### PROFESSIONAL SERVICES AGREEMENT

This Agreement ("Agreement") is entered into as of May 1, 2015 ("Effective Date") and will end on April 30, 2018, by and between the State of Delaware, Department of Natural Resources and Environmental Control, Division of Air Quality, ("Delaware"), and Pennsylvania State University, with offices at University Park, Pennsylvania ("VENDOR").

WHEREAS, Delaware desires to obtain certain services to Air Quality Forecasting and

WHEREAS, VENDOR desires to provide such services to Delaware on the terms set forth below;

WHEREAS, Delaware and VENDOR represent and warrant that each party has full right, power and authority to enter into and perform under this Agreement;

FOR AND IN CONSIDERATION OF the premises and mutual agreements herein, Delaware and VENDOR agree as follows:

#### 1. Services.

1.1 VENDOR shall perform for Delaware the services specified in the Appendices to this Agreement, attached hereto and made a part hereof.

1.2 Any conflict or inconsistency between the provisions of the following documents shall be resolved by giving precedence to such documents in the following order: (a) this Agreement (including any amendments or modifications thereto); (b) Delaware's request for proposals, attached hereto as Appendix A; (c) VENDOR's response to the request for proposals, attached hereto as Exhibit A. The aforementioned documents are specifically incorporated into this Agreement and made a part hereof.

1.3 Delaware may, at any time, by written order, make changes in the scope of this Agreement and in the services or work to be performed. No services for which additional compensation may be charged by VENDOR shall be furnished without the written authorization of Delaware. When Delaware desires any addition or deletion to the deliverables or a change in the Services to be provided under this Agreement, it shall notify VENDOR, who shall then submit to Delaware a "Change Order" for approval authorizing said change. The Change Order shall state whether the change shall cause an alteration in the price or the time required by VENDOR for any aspect of its performance under this Agreement. Pricing of changes shall be consistent with those established within this Agreement.

1.4 VENDOR will not be required to make changes to its scope of work that result in VENDOR's costs exceeding the current unencumbered budgeted appropriations for the services. Any claim of either party for an adjustment under Section 1 of this Agreement shall be asserted in the manner specified in the writing that authorizes the adjustment.

#### 2. Payment for Services and Expenses.

2.1 The term of the initial contract shall be from May 1, 2015 through April 30, 2016.

2.2 Delaware will pay VENDOR for the performance of services described in Appendix B, Statement of Work. The fee will be paid in accordance with the payment schedule attached hereto as part of Appendix C.

2.3 Delaware's obligation to pay VENDOR for the performance of services described in Appendix B, Statement of Work will not exceed the fixed fee amount of \$21,480. It is expressly understood that the work defined in the appendices to this Agreement must be completed by VENDOR and it shall be VENDOR's responsibility to ensure that hours and tasks are properly budgeted so that all services are completed for the agreed upon fixed fee. Delaware's total liability for all charges for services that may become due under this Agreement is limited to the total maximum expenditure(s) authorized in Delaware's purchase order(s) to VENDOR.

2.4 VENDOR shall submit invoices in accordance with the schedule set forth in Appendix C of this contract, to Delaware in sufficient detail to support the services provided during the billing period. Delaware agrees to pay those invoices within thirty (30) days of receipt. In the event Delaware disputes a portion of an invoice, Delaware agrees to pay the undisputed portion of the invoice within thirty (30) days of receipt and to provide VENDOR a detailed statement of Delaware's position on the disputed portion of the invoice within thirty (30) days of receipt. Delaware's failure to pay any amount of an invoice that is not the subject of a good-faith dispute within thirty (30) days of receipt shall entitle VENDOR to charge interest on the overdue portion at no more than 1.0% per month or 12% per annum. All payments should be sent to The Pennsylvania State University, Research Accounting, 227 West Beaver Avenue, Suite 401, State College, PA 16801.

2.5 Unless provided otherwise in an Appendix, all expenses incurred in the performance of the services are to be paid by VENDOR.

