GENERAL INSTRUCTIONS**

A. Submit cost and pricing information prepared in accordance with FAR 15.408 and the following:

1. Clearly identify separate cost or pricing information associated with each contract year
2. Major Tasks, if required by the special instructions.

The Offeror may indicate the above cost or price-detailed information in narrative form or on a spread sheet, provided that all cost or pricing information is adequately and clearly described.

B. Clearly identify all costs and information in support of the proposed cost/price. Include the index required by FAR 15.408, Table 15-2, I.B.

C. Submit a current financial statement, including a balance sheet and a statement of profit and loss for the last completed fiscal year. Specify resources available to perform the contract without assistance from any outside source. If sufficient resources are not available, indicate in your proposal the amount required and the anticipated source (i.e. bank loans, letter or lines of credit, etc.)

D. If other divisions, subsidiaries, a parent or affiliated companies will perform work or furnish materials under this proposed contract, please provide the name and location of such an affiliate and your inter-company pricing policy. Separately identify costs and supporting information for each such entity proposed.

E. If the contract schedule includes a "Fixed Rate for Services" clause, please provide in your cost proposal a schedule duplicating the format in the clause and include your proposed fixed hour rate per labor category.

F. If the solicitation include the clause at EPAAR 1552.232-73, "Payments - Fixed Rate Services Contract," the offeror shall include in the cost proposal the estimated costs and burden rate that will be applied to travel, subcontracts, or other direct costs. The Government will include these costs as part of its cost proposal evaluation.

G. Whenever subcontractor effort is included in the proposed costs, the prime contractor shall include an additional supporting cost summary consolidating all costs (both contractor and subcontractor) by element for each contract period.

H. The offeror shall submit an official written copy of its corporate personnel policy including reimbursement of overtime paid to professional or exempt employees and corporate holidays. This policy shall also include information regarding compensation and benefit policies for full-time, part-time, and any other category of employee such as non-full time/casual labor or temporary employees.

The offeror shall describe in detail how it will charge for all non-site specific costs.

The offeror shall certify that it will comply with the Federal Travel Regulations concerning all travel and subsistence under this contract, and shall provide a copy of its corporate travel policies.

#### **SPECIFIC INSTRUCTIONS**

The purpose of these cost instructions is to assist offerors in submitting information required to evaluate the reasonableness and realism of proposed costs. Offerors should provide sufficient detail to demonstrate the

reasonableness of proposed costs. The burden of proof for credibility of proposed costs/prices rests with the offeror.

Cost information for this procurement is limited to the contractor's direct labor rates, indirect rates, and other elements required by the Government to establish price realism. All dollar amounts provided shall be rounded to the nearest dollar. All loaded labor rates shall be rounded to the nearest penny.

Cost proposals shall include:

1. Cover Letter, Title Page, Table of Contents
2. Summary descriptions of estimating, purchasing, and accounting systems
3. Changes to estimating, accounting practices, or CAS Disclosure Statement
4. Financial Statements
5. Cost and Pricing Information - including estimating methodology
6. Representations & Certifications - See Section K
7. Exceptions
8. Small Disadvantaged Business Plan (costs included) and Small Business Subcontracting Plan

The offeror shall provide a summary description of its standard estimating, purchasing and accounting systems which cover (separately) each major cost element. Also, identify any deviations from the standard estimating, purchasing and accounting procedures in preparing this proposal. State whether you have Government approval of these systems and if so, provide evidence of such approval.

The offeror shall provide a comprehensive listing of professional and technical labor categories they intend to propose for work under this contract. Labor classification statement for each proposed category of labor, describing position qualifications shall be included (see Table 1 for suggested format).

To support reasonableness, describe the basis of estimate for the proposed direct and indirect rates and factors and provide support for all elements. This support should describe any assumptions and mathematical calculations used to develop the proposed rates. In addition, if your rates have been recently approved, include a copy of the rate agreement. Otherwise, please provide documentation that shows the pool and base information, by element for each of the proposed indirect rates. A description of the treatment of all non-labor costs (subcontracts, materials, ODCs) with respect to applicable burdens, should also be provided.

