

# Request for Proposals

for

**Southeastern Emissions Inventory Development**

**November 21, 2008**

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**TABLE OF CONTENTS**

Section	Subsection	Topic Area	Page #
I.		Introduction to the Southeastern Air Quality Collaboration	3
II.		Introduction to the Project	4
III.		Statutory and Regulatory Basis	4
IV.		Sources of Funding.	5
V.		Scope of Work	6
	A.	Background	6
	B.	Emissions Inventory Development Expectations	6
	C.	Deliverables	9
VI.		Task Descriptions	9
	A.	Task 1. Project Management	9
	B.	Task 2. Base Year Emissions Inventories	11
	C.	Task 3. Projection Year Emissions Inventories	19
	D.	Task 4. Special Inventory Development Project	22
	E.	Task 5. Alternative Control Strategy Inventories	23
	F.	Task 6. Alternative Projection Year	23
	G.	Task 7. Data Display and Archival	23
VII.		Schedule	24
	A.	Administrative Schedule	24
	B.	Technical Project Schedule	24
VIII.		Proposal Submission Requirements and Conditions	24
	A.	Proposal Submittal Deadline	25
	B.	Number of Copies and Proposal Format	25
	C.	Proposal Content	25
	D.	Deficient Proposals	26
	E.	Proposal Preparation and Submission Costs	27
	F.	Inquiries	27
IX.		Proposal Evaluation and Selection Procedures	27
	A.	Proposal Evaluation Criteria	27
	B.	Process and Sequence of Proposal Review	28
	C.	General Procurement Provisions and Conditions	28
X.		General Project Requirements and Conditions	28
X.		Project Responsibilities – Contractor	31
XII.		Project Responsibilities - SESARM	32

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**I. INTRODUCTION TO THE SOUTHEASTERN AIR QUALITY COLLABORATION.**

Southeastern States Air Resource Managers Inc. (SESARM) is a corporation registered in the state of Georgia and organized under the nonprofit provisions of the Internal Revenue Code, Title 26, Subtitle A, Chapter 1, Subchapter F, Part I, Section 501 (c)(3). It was formed by, and serves the needs of, the air pollution control agencies located in the southeastern region of the United States, to which the Environmental Protection Agency (EPA) refers as Region 4. Eight states are members of SESARM – Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee. SESARM maintains its corporate office in Forest Park, Georgia.

The United States Environmental Protection Agency (EPA) designated SESARM as the organization responsible for conducting regional air quality planning in the Southeast, specifically for regional haze. SESARM created a collaborative effort called Visibility Improvement – State and Tribal Association of the Southeast, also known as VISTAS.

In 2001, SESARM invited the contiguous states of Virginia and West Virginia to join the regional haze effort. SESARM also invited the local agencies in the Southeast to be represented by the Knox County, Tennessee air pollution control program. Though southeastern tribes are not required to develop and submit tribal implementation plans, SESARM invited the Eastern Band of Cherokee Indians to represent the six federally-recognized Southeastern tribes.

The participating state agencies have obligations to protect human health and the environment from the impacts of air pollutants. They are responsible for air quality planning efforts and have primary authority and responsibility to develop, adopt, and implement state implementation plans (SIPs) for all air pollutants and aesthetic concerns including fine particles, ozone, and regional haze.

A memorandum of understanding was developed in 2001 by SESARM and executed among the participating agencies to formalize their regional haze project commitment as well as to establish formal goals and procedures for technical air quality analyses. A policy board (the STAD), a day-to-day operations group (the Coordinating Committee), and three work groups (Data, Planning, and Technical Analysis) were created to oversee, guide, and conduct the collaborative work within SESARM's structure. The projects continue to be managed in this manner. Later, fine particle and ozone SIP support was identified as an additional critical opportunity for SESARM to assist the participating state agencies in managing, improving, and maintaining air quality.

The work of SESARM and the in-kind services of the participating agencies are designed to produce technical analyses to aid the participating agencies in developing SIPs required by the Clean Air Act. SESARM solicits input from various stakeholders to the fine particle, ozone, and regional haze projects. Participation is also encouraged from representatives of federal agencies including EPA, the Department of Agriculture's Forest Service, and the Department of Interior's National Park Service and Fish and Wildlife Service; the regulated community; academia; environmental groups; and the general public.

## II. INTRODUCTION TO THE PROJECT.

**The purpose of this request for proposals (RFP) is to manage development of the emission inventories to support required modeling analyses, control strategy assessments, and other air quality management needs.**

Technical air quality analysis projects generally include compilation and analysis of existing ambient air quality monitoring data, collection of additional monitoring data as needed, assessment of air quality trends, preparation of emission inventories, development of emissions control scenarios, modeling of meteorology, emissions, and air quality, and completion of reports revealing the impact of emissions and the air quality benefits of varying emission control levels. This emissions inventory project will support this larger group of tasks.

SESARM intends to develop common emissions inventories to concurrently address, to the extent feasible, national ambient air quality standard (NAAQS) requirements and to evaluate progress towards long-term regional haze goals. Because similar pollutant emissions and atmospheric processes control chemical formation and transport for fine particles, ozone, and regional haze, similar technical analyses are necessary to evaluate air quality benefits of emissions controls. Using the developed emission inventories, SESARM will develop and operate a single integrated, one-atmosphere air quality modeling platform to provide to the states technical analyses supporting the required air quality demonstrations.

The tasks anticipated for this RFP may include but are not limited to creation of new base year and future base year inventories as well as future year control strategy inventories, improving the quality of fire records and estimated emissions, establishing consistent definitions and assumptions for area source categories, improving inventories for rail, marine, and aircraft operations within the non-road category, improving the agricultural ammonia inventory, and improving the understanding of sources and impacts of primary and secondary organic carbon emissions.

## III. STATUTORY AND REGULATORY BASIS.

The NAAQS for fine particulate matter (particles with a diameter less than 2.5

micrometers – known as PM<sub>2.5</sub>) includes an annual limitation of 15 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) set in 1997 and a daily limitation of 35  $\mu\text{g}/\text{m}^3$  set in 2006. SIPs demonstrating attainment of the annual PM<sub>2.5</sub> NAAQS were due to EPA in April 2008. Areas failing to attain the daily PM<sub>2.5</sub> NAAQS were proposed by EPA in August 2008 and are expected to be finalized in April 2009. SIPs for the daily PM<sub>2.5</sub> NAAQS are due in April 2012.

The 8-hour ozone NAAQS was revised in March 2008 from 0.08 ppm to 0.075 ppm based on a three-year average of the annual fourth highest daily maximum 8-hour average reading at each monitoring location. States are to recommend to EPA which areas will not attain the 0.075 ppm ozone NAAQS by March 2009. EPA will propose nonattainment areas in the summer of 2009 and finalize nonattainment areas in March 2010 (or March 2011 depending on the availability of adequate data to make attainment decisions.) SIPs for the 2008 ozone NAAQS will be due in March 2013, 2014, or 2016, depending on the designation date and severity classification.

The 1999 Regional Haze Rule (RHR) requires states to define long-term strategies to improve visibility in Federal Class I national parks and wilderness areas. States are to establish baseline visibility conditions for the period 2000-2004, natural visibility conditions in the absence of anthropogenic influences, and an expected rate of progress to reduce emissions and improve visibility systematically to reach natural visibility conditions by 2064. The RHR requires states to improve visibility on the 20% haziest days and protect visibility on the 20% clearest days. States were required to submit SIPs by December 17, 2007 demonstrating reasonable progress to improve visibility by 2018. States are to evaluate progress toward visibility improvement goals every 5 years (beginning in 2012) and to submit revised SIPs every ten years. States are to consult with Federal Land Managers in developing these plans.

#### **IV. SOURCES OF FUNDING, USE, AND LIMITATIONS.**

This project will be funded by federal grant funds pursuant to Section 103 of the Clean Air Act. EPA has allocated certain funds for regional haze work and the member agencies of SESARM have reserved a portion of their normal annual grant funds to support fine particle and ozone analyses.

