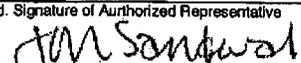


APPLICATION FOR FEDERAL ASSISTANCE		2. DATE SUBMITTED	Applicant Identifier
1. TYPE OF SUBMISSION: Application <input type="checkbox"/> Construction <input type="checkbox"/> Pre-application <input checked="" type="checkbox"/> Non-Construction <input type="checkbox"/> Non-Construction		3. DATE RECEIVED BY STATE	State Application Identifier
		4. DATE RECEIVED BY FEDERAL AGENCY	Federal Identifier
5. APPLICANT INFORMATION			
Legal Name: <b>STATE OF IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY</b>		Organizational Unit: Department: Environmental Quality	
Organizational DUNS: <b>02-024-3684</b>		Division: Air Quality	
Address: Street: <b>1410 NORTH HILTON</b>		Name and telephone number of person to be contacted on matters involving this application (give area code) Prefix:                      First Name: Ms.                              Mary	
City: <b>BOISE</b>		Middle Name:	
County: <b>ADA</b>		Last Name: Grandjean	
State: <b>IDAHO</b>		Suffix:	
Zip Code: <b>83706-1255</b>		Email: mgrandje@deq.idaho.gov	
Country: <b>UNITED STATES</b>		Phone Number (give area code): (208) 373-0525	
6. EMPLOYER IDENTIFICATION NUMBER (EIN): <input type="checkbox"/> 8 2 - 6 0 0 0 9 5 2		Fax Number (give area code): (208) 373-0315	
8. TYPE OF APPLICATION: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision If Revision, enter appropriate letter(s) in box(es) (See back of form for description of letters.) <input type="checkbox"/> <input type="checkbox"/>		7. TYPE OF APPLICANT: (See back of form for Application Types) State Other (specify)	
Other (specify)		9. NAME OF FEDERAL AGENCY: US Environmental Protection Agency	
10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: <input type="checkbox"/> 6 6 - 0 3 4		11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT: Treasure Valley Air Toxics Monitoring Community Scale Assessment	
TITLE (Name of Program): Local-Scale Air Toxics Ambient Monitoring			
12. AREAS AFFECTED BY PROJECT (Cities, Counties, States, etc.): Ada and Canyon Counties			
13. PROPOSED PROJECT Start Date: 01/01/06		14. CONGRESSIONAL DISTRICTS OF: a. Applicant 1	
Ending Date: 01/31/07		b. Project 1 & 2	
15. ESTIMATED FUNDING:		16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?	
a. Federal	\$ 474,882.00	a. Yes. <input type="checkbox"/> THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON DATE:	
b. Applicant	\$ .00	b. No. <input checked="" type="checkbox"/> PROGRAM IS NOT COVERED BY E. O 12372 OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW	
c. State	\$ .00	17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?	
d. Local	\$ .00	<input type="checkbox"/> Yes If "Yes" attach an explanation. <input checked="" type="checkbox"/> No	
e. Other	\$ .00	18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT. THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.	
f. Program Income	\$ .00	a. Authorized Representative	
g. TOTAL	\$ 474,882.00	Prefix <b>Ms.</b> First Name <b>Toni</b> Middle Name	
		Last Name <b>Hardesty</b> Suffix	
		b. Title <b>Director</b> c. Telephone Number (give area code) <b>(208) 373-0502</b>	
d. Signature of Authorized Representative 		e. Date Signed <b>08/19/05</b>	

**Project Title:** Treasure Valley Air Toxics Monitoring  
**Category:** Community Scale Assessment  
**Applicant Information:**  
**Organization:** Idaho Department of Environmental Quality  
**Address:** 1410 North Hilton  
Boise, ID 83706  
**Contact Person:** Michael DuBois, Air Quality Analyst  
**Phone:** 208-373-0219  
**Fax:** 208-373-0154  
**e-mail:** [m.dubois@deq.idaho.gov](mailto:m.dubois@deq.idaho.gov)

**Funding Requested:** \$474,882  
**Total Project Cost:** \$474,882  
**Project Period:** 01/06 - 01/07 (Monitoring Period)  
02/07 - 01/08 (Data Evaluation/Risk Assessment)

### **Project Summary**

This proposal details the objectives and methods for a hazardous air pollution (HAP) monitoring program to be conducted by the Idaho Department of Environmental Quality (DEQ) for the Treasure Valley airshed. The airshed encompasses Idaho's most populated counties, Ada and Canyon, and two largest cities, Boise and Nampa and the rapidly growing Boise Metropolitan Statistical Area which now encompasses over 500,000 people. 1999 NATA predictions place Ada County in the 90<sup>th</sup> percentile for air toxics cancer risk.

The project will add four monitors to supplement a single existing monitoring site, which operated from 2002 to 2004 and will restart operation in January 2006. The monitoring network will cover the entire airshed to provide temporal and spatial representation of air toxics. IDEQ will perform a comprehensive risk assessment program utilizing the agency's established SMOKE/CMAQ/HAPEM modeling capabilities. The results will be used to develop and implement HAP emissions and risk reduction strategies in concert with Treasure Valley stakeholders, and provide for information and technology sharing with other state and local agencies and tribes.

### **Project Background**

Much of the focus on air quality in Idaho has centered on the Treasure Valley, which is the largest and most highly populated urban area in the state. The valley is home to about one-third of the state's population and a significant percentage of the state's industry and business. The Treasure Valley has been one of the fastest growing metropolitan areas in the U.S. and the trend is expected to continue.

