

Ch 1 # 48004

SWIFT Contract No. 47679  
T-Number: 13AIH

**STATE OF MINNESOTA  
PROFESSIONAL AND TECHNICAL SERVICES  
MASTER CONTRACT  
INDUSTRIAL HYGIENE SERVICES FOR ASBESTOS AND OTHER HAZARDOUS  
MATERIAL ABATEMENT PROJECT MANAGEMENT, TESTING, AND SURVEYS**

This master contract is between the State of Minnesota, acting through its Commissioner of Administration ("State") and Angstrom Analytical, Inc., 5001 Cedar Lake Road S., St. Louis Park, MN 55416 ("Consultant").

**Recitals**

1. Under Minnesota Statute § 15.061 the State is empowered to engage such assistance as deemed necessary.
2. The State is in need of industrial hygiene services for asbestos and other hazardous material abatement project management, testing, and surveys.
3. The Consultant represents that it is duly qualified and agrees to perform all services described in this master contract and performed under work order contracts to the satisfaction of the State.

**Master Contract**

**1 Term of Master Contract**

- 1.1 **Effective Date:** July 1, 2012, or the date the State obtains all required signatures under Minnesota Statute § 16C.05, subdivision 2, whichever is later.  
**The Consultant must not accept work under this master contract until this master contract is fully executed and the Consultant has been notified by the State's Authorized Representative that it may begin accepting Work Order Contracts.**
- 1.2 **Work Order Contracts.** The term of work under work order contracts issued under this master contract may not extend beyond the expiration date of this master contract.
- 1.3 **Expiration Date:** June 30, 2014.
- 1.4 **Survival of Terms.** The following clauses survive the expiration or cancellation of this master contract and all work order contracts: 8. Indemnification; 9. State Audits; 10. Government Data Practices and Intellectual Property; 13. Publicity and Endorsement; 14. Governing Law, Jurisdiction, and Venue; and 18. Data Disclosure.

**2 Scope of Work**

The Consultant, who is not a state employee, may be requested to perform any of the following services under individual work order contracts:

The Scope of Work for this master contract includes but is not limited to the tasks described below for the Categories and Descriptions listed in Attachment 1. A complete detailed description of required work will be furnished in each work order contract issued.

**Project Management**

- On-site observation of project work
- Preparation of recommendations and reports

**Air Monitoring, Sampling, and Testing**

- On-site monitoring and daily log reports in electronic and email format
- On-site and off-site sample analysis, testing reports
- Industrial hygiene sampling following the American Conference of Governmental Industrial Hygienists (ACGIH), Occupational Safety & Health Administration (OSHA), National Institute of Occupational Safety & Health (NIOSH) or other applicable regulatory or industry best guidelines.

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STATE OF MINNESOTA  
DEPT. OF ADMINISTRATION  
GENERAL SERVICES  
COMMUNICATIONS SECTION

**Collection and Analysis**

Bulk material analysis and reports

Analysis compared to ACGIH, OSHA, NIOSH or other applicable regulatory or industry best guidelines. An American Industrial Hygiene Association (AIHA) or comparable accredited lab to complete lab work.

**Surveys and Reports**

Surveys, electronic database files, and written reports

**Emergency Response**

Respond to emergency request for the presence of hazardous materials on site.

An individual performing work under this master contract must possess a current license issued by the Minnesota Department of Health for the type of work being done.

The Consultant understands that only the receipt of a fully executed work order contract authorizes the Consultant to begin work under this master contract. Any and all effort, expenses, or actions taken before the work order contract is fully executed is not authorized under Minnesota Statutes and is under taken at the sole responsibility and expense of the Consultant. A sample work order contract is attached and incorporated into this master contract as Exhibit A.

The Consultant understands that this master contract is not a guarantee of a work order contract. The State has determined that it may have need for the services under this master contract, but does not commit to spending any money with the Consultant.

**3 Time**

The Consultant must comply with all the time requirements described in work order contracts. In the performance of work order contracts, time is of the essence.

**4 Consideration and Payment**

**4.1 Consideration.** The State will pay for all services satisfactorily performed by the Consultant for all work order contracts issued under this master contract. The total compensation of all work order contracts may not exceed \$1,000,000.00 annually.

**Travel Expenses.** There are no allowable travel or other reimbursable expenses. All such expenses are included in the Consultant's fee schedule of hourly rates.

Reimbursement for travel and subsistence expenses actually and necessarily incurred by the Consultant as a result of any work order contract will be reimbursed in same manner and in no greater amount than provided in the current "Commissioner's Plan" promulgated by the Commissioner of Minnesota Management and Budget A copy of the Commissioner's Plan is available on the web at: at <http://www.mmb.state.mn.us/comp-commissioner> (click on "Commissioner's Plan" in the right side column. The Consultant will not be reimbursed for travel and subsistence expenses incurred outside Minnesota unless it has received the State's prior written approval for out of state travel. Minnesota will be considered the home state for determining whether travel is out of state.

**4.2. Payment**

(A) **Invoices.** The State will promptly pay the Consultant after the Consultant presents an itemized invoice for the services actually performed and the State's Authorized Representative accepts the invoiced services. Invoices must be submitted timely no more frequently than monthly.

(B) **Retainage.** Under Minnesota Statute § 16C.08, subdivision 5(b), no more than 90 percent of the amount due under any work order contract may be paid until the final product of the work order contract has been reviewed by the State's agency head. The balance due will be paid when the State's agency head determines that the Consultant has satisfactorily fulfilled all the terms of the work order contract.

**5 Conditions of Payment**

All services provided by the Consultant under a work order contract must be performed to the State's satisfaction, as determined at the sole discretion of the State's Authorized Representative and in accordance with all applicable federal, state, and local laws, ordinances, rules, and regulations. The Consultant will not receive payment for work found by the State to be unsatisfactory or performed in violation of federal, state, or local law.

**6 Authorized Representatives and Project Managers**

The State's Authorized Representative for this master contract is Jerome Ryan, Project Manager, available at 651.201.2393, or his/her successor, and has the responsibility to monitor the Consultant's performance.

The State's Project Manager will be identified in each work order contract.

The Consultant's Authorized Representative is Charles Tye at 952.252.0405, [CTyeAng@aol.com](mailto:CTyeAng@aol.com). If the Consultant's Authorized Representative changes at any time during this master contract, the Consultant must immediately notify the State.

The Consultant's Project Manager will be identified in each work order contract.

**7 Assignment, Amendments, Waiver, and Contract Complete**

7.1 **Assignment.** The Consultant may neither assign nor transfer any rights or obligations under this master contract or any work order contract without the prior consent of the State and a fully executed Assignment Agreement, executed and approved by the same parties who executed and approved this master contract, or their successors in office.

7.2 **Amendments.** Any amendment to this master contract or any work order contract must be in writing and will not be effective until it has been executed and approved by the same parties who executed and approved the original contract, or their successors in office.

7.3 **Waiver.** If the State fails to enforce any provision of this master contract or any work order contract, that failure does not waive the provision or its right to enforce it.

7.4 **Contract Complete.** This master contract and any work order contract contain all negotiations and agreements between the State and the Consultant. No other understanding regarding this master contract or work order contract, whether written or oral, may be used to bind either party.

**8 Indemnification**

In the performance of this contract by Consultant, or Consultant's agents or employees, the Consultant must indemnify, save, and hold harmless the State, its agents, and employees, from any claims or causes of action, including attorney's fees incurred by the state, to the extent caused by Consultant's:

- 1) Intentional, willful, or negligent acts or omissions; or
- 2) Actions that give rise to strict liability; or
- 3) Breach of contract or warranty.

The indemnification obligations of this section do not apply in the event the claim or cause of action is the result of the State's sole negligence. This clause will not be construed to bar any legal remedies the Consultant may have for the State's failure to fulfill its obligation under this contract.

**9 State Audits**

Under Minnesota Statute § 16C.05, subdivision 5, the Consultant's books, records, documents, and accounting procedures and practices relevant to any work order contract are subject to examination by the State and/or the State Auditor or Legislative Auditor, as appropriate, for a minimum of six years from the end of this master contract.

**10 Government Data Practices and Intellectual Property**

10.1. **Government Data Practices.** The Consultant and State must comply with the Minnesota Government Data Practices Act, Minnesota Statute Ch. 13, as it applies to all data provided by the State under any work order contract, and as it applies to all data created, collected, received, stored, used, maintained, or disseminated by the Consultant under the work order contract. The civil remedies of Minnesota Statute § 13.08 apply to the release of the data referred to in this clause by either the Consultant or the State.

If the Consultant receives a request to release the data referred to in this Clause, the Consultant must immediately notify the State. The State will give the Consultant instructions concerning the release of the data to the requesting party before the data is released.

**10.2. Intellectual Property Rights**

(A) **Intellectual Property Rights.** The State owns all rights, title, and interest in all of the intellectual property rights, including copyrights, patents, trade secrets, trademarks, and service marks in the Works and Documents *created and paid for under work order contracts*. Works means all inventions, improvements, discoveries (whether or not patentable), databases, computer programs, reports, notes, studies, photographs, negatives, designs