SESARM is responsible for applications, receipt, disbursement, and management of federal grant funds for the Southeast. This RFP and the project it will ultimately support are subject to the availability of these funds. Any services sought and ultimately procured pursuant to this RFP are contingent on current and continuing availability of federal funds.

Pursuant to this RFP, separate contracts may be awarded to multiple bidders for individual or collective tasks designed to support the fine particle, ozone, and regional haze assessments. The funding source will be identified for each individual task. The grant(s) assigned to fund each task will be defined in the respective contract(s) rather

than in this RFP.

## **V. SCOPE OF WORK.**

### **A. Background.**

The project supported by this RFP is intended to develop a comprehensive annual and average summer daily emissions inventory for the Southeast to support modeling and assessment of the emissions and atmospheric processes that result in fine particles, ozone, and regional haze. This work includes development of at least one base year inventory consistent with EPA's criteria for emission reporting and also meeting the spatial and temporal allocation requirements for regional emissions and air quality modeling. Candidate modeling base years for inventory development are 2005 and 2008. States are also considering whether meteorological conditions in 2006 or 2007 would be more representative as the modeling base year. In consultation with its participating agencies and EPA, SESARM will decide which year to use as the base year before the inventory work begins.

This project also includes developing emissions inventories for at least one future year inventory for emissions and air quality modeling purposes. SESARM will select the future modeling year or years as appropriate to support fine particle, ozone, and regional haze objectives.

Finally, this project also includes development of emissions inventories for future year control strategies that will support modeling and assessment of controls necessary to assess the extent of NAAQS attainment and regional haze.

### **B. Emissions Inventory Development Expectations.**

This project will produce preliminary and final sets of comprehensive annual and summer daily base year and future year emissions inventories for the participating states to support regional air quality modeling and assessment of fine particles, ozone, and regional haze. Emissions shall be reported by source category (i.e., point, area, on-road mobile and non-road mobile) by county for each county in Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia. The emissions inventory development is specific to these states only. SESARM will obtain emissions inventories for other states directly from those states or regional organizations. Additional reporting requirements for the major source categories are discussed below.

The emissions inventories shall consist of all primary and precursor emissions necessary to accurately model fine particles and ozone including ammonia (NH<sub>3</sub>), carbon monoxide (CO), PM<sub>2.5</sub>, particles with a diameter less than 10 micrometers (PM<sub>10</sub>), sulfur dioxide (SO<sub>2</sub>), and volatile organic compounds (VOCs) for area, non-road mobile, on-road mobile, utility, and other industrial categories.

To project emissions from the base year to future years, the Contractor shall review, summarize, and recommend methods and growth and control factors consistent with SESARM's objective to develop future year base case and control strategies for demonstrating attainment with the PM<sub>2.5</sub> and ozone NAAQS and to meet reasonable progress obligations for improving visibility. These methods and factors shall include the control technologies and associated percentage reductions, rule effectiveness, and rule penetration values, growth rates, and energy efficiency factors used to generate the future year base case and control strategy emissions inventories.

The emission inventories shall be delivered in electronic format consistent with the requirements for conducting regional emissions and air quality modeling. The emission model input formats will be defined once the emissions model has been selected. For purposes of this proposal, potential bidders should assume that inventories shall also be provided consistent with EPA's current emissions inventory reporting requirements. The Contract Officer will provide more specific direction on inventory formats, if clarification is needed, after a contractor is selected and development of a detailed work plan is initiated.

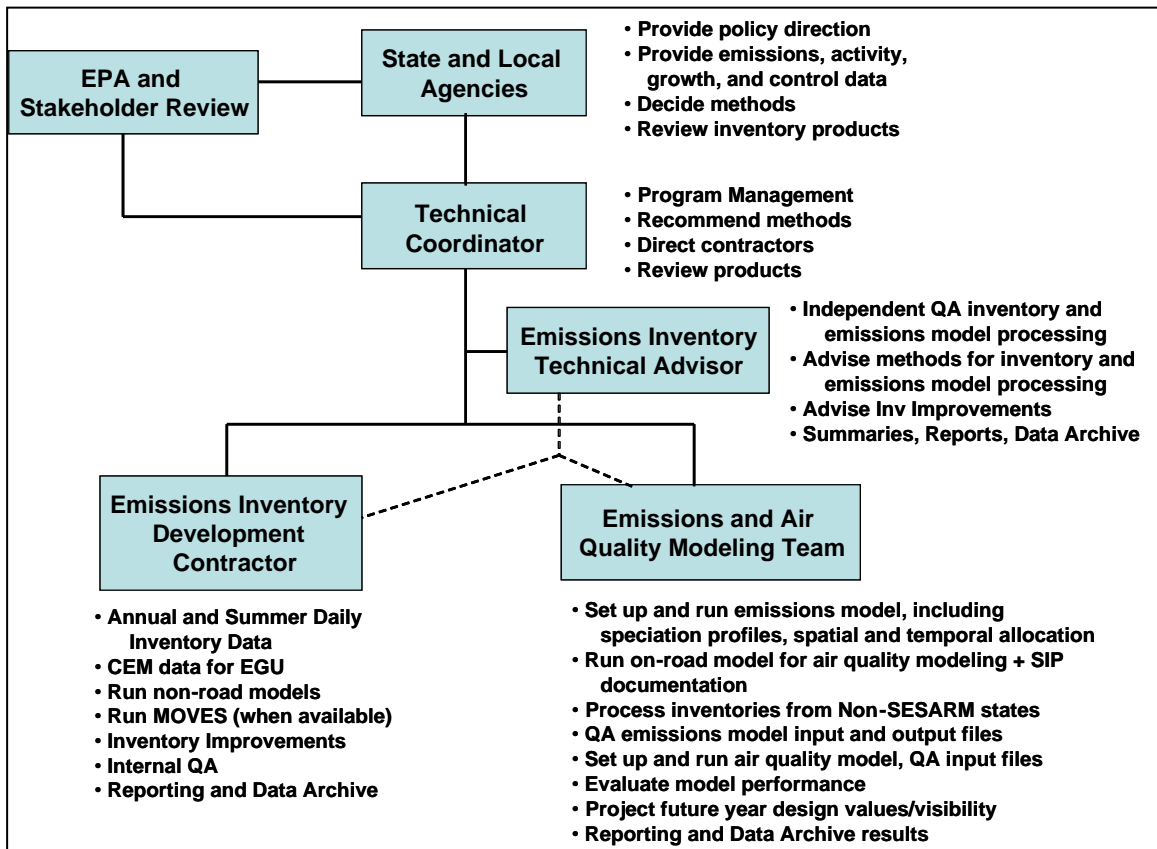
The Contractor shall work consistent with contract provisions, federal grant and project requirements, and the final project work plan to collect, quality assure, document, and prepare recommendations for the use or revision of these data for the purposes of developing base year and future year inventories. The selected bidder shall participate in meetings and conference calls and provide insight, background, and suggestions within their areas of expertise. Further, the Contractor may be requested to provide written reports and/or analyses of certain aspects of the inventory development work. The methods used to develop the inventories shall be documented in technical reports for purposes of supporting SIPs for fine particles, ozone, and regional haze. All revisions to inventories and the sources of the revisions shall be clearly documented.

The expected organizational responsibilities for emissions inventory development are outlined in Figure 1. These are not all the technical tasks that SESARM will manage within this project but only those related to emissions inventory development. Participating agencies will be responsible for collection of inventory data from sources within their respective jurisdictions and for seeking appropriate stakeholder review of inventory methods and products for the major source sectors. The Technical Coordinator will provide overall SESARM program management and specific direction to this project.

The Contractor selected for emissions inventory development will work closely with the future emissions and air quality modeling team, the services of which will be sought via a separate procurement process. Additional emissions data requirements for emissions modeling will be the responsibility of the future emissions and air quality modeling team, including the following:

1. Speciation factors for primary PM<sub>2.5</sub> and PM<sub>10</sub>, including factors for elemental carbon, organic carbon, crustals or an alternative measure of base cations, and trace elements.
2. Spatial and temporal allocation factors as appropriate for the selected emissions and air quality models.
3. On-road mobile emissions as input to the air quality model.
4. Biogenic emissions as input to the air quality model.

Figure 1. SESARM Emissions Inventory Development Project Responsibilities.



After the successful bidder is selected for this emissions inventory development work and to support a separate, future emissions and air quality modeling contract, SESARM intends to seek proposals for an emissions inventory technical advisor to work closely with, but independently of, the emissions inventory contractor and the future emissions and air quality modeling team. The technical advisor is expected to provide independent review and quality assurance of inventory data and emissions modeling products, to recommend methods for emissions inventory and emissions

modeling, and to support SESARM project management and delivery. The emissions inventory technical advisor may not be a member of the emissions inventory development team or the emissions and air quality modeling team, nor be a member of the same firm as the emissions inventory development team nor the emissions and air quality modeling team.

C. Deliverables.

The deliverables of this scope of work include the following components.

1. Work plan.
2. Quality assurance project plan (QAPP) consistent with the requirements of Title 40 of the Code of Federal Regulations, Section 30.54 and ANSI/ASQC E4, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs."
3. Base year inventory and report.
4. Future year base case inventory and report.
5. Special inventory improvement products (to be defined).
6. Future year control strategy inventories (to be defined).
7. Final inventory report.
8. Data archival of the emissions inventories specified herein.

**VI. TASK DESCRIPTIONS.**

Bidders shall provide a detailed description of work consistent with tasks described below. Each task shall require the application of applicable QAPP provisions and documentation and delivery of summaries of quality assurance procedures completed for each task. Such quality assurance summaries shall be delivered with draft reports and/or draft data transmittals.

A. Task 1. Project Management.

1. Final Project Work Plan.

The work plan shall provide additional detail concerning methods and approaches that will be used in the project. The work plan shall build upon and provide more specifics to the technical provisions in this RFP and shall reflect the Contractor's response to direction from SESARM via its Contract Officer. The

work plan shall describe the project approach, the schedule for deliverables for each task, staff assignments, and the projected level of effort for each task. It shall describe the inventory review process and how inventories will be modified in response to direction from the Contract Officer. The work plan shall be consistent with EPA guidance for emissions inventory development and any deviations from the guidance shall require approval of the Contract Officer.

Costs for individual tasks shall be consistent with those identified in the winning bid unless the Contract Officer has requested changes from the proposed technical scope that necessitate cost changes. Such cost modification proposals shall be subject to verification and approval by the Contract Officer.

The proposed final project work plan shall be submitted within 14 calendar days of contract execution. Work on the remaining tasks specified in this RFP shall not begin until the Contract Officer authorizes the work plan and costs in writing.

## 2. Quality Assurance Project Plan.

Bidders should note that SESARM, as a federal grant recipient, is governed by grant conditions as well as federal regulations. SESARM is obligated under federal regulations and its grant conditions to submit a QAPP to EPA for review 60 days prior to the collection and/or use of environmental data and is prohibited from beginning such work until the QAPP is formally approved.

The Contractor shall prepare and submit to SESARM a QAPP covering development of at least one base year inventory, one future year base case inventory, and future year control strategy inventories as requested by the Contract Officer. The QAPP for this project shall be designed to ensure preparation of complete, accurate, and consistent emissions inventories. The QAPP shall address, but is not limited to the following tasks: data collection and compilation, inventory review, revisions and corrections, documentation, and data archival. The QAPP shall specify conformance with EPA's emissions inventory development guidance and shall include policies, procedures, specifications, standards, and documentation sufficient to produce data of quality adequate to meet project objectives and to minimize loss of data due to out-of-control conditions or malfunctions. The Contract Officer must pre-approve any deviations from EPA guidance.

The Contractor shall submit the QAPP to SESARM along with the project work plan, within 14 days of contract execution, unless otherwise approved by the Contract Officer. The QAPP will be reviewed by SESARM and/or its participating agencies. The Contractor shall incorporate any comments or changes requested by the Contract Officer pursuant to this review. Work on the remaining tasks specified in the Contract and work plan shall not begin until the Contract Officer authorizes the QAPP in writing.

### 3. Project Management and Communications.

The Contractor shall regularly communicate with the Contract Officer as well as participate in monthly conference calls to discuss progress of the project. Brief but informative monthly progress reports shall be submitted within 30 days of the end of each month. For costing purposes, bidders should assume attendance at two 1-day meetings during the project in a major city in the Southeast with up to two Contractor staff attending each meeting.

#### B. Task 2. Base Year Emissions Inventories.

This work shall include development of at least one base year inventory consistent with EPA emissions inventory criteria and with spatial and temporal requirements for regional emissions and air quality modeling. A 2005 inventory exists pursuant to EPA's Comprehensive Emissions Reporting Rule (CERR) and is based on 2005 Continuous Emissions Monitoring (CEM) data for Electric Generating Units (EGUs) and large industrial units supplemented with growth and control factors applied to the 2002 base year inventory for other sectors. A 2008 CERR inventory will be due to EPA by June 2010. If SESARM determines that a base year other than 2005 or 2008 will be used as the modeling year, then the CERR inventory will require modification to the selected modeling year using appropriate emissions factors. SESARM, after consultation with its participating agencies, will decide on the base year to use prior to official initiation of the inventory development effort.

In 2008, the southeastern states participated with other eastern states in the Eastern Regional Technical Analysis Coordination (ERTAC) group to improve inventory methods for area source categories and railroad emissions. States will continue working through the ERTAC effort to improve inventory methods for carbon emissions from mobile sources, agricultural ammonia emissions, and marine non-road emissions. Inventory methods recommended by these efforts shall be applied by the Contractor to the development process for the selected inventories as prescribed by SESARM.

For each emissions sector, the Contractor shall access available state, local and EPA inventory data for the base year and review methods used to develop these data. The Contractor shall recommend to SESARM where additional analyses may be appropriate and necessary to improve confidence in source sector activity data and/or emissions data. Following SESARM direction, the Contract Officer will instruct the Contractor to compile a draft base year inventory for each source sector specified in more detail below. The inventory shall be characterized by Source Classification Code (SCC) and shall be consistent with EPA emission reporting requirements. The Contractor shall provide draft inventories to SESARM for review. SESARM will determine the level of stakeholder review required for each source sector. The Contractor shall incorporate comments submitted by SESARM and resubmit prescribed revised inventories in accordance with established schedules. Methodologies used shall be documented by the Contractor for each applicable task

and shall be submitted to SESARM via technical memoranda.

1. Point Source Emissions Inventories.

a. EGU Point Sources Emissions Inventory.

For EGU emissions, the Contractor shall obtain individual unit level emission files from the applicable local and state agencies for 2005 and for the modeling base year if different than 2005, including the CEM data for 2005-2008. If so directed by the Contract Officer, the Contractor shall also obtain the EPA Clean Air Markets Division inventory and control files for EGU point sources. The source lists shall be compared to SESARM's regional haze 2002 Best and Final EGU point source inventories to identify any unmatched units and the Contractor shall bring such unmatched units to the attention of the appropriate agency(ies).

b. Non-EGU Point Sources Emissions Inventory.

For non-EGU point sources, the Contractor shall obtain point source emissions from the applicable local and state agencies for 2005 and the modeling base year if different than 2005, including CEM data as available for large industrial boilers. If so directed by the Contract Officer, the Contractor shall also obtain EPA's most current inventory files for non-EGU point sources. The source lists shall be compared to SESARM's regional haze 2002 Best and Final point source inventory to identify any unmatched units and the Contractor shall bring such unmatched units to the attention of the appropriate agency(ies).

c. Typical EGU Point Sources Base Year Emissions Inventory.

To correct for possible non-typical operating conditions for EGUs during the modeling base year, a typical base year inventory will be used as the basis for projection to future emissions years. The Contractor shall obtain CEM data for EGUs for the five years that contribute to the base year design value. Previously, the average heat input from the contributing years has been used to define heat input and emissions for the typical EGU inventory. The specific methods and years to be used for typical EGU emissions will be determined in consultation with SESARM.

2. Area Source Emissions Inventories.

The development of area source emissions inventories shall exclude fire emissions data which shall be addressed as a separate sub-task. The Contractor shall obtain area source emissions data from the applicable local and state agencies. The Contractor shall also obtain EPA's 2005 inventory files as well as files for the modeling base year if different than 2005. The Contractor

shall conform with area source inventory ERTAC methods (expected to be available in early 2009) as specified by SESARM.. For source sectors for which SESARM does not have recommended methods, the Contractor shall recommend appropriate methods to SESARM and shall apply them to the task as directed by SESARM.

For agricultural ammonia, the Contractor shall recommend methods to estimate livestock emissions, including options for applying models to calculate ammonia emissions. SESARM will review Contractor recommendations and provide direction for methods to be applied. Bidders are encouraged to recommend approaches in their proposals. SESARM expects the ERTAC Work Group to consider a process model approach to calculating temporal profiles for agricultural emissions in 2009.

### 3. Fire Emissions Inventories.

SESARM intends to develop a detailed fire inventory based on a combination of fire activity data collected from state and federal forestry agencies and satellite imagery data. All ten participating states have electronic records for wild fire activity data. Some states, but not all, have electronic records for prescribed and agricultural fires. Federal agencies, including the National Park Service, Forest Service, Fish and Wildlife Service, and Department of Defense, have electronic fire records for wild and prescribed fires.

SESARM intends to archive past and future fire activity data within the Fire Emissions Tracking System (FETS) that has been developed by the Western Regional Air Partnership as a national data archive for fire activity and emissions data for regional air quality modeling. The web site for this data base is <http://www.wrapfets.org/>. FETS already retrieves and archives wild fire data from the federal ISC209 data base. This data base only reports wild fires greater than 100 acres. The majority of wild fires in the Southeast are smaller than 100 acres and will not be available in FETS. FETS is linked to the CONSUME 3.0 data base to calculate emissions from fire activity data. For the southeastern fire data, FETS and CONSUME must be modified to accept fuel types, fuel loadings, and fuel consumption consistent with conditions in the Southeast.

EPA manages a national fire inventory data base called SMARTFIRE that is derived from satellite imagery of fire incidences and locations and is linked to the Blue Sky fire emissions framework. SMARTFIRE can identify fire incidence and estimate fire acreage but it cannot distinguish fire type (e.g., wild fires versus prescribed fires versus agricultural burning) or provide all the input data necessary for emissions modeling. SMARTFIRE is intended to reconcile fire incidence from satellite imagery with fire activity records.

Fire inventory development for the SESARM states will be led collectively by the southeastern state forestry and air quality agencies and federal forestry and air

quality agencies. These groups are already participating in the southeastern Fire Activity and Emissions Tracking System Work Group that was convened to improve management of state fire activity data and state forestry agency decision making for prescribed fire. SESARM and state air quality agencies will utilize this existing work group to provide information, guidance, and recommendations that will support emissions inventory development decisions.

SESARM has identified several sub-tasks for fire inventory development for the Southeast. Bidders are requested to provide separate cost estimates for each sub-task listed below. SESARM reserves the right to award some but not all sub-tasks to the successful bidder.

Fire emissions modeling will not be part of this emissions inventory development scope of work but will be the responsibility of the emissions and air quality modeling team. As part of the emissions and air quality modeling design and implementation, SESARM will consider a specific fire modeling component for selected fire events. That decision will not be part of this proposal selection.

a. Sub-task 1. Data collection and data entry in the FETS.

In Sub-task 1, available electronic fire activity data shall be gathered and entered in FETS consistent with existing FETS data requirements. For the period from 2005 to 2008, the Contractor shall collect from state and federal forestry agencies in the Southeast all available electronic records of fire activity for wild fire, prescribed fire, land clearing, and agricultural burning. Electronic wild land fire records are available for all southeastern states and federal agencies in those states. Prescribed fire records are also available electronically for Alabama, Florida, and South Carolina, and possibly for other states. Additional fire activity records are available from the states in paper form. The Contractor shall review submitted electronic data and compare it to existing FETS data requirements. The Contractor shall format electronic records consistent with FETS data requirements and enter the data in FETS.

The Contractor shall identify to state and federal forestry agencies missing data records. State and federal forestry agencies may begin the data assembly portion of this task in advance of the contract award. The objective of this Sub-task 1 is to promptly populate FETS with available data to support the data refinement and improvement work addressed in Sub-task 4.

The fire activity for the selected year may include overlapping records from the state and federal agencies. Bidders shall address how they will resolve overlapping fire events between federal and state records. In addition, the state and federal forestry agencies may have land clearing and agricultural burning data. Bidders shall recommend how these data should be handled in FETS. SESARM will review these recommendations and provide guidance to the Contractor on the chosen approaches to account for overlapping fire activity records, land clearing, and agricultural burning.

- b. Sub-task 2. Development of an initial fire inventory for the modeling base year.

Fire activity data in FETS is currently linked to CONSUME to calculate emissions from wild land fires. Current assumptions used in CONSUME will not completely reflect fire characteristics in the Southeast. In Sub-task 2, the Contractor shall work with state and federal forestry agencies to modify the existing CONSUME assumptions used in FETS to calculate emissions consistent with fire characteristics in the Southeast. The Contractor shall work with state and federal agencies to develop agreed upon methods to define acreage and parameters for calculating emissions for wild land fires, prescribed fires, land clearing, and agricultural burning.

The Contractor shall apply agreed methods and enter resulting revised fire descriptive files in FETS. The Contractor shall work with FETS managers to modify CONSUME to implement emissions calculations, produce comprehensive fire emissions inventories for the Southeast, and export emissions data in a format that meets the requirements of EPA's emission reporting requirements. Emissions shall be reported daily and summarized monthly by county, state, fire type, and pollutant.

The Contractor shall develop a draft fire inventory report that documents input data sets, methods and assumptions used to develop this inventory and that summarizes emissions results. Changes from the unadjusted activity data provided by the state and federal forestry agencies to the final data shall be clearly documented in the final report.

- c. Sub-task 3. Conversion of paper records to electronic data files and development of assumptions for fire activity where no fire activity exists.

In Sub-task 3, the existing electronic records for the selected modeling year inventory shall be expanded to include conversion of paper records and completion of fire category information where states do not keep records. An improved inventory will be developed just for the selected modeling year. Prescribed fire records for several states are currently collected as individual paper records. Bidders shall provide methods, level of effort to convert paper records for one single base year to electronic files consistent with the FETS data requirements, and corresponding costs. Because SESARM cannot explicitly define the total scope of paper records to be reviewed, the bidder's proposed levels of effort and costs should be scalable to a higher or lower level of effort once the scope of paper records is better defined. Due to limited funding, SESARM reserves the right to fund less than a complete conversion of all state paper records to electronic records.

Bidders shall also describe how available agricultural records should be processed and how to estimate agricultural burning for states that do not archive that information. As well, bidders shall recommend methods for improving capture or estimates of land clearing fire activities, particularly for states that do not archive this data.

- d. Sub-task 4. Evaluation and merger of satellite and ground-based fire activity data.

In Sub-task 4, the ground-based fire activity data shall be compared to the SMARTFIRE activity data based on satellite records of fire occurrence. EPA's SMARTFIRE program has compiled satellite imagery for fire activity for 2005-2007 and will shortly incorporate 2008 information. SMARTFIRE has already integrated some ground-based fire activity data with the satellite fire incidence records. If available funds are sufficient, SESARM intends to evaluate, for the single modeling base year, the efficiency of SMARTFIRE in merging the two fire activity data sets. The Contractor shall compare, for the modeling base year only, the ground based fire activity records developed under Tasks 1, 2 and 3 and the merged satellite and ground-based fire activity records from SMARTFIRE. The Contractor shall provide a technical assessment of SMARTFIRE's performance in identifying and merging corresponding fire events. The Contractor shall recommend methods that might improve the merged satellite and ground-based data for the modeling year and secondarily, for an average of the period 2005-2008. Bidders shall provide methods and costs to complete this evaluation and recommendations including options to review records for a single state rather than ten states as an approach to reduce the costs of the evaluation. The state and federal forestry and air quality agencies will review these recommendations and available funding to determine the level of effort that will be authorized to expand on merging SMARTFIRE and SESARM ground based fire activity data. If authorized by the Contract Officer, the Contractor shall implement the methods approved by state and federal agencies for merging the satellite and ground-based data.

The FETS and SMARTFIRE data systems both calculate fire emissions from fire activity data. The bidder shall provide costs to compare the assumptions for fuel type, fuel loading, and consumption between the two systems. After comparison of the fire activity data, the state and federal forestry and air quality agencies will determine the appropriate additional effort necessary to merge these two data systems for regional air quality modeling purposes for the Southeast. The Contract Officer will provide direction to the Contractor on the selected course of action.

- e. Sub-task 5. Apply approved fire inventory development methods to merged fire activity data and electronically archive.

In Sub-task 5, the Contractor shall work with all parties to finalize the methods to be used for the Southeast to develop a base year fire emissions inventory for SESARM's regional air quality modeling purposes and shall outline how those methods will be linked to the FETS fire activity records. The Contractor shall apply approved fire inventory development methods to merged satellite and ground-based fire activity data. The Contractor shall work with the managers of FETS to assure that appropriate inventory calculation methods are linked to the fire activity data stored in FETS.

f. Sub-task 6. Document fire inventory.

In Sub-task 6, the fire inventory methods and results shall be reported. The draft report delivered in Sub-task 2 shall be revised to address methods and results from Sub-tasks 3, 4, and 5, and shall clearly document how comments from state and federal agencies that contributed data to the inventory were incorporated.

g. Sub-task 7. Develop typical modeling base year fire inventory.

In Sub-task 7, a typical fire inventory shall be developed and reported consistent with emissions and air quality modeling requirements. To correct for possible non-typical fire activity during the modeling base year for purposes of future year inventory projections for each county and/or state, the Contractor shall develop average activity data for 2005-2008 for wild fire and prescribed fires. The Contractor shall adjust acreage for individual fires in the modeling year by the average acreage for the county or state over the period 2005-2008. The specific methods applied shall be resolved in consultation with SESARM and federal forestry and air quality agencies.

4. Non-road Mobile Source Emissions Inventories.

The Contractor shall collect the latest available activity data from southeastern agencies for non-road mobile sources including airplane, railroad, and commercial marine vessels for 2005 and the modeling base year if different than 2005. If so directed by the Contract Officer, the Contractor shall also obtain the EPA 2005 inventory. The most recent version of the NONROAD model shall be applied to calculate activity and emissions for applicable non-road equipment. The Contractor shall obtain any existing ERTAC Rail Work Group methods recommendations for collecting activity data for rail yards and rail lines and applying emissions data. The ERTAC Marine Work Group may also be able to recommend additional activity and emissions data to apply for ports and for coastal shipping in the Gulf of Mexico, Atlantic Ocean, and major inland rivers. The Contractor shall review ERTAC recommendations for new inventory methods and provide any additional recommendations to SESARM. The Contractor shall apply approved methods to develop these inventories consistent with EPA emissions inventory reporting requirements. Bidders are encouraged

to propose other methods for developing inventories for aircraft, rail, and marine emissions if believed to be more effective than CERR methods prescribed by EPA for the 2005 inventory.

5. On-road Mobile Source Emissions Inventories.

The Contractor shall collect the latest available on-road mobile fleet data from southeastern agencies and EPA for the selected modeling base year. Southeastern air quality agencies shall coordinate with local and/or state transportation agencies to obtain relevant mobile model input data for the base year. Link-level mobile data shall be obtained for those states that request that link data be used in mobile modeling. At this time, Georgia is on-record with such a request.

Currently, on-road emissions are calculated using the MOBILE6 emissions model. EPA is developing a new model for on-road mobile emissions called MOVES that states will be required to use in the future for on-road emissions calculations. Release of MOVES has been delayed and it is not clear when the model will be available to replace the MOBILE6 model. The initial release version of MOVES is not expected to be functional for emissions and air quality modeling purposes. The Contractor shall process local and state data and provide model inputs to the southeastern agencies for review and confirmation. Upon direction from the Contract Officer, the Contractor shall run the appropriate MOVES model to produce mobile emissions that are consistent with relevant EPA emission inventory reporting requirements. For emissions modeling purposes, the Contractor shall provide the approved mobile model inputs to the emissions and air quality modeling team to process the mobile emissions.

SESARM is participating in a national project to evaluate particulate matter emission profiles for highway vehicles using results of an emission measurement study for gasoline and diesel vehicles in Kansas City, Kansas. The current project will develop revised mobile emissions profiles for two northern cities, Detroit, Michigan and New York, New York and compare these revised profiles to those currently used in MOBILE6. The SESARM Contractor shall review these findings and recommend modifications, if any, to mobile emissions profiles for southeastern states.

6. Non-CERR Base Year Emissions Inventories. (Contingency.)

If 2006 or 2007 is selected by SESARM as the modeling base year instead of 2005 or 2008, then the Contractor shall project emissions to the modeling year. Bidders shall describe their proposed technical approach and associated costs to project emissions for all sectors to the selected modeling base year. SESARM reserves the right not to fund this task.

7. Preparation and Submittal of Data Summaries and Reports.

The Contractor shall document the inventory data sources, methods, approaches, results, agency-prescribed revisions, and any special tasks performed to develop the base year inventory. Data shall be summarized in tables by pollutant, major source sector, and state. The draft report shall be compiled for each source sector in one base year inventory report and data summary. The Contractor shall incorporate comments from the Contract Officer in a revised base year inventory report.

The Contractor shall provide inventory data electronically, formatted as requested by the Contract Officer. These outputs shall include spreadsheets in Microsoft Excel format with data summaries for southeastern agency review, emissions summaries consistent with EPA emissions inventory reporting requirements and as requested by the Contract Officer, and emissions data prepared for emissions modeling input files. The Contractor shall also include emissions model output files for specific source categories where models are used to develop inventories (e.g., fire, mobile, non-road, and NH<sub>3</sub>). Coordination with the emissions and air quality modeling team may be required to complete the emissions summaries for on-road mobile emissions. Data shall be provided by county by state for all pollutants (CO, NH<sub>3</sub>, NO<sub>x</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, and VOCs) for the area, nonroad and on-road mobile engine, and point source categories.

The SESARM technical data shall be archived on one data website. The Contractor shall be responsible for providing electronic data formatted as directed by the Contract Officer to the SESARM data archive.

### C. Task 3. Projection Year Emissions Inventories.

Either 2012 or 2013 is expected to be selected as the future base case projection year for fine particles, ozone, and regional haze modeling. The Contractor shall assemble the base year emissions inventory and associated data from Task 2, the SESARM fine particle/ozone 2012 initial inventory for the southeastern states, and relevant SESARM projection methods, models, growth and control factors from the state and local agencies. This information will serve as the basis for future year emissions projections for SIPs. Data sources for growth and control data shall be clearly articulated. The Contractor shall provide these data, in Microsoft Excel spreadsheets unless specified otherwise, to the Contract Officer and the southeastern agencies for review and decision on appropriate information to use in developing a preliminary future year base case emission inventory. The Contractor shall recommend where additional analyses might be appropriate to improve confidence in growth and control factors. Southeastern agencies will be responsible for appropriate EPA and stakeholder review of major source categories.

Consistent with guidance from the Contract Officer on behalf of the southeastern agencies, the Contractor shall apply approved growth and control factors to provide the base case future year inventory. Initial results shall be provided in Microsoft

Excel spreadsheet format for review by the southeastern agencies. SESARM will facilitate an appropriate level of EPA and stakeholder review of inventory results. All EPA and stakeholder comments will be reviewed by SESARM. Inventory revisions as directed by the Contract Officer shall be incorporated in a revised base case inventory. Inventory development methods and projection year results shall be clearly documented in a projection year inventory report. Additional information and expectations are provided below for each major source sector.

1. EGU Point Source Projection Year Emissions Inventories.

For the previous SESARM future year projections, the Integrated Planning Model (IPM) was used to project future electricity demand, controls, and utilization of existing, planned, and new units. In 2009 alternative projections methods for future EGU growth and controls will be evaluated through the ERTAC effort. The Contractor shall recommend methods to project EGU growth and controls for future years with or without proprietary models. The Contractor shall obtain future year growth and control factors for EGUs from southeastern agencies and work with the agencies to define future year EGU projection methods where growth and control are not known. SESARM will facilitate EPA and stakeholder comment as appropriate. The Contractor shall implement and document methods for the EGU projection inventory as directed by the Contract Officer. Growth and control methods shall be clearly documented for EPA review.

2. Non-EGU Point Source Projection Year Emissions Inventories.

The Contractor shall obtain state and EPA recommendations for growth and control methods for non-EGU point sources. The Contractor shall review methods applied in previous SESARM technical analysis projects and by EPA and other entities in reliable projection inventories and shall recommend growth and control methods to be used in the non-EGU point source projection. The states, along with EPA and stakeholders as appropriate, will review recommended methods and will determine the methods to be applied. The Contract Officer will provide direction to the Contractor consistent with participating agency direction on the preferred approach. The Contractor shall assemble relevant state and EPA growth and control data and apply to the SESARM base year to project to the future year.

3. Area Source Projection Year Emissions Inventories (Non-Fire).

The Contractor shall obtain SESARM, ERTAC, and EPA recommendations for growth and control methods and models to be used for the area source sector. The bidder shall recommend alternative methods they may be more effective in producing desired results.

SESARM and the participating states will review methods, involve EPA and stakeholders in reviews as appropriate, and determine methods that will be

applied. The Contract Officer will provide direction to the Contractor on technical approach. The Contractor shall assemble relevant state and EPA growth and control data and apply to the SESARM base year to project to the future year.

The bidder shall recommend growth and control methods and models to be used for this sector.

4. Fire Projection Year Emissions Inventories.

The Contractor shall work with state and federal agencies to identify assumptions to use for future fire activity in the southeastern states. Initially, the Contractor shall assume that the typical base year fire inventory will be projected to the future year. Growth in fire activity may be adjusted to account for changes in fire or smoke management practices. SESARM and the southeastern states will determine assumptions for future fire management that will be incorporated in the base case future projection year and that might be evaluated in a fire management scenario. For example, the SESARM regional haze 2002 typical prescribed fire inventory was adjusted to 2009 and 2018 to incorporate increases in prescribed fire activity planned by the Forest Service and the Fish and Wildlife Service. The southeastern states accepted these increases in federal prescribed fire activity in the 2009 and 2018 base case inventory projections (except for Florida where fire incidence is high and increased prescribed fire activity might be offset by reduced wild fire incidence.) The bidder shall offer recommendations on methods to address changing fire management practices.

5. Non-road Mobile Source Projection Year Emissions Inventories.

The Contractor shall obtain SESARM, ERTAC, and EPA growth and control methods appropriate for the non-road source sectors including NONROAD or its replacement EPA model, and air, rail, and marine sectors and shall recommend methods to the southeastern agencies. SESARM will be responsible for facilitating appropriate EPA and stakeholder review. SESARM will review Contractor recommendations, determine methods to be applied in consultation with the participating agencies, and advise the Contractor accordingly. The Contractor shall deliver the non-road projection year inventory for state review and shall incorporate state revisions. Growth and control methods shall be clearly documented in the projection year inventory report. The bidder shall recommend, as appropriate, use of alternative growth and control methods and models to be used for this sector if different than applied in previous SESARM and/or EPA projections.

6. On-road Mobile Source Projection Year Emissions Inventories.

The Contractor shall obtain SESARM, ERTAC, and EPA growth and control methods and recommend methods to be applied to the SESARM base year on-road mobile inventory. The Contractor shall apply the MOVES model when

available from EPA to determine future year emissions factors and shall use vehicle growth and control rates as provided by the southeastern agencies. SESARM will review methods recommendations and the Contract Officer will direct the Contractor consistent with participating agency guidance. The Contractor shall provide inputs appropriate to process on-road mobile emissions within the emissions model to the emissions and air quality modeling team.

#### 7. Preparation of Reports and Data Summaries.

For the future year base case inventory, the Contractor shall document the inventory data sources, methods, approach, results, state revisions, and any special tasks performed to develop these inventories. The documentation shall include tabular and graphical analyses (e.g., emission density plots and bar charts) of the point, area, non-road and mobile source category data by pollutant by individual local and state agency. The Contractor shall also provide emissions inventory totals for the entire Southeast by pollutant and source category. The documentation shall discuss the growth assumptions and projection factors used to generate these inventories. The Contractor shall incorporate comments from SESARM in revised reports. For costing purposes, the Contractor shall assume that it will be responsible for preparation of separate draft and final reports at the completion of the future year base case inventory.

The Contractor shall provide inventory data electronically, formatted as requested by Contract Officer. These outputs shall include spreadsheets in Microsoft Excel format with data summaries for southeastern agency review, emissions summaries consistent with EPA emissions inventory reporting requirements, and as requested by the Contract Officer, emissions data prepared for emissions modeling input files. The Contractor shall also include emissions model output files for specific source categories where models are used to develop inventories (e.g., fire, mobile, non-road, and NH<sub>3</sub>). Data shall be provided by county by state for all pollutants (CO, NH<sub>3</sub>, NO<sub>x</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, and VOCs) for the point, area, and on-road mobile and non-road engine source categories. The Contractor shall work with the emissions and air quality modeling team as necessary to compile on-road mobile emissions summaries.

#### D. Task 4. Special Emissions Inventory Development Project. (Contingency).

The ERTAC cooperative inventory development effort among the eastern states may lead to recommendations for specific inventory development projects to be funded by SESARM. If the Contractor is requested to support such an effort, then SESARM will provide a detailed technical scope and the Contractor may be asked to respond with methods and cost estimates. No cost estimate is requested at this time.

#### E. Task 5. Alternative Control Strategy Emissions Inventories. (Contingency).

SESARM may ask the Contractor to develop inventories for potential control strategies. Bidders shall provide cost estimates to deliver four control strategy inventories, one for each of four source sectors – EGU, non-EGU point, on-road mobile, and non-road mobile sources. These sectors are requested for the purpose of reviewing costs of candidate control strategies including two potential strategies that might require the on-road mobile or NONROAD model to be run. No funding will be awarded for this task at the beginning of the contract. Rather, specific content and control strategies may be defined after the projection year inventory is defined. This request for cost estimates does not reflect or presume specific planned control strategies. At the time that this task is initiated, the Contract Officer will provide a specific statement of work and the Contractor will be asked to provide specific costs.

The Contractor shall document for any future year control strategies the inventory data sources, methods, approaches, results, revisions, and any special tasks performed to develop these inventories. The Contractor shall incorporate comments from the Contract Officer in revised reports. For costing purposes, the Contractor shall assume that separate draft and final reports will be required and prepared at the completion of the future year control strategy inventories.

F. Task 6. Alternative Projection Year Emissions Inventories. (Contingency).

SESARM has not yet determined the future modeling year or years necessary to meet requirements for demonstration of progress for regional haze in 2012 and demonstration of attainment of the daily PM<sub>2.5</sub> and the 2008 ozone standards in 2012 and 2013. If more than one future modeling year will be required, SESARM will request the Contractor to prepare a specific scope of work and cost estimate for the alternative future year. No response is required at this time.

G. Task 7. Data Display and Archival.

The Contractor shall provide to SESARM at least one electronic copy of all input files and output files for emissions models used to develop the emissions inventories (e.g. NONROAD, MOBILE or MOVES, and any area source models) and any supporting technical analyses to the Contract Officer and State and Local Agencies in accordance with SESARM's prescribed schedule.

Inventory data shall be archived on a common SESARM data website. The Contractor shall promptly provide the electronic inventory data for posting. When a new version of the inventory is developed, previous versions of inventory shall be moved to an archive section of the website so that it is clear which data sets are the most recent. Some data may be kept on a password protected website. The Contractor shall assist SESARM and other contractors to keep the website up-to-date. The procedures for data archive shall be clearly described in the draft and final reports.

## **VII. Schedule.**

### **A. Administrative Schedule.**

The following schedule is projected for administrative actions SESARM will take leading up to contract execution:

1. Release RFP – November 21, 2008.
2. Deadline for proposals – January 9, 2009.
3. Complete contractor selection process and notify winning bidder – January 30, 2009.
4. Complete negotiation of contract – February 15, 2009.

### **B. Technical Project Schedule.**

The following schedule is projected for initial technical project tasks:

1. Contractor completes and submits project work plan to SESARM – March 1, 2009.
2. Contractor completes and submits QAPP to SESARM and EPA – March 1, 2009.
3. EPA approves QAPP – April 1, 2009.
4. Work begins on draft 2005 base year emissions inventories – April 1, 2009.
5. Reserved for deadlines for completion of draft base year inventories and other tasks. (Will be determined during or subsequent to contract and work plan negotiations phases.)

## **VIII. PROPOSAL SUBMISSION REQUIREMENTS AND CONDITIONS.**

### **A. Proposal Submittal Deadline.**

In order to be guaranteed consideration, proposals shall be submitted to SESARM and received no later than 5:00 p.m. EST on Friday, January 9, 2009. SESARM reserves the right not to accept proposals received after the prescribed day and time.

### **B. Number of Copies and Proposal Format.**

Bidders shall submit to SESARM one paper copy and one electronic copy of their

respective Technical Proposal and Cost Proposal in Microsoft Word, Microsoft Excel, and/or Adobe Portable Document Format as appropriate. Required copies shall be sent via regular mail and e-mail to the following SESARM representatives:

Patricia Brewer, Tech Coordinator  
c/o NC Division of Air Quality  
2090 US Highway 70  
Swannanoa, NC 28778  
[pat.brewer@ncmail.net](mailto:pat.brewer@ncmail.net)

John E. Hornback, Executive Director  
Southeastern States Air Res Managers, Inc.  
526 Forest Pkwy Ste F  
Forest Park, GA 30297-6140  
[hornback@metro4-sesarm.org](mailto:hornback@metro4-sesarm.org)

### C. Proposal Content.

Bidders are cautioned to carefully follow the requirements of this RFP in preparation of bids in order that submitted proposals will contain as much consistency as possible. A respondent may submit a partial proposal that addresses specific tasks and clearly states for which tasks a response is not provided.

Responses to this RFP shall contain, at a minimum, the following components:

#### 1. Transmittal Letter.

A transmittal letter shall be submitted with a proposal and shall include the name, address, telephone number, fax number, and email address for all primary and secondary contacts for the proposal. The proposal shall be submitted by an authorized representative whose signature on the transmittal letter shall serve to certify the accuracy of the proposal and all attachments and appendices and the commitment of the bidding entity to fulfill the requirements of the project.

#### 2. Title Page.

The proposal shall contain a title page referencing the title and date of the RFP, the date of the proposal, and respondent information.

#### 3. Technical Proposal.

The entire Technical Proposal should be no more than twenty single spaced pages, not counting attachments and appendices. The Technical Proposal shall follow the Project task outline in Section VI. of this RFP and shall describe the proposed approach for accomplishing each task. The Technical Proposal shall include a brief abstract with a summary of qualifications, a list of key personnel, and a description of the proposed general approach. A proposed schedule for completing the project tasks shall be included in the Technical Proposal.

#### 4. Cost Proposal.

The cost proposal shall provide a detailed breakdown of projected expenditures by task, including a listing of investigators by labor category, hours proposed for

each investigator, travel cost estimates, and other direct and indirect charges. The cost proposal shall also summarize total costs by task. **The cost proposal shall follow the order and content of Attachment 1 to this RFP.**

5. Respondent Qualifications.

A summary shall be provided in the proposal outlining relevant capabilities and experience. More detailed descriptions of qualifications and references shall be appended to the proposal. This appended information shall include a summary description of previous work performed by key personnel including the name of the entity for which the work was performed as well as a client contact person familiar with the quality of the deliverable.

6. Key Personnel.

The respondent shall provide a listing of key personnel who will be assigned to contribute substantially to completion of the project. Included shall be each individual's name, job title, specific project work for which the individual will be responsible, and any specialized abilities that each person would bring to the project. Resumes may be appended to the proposal.

7. Reporting Commitment.

The proposal shall contain a commitment to submit concise but informative progress reports outlining work tasks associated with each invoice.

8. Certificate Related to Debarment and Suspension.

A signed certification shall be submitted with the proposal indicating that the respondent is not debarred or suspended from receiving payments utilizing federal funds. **See Attachment 2 for the required certification form.**

D. Deficient Proposals.

Failure of a respondent to comply with all submission requirements shall be cause for SESARM, at its sole discretion, to disqualify the proposal. SESARM will give primary consideration to proposals from individuals, corporations, and other qualified entities meeting the terms and conditions of this RFP and demonstrating adequate experience in the development of state and/or regional emissions inventories.

E. Proposal Submission Costs.

Expenses for preparing project proposals shall be solely the responsibility of the respondent. Once submitted, proposals shall become the property of SESARM. Negotiation of the final contract shall not be a billable task.

## F. Inquiries.

Inquiries regarding RFP requirements, project expectations, and other related information shall be directed to the SESARM Executive Director whose contact information may be found in Section VIII. B. of this RFP above. SESARM reserves the right to compile bidder questions and issue responses for distribution to all bidders.

## IX. PROPOSAL EVALUATION AND SELECTION PROCEDURES.

SESARM shall entertain all proposals from respondents qualifying to expend federal funds and proven to have experience in emissions inventory development. SESARM reserves the right to reject any proposal containing components that are substantially inconsistent with any of the requirements set forth in this RFP.

Proposals will be evaluated as to responsiveness to the full range of services requested and conditions specified in this RFP. SESARM may choose to hire more than one contractor for this project. SESARM may choose to award a contract for individual or multiple components of this RFP as well as in its entirety.

The ability of a respondent to perform the tasks outlined in the statement of work section shall be determined based upon an evaluation of the respondent's Technical Proposal, the completeness and clarity of the contents of the proposal, and the relevance of the information provided with respect to the criteria in this RFP.

While this project requires strong technical skills, SESARM shall also give weight to communication skills to ensure that the project results can be conveyed to policy makers and, if necessary, the public in a satisfactory manner.

### A.. Proposal Evaluation Criteria.

SESARM shall evaluate each Technical Proposal based upon the following criteria:

1. Technical conformance with the goals of the project including a demonstrated understanding of project objectives, a credible approach to accomplishing the objectives, completeness in addressing technical objectives, realistic but aggressive product delivery schedule, use of existing efforts and programs where available and appropriate, clarity of the proposal, and other relevant factors at the discretion of SESARM.
2. Qualifications and experience including demonstrated experience in developing emissions inventories and in working with various governmental and business/industry stakeholders as well as the allocation of more highly qualified senior staff versus support staff.

3. Costs including total projected costs, hourly rates, hours per task, fringe and other overhead costs, travel costs, and any special costs. **Please note that the federal government caps its participation in salary rates for consultant services procured by grantees at the maximum daily rate of a GS-18 federal employee.** Since SESARM has no other source of funding for this project, it will be required to conform with this cost limitation.
4. Other pertinent factors at the discretion of SESARM.