2.6 Delaware is a sovereign entity, and shall not be liable for the payment of federal, state and local sales, use and excise taxes, including any interest and penalties from any related deficiency, which may become due and payable as a consequence of this Agreement.

2.7 Delaware understands that forecasting data is not an absolute science and predictions may not always be correct. Nevertheless, should VENDOR fail to exercise good faith in providing its forecasts, Delaware shall subtract from any payment made to VENDOR all damages, costs and expenses caused by VENDOR's negligence, resulting from or arising out of gross errors or omissions in VENDOR's work products.

2.8 Invoices shall be submitted to:

Division of Air Quality 715 Grantham Lane New Castle, DE 19720 Attn: Joseph Martini

#### 3. **Responsibilities of VENDOR.**

3.1 VENDOR shall be responsible for the professional quality, technical accuracy, timely completion, and coordination of all services furnished by VENDOR, its subcontractors and its and their principals, officers, employees and agents under this Agreement. In performing the specified services, VENDOR shall follow practices consistent with generally accepted professional and technical standards. VENDOR shall be responsible for ensuring that all services, products and deliverables furnished pursuant to this Agreement comply with the standards promulgated by the Department of Technology and Information ("DTI") published at <a href="http://dti.delaware.gov/">http://dti.delaware.gov/</a> and as modified from time to time by DTI during the term of this Agreement. If any service, product or deliverable furnished pursuant to this Agreement does not conform with DTI standards, VENDOR shall, at its expense and option either (1) replace it with a conforming equivalent or (2) modify it to conform with DTI standards. VENDOR shall be and remain liable in accordance with the terms of this Agreement and applicable law for all damages to Delaware caused by VENDOR's failure to ensure compliance with DTI standards.

3.2 It shall be the duty of the VENDOR to assure that all products of its effort are technically sound and in conformance with all pertinent Federal, State and Local statutes, codes, ordinances, resolutions and other regulations. Delaware understands that forecasting data is not an absolute science and predictions may not always be correct. Nonetheless, VENDOR will not produce a work product that knowingly violates or infringes on any copyright or patent rights. VENDOR shall, without additional compensation, correct or revise any errors or omissions in its work products that are not in accordance with the Statement of Work

3.3 Permitted or required approval by Delaware of any products or services furnished by VENDOR shall not in any way relieve VENDOR of responsibility for the professional and technical accuracy and adequacy of its work. Delaware's review, approval, acceptance, or payment for any of VENDOR's services herein shall not be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement, and VENDOR shall be and remain liable in accordance with the terms of this Agreement and applicable law for all damages to Delaware caused by VENDOR's performance or failure to perform under this Agreement.

3.4 VENDOR shall appoint a Project Manager who will manage the performance of services. All of the services specified by this Agreement shall be performed by the Project Manager, or by VENDOR's associates and employees under the personal supervision of the Project Manager. The positions anticipated include:

Project Team	Title	% of Project Involvement
Air Quality Forecasting in Delaware	Dr, Amy Huff, Principal Investiga	tor 100%

3.5 Designation of persons for each position is subject to review and approval by Delaware. Should the staff need to be diverted off the project for what are now unforeseeable circumstances, VENDOR will notify Delaware immediately and work out a transition plan that is acceptable to both parties, as well as agree to an acceptable replacement plan to fill or complete the work assigned to this project staff position. Replacement staff persons are subject to review and approval by Delaware. If VENDOR fails to make a required replacement within 30 days, Delaware may terminate this Agreement for default. Upon receipt of written notice from Delaware that an employee of VENDOR is unsuitable to Delaware for good cause, VENDOR shall remove such employee from the performance of services and substitute in his/her place a suitable employee.

3.6 VENDOR agrees that its officers and employees will cooperate with Delaware in the performance of services under this Agreement and will be available for consultation with Delaware at such reasonable times with advance notice as to not conflict with their other responsibilities.

3.7 VENDOR has or will retain such employees as it may need to perform the services required by this Agreement. Such employees shall not be employed by Delaware or any other political subdivision of Delaware.

3.8 VENDOR will not use Delaware's name, either express or implied, in any of its advertising or sales materials without Delaware's express written consent.