For labor rate contracts, for each fixed labor rate, offerors shall identify the basis for the loaded fixed hourly rate for each contract period for example, the rate might consist of the following cost elements: raw wage or salary rate, plus fringe benefits (if applicable), plus overhead rate (if applicable), plus G&A expense rate (if applicable), plus profit. When determining the composite raw wage for a labor category, the offeror shall:

(A) provide in narrative form the basis for the raw wage for each labor category. If actual wages of current employees are used, the basis for the projections should be explained.

(B) If employees are subject to the Service Contract Act or Davis Bacon Act, they must be compensated at least at the minimum wage rate required by the applicable Wage Determination.

All indirect rates and profit shall be included in the fixed labor rate proposed for each category. This includes all costs associated with program management activities and preparation of workplans for individual task orders. The contractor shall not "double-bill" for any work (e.g. do not include contract management as a separate labor category if it is a firm's standard practice to include contract management as an indirect charge).

To facilitate evaluation of the cost proposal, the offeror may utilize the following matrix (or equivalent) to illustrate the composition of the proposed fully burdened base hourly labor rates.

**NOTE\*\*\*** - The rates developed in Tables 2 (or equivalent tables) will be utilized to populate the fixed rates and prices in the section B clause entitled, FIXED RATES FOR SERVICES - INDEFINITE DELIVERY/INDEFINITE QUANTITY CONTRACT.

The offeror shall identify any proposed labor category that will be performed by subcontractor(s). Subcontractors proposed as part of the team arrangement shall be billed at the rates specified for the prime contractor and not placed under Specialized Labor. Only one rate will be utilized for a specified category whether it is performed by the prime or a team subcontractor.

Labor categories are the offeror's job disciplines anticipated to be needed to perform the tasks listed in the SOW. Fully burdened hourly rates shall be developed for both On-Site/Field and Off-Site/Non-Field responses. The base rate is the current rate of the individuals or the contractor's labor categories anticipated to be performed under this contract. The burdened rates shall be based on the contractor's estimating/accounting system.

Equipment, facilities and special equipment, including tooling shall be accounted for as follows:

If direct charges for use of existing contractor equipment are proposed, provide a description of these items, including estimated usage hours, rates, and total costs.

If equipment purchases are proposed, provide a description of these items, and a justification as to why the Government should furnish the equipment or allow its purchase with contract funds. (Unless specified elsewhere in this solicitation, FAR 45.302-1 requires contractors to furnish all facilities in performance of contracts with certain limited exceptions.)

Identify Government-owned property in the possession of the offeror or proposed to be used in the performance of the contract, and the Government **agency** which has cognizance over the property.

Submit proposed rates or use charges for equipment, along with documentation to support those rates.

If special purposes facilities or equipment are being proposed, provide a description of these items, details for the proposed costs including competitive prices, and justification as to why the Government should furnish the equipment or allow its purchase with contract funds.

If fabrication by the prime contractor is contemplated, include details of material, labor, and overhead.

### **SOW Organization**

The offeror shall provide the necessary technical support as described in this SOW to assist the EPA in operation of the CASTNET program. The scope of this SOW includes specific requirements for the Core operation of the CASTNET program (Task 1) with additional tasks following to account for the number of EPA-sponsored CASTNET sites. The monetary value, technical time and operational needs vary with the number of EPA-sponsored sites and are reflected in these additional tasks.

Task 1, Core operations of the CASTNET Program includes requirements such as database management, quality assurance, training, data acquisition, field calibrations, reporting and participation in scientific meetings/conferences. Task 1 includes all procedures that are independent of or only partially dependent on the number of monitoring sites or execution of additional tasks.

Some, but not necessarily all, additional tasks will be performed at each site to allow flexibility in operation of the network. For example, the offeror shall propose a cost for the operation of one dry deposition filterpack at an average site. The final compensation amount will be the product of the price of operating one dry deposition filterpack multiplied by the number sites which a dry deposition filterpack was operated.

Many of the activities associated with the additional tasks are dependent on whether the offeror will be required to provide an operator at the site to perform the duties or if a local collaborator will perform the on-site duties for the task. For example, in operating a dry deposition filterpack at the CASTNET site in Beltsville Maryland (BEL116) the offeror would provide all services for the operation of the site; at the Cherokee Nation site (CHE185) the Cherokee Nation provides an operator for the routine tasks, but the Contractor would perform the semi-annual instrument calibration checks and other non-routine duties.

For the purposes of this solicitation, the offeror shall assume operation of the 59 EPA-sponsored sites and manage data and coordinate network activities for 25 NPS-sponsored sites. The offeror shall provide a proposal for the Core operations of the CASTNET Program (Task 1) with Tasks 2 through 27 proposed and priced individually. In preparing cost estimates for Tasks 2 through 17, the offeror is reminded that they shall compensate for any additional cost incurred to the Core operations, by the addition of Tasks 2 through 17, in the individual cost estimates of Tasks 2 through 17.

The EPA anticipates services described in this section to initiate upon award of the contract. During a 90- calendar day transition period beginning no later than 15- calendar days after the contract award date the offeror shall

begin coordinating the transition of operation of the network with the existing CASTNET contractor and shall begin operating all aspects of the network at the end of the 90- calendar day transition period. Transition activities shall include the extraction and analysis of up to 100 filter or filtrate samples provided by EPA to establish comparability of the offeror's laboratory analyses with historical analyses.

**Assumptions**

Travel

For the purposes of this solicitation, the Offeror should assume meeting with EPA project management staff twice per year for a length of one day. The successful offeror will determine the appropriate number of their staff to attend the meeting with EPA project management.

All other travel will be tasked as a Level of Effort activity.

Third Party Audits

For the purposes of this solicitation, no more than 10 sites will be visited by State or local agencies per year. Offerors may assume, for the purposes of this solicitation, that third party auditors will visit each monitoring site and the Offeror's facility once per year.

Filterpack Preparation and Laboratory Analysis

For the purpose of this solicitation, the following table lists the maximum and minimum number of samples that will be submitted for each year of the contract. Laboratory analytical costs shall be priced as an ODC based on a fixed unit cost that is inclusive of labor and other incidental costs. Internal laboratory quality assurance costs (e.g. method blanks, replicate runs, and end of run internal standards) shall be incorporated into the unit cost. We are looking for (2) unique unit costs. The unit bases for these analytical costs shall be 1) one filterpack assembly prepared, shipped, received and analyzed from the field and 2) one audit sample received and analyzed.

**Table 1. Assumed Number of Units for Solicitation**

SOW Tasks	Description	Number of Sites			
		Base Period		Option Periods 1-4	
		Minimum	Maximum	Minimum	Maximum
1	Core Operations	1	12	1	12
2.1	Dry deposition Filterpack - w/ operator	552	612	0	1200
2.2	Dry deposition Filterpack - w/o operator	96	96	0	1200
3.1	Ozone Monitoring - w/ operator	456	516	0	1200
3.2	Ozone Monitoring - w/o operator	60	60	0	1200
4.1	Ozone monitoring AQS - w/ operator	96	96	0	1200