Due to topography, weather patterns, and rapid growth, the Treasure Valley is subject to some of the most severe wintertime inversions in the intermountain West. During these events, PM<sub>2.5</sub> and PM<sub>10</sub> monitors in the valley have recorded levels above the national health-based standards. The valley also experiences air pollution problems in the summer months as stagnant air conditions and intense sunlight combine to produce

unhealthful accumulations of ozone. Monitoring has shown increased levels of ozone in the valley, sometimes to unhealthful levels, during the past several summers.

Meteorological analyses and modeling results show that the Treasure Valley is a single airshed, with shared pollution problems that impact both Ada and Canyon Counties. To facilitate the development and application of solutions and controls throughout the airshed, DEQ has developed an airshed management program aimed at preventing deterioration of air quality through proactive planning. The foundation of airshed management is community involvement and community-directed initiatives to protect air quality.

### **Hazardous Air Pollutants in the Treasure Valley**

Until recently airshed management has necessarily focused on criteria pollutant and associated attainment issues. In 2002, DEQ began monitoring HAPs in an effort to achieve a more integrated and comprehensive approach to airshed management. Funding has limited monitoring to one site which cannot provide spatial representation of HAP emissions in the airshed. DEQ believes that by obtaining spatial data a robust assessment of the risk posed by HAPs to the Treasure Valley can be achieved. DEQ needs spatially distributed and speciated HAPs data to support more refined analysis of PM<sub>2.5</sub> and ozone precursors and subsequently implement more effective emissions and risk reduction strategies. Through the establishment of multi-site monitoring capability, DEQ can assure continued HAPs evaluation in the future through proactive monitoring regimes in support of airshed management goals.

Hazardous air pollution is a valid concern in the Treasure Valley. The 1999 National Air Toxics Study (NATA) predicted the median cancer risk for Ada County to be over 50 in a million and 40 in a million for Canyon County. Ada and Canyon counties ranked nationally in the 90<sup>th</sup> and 75<sup>th</sup> percentile and 1<sup>st</sup> and 2<sup>nd</sup> in the state of Idaho respectively for cancer risk based on median values. Since 1999 over 100,000 people have relocated to the Treasure Valley and vehicle traffic has increased significantly. Analysis of 2002 HAP monitoring data in the Boise metropolitan area confirms that concentrations of formaldehyde, acetaldehyde and benzene exceed NATA predicted values. The IDEQ is concerned that it's current monitoring site may not be representative of air toxic concentrations in the Boise urban core and may be underpredicting values to which the majority of the area's citizens are exposed.

Finally, the Treasure Valley is the only major metropolitan area in the Northwest for which a temporal and spatial assessment of air toxics has not been performed. It is important to the IDEQ that local data be available for comparison with studies already performed in Seattle and Spokane, WA and Portland,OR.

### **Meeting the Objectives of Community Scale Monitoring**

- Supporting Health Effects Assessments

The IDEQ will perform a risk assessment of monitored data in conjunction with a health consultation by toxicologists from the Idaho Department of Health and

Welfare (IDHW). These consultations are in turn subject to peer review from the Agency of Toxics Substances and Disease Registry (ATSDR).

- **Evaluating and Improving Air Quality Models**

IDEQ will use monitoring data in support of the agency's SMOKE/CMAQ and CALPUFF capability. IDEQ has considerable modeling resources and is a major partner in Region 10's NWAIRQUEST modeling consortium.

- **Baseline Reference Frame for Air Quality**

The IDEQ will use this study to prepare for risk reduction through regulatory and voluntary measures and NESHAPs residual risk assessments. Effectiveness of reduction strategies will be assessed through comparison of future monitored values to baseline concentrations.

- **Local Scale HAP concentration gradients**

IDEQ's study plan includes a variety of monitoring environments including isolated background locations, urban, residential, mixed zoning and mobile source impacted areas. The siting plan provides for spatial and temporal representation of the entire airshed.

### **Proposed Monitoring Sites**

DEQ proposes to add two new monitoring sites to supplement three existing locations (one of which is a current HAPs site) for the project (Figure 1). The existing Nampa, Parma, and Mountain View elementary school or Boise Fire Station #5 sites allows DEQ to leverage resources. This proposal includes three sites for the measurement of continuous black carbon and  $PM_{2.5}$  to assess diesel particulate matter and remains flexible subject to EPA comment. Proposed site characteristics and capabilities are as follows:

#### **Existing Sites**

- **Nampa** DEQ monitored HAPs from 2003 -2004 at the Northwest Nazarene University campus in the City of Nampa. Nampa is the second largest city in Idaho with a rapidly growing population of nearly 70,000 and is located about 20 miles from Boise on the western end of the airshed. Nampa has a diverse source profile including Title V and minor sources, light industry and sprawling residential areas feeding heavy commuter traffic. Monitored  $PM_{2.5}$  concentrations at this site are often the highest in the Treasure Valley. Parameters measured at this site include  $PM_{2.5}$ ,  $PM_{10}$ , carbonyls using TO11A, SVOC using TO13A, VOCs using TO15 and  $PM_{2.5}$  speciation metals.
- **Parma** This location about 45 miles west of Boise will serve as a transport site to the airshed. Equipment operating at this location includes  $PM_{2.5}$  FRM and a  $PM_{2.5}$  TEOM continuous monitor. Diesel PM will be assessed using continuous black carbon and  $PM_{2.5}$  measurements.