3.9 The rights and remedies of Delaware provided for in this Agreement are in addition to any other rights and remedies provided by law.

3.10 Given that this is a fixed price Agreement, VENDOR will not be required to submit Monthly Accurate Usage Report

# 4. Time Schedule.

4.1 A project schedule is included in Appendix A.

4.2 Any delay of services or change in sequence of tasks must be approved in writing by Delaware.

4.3 In the event that VENDOR fails to complete the project or any phase thereof within the time specified in the Contract, or with such additional time as may be granted in writing by Delaware, or fails to prosecute the work, or any separable part thereof, with such diligence as will insure its completion within

the time specified in this Agreement or any extensions thereof, Delaware shall suspend the payments scheduled as set forth in Appendix A

## 5. State Responsibilities.

5.1 In connection with VENDOR's provision of the Services, Delaware shall perform those tasks and fulfill those responsibilities specified in the appropriate Appendices.

5.2 Delaware agrees that its officers and employees will cooperate with VENDOR in the performance of services under this Agreement and will be available for consultation with VENDOR at such reasonable times with advance notice as to not conflict with their other responsibilities.

5.3 The services performed by VENDOR under this Agreement shall be subject to review for compliance with the terms of this Agreement by Delaware's designated representatives. Delaware representatives may delegate any or all responsibilities under the Agreement to appropriate staff members, and shall so inform VENDOR by written notice before the effective date of each such delegation.

5.4 The review comments of Delaware's designated representatives may be reported in writing as needed to VENDOR. It is understood that Delaware's representatives' review comments do not relieve VENDOR from the responsibility for the professional and technical accuracy of all work delivered under this Agreement.

5.5 Delaware shall, without charge, furnish to or make available for examination or use by VENDOR as it may request, any data which Delaware has available, including as examples only and not as a limitation:

- a. Copies of reports, surveys, records, and other pertinent documents;
- b. Copies of previously prepared reports, job specifications, surveys, records, ordinances, codes, regulations, other document, and information related to the services specified by this Agreement.

VENDOR shall return any original data provided by Delaware.

5.6 Delaware shall assist VENDOR in obtaining data on documents from public officers or agencies and from private citizens and business firms whenever such material is necessary for the completion of the services specified by this Agreement.

5.7 VENDOR will not be responsible for accuracy of information or data supplied by Delaware or other sources to the extent such information or data would be relied upon by a reasonably prudent contractor.

5.8 Delaware agrees not to use VENDOR's name, either express or implied, in any of its advertising or sales materials. VENDOR reserves the right to reuse the nonproprietary data and the analysis of industry-related information in its continuing analysis of the industries covered.

# 6. Work Product.

6.1 Any proposed deliverables resulting from the executed Agreement by the VENDOR are the sole and exclusive property of Delaware.

# 7. Confidential Information.

The parties do not anticipate any deliverables produced pursuant to this Contract to be confidential.

#### 8. Warranty.

8.1 VENDOR shall perform all work under this agreement diligently, carefully and in accordance with the highest professional standards. All personnel shall be appropriately qualified in accordance with applicable professional standards and perform in accordance with the proposed statement of work.

### 9. Indemnification; Limitation of Liability.

9.1 VENDOR shall indemnify and hold harmless the State, its agents and employees, from any and all liability, suits, actions or claims, together with all reasonable costs and expenses (including reasonable attorneys' fees) directly arising during VENDOR's, its agents and employees work or service under this Contract, unless such suits, actions, claims or liabilities are due to the negligence or willful misconduct of the State, its employees or agents. Vendor shall not have any responsibility or liability for Delaware's reliance upon, use or distribution of any of Vendor's deliverables under this agreement including claims for infringement, unless Vendor knowingly infringes.

### 10. Employees.

10.1 VENDOR has and shall retain the right to exercise full control over the employment, direction, compensation and discharge of all persons employed by VENDOR in the performance of the services hereunder; provided, however, that it will, subject to scheduling and staffing considerations, attempt to honor Delaware's request for specific individuals.

