AGREEMENT FOR SERVICES

This agreement is entered into between the Puget Sound Clean Air Agency, a municipal corporation of the laws of the State of Washington, hereinafter referred to as the "Agency" and the University of Washington, Grant and Contract Services, 3935 University Way N.E., Seattle, WA 98105-6613, hereinafter referred to as the "Consultant".

WITNESSETH

WHEREAS, the Board of Directors of the Puget Sound Clean Air Agency deems it desirable to utilize the services of the Consultant to perform enhancements to the existing high-resolution mesoscale meteorological modeling tools for western Washington in support of air-quality forecasting for Air Quality Index levels, Agency wood smoke Burn Bans, predicted air stagnation conditions that enhance high fine-particle or ozone events, and for planning and testing control scenarios for the Agency; and

WHEREAS, the Consultant represents and warrants that it is available, experienced, and qualified to perform said services in high-resolution meteorological modeling, and creating graphical display products for Agency use;

NOW, THEREFORE, the Agency and the Consultant mutually agree as follows;

1. Services
   The Consultant shall provide the following services:
   - Provide a suite of meteorological analyses and forecast products to the Agency created from twice daily, operational runs using the current and future regional versions of the Pennsylvania State/NCAR Mesoscale Model (MM5).
   - Create twice-daily (0000Z/1200Z) forecast, Skew-t diagrams, Meteograms and time-height cross-section graphic products valid at 3 hourly increments from initialization through 72 hours. These products will be for both the 12 and 4-km (through 48-h) domain. The Consultant shall add additional sites, as provided by the Project Manager.
• Create improved sounding charts capable of showing more detail in the lower troposphere for air quality applications.

• Participate in a MM5 verification project to determine model skill in predicting selected meteorological parameters which significantly impact air quality. The Consultant is expected to provide such support as necessary to complete the model assessment following a collaborative technical design process.

• Using the assessment conducted by Washington State University in 2004 (Vaughn, et al), normalize formulations of the ventilation index products and implement changes to improve the clarity of the products to describe: Excellent, Good, Marginal, Poor and Very Poor ventilation conditions.

• Develop new map backgrounds for the Puget Sound region to improve public display of products.

• Make improvements in hardware and the modeling system to enhance forecast skill and product availability.

The term of this Agreement is April 1, 2004 to June 30, 2005.

The Agency Project Manager for this Agreement is Mike Gilroy, telephone (206) 689-4001, e-mail MikeG@pscleanair.org. The Consultant shall report results to and submit documents, written reports, and invoices to the Project Manager on or before the last day of each calendar quarter (September 2004, December 2004, March 2005, and June 2005).

2. **Performance Evaluation Criteria**

a. New ventilation products that reflect the analysis of the different methods of determining Good-Poor level of stagnation.

b. New map backgrounds that improve the Agency's ability to display MM5 products.

c. Timely and reliable delivery of all operational runs to support Agency forecasting needs.
3. **Compensation**

The Agency shall retain the Consultant for the total amount of this Agreement, which shall not exceed $25,000. This shall be paid from the Agency’s Wood Stove Grants. The Consultant shall submit invoices to the Manager of Finance and Purchasing, invoices shall be paid within thirty (30) days after review and approval of the Project Manager. Invoices must contain a breakdown of the work performed per task. The final invoice must be submitted no later than ten (10) working days after termination date.

4. **Changes.** The agency may, from time to time, require changes in the scope of services performed under this Agreement. The parties shall mutually agree to the changes by written amendment to the Agreement.

5. **Termination.** Either party may terminate this Agreement at any time with or without cause by giving a thirty day (30) written notice to the other party of such termination and by specifying the effective date of the termination; provided, that the termination shall be preceded by a face-to-face meeting between the Consultant and the Agency. Upon termination of this Agreement, the Agency, in addition to any other rights provided in this Agreement, may require the Consultant to deliver to the Agency any property specifically produced or acquired for the performance of such part of this Agreement as has been terminated.

The Agency shall pay to the Consultant the amount agreed upon by the Consultant and the Agency for (i) completed work and services for which no separate price is stated, (ii) partially completed work and services, (iii) other property or services which are accepted by the Agency, and (iv) the protection and preservation of property, unless the termination is for default, in which case the Agency shall determine the extent of the liability of the Agency. The Agency may withhold from any amounts due the Consultant such sums as the Agency determines to be necessary to protect the Agency against potential loss or liability.

6. **Agency Access to Data.** The Consultant shall provide the Agency, at no additional charge, access to all data generated under this Agreement. "Data" includes all information that supports the findings, conclusions and recommendations of the Consultant's reports, including computer models and the methodology for those models.

7. **Copyright Provisions.** The Consultant will be free to publish the results of research under this agreement, after providing a copy of the proposed publication to the Agency. Title to and the right to determine the disposition of any copyrights, or copyrightable materials, first produced or composed in the performance of this research, shall remain with the Consultant, provided that the Consultant shall grant the Agency an irrevocable, copyright-free,
nonexclusive right to produce, translate and use all such copyrighted material for its own purposes.

8. **Consultant Not an Employee of the Agency.** The Consultant and his or her employees or agents, shall at all times be an independent contractor and not an employee of the agency and shall not be entitled to compensation or benefits of any kind other than as specifically provided herein. The Consultant will not hold himself/herself out as nor claim to be an officer or an employee of the agency or of the State of Washington by reason hereof, nor will the Consultant make any claim of right, privilege or benefit which would accrue to an employee under Chapter 41.06 RCW.

9. **Indemnification.** The Consultant shall perform the work under this Agreement as an independent contractor. Each party to this Agreement agrees to indemnify and to hold harmless the other party from damage to persons or property resulting from the negligence on the part of itself, its employees, its agents, or its officers. Neither party assumes any responsibility to the other party for the consequences of any act or omission of any person, firm or corporation not a party to this Agreement.

10. **Subcontracting.** Neither the Consultant nor a subcontractor of the Consultant shall enter into subcontracts for any of the services or work contemplated under this contract without obtaining prior written approval of the Project Manager.

11. **Payroll and Taxes.** The Consultant assumes full responsibility for the payment of all wages, payroll taxes, use, sales, income or other form of taxes, fees and licenses.

12. **Licensing, Accreditation, and Registration.** The Consultant shall comply with all applicable local, state, and federal licensing, accreditation, and registration requirements/standards, necessary for the performance of this contract.

13. **Industrial Insurance Coverage.** The Consultant shall provide or purchase industrial insurance coverage prior to performing work under this contract and shall maintain full compliance with Chapter 51.12 RCW during the term of this contract. If a Consultant is exempt from the requirements of Chapter 51.12 RCW, he/she must carry appropriate liability insurance equivalent to the coverage provided under that chapter. The agency will not be responsible for the payment of industrial or liability insurance premiums or for any other claim or benefit for this Consultant, or any subcontractor or employee of the Consultant, which might arise under the industrial insurance laws during the performance of duties and services under this contract. If the Department of Labor and Industries, upon audit, determines that industrial insurance payments are due and owing as a result of work
performed under this contract, those payments shall be made by the Consultant; the
Consultant shall indemnify the agency and guarantee payment of such amounts.

14. **Limitation of Authority.** Only the agency's Project Manager shall have the express,
implied or apparent authority to alter, amend, modify or waive any clause or condition of this
contract except for clauses or conditions required by law. Furthermore, any alteration,
 amendment, modification or waiver of any clause or condition of the contract is not effective
or binding unless made in writing and signed by the agency's Project Manager.

15. **Governing Law.** This contract shall be governed by the laws of the state of
Washington. The Consultant, by execution of the contract, acknowledges the jurisdiction of
the courts of the state of Washington in this matter.

16. **Severability.** The provisions of this contract are severable. If any provision is illegal
or invalid for any reason whatsoever, that illegality or invalidity shall not affect the validity of
the rest of the contract.

17. **Nondiscrimination.** During the performance of this contract, the Consultant shall
comply with all federal and state nondiscrimination laws, regulations and policies.

18. **Noncompliance with Nondiscrimination Laws.** In the event of the Consultant's
noncompliance or refusal to comply with any nondiscrimination law, regulation, or policy,
this contract may be rescinded, canceled or terminated in whole or in part, and the Consultant
may be declared ineligible for further contracts with the agency. The Consultant shall,
however, be given a reasonable time in which to remedy this noncompliance.

19. **Utilization of Minority and Women-Owned Business Enterprises (MWBE).** To
the extent practicable, when performing the services agreed to under this contract, the
Consultant should utilize MWBEs certified by the Office of Minority and Women's Business
Enterprises under the state of Washington certification program.

20. **Assignment.** The work provided under this agreement, and any claim arising
thereunder, is not assignable or delegable by either party, in whole or in part, without the
express prior written consent of the other party, which consent shall not be unreasonably
withheld.
21. **Attorneys' Fees.** In the event of litigation or other action brought to enforce contract terms, each party agrees to bear its own attorneys' fees and costs.

22. **Content and Understanding.** This contract contains a complete and integrated understanding and agreement between the parties.

**IN WITNESS HEREOF,** the Agency and the Consultant have executed this Agreement.

**PUGET SOUND CLEAN AIR AGENCY**

By: [Signature]

Bill Evans
Chair, Board of Directors

Date: 6/11/04

**CONSULTANT UNIVERSITY OF WASHINGTON**

By: [Signature]

Carol Zuiches, Director
Grant and Contract Services

Date: 5/18/04

Attest:

By: [Signature]

Dennis J. McLellan
Executive Director

Date: 6/15/04

Approved as to Form:

By: [Signature]

Laurie Halvorson
General Counsel

Date: 6/2/04
Puget Sound Clean Air Agency  
110 Union Street, Suite 500  
Seattle, WA 98101

Certification Regarding  
Debarment, Suspension and Other Responsibility Matters

The prospective participant certifies to the best of its knowledge and belief that it and its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

(b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and

(d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Sec. 1001, a false statement may result in a fine of up to $10,000 or imprisonment for up to 5 years, or both.

CAROL ZUICHES  
Asst. Vice Provost For Research  
Executive Director, Grant and Contract Services

Typed Name & Title of Authorized Representative

Signature of Authorized Representative

Date

☐ I am unable to certify to the above statements. My explanation is attached
Puget Sound Clean Air Agency
Clifford F. Mass – P.I.
University of Washington

April 1, 2004 to June 30, 2005

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<th>Salaries</th>
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<tr>
<td>Clifford Mass, P.I. 0.1 Mo.</td>
<td>1,015</td>
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<td>Mark Albright, Research Meteorologist – 1 Mo.</td>
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<td>Dave Ovens, Research Meteorologist – 1 Mo.</td>
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<td>Total Salaries</td>
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<td>Total Salary and Benefits</td>
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| Total Direct Costs                      | 16,491|
| Indirect Costs                          | 8,509 |

| Total                                   | 25,000|