- **Central Boise** Mountain View Elementary is located in northwest Boise in a residential area adjoining busy Chinden Blvd. (US 20/26) and numerous light industrial areas. The Boise River and the City of Boise's waste treatment facility are also in close proximity. Current monitoring capabilities include a PM<sub>2.5</sub> TEOM monitor, an FRM PM<sub>2.5</sub> sampler and a PM<sub>10</sub> high volume sampler.

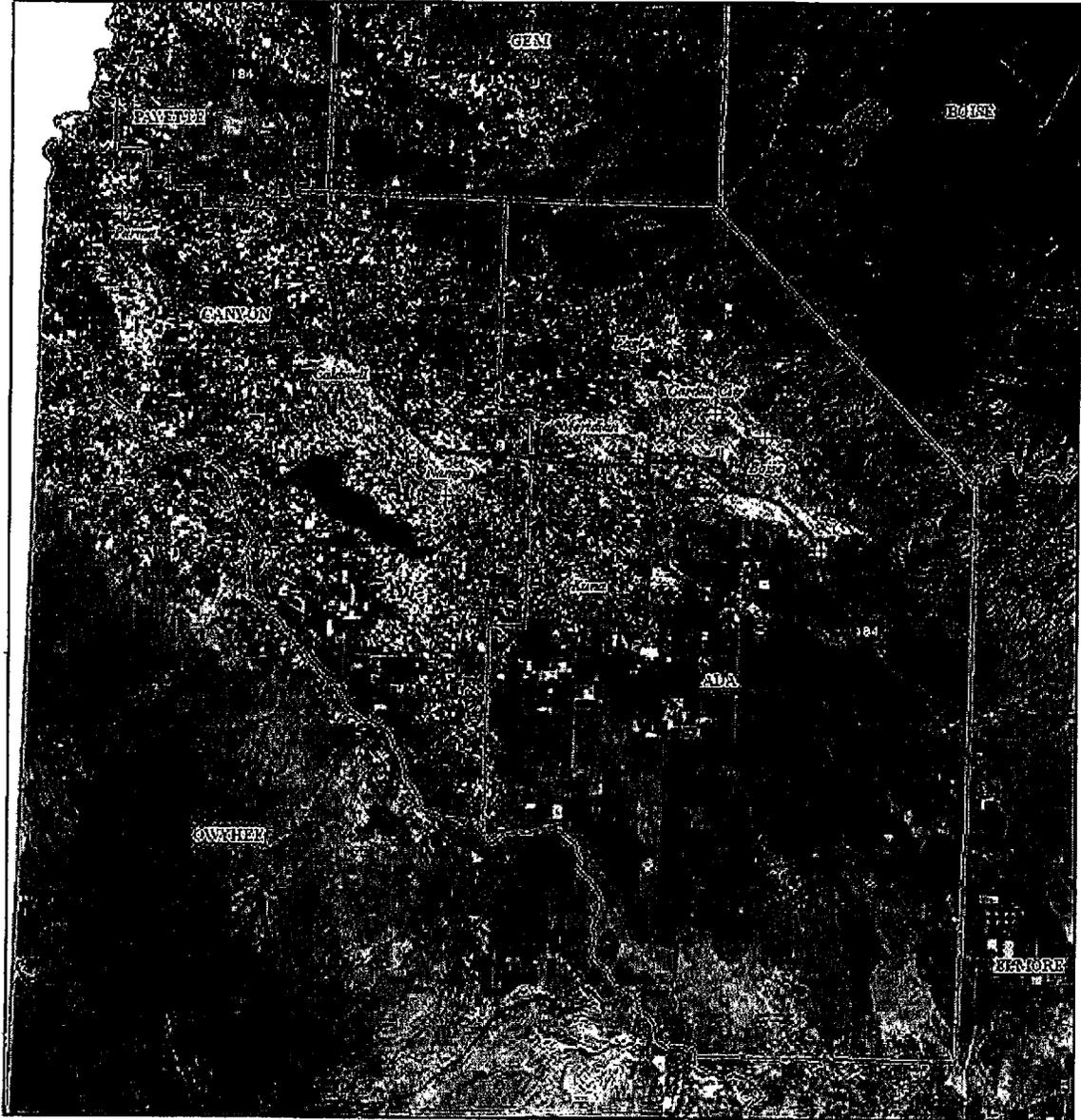
Or

- **Central Boise** Boise Fire Station #5 is an existing site with PM<sub>10</sub> TEOM sampling. The location is within 1 mile of downtown Boise and may be an air toxics "hot spot". The area is primarily office buildings, small business and light industrial zoning with small pockets of residential housing.

### **New Sites**

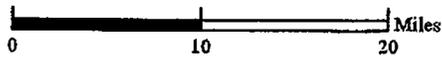
- **Interstate 84/Eagle Road** This location is approximately 10 miles west of downtown Boise near the center of the airshed and is one of the busiest intersections in Idaho particularly during commute times. Eagle Road is a principal urban arterial with traffic volumes of up to 50,000 vehicles per day. Traffic on Interstate 84 at its intersection with Eagle Road approaches 100,000 vehicles per day. The area is characterized by a variety of zoning uses including light industrial, several "big box" retail centers, residential subdivisions, a large planned senior community, and a major hospital. As this site is subject to significant mobile source impacts it is the central airshed location for diesel PM monitoring. This site is also being prepared to serve as a Level 2 Core site as per the National Monitoring Strategy.
- **Southeast Boise** This site will be developed approximately five miles from downtown Boise on the southeastern edge of the airshed. This region of the study area is one of the fastest growing in Ada County. This location is impacted by the Boise Airport, some large industrial complexes including a Title V facility, mobile emissions from large arterial roads and is surrounded by extensive residential subdivisions. This site will serve as a "downwind" monitoring location which will include diesel PM capability.