10.2 During the term of this Agreement and for a period of one (1) year thereafter, Dr. Amy Huff shall not solicit or recruit for employment (or attempt to solicit or recruit for employment) any of Delaware's employees, or directly induce or encourage Delaware's employees to terminate their employment. The parties agree that this provision: (i) shall survive termination of this Agreement; (ii) is reasonable and necessary to protect the parties' legitimate business interests; and (iii) does not create undue hardship. This restriction shall not apply to non-solicited, non-recruited responses to general advertisements for employment.

10.3 Possession of a Security Clearance, as issued by the Delaware Department of Public Safety, may be required of any employee of VENDOR who will be assigned to this project.

## 11. Independent Contractor.

11.1 It is understood that in the performance of the services herein provided for, VENDOR shall be, and is, an independent contractor, and is not an agent or employee of Delaware and shall furnish such services in its own manner and method except as required by this Agreement. VENDOR shall be solely responsible for, and shall indemnify, defend and save Delaware harmless from all matters relating to the payment of its employees, including compliance with social security, withholding and all other wages, salaries, benefits, taxes, exactions, and regulations of any nature whatsoever.

11.2 VENDOR acknowledges that VENDOR and any subcontractors, agents or employees employed by VENDOR shall not, under any circumstances, be considered employees of Delaware, and that they shall not be entitled to any of the benefits or rights afforded employees of Delaware, including, but not limited to, sick leave, vacation leave, holiday pay, Public Employees Retirement System benefits, or health, life, dental, long-term disability or workers' compensation insurance benefits. Delaware will not provide or pay for any liability or medical insurance, retirement contributions or any other benefits for or on behalf of Delaware or any of its officers, employees or other agents.

11.3 VENDOR shall be responsible for providing liability insurance for its personnel.

11.4 As an independent contractor, VENDOR has no authority to bind or commit Delaware. Nothing herein shall be deemed or construed to create a joint venture, partnership, fiduciary or agency relationship between the parties for any purpose.

## 12. Suspension.

12.1 Delaware may suspend performance by VENDOR under this Agreement for such period of time as Delaware, at its sole discretion, may prescribe by providing written notice to VENDOR at least 30 working days prior to the date on which Delaware wishes to suspend. All reasonable costs and non-cancelable obligations incurred by VENDOR directly and solely related to the performance of this Contract at the time of said suspension shall be reimbursed by Delaware. VENDOR shall not perform further work under this Agreement after the effective date of suspension. VENDOR shall not perform further work under this Agreement after the effective date of suspension until receipt of written notice from Delaware to resume performance.

12.2 In the event Delaware suspends performance by VENDOR for any cause other than the error or omission of the VENDOR, for an aggregate period in excess of 30 days, VENDOR shall be entitled to reimbursement of all reasonable costs and non-cancelable obligations directly and solely related to the performance of this Contract incurred by VENDOR at the time of said suspension.

### 13. Termination.

13.1 Termination for Non-Appropriation. In the event the Delaware General Assembly fails to appropriate the specific funds necessary to enter into or continue the contractual Agreement, in whole or in part, the agreement shall be terminated as to any obligation of the State requiring the expenditure of money for which no specific appropriation is available at the end of the last fiscal year for which no appropriation is available or upon exhaustion of funds. This is not a termination of convenience and will not be converted to such.

13.2 Other Termination. Either party may terminate this Agreement upon fifteen (15) days prior written notice to the other. All reasonable costs and non-cancelable obligations incurred by Vendor at the time of said termination shall be reimbursed by Delaware. At the request of DNREC, all unused Vendor-provided materials at the time of the termination shall either be destroyed by Vendor or returned to Delaware.

13.3 The rights and remedies of Delaware and VENDOR provided in this section are in addition to any other rights and remedies provided by law or under this Agreement.