4.2	Ozone monitoring AQS - w/o operator	36	36	0	1200
5.1	Meteorology - w/ operator	552	612	0	1200
5.2	Meteorology - w/o operator	96	96	0	1200
6.1	Trace gas NOy - w/ operator	12	48	0	1200
6.2	Trace gas NOy - w/o operator	12	72	0	1200
7.1	Trace gas SO2 - w/ operator	12	48	0	1200
7.2	Trace gas SO2 - w/o operator	12	72	0	1200
8.1	Trace gas CO - w/ operator	12	48	0	1200
8.2	Trace gas CO - w/o operator	12	72	0	1200
9.1	PM2.5 FRM mass - w/ operator	0	0	0	1200
9.2	PM2.5 FRM mass - w/o operator	0	0	0	1200
10.1	PM2.5 speciation - w/ operator	0	0	0	1200
10.2	PM2.5 speciation - w/o operator	0	0	0	1200
11.1	PM10-2.5 FRM mass - w/ operator	0	0	0	1200
11.2	PM10-2.5 FRM mass - w/o operator	0	0	0	1200
12.1	PM10-2.5 speciation - w/ operator	0	0	0	1200
12.2	PM10-2.5 speciation - w/o operator	0	0	0	1200
13.1	Continuous PM2.5 mass - w/ operator	0	0	0	1200
13.2	Continuous PM2.5 mass - w/o operator	0	0	0	1200
14	Filterpack prep & analysis	4244	4826	0	7476
	Filterpack field samples	3848	4368	0	6760
	Filterpack field blanks	193	219	0	338
	Laboratory blanks	193	219	0	338
	Artificial precipitation audit sample	10	20	0	40
15.1	Operation of NADP sampler - Collocated w/ filterpack	144	240	0	360
15.2	Operation of NADP sampler - Not collocated w/ filterpack	36	120	0	360
16.1	Operation of IMPROVE sampler - Collocated w/ filterpack	24	60	0	120
16.2	Operation of IMPROVE sampler - Not collocated w/ filterpack	24	60	0	120
17	Acquisition and Management of NPS data -	240	300	0	360

#### Operations of NADP sites

Occasional non-routine visits by the site operator, and the costs of shipping (sample and document transfer) shall be included in the total cost of

maintaining these sites. For the purposes of estimating costs the Contractor shall assume 3 trips to EPA sponsored sites will be necessary for the year.

If the offeror takes exception to any part of the RFP, they shall include an "EXCEPTIONS" section that shall consist of any exceptions the Offeror has to the terms and conditions of the solicitation. Offerors are reminded that

exceptions to the solicitation are discouraged as they may result in the proposal being determined a non-conforming counteroffer. Any exceptions to the terms or conditions of the solicitation shall only be addressed in the event discussions are held. Offerors should be aware that the appropriate time to request clarifications or exceptions to the terms or conditions of the contract as set forth in the RFP is during the proposal preparation stage before the proposal due date.

TABLE 1 - - Labor Classification Table

NOTE\*\* - - The following table is an TEMPLATE for labor classifications, job titles, experience, and job description. The offeror should provide the requested information in accordance with their accounting system and labor categories.

CATEGORY	TYPICAL JOB TITLES	MINIMUM EXPERIENCE	JOB DESCRIPTION/DUTIES

TABLE 2 - - Labor, Fully Burdened Hourly Rate

Note\*\* The following table is a TEMPLATE for 'Labor, Fully Burdened Hourly Rate.' The offeror should provide the requested information in accordance with their accounting system and labor categories.

LABOR CATEGORY	BASE RATE	BURDEN %	G&A %	PROFIT	FULLY BURDENED HOURLY RATE

18.The attachment entitled "EPA INFORMATION SECURITY MANUAL" has been added.  
The text is as follows:

PLEASE SEE ATTACHMENT FOR "EPA INFORMATION SECURITY MANUAL."

19.The attachment entitled "AGENCY NETWORK SECURITY POLICY" has been added.  
The text is as follows:

PLEASE SEE ATTACHMENT FOR "AGENCY NETWORK SECURITY POLICY."

20.The attachment entitled "DATABASE SCHEMA" has been added. The text is as  
follows:

PLEASE SEE ATTACHMENT FOR "DATABASE SCHEMA."

21.The attachment entitled "DATA DICTIONARY" has been added. The text is as  
follows:

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22.The attachment entitled "SOURCE CODE OF THE SYSTEM APPLICATION" has been  
added. The text is as follows:

PLEASE SEE ATTACHMENT FOR "SOURCE CODE OF THE SYSTEM APPLICATION"

23.The attachment entitled "SERVICE CONTRACT ACT INFORMATION" has been added.  
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