Figure 1: Treasure Valley Monitoring Locations



**Legend**

-  Monitoring Sites
-  County Boundaries



## Pollutants to be Monitored, Analytical Methods and Equipment

Table 1 lists the pollutants to be monitored and the methods of analysis for the proposed program. The Oregon Department of Environmental Quality (ODEQ) will perform all sample analysis. ODEQ had been contracted to analyze the samples from the Nampa site. In the interest of collaboration and information sharing, DEQ intends to restart the agreement to include samples from this project.

**Table 1 Monitoring Plan**

Substance	Method	Equipment
<b>Diesel Particulate Matter</b>	Continuous Black Carbon (Aetholometer) & PM <sub>2.5</sub>	
<b>Volatile Organic Compounds</b>		
Benzene	TO-15	ATEC 2200
1,3-butadiene		
Carbon tetrachloride		
Chloroform		
1,2-dichloropropane		
Dichloromethane (methylene chloride)		
Tetrachloroethene		
Trichloroethene		
Vinyl chloride		
<b>Aldehydes (Carbonyls)</b>		
Acetaldehyde	TO-11A	ATEC 2200
Formaldehyde		
<b>Metals</b>		
Arsenic compounds	IO-3	PM-19 Hi-vol
Beryllium & beryllium compounds		
Cadmium compounds		
Chromium compounds		
Lead compounds		
Manganese compounds		
Nickel compounds		

Note: These analysis methods are capable of measuring over 100 compounds which might be present in ambient air. All valid samples will be analyzed and compounds beyond the urban core group will be reported.

### Model to Monitor and Data Analysis

A full risk assessment will be performed with the data collected under this monitoring program, and is not expected to receive support under this grant. DEQ's capabilities and approach to modeling and risk assessment varies somewhat from the methodology of NATA which used the ASPEN modeling system to estimate ambient concentrations

and the HAPEM model to estimate the exposure and risk levels. Previous urban scale modeling efforts in the Pacific Northwest have also used ASPEN and the CALPUFF dispersion models. DEQ's approach involves the CMAQ modeling system to predict ambient concentrations in conjunction with the HAPEM model.

One of the benefits of using CMAQ over other models is that CMAQ has been designed to approach air quality as a whole by including state-of-the-science capabilities for modeling multiple air quality issues, including toxics. CMAQ was also designed to have multi-scale capabilities eliminating the need for separate urban and regional scale air quality models. DEQ will continue to use CMAQ for urban scale modeling projects in the Treasure Valley as well as statewide modeling analyses. CMAQ also has chemical conversion capabilities.

The results of this monitoring program will be used to build on a modeling study DEQ performed under a Comprehensive Approach to Community Assessment and Risk Reduction grant. That study evaluated a wintertime inversion episode in 1999 and was chosen because detailed emission inventory and meteorological data sets were available. DEQ used the EPA research code, CMAQ\_TOXICS, under development at EPA Office of Research and Development that explicitly simulates chemistry and transport of up to 18 hazardous air pollutants. A lack of monitoring data available for the modeled episode made an assessment of accuracy difficult. The data collected under this proposed monitoring program will provide DEQ with important model to monitoring information improving accuracy, reliability and validity in future risk assessment.

### **Benefits to the Public**

The risk to the public from monitored air toxics will be assessed to help develop regulatory mechanisms and/or voluntary community programs which lead to reductions in risk. The IDEQ has in place a strong coalition to implement targeted reductions through the Treasure the Valley's Air (TVA) partnership.

### **TVA Overview**

Treasure the Valley's Air is a coalition of local partners working together to implement community-based projects to improve and protect air quality in the Treasure Valley. Partnerships are voluntary and dynamic, and can include any mix of businesses, government agencies, organizations and individuals. Under the Treasure the Valley's Air concept, partners join together to share expertise and leverage resources to design, carry out and promote air quality improvement projects.

### **Projects**

The coalition has already begun functioning in the Valley and partnerships and projects are underway.

Current projects include:

- **Clean Air Zone Idaho:** A project designed to protect children's health and reduce air toxics around schools by reducing vehicle idling schools and improving efficiency of school bus fleets.
- **Clean Cities Coalition:** A local effort led by the City of Boise, General Services Administration, and the Idaho Energy Division, and other interested parties to

work toward a designation for the Treasure Valley as a Clean Cities Coalition, which will allow for the further development of a strong alternative fuel infrastructure across the Valley.

- **Agricultural Diesel Retrofit Program:** A DEQ project to provide retrofits to high polluting diesel farm equipment to reduce diesel air toxics and their impact on the air pollution in the valley.
- **Treasure Valley Air Quality Council:** The Idaho Legislature created an advisory council to be appointed by the Governor to suggest ways to address air quality issues in the Treasure Valley. DEQ will provide staff input to the council.

### **Public Outreach**

The cornerstones of the Treasure the Valley's Air Coalition are partnerships and support. Current partners will continue to share the Treasure the Valley's Air concept with potential partners and work together to implement new projects that protect air quality.

To increase support, Treasure the Valley's Air partners have launched a public outreach campaign to introduce the public to the concept and gain support for projects. The support of local and state leaders has enhanced this effort. With the vocal support of key decision-makers and partnership exposure through the media, the effort has gained credibility, adding to the success of the projects.

PSAs have been developed and aired on such Treasure the Valley's Air topics as new alternative fuel stations, anti-idle programs, and air quality alerts and awareness efforts.

### **Transferability of Project Outcomes**

In addition to the TVA coalition, DEQ has partnered with the Idaho Department of Health and Welfare for peer review and risk assessment and with Region 10's Northwest International Air Quality Environmental Science and Technology Consortium (NW-AIRQUEST). NW-AIRQUEST encompasses a virtual air quality science center dependent on active involvement of all its sustaining members. Sustaining members ensure that goals are met through consistent long-term collaboration, and collectively seek financial support to meet the basic operation of the virtual air quality science center.

The current sustaining members of NW-AIRQUEST are:

Environment Canada	University of Washington
BC Ministry of Water, Lands and Air Protection	U.S. EPA Region 10
University of British Columbia	USDA Forest Service, Pacific Northwest Research Station
Greater Vancouver Regional District	National Park Service, Pacific West Region
Idaho Department of Environmental Quality	Washington Department of Ecology
Oregon Department of Environmental Quality	Washington State University
Puget Sound Clean Air Agency	Oregon Department of Forestry
Southwest Clean Air Agency	

Local stakeholders and partners asked to participate in this monitoring project include the City of Boise, Boise State University, the Community Planning Association of Southwest Idaho (COMPASS), the Oregon Department of Environmental Quality (ODEQ), the Idaho Department of Health and Welfare (IDHW). In addition, DEQ participates in partnerships with the American Lung Association and Asthma Coalition of Idaho and pollution prevention projects with the Boise State University Small Business Development Center.

## **Tracking and Measuring Progress**

### **EPA Strategic Plan**

The frequency means and evaluation criteria for project progress tracking will be made available to EPA prior to the beginning of the study through the IDEQ's written project plan. This proposal meets the EPA Strategic Plan Goals 1.1 (Healthier Outdoor Air) and 1.1.2 (Reduced Risk from Toxic Air Pollutants) by performing local scale ambient monitoring to provide data to reduce public exposure to hazardous air pollutants.

### **Outcomes**

The essential outcome of this project will be the determination of temporal and spatial patterns for air toxic compounds in the Treasure Valley. This knowledge will enable development of tools and programs that will provide for effective reduction of risk from air toxics. The success of IDEQ's ability to measure, analyze and record air toxics monitoring data will be tracked by adherence to sampling, analytical and QA/QC protocols. This allows IDEQ to identify anomalies and failures and implement corrective action as needed.

As IDEQ quantifies the risk to the public from monitored air toxics and promotes regulatory or voluntary measures to reduce that risk, the outcome will be measured by IDEQ's ability to measure subsequent reductions in air toxics. The degree of success achieved will be determined through a continued monitored decrease in concentrations of air toxics and compliance with control measures.

### **Outputs**

The IDEQ will meet the anticipated output of increased public availability of air toxics data by entering data into AQS as the project proceeds and establishing the means for the public to access data through web based and print applications. This will be tracked by adherence to protocol and timelines established for data submission to AQS. The IDEQ's partners in the Treasure Valley will have access to collected data, thereby increasing the public input to regulatory and voluntary processes that will eventually take shape to reduce air toxics concentrations. The success of this outcome will be measured through an assessment of the frequency of data inquiry, extent of information dissemination and rate of contribution to the IDEQ's strategy from outside the agency.

### **Quality Assurance/Quality Control**

Quality assurance and control procedures (Quality System) will be implemented

following and building upon IDEQ's EPA approved July 2002 Quality Assurance Project Plan (QAPP). Revisions to that plan will be made as necessary in consultation with EPA and following the template provided in the EPA's Quality Assurance Document (EPA-454/R-01-007). Data Quality Objectives (DQOs) will be identified as detailed in EPA document EPA/600/R-96-055. Additional guidance will include protocols outlined in the National Air Toxics Trend System Technical Assistance Document, National Air Monitoring and Air Toxics Strategies and Air Toxics Monitoring Concept Paper. The study also includes a precision site with duplicate monitoring equipment and sample collection and analysis regimes. A project-specific QAPP will be developed and submitted to EPA for comment and approval prior the beginning of monitoring. QA/QC expenditures will not be less than 10% of total expenditures for the project.

**Actions and Methods to be Undertaken**

<b>Activity</b>	<b>Responsibility</b>	<b>Schedule</b>
Project management	IDEQ	Ongoing
Identify / secure use of monitoring sites	IDEQ	September 2005
Obtain monitoring equipment	IDEQ	October 2005
Staff training	IDEQ	Nov – Dec, 2005
Prepare Quality Assurance Plan Submit to EPA	IDEQ	December 2005
Obtain EPA approval for monitoring plans	IDEQ/Region 10	January 2006
Monitoring equipment installed and operational	IDEQ	January 2006
Obtain air samples – field work	IDEQ	Jan 2006 – Jan 2007
Analyze samples	ODEQ	Jan 2006 – Jan 2007
QA – audit and quality checks on monitoring equipment	IDEQ/ODEQ	Jan 2006 – Jan 2007
Quality assurance – data validation	IDEQ/ODEQ	Jan 2006 – Jan 2007
Characterize the types and amounts of HAP	IDEQ/IDHW	Feb 2006 – Jan 2007
Evaluate public exposure & health risks	IDEQ/IDHW	March 2007 – Jan 2008
Determine the need for future HAPs monitoring	IDEQ/Region10	January 2008
Publish findings	IDEQ/IDHW	January 2008

## Budget

<b>Personnel</b>			
Position:	Per hour	FTE portion	
Project mgmt, QA, data analysis	\$28.00	0.500	\$29,120
Maintenance, calibration, repair	\$24.00	0.500	\$24,960
Salary adjustment @ 5%			\$2,704
<b>Subtotal</b>		<b>1.000</b>	<b>\$56,784</b>
<b>Fringe Benefits</b>			
Benefits @ 34%			\$19,307
<b>Subtotal</b>			<b>\$19,307</b>
<b>Travel</b>			
	No units	Per unit	
Airfare	1	\$400.00	\$400
Out-of-state per diem	2	\$60.00	\$120
Out-of-state lodging	1	\$110.00	\$110
In-state per diem	40	\$30.00	\$1,200
Local mileage	1654	\$0.405	\$670
<b>Subtotal</b>			<b>\$2,500</b>
<b>Equipment</b>			
	No. units	Per unit	
Carbonyl-VOC sampler (e.g. ATEO Model 2200)	4	\$10,500	\$42,000
Aethelometers	2	\$12,000	\$24,000
<b>Subtotal</b>			<b>\$66,000</b>
<b>Supplies</b>			
	No. units	Per unit	
Outdoor enclosures	4	958.00	\$3,832
Label Printers	4	500.00	\$2,000
Monitoring equipment supplies			\$5,000
Spare parts			\$12,000
<b>Subtotal</b>			<b>\$22,832</b>
<b>Contractual</b>			
Sample collection			\$50,000
<b>Subtotal</b>			<b>\$50,000</b>
<b>Construction</b>			
<b>Subtotal</b>			<b>\$0</b>
<b>Other/Laboratory</b>			
	No. units	Per unit	
Lab analysis	276	665.00	\$183,540
Set-up for 4 sites (power, security)			\$12,000
Rent	1.00	3,850.00	\$3,850
Training			\$3,000
Postage/special handling	52	\$468.75	\$24,375
<b>Subtotal</b>			<b>\$226,765</b>
<b>Indirect</b>			
Personnel & Fringe Benefits \$ x 40.34			\$30,695
<b>Subtotal</b>			<b>\$30,695</b>
<b>TOTAL REQUESTED AMOUNT</b>			<b>\$474,882</b>

## **IDEQ Project Staff**

### **Bruce Louks                      Manager – Modeling, Monitoring and Emission Inventory Group**

Bruce has been with the IDEQ for seven years and serves as the State's technical expert on issues relating to air quality monitoring and chemistry. His responsibilities include developing program goals for Idaho's statewide air quality monitoring network, standard operating procedures and quality assurance project plans. Bruce also directs the work of IDEQ staff and agency contractors in performing specialized monitoring, modeling and data management operations. Bruce is the IDEQ liaison to USEPA for air quality monitoring, modeling, emission inventory and data issues and represents the Department to technical committees concerned with air quality monitoring, emission inventory and modeling issues.

Prior to joining the IDEQ, Bruce served as the principal chemist for the Idaho Department of laboratories for eight years and a senior chemist with the Santa Clara Water District in San Jose, CA for seven years. Bruce has a Bachelor of Science degree in Soil and Water Science from the University of California at Davis.

### **Michael DuBois                      Air Toxics Analyst**

Michael DuBois serves as the IDEQ's lead on Air Toxics for the Air Quality Division's State Office in Boise. Michael has been with IDEQ for five years and has served as a permit writer, dispersion modeler, and emission inventory coordinator and is currently the project manager for the Southern Idaho Mercury Deposition Study. Prior to joining the IDEQ, Michael served as a project manager for the Almega Corporation air quality consulting firm in Los Angeles, CA for five years. Michael has a Bachelor of Science degree in Environmental Science from the Huxley College of Environmental Studies at Western Washington University.

### **June Ramsdell                      Airshed Manager**

June Ramsdell is the Airshed Manager for the Boise Regional Office of the Department of Environmental Quality (DEQ). Previously, she was an Airshed Coordinator at DEQ's Boise Regional Office. June has been an Air Quality Project Manager and Technical Analyst for the Community Planning Association of Southwest Idaho (COMPASS), worked as an Environmental Health Specialist for Snohomish Health District in Everett, Washington, and was a Weather Forecaster in the Air Force for over eight years. She holds a Bachelor of Science degree in environmental health and a Bachelor of Applied Science from Boise State University. She is currently pursuing a master of public administration with an emphasis in environmental policy from Boise State University.

### **Mary Anderson                      Airshed/SIP Modeling Coordinator**

Mary Anderson is the Airshed/SIP Modeling Coordinator for the Air Quality Program. She has worked in air quality modeling at the Department of Environmental Quality (DEQ) for five years. Prior to joining DEQ, Mary served as a staff scientist for eight years for the consulting company Science Applications International Corporation (SAIC). As the Airshed/SIP Modeling Coordinator, Mary is responsible for ensuring consistency and providing program direction in airshed modeling. Mary's areas of expertise include quality assurance and quality control requirements for modeling, airshed management principles, air dispersion modeling, human health risk assessment, sensitivity/uncertainty analysis associated with risk assessment, model development, and exposure assessment and scenario development. Mary has a Bachelor of Science degree in Physics and a Masters of Sciences degree in Hazardous Waste Management from Idaho State University.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

May 3, 2005

OFFICE OF  
ADMINISTRATION  
AND RESOURCES  
MANAGEMENT

Dave Sande  
Chief Financial Officer  
Idaho Department  
of Environmental Quality  
1410 North Hilton  
Boise, Idaho 83706-1255

Dear Mr. Sande:

Enclosed is a negotiation agreement reflecting an understanding reached with you concerning the indirect cost rate to be used on grants and contracts with the Federal Government.

I have already signed the agreement. Please have the agreement countersigned by a duly authorized representative of your organization. Photocopy the agreement for your files and mail the original to me. Please give this matter your immediate attention.

Return the countersigned original agreement as follows:

James Pecot, Cost Negotiator (3802R)  
Financial Analysis & Rate Negotiation Service Center  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, N.W.  
Washington, D.C. 20460-0001

If you have questions, please contact me on (202) 564-4423.

Sincerely yours,

A handwritten signature in black ink, appearing to read "James Pecot", written over the typed name and title.

James Pecot, Cost Negotiator  
Financial Analysis and Rate  
Negotiation Service Center

Enclosure



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OMB CIRCULAR A-87 COGNIZANT AGENCY  
NEGOTIATION AGREEMENT

Page 1 of 2

Idaho Department of  
Environmental Quality  
Boise, Idaho

Date: May 3, 2005

Filing Ref: January 20, 2004

The indirect cost rate contained herein is for use on grants and contracts with the Federal Government to which Office of Management and Budget Circular A-87 applies, subject to the limitations contained in the Circular and in Section II, A below.

**SECTION I: RATES**

Type	Effective Period		Rate	Base
	From	To		
Fixed	7/1/2005	6/30/2006	40.34%	(a)

**Basis for Application**

(a) Direct salaries and wages plus applicable fringe benefits costs.

**Treatment of Fringe Benefits:** Fringe benefits applicable to direct salaries and wages are treated as direct costs.

**SECTION II: GENERAL**

**A. LIMITATIONS:** The rate in this Agreement is subject to any statutory and administrative limitations and apply to a given grant, contract or other agreement only to the extent that funds are available. Acceptance of the rate is subject to the following conditions: (1) Only costs incurred by the department/agency or allocated to the department/agency by an approved cost allocation plan were included in the indirect cost pool as finally accepted; such costs are legal obligations of the department/agency and are allowable under governing cost principles; (2) The same costs that have been treated as indirect costs have not been claimed as direct costs; (3) Similar types of costs have been accorded consistent accounting treatment; and (4) The information provided by the department/agency which was used to establish the rates is not later found to be materially incomplete or inaccurate by the Federal Government. In such situations the rate(s) would be subject to renegotiation at the discretion of the Federal Government.

**B. ACCOUNTING CHANGES:** The fixed rate contained in this agreement is based on the organizational structure and the accounting system in effect at the time the proposal was submitted. Changes in the organizational structure or changes in the method of accounting for costs which affect the amount of reimbursement resulting from use of the rate in this agreement, require the prior approval of the authorized representative of the responsible negotiation agency. Failure to obtain such approval may result in subsequent audit disallowances.

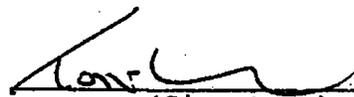
**C. FIXED RATE:** The fixed rate contained in this agreement is based on an estimate of the cost which will be incurred during the period for which the rate applies. When the actual costs for such a period have been determined, an adjustment will be made in the negotiation following such determination to compensate for the difference between the cost used to establish the fixed rate and that which would have been used were the actual costs known at the time.

**D. NOTIFICATION TO FEDERAL AGENCIES:** Copies of this document may be provided to other Federal agencies as a means of notifying them of the agreement contained herein.

**E. SPECIAL REMARKS:** None.

ACCEPTANCE

By the State Agency:

  
\_\_\_\_\_  
(Signature)

Toni Hardesty  
\_\_\_\_\_  
(Name)

Director  
\_\_\_\_\_  
(Title)

IDEQ  
\_\_\_\_\_  
(Agency)

5/13/05  
\_\_\_\_\_  
(Date)

By the Federal Agency:

  
\_\_\_\_\_  
(Signature)

James Pecot, Cost Negotiator  
Financial Analysis and Rate  
Negotiation Service Center  
U.S. Environmental  
Protection Agency  
May 3, 2005

Negotiated by: James Pecot  
Telephone: (202) 564-4423



Mary.Grandjean@deq.idaho.gov

08/22/2005 02:53 PM

To Mike Jones/RTP/USEPA/US@EPA

cc Mike.Dubois@deq.idaho.gov

bcc

Subject Idaho DEQ's grant application...

History:

 This message has been replied to.

in response to your Request for Application (RFA) OAR-EMAD-05-16 is attached to this email as a PDF file: 06 Local Scale TV HAPs Monitoring c.pdf. Please let me know if you have any questions regarding the application. I would appreciate an email from you indicating the information was successfully transmitted. Thank you. MG

Mary Grandjean

Idaho DEQ

1410 N Hilton St

Boise, ID 83706

Voice: 208 373-0525

Fax: 208 373-0315

Email: [mary.grandjean@deq.idaho.gov](mailto:mary.grandjean@deq.idaho.gov)

Web site: [www.deq.idaho.gov](http://www.deq.idaho.gov)



06 Local Scale TV HAPs Monitoring c.pdf



Mary.Grandjean@deq.idaho.gov

08/31/2005 06:25 PM

To Mike Jones/RTP/USEPA/US@EPA

cc Mike.Dubois@deq.idaho.gov, Martin.Bauer@deq.idaho.gov

bcc

Subject RE: Idaho DEQ's grant application...two letters of support

Mike, thanks for confirming receipt of our application. I have attached a PDF file that contains two letters of support for the project. One is from the mayor of Boise and the other is from an Idaho state senator. Best regards. MG

-----Original Message-----

From: Jones.Mike@epamail.epa.gov [mailto:Jones.Mike@epamail.epa.gov]

Sent: Monday, August 22, 2005 2:57 PM

To: Mary Grandjean

Cc: Mike Dubois

Subject: Re: Idaho DEQ's grant application...

Received - thanks! Mike

---

Michael N. Jones  
Air Toxics Monitoring Program  
Office of Air Quality Planning and Standards  
US Environmental Protection Agency  
Voice: (919) 541-0528  
Fax: (919) 685-3260  
jones.mike@epa.gov

Mary.Grandjean@d  
eq.idaho.gov

08/22/2005 02:53  
PM

Mike Jones/RTP/USEPA/US@EPA

To

Mike.Dubois@deq.idaho.gov

cc

Subject  
Idaho DEQ's grant application...

(Embedded image moved to file: pic24227.gif)

in response to your Request for Application (RFA) OAR-EMAD-05-16 is attached to this email as a PDF file: 06 Local Scale TV HAPs Monitoring c.pdf. Please let me know if you have any questions regarding the application. I would appreciate an email from you indicating the information was successfully transmitted. Thank you. MG

Mary Grandjean  
Idaho DEQ  
1410 N Hilton St  
Boise, ID 83706  
Voice: 208 373-0525  
Fax: 208 373-0315  
Email: mary.grandjean@deq.idaho.gov

Web site: [www.deq.idaho.gov](http://www.deq.idaho.gov)

[attachment "06 Local Scale TV HAPs Monitoring c.pdf" deleted by Mike Jones/RTP/USEPA/US]



06 Local Scale TV HAPs Monitoring letters.pdf



## Office of the Mayor

**David H. Bieter**  
Mayor

**City Council**  
**President**  
Maryanne Jordan

**Council ProTem**  
Elaine Clegg

Vernon L. Bisterfeldt  
David Eberle  
M. Jerome Mapp  
Alan W. Shealy

**Boise City Hall**  
Third Floor  
150 N. Capitol Boulevard

**Mailing Address**  
P. O. Box 500  
Boise, Idaho 83701-0500

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208/384-4422

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800/377-3529

**Web**  
[www.cityofboise.org/mayor](http://www.cityofboise.org/mayor)

August 18, 2005

Ms. Toni Hardesty, Director  
Idaho Department of Environmental Quality  
1410 N. Hilton St.  
Boise, ID 83706

Dear Ms. Hardesty:

I write to express Boise City's support for the Idaho Department of Environmental Quality's application for an U.S. Environmental Protection Agency grant to conduct a Hazardous Air Pollution Monitoring and Risk Assessment study in the Treasure Valley.

Knowledge regarding ambient concentrations of hazardous air pollutants in the Treasure Valley is currently lacking. This study will be a significant step forward in the effort to understand more about the valley's air quality and the potential risks to its population. Boise City is committed to improving the community health throughout the valley.

Boise City will continue to support and is pleased to collaborate with the Department of Environmental Quality in proactive endeavors intended to improve the health of the community in the Treasure Valley. The city endorses this study as a means to learn more about the risks associated with hazardous pollutants in the Treasure Valley. We appreciate the Department of Environmental Quality's efforts to better address this issue and urge the study's timely implementation.

Sincerely,

David H. Bieter  
Mayor

KATE KELLY  
DISTRICT 18  
ADA COUNTY



HOME ADDRESS  
P.O. BOX 654  
BOISE, IDAHO 83701  
(208) 850-7217  
KKELLY@SENATE.IDAHO.GOV

## Idaho State Senate

State Capitol  
P.O. Box 83720  
Boise, Idaho 83720-0081

RECEIVED

AUG 29 2005

Dept. of Environmental Quality  
Director's Office

August 24, 2005

Toni Hardesty, Director  
Idaho Department of Environmental Quality  
1410 N. Hilton  
Boise, Idaho 83706

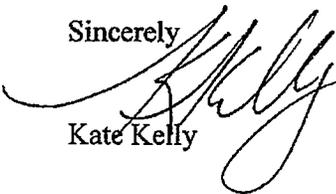
Re: Treasure Valley Air Toxics Ambient Monitoring Project

*Toni*  
Dear Director ~~Hardesty~~

Please accept this letter in support of the Idaho Department of Environmental Quality's application for a grant from the U.S. Environmental Protection Agency for funds to implement a project to monitor and assess toxic air pollutants in the Treasure Valley. The project results will be of great value to the scientific and general community in our region. As a legislator, the information will be useful to me in advocating for my Treasure Valley constituents, including the families who live here and the businesses that operate here.

I will continue to support DEQ's air quality monitor efforts across the state and I am pleased to be in a position to collaborate with you in the Legislature. I endorse this project as a means for us all to learn more about the air quality in the Treasure Valley. I appreciate your efforts in this regard and wish you success.

Sincerely

  
Kate Kelly

31650