#### 13.4 Gratuities.

- 13.4.1 Delaware may, by written notice to VENDOR, terminate this Agreement if it is found after notice and hearing by Delaware that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by VENDOR or any agent or representative of VENDOR to any officer or employee of Delaware with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending or making of any determinations with respect to the performance of this Agreement.
- 13.4.2 In the event this Agreement is terminated as provided in 13.4.1 hereof, Delaware shall be entitled to pursue the same remedies against VENDOR it could pursue in the event of a breach of this Agreement by VENDOR.
- 13.4.3 The rights and remedies of Delaware provided in Section 13.4 shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Agreement.

## 14. Severability.

If any term or provision of this Agreement is found by a court of competent jurisdiction to be invalid, illegal or otherwise unenforceable, the same shall not affect the other terms or provisions hereof or the whole of this Agreement, but such term or provision shall be deemed modified to the extent necessary in the court's opinion to render such term or provision enforceable, and the rights and obligations of the

parties shall be construed and enforced accordingly, preserving to the fullest permissible extent the intent and agreements of the parties herein set forth.

# 15. Assignment; Subcontracts.

15.1 Any attempt by VENDOR to assign or otherwise transfer any interest in this Agreement without the prior written consent of Delaware shall be void. Such consent shall not be unreasonably withheld.

15.2 Services specified by this Agreement shall not be subcontracted by VENDOR, without prior written approval of Delaware.

15.3 Approval by Delaware of VENDOR's request to subcontract or acceptance of or payment for subcontracted work by Delaware shall not in any way relieve VENDOR of responsibility for the professional and technical accuracy and adequacy of the work. All subcontractors shall adhere to all applicable provisions of this Agreement.

15.4 VENDOR shall be and remain liable for all damages to Delaware caused by negligent performance or non-performance of work under this Agreement by VENDOR, its subcontractor or its sub-subcontractor.

15.5 The compensation due shall not be affected by Delaware's approval of the VENDOR's request to subcontract.

## 16. Force Majeure.

Neither party shall be liable for any delays or failures in performance due to circumstances beyond its reasonable control.

#### **17.** Non-Appropriation of Funds.

17.1 Validity and enforcement of this Agreement is subject to appropriations by the General Assembly of the specific funds necessary for contract performance. Should such funds not be so appropriated Delaware may immediately terminate this Agreement, and absent such action this Agreement shall be terminated as to any obligation of the State requiring the expenditure of money for which no specific appropriation is available, at the end of the last fiscal year for which no appropriation is available or upon the exhaustion of funds.

17.2 Notwithstanding any other provisions of this Agreement, this Agreement shall terminate and Delaware's obligations under it shall be extinguished at the end of the fiscal year in which Delaware fails to appropriate monies for the ensuing fiscal year sufficient for the payment of all amounts which will then become due.

# **18.** Complete Agreement.

18.1 This agreement and its Appendices shall constitute the entire agreement between Delaware and VENDOR with respect to the subject matter of this Agreement and shall not be modified or changed without the express written consent of the parties. The provisions of this agreement supersede all prior oral and written quotations, communications, agreements and understandings of the parties with respect to the subject matter of this Agreement.

18.2 If the scope of any provision of this Agreement is too broad in any respect whatsoever to permit enforcement to its full extent, then such provision shall be enforced to the maximum extent permitted by law, and the parties hereto consent and agree that such scope may be judicially modified accordingly and that the whole of such provisions of the Agreement shall not thereby fail, but the scope of such provision shall be curtailed only to the extent necessary to conform to the law. 18.3 VENDOR may not order any product requiring a purchase order prior to Delaware's issuance of such order. Each Appendix, except as its terms otherwise expressly provide, shall be a complete statement of its subject matter and shall supplement and modify the terms and conditions of this Agreement for the purposes of that engagement only. No other agreements, representations, warranties or other matters, whether oral or written, shall be deemed to bind the parties hereto with respect to the subject matter hereof.

# **19.** Miscellaneous Provisions.

19.1 In performance of this Agreement, VENDOR shall comply with all applicable federal, state and local laws, ordinances, codes and regulations. VENDOR shall solely bear the costs of permits and other relevant costs required in the performance of this Agreement.