B. Process and Sequence of Proposal Review.

SESARM shall convene a Selection Committee which will develop final proposal evaluation criteria. After completion of the review of proposals, recommendations will be provided to the SESARM Board of Directors for approval. Upon final approval of the Board, bidders will be notified of the outcome of the selection process and work on the contract and scope of work will begin.

C. General Procurement Provisions and Conditions.

1. SESARM reserves the right not to award any contract based on this request for Proposals.
2. At the conclusion of the selection process, SESARM may provide information on the strengths and weaknesses of an individual proposal to that respective respondent. Except as required by state and federal law, SESARM shall not be obligated to provide more detailed information including Contractor selection scoring sheets or other information relative to the relative weightings of the Proposals. SESARM shall not provide copies of proposals submitted pursuant to this RFP to any entity other than official representatives of SESARM and EPA.

## X. GENERAL PROJECT REQUIREMENTS AND CONDITIONS.

A. Conformance with Federal Requirements.

Funds available for this project are federal funds from EPA. No entity shall provide a proposal in response to this RFP unless it is in conformance with Contractor requirements applicable to federally-funded projects and unless the Respondent can assure performance consistent with all applicable federal requirements.

B. Data in Public Domain.

All project information and data delivered by the Contractor pursuant to this RFP shall be in the public domain.

C. Signature and Certification of Proposal.

The signature on the cover transmittal letter of any submitted proposal shall signify agreement and compliance with all requirements set forth in this RFP except where specifically noted in the response. Said signature shall also represent and warrant that the information has been checked for errors and omissions, that the costs stated in the proposal are correct and as intended, that the cost information is complete and correct for performing the work and furnishing the labor, supplies, and materials to complete the tasks, and that the firm has the staff and resources available to perform the tasks within the schedule quoted.

D. Right to Contact Bidders.

SESARM reserves the right to contact any bidder in order to clarify any point in a response or to obtain further information needed to evaluate a particular response. SESARM also reserves the right to contact companies and names supplied in connection with descriptions of previous work. Once the criteria for contract award are applied to each proposal, certain respondents may be asked to make an oral presentation or demonstration before SESARM for additional clarification.

E. Indemnification.

The issuance of this RFP and the receipt of proposals in response to this request shall not, in any way, cause SESARM or its representatives to incur any liability, financial or otherwise. SESARM is the legal entity that will select the winning proposal and award the Contract. Any expenses incurred as a result of formulating a response to this request are the sole responsibility of the applicant. SESARM and its representatives assume no obligation to reimburse or in any way compensate any respondent for expenses incurred in connection with their response to this request.

F. Use and Disclosure of Information.

Any response to this RFP shall become the property of SESARM and as such, may be distributed to SESARM and its member agencies to the extent required by the Proposal review process. Proposals and selection process documents pursuant to this RFP shall not be shared with individuals outside SESARM except to the extent required by law. The final contract, if one is executed, along with any final work products completed pursuant to said contract, shall be considered in the public domain and will be shared upon request with individuals outside SESARM as required by federal and state laws.

G. Ownership of Results.

Results of SESARM-supported work shall reside in the public domain. Anticipated results subject to this Paragraph shall include but not be limited to data, coding, databases developed or improved with SESARM support, reports, and other materials developed as a part of any contract that results from this RFP. SESARM

recognizes that any raw data generated outside SESARM but used to generate inputs to SESARM efforts shall not be covered by this ownership clause and shall remain in the domain of the data stewards that supply the inputs to SESARM and/or its Contractor(s). SESARM will define the specific project files that need to be provided.

H. Billing Frequency.

Billing as a result of any contract executed pursuant to this RFP shall occur on a frequency of no more than once per calendar month and no less than once per calendar quarter basis unless otherwise authorized or required by SESARM.

I. Conflict of Interest Policy

No person or organization shall enjoy any preference in performing work for SESARM by virtue of being an active member of SESARM or a participant in a SESARM-sponsored project. Any potential or actual conflict of interest by anyone associated with any proposal shall be disclosed in the proposal.

J. Expenditure Authorizations.

This RFP solicits proposals assuming purchase of services on a time and materials basis. Reimbursement will be made for services rendered under specific task authorizations. Work outside any agreed-upon scope of work will be allowed only after written approval by the Contract Officer.

K. Project Budget and Funding.

The scope of work defined in this RFP may extend across multiple funding years and potentially over multiple grant cycles. SESARM funding for this project in future years is uncertain, and SESARM reserves the right to fund some, but not all, tasks described in this RFP. SESARM further reserves the right, at its sole discretion, to terminate this project and any contracts in force due to a lack of available funding.

L. Disadvantaged Business Services.

SESARM is obligated to conform with the disadvantaged business enterprise (DBE) provisions of 40 CFR Part 33, Subpart C. Contracts executed pursuant to this RFP shall contain provisions requiring contractors to:

1. Make DBEs aware of sub-contracting and procurement opportunities within this project.
2. Make information available to DBEs on forthcoming opportunities to participate in provision of needed services.

3. Consider sub-contracting with a consortium of DBEs when a contract is too large for a single DBE to properly service.
4. Use the services and assistance of the Small Business Administration and the Minority Business Development Agency of the U.S. Department of Commerce to gain knowledge on how to better allow DBEs to compete for services needed to support this project.

## **XI. PROJECT RESPONSIBILITIES – CONTRACTOR.**

- A. The Contractor shall designate a Technical Project Manager to interface with SESARM's Contract Officer on technical issues and an administrative contact to interface SESARM's administrative offices on issues related to execution of contracts, payment of invoices, and other administrative functions.
- B. The Contractor shall work with SESARM to negotiate and finalize a final project work plan within two weeks after execution of the contract. The final work plan shall outline in detail the technical expectations of the project. The Contractor shall conform with all provisions of the work plan as finalized.
- C. The Contractor shall develop, complete, and submit to SESARM and EPA within 30 days of awarding of the contract a QAPP meeting the quality and content standards of EPA and consistent with SESARM's Quality Management Plan. The Contractor shall conduct all applicable work in accordance with the QAPP as approved by EPA.
- D. The Contractor shall modify project activities and make reasonable revisions and adjustments to the work products, consistent with the approved scope of work, as directed by SESARM.
- E. During the administration of the contract, the Contractor shall coordinate and communicate with SESARM as requested and as the need arises through telephone calls, e-mail messages, and by providing regular progress reports and briefings in accordance with any schedule provided by SESARM.
- F. The Contractor shall produce a draft project report in accordance with the criteria and schedule provided by SESARM. This report shall be offered to SESARM for review and comment and shall be revised in a timely manner pursuant to feedback received from SESARM. A final report shall be produced at the conclusion of the project.
- G. The Contractor shall prepare and present at any scheduled project workshop(s) the procedures, results, conclusions, and recommendations of the project.
- H. The Contractor shall prepare and submit to SESARM adequately documented and accurate invoices showing total cost, specific costs by task, individual, or other

chargeable category, and work that was completed during the billing period. Billing shall be in full calendar month increments with a minimum of one month and a maximum of three months each. Invoices shall be submitted within thirty days of the end of each respective billing period and shall be accompanied by a progress report that defines the work performed.

## **XII. PROJECT RESPONSIBILITIES – SESARM.**

- A. SESARM shall hold a meeting or conference call with the winning respondent after the bid is accepted and shall work with the respondent to finalize and execute a contract describing the expectations of the project and the responsibilities of the Contractor and SESARM.
- B. The Contract Officer for SESARM shall be Patricia Brewer, SESARM Technical Coordinator. The Contract Officer will oversee the project consistent with the expectations of SESARM and its participating agencies. Input will be sought from southeastern agency representatives who will provide review and recommendations on methods, assumptions, conclusions, and interpretations. Stakeholders will provide review as requested by SESARM.
- C. SESARM may schedule and host one or more project workshops at locations in the Southeast to deliver information and updates to participating agencies and stakeholders. SESARM shall bear the cost of any such workshops. Contractor travel expenses to such workshops shall be billable to SESARM.