19.2 Neither this Agreement nor any appendix may be modified or amended except by the mutual written agreement of the parties. No waiver of any provision of this Agreement shall be effective unless it is in writing and signed by the party against which it is sought to be enforced.

19.3 The delay or failure by either party to exercise or enforce any of its rights under this Agreement shall not constitute or be deemed a waiver of that party's right thereafter to enforce those rights, nor shall any single or partial exercise of any such right preclude any other or further exercise thereof or the exercise of any other right.

19.4 Dr. Amy Huff covenants that she presently has no interest and will not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of services required to be performed under this Agreement.

19.5 VENDOR acknowledges that Delaware has an obligation to ensure that public funds are not used to subsidize private discrimination. VENDOR recognizes that if they refuse to hire or do business with an individual or company due to reasons of race, color, gender, ethnicity, disability, national origin, age, or any other protected status, Delaware may declare VENDOR in breach of the Agreement, terminate the Agreement, and designate VENDOR as non-responsible.

19.6 VENDOR warrants that no person or selling agency has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, or a percentage, brokerage or contingent fee. For breach or violation of this warranty, Delaware shall have the right to annul this contract without liability or at its discretion deduct from the contract price or otherwise recover the full amount of such commission, percentage, brokerage or contingent fee.

19.7 This Agreement was drafted with the joint participation of both parties and shall be construed neither against nor in favor of either, but rather in accordance with the fair meaning thereof.

19.8 During the term of this Agreement, authorized representatives of Delaware may inspect or audit VENDOR's performance and records pertaining to this Agreement at the VENDOR business office during normal business hours.

### 20. Insurance.

20.1 VENDOR shall maintain the following insurance or self-insurance during the term of this Agreement:

A. Worker's Compensation and Employer's Liability Insurance in accordance with applicable law, **and** 

B. Commercial General Liability - \$1,000,000.00 per person/\$3,000,000 per occurrence, and

20.2 Product Liability - \$1,000,000.00 per person/\$3,000,000 per occurrence. VENDOR shall provide forty-five (45) days written notice of cancellation or material change of any policies.

20.3 Before any work is done pursuant to this Agreement, the Certificate of Insurance and/or copies of the insurance policies, referencing the contract number stated herein, shall be filed with the State. The certificate holder is as follows:

State of Delaware Division of Air Quality 715 Grantham Lane New Castle, DE 19720 Attn: Joseph M. Martini

20.4 In no event shall the State of Delaware be named as an additional insured on any policy required under this agreement.

#### 21. Governing Law.

This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, except where Federal Law has precedence. VENDOR consents to jurisdiction venue in the State of Delaware.

#### 22. Notices.

Any and all notices required by the provisions of this Agreement shall be in writing and shall be mailed, certified or registered mail, return receipt requested. All notices shall be sent to the following addresses:

TO DELAWARE: Division of Air Quality; Attn: Joe Martini; 715 Grantham Lane, New Castle, DE 19720.

TO VENDOR: John W. Hanold, Associate Vice President for Research; Office of Sponsored Programs; 110 Technology Center Building; University Park, PA 16802; osp@psu.edu

### 25. Publication.

Delaware acknowledges that VENDOR shall have the right to publish any results of the Project that do not disclose Confidential Information. VENDOR agrees not to publish or otherwise disclose Confidential Information. Delaware shall be furnished copies of any proposed publication or presentation at least 60 days before submission of such proposed publication or presentation. During that time, Delaware shall have the right to review the material for Confidential Information provided by Delaware and to assess the patentability of any invention described in the material. If Delaware decides that a patent application should be filed, the publication or presentation shall be delayed an additional seventy-five (75) days or until a patent application is filed, whichever is sooner. At Delaware's request, Confidential Information provided by Delaware shall be deleted.

SIGNATURE PAGE TO FOLLOW

IN WITNESS THEREOF, the Parties hereto have caused this Agreement to be duly executed as of the date and year first above written.

		STATE OF DELAWARE DEPARTMENT OF
Witness	Name: _	
Date:		Title: Date:
		VENDOR
Witness	Name: _	
		Title:
Date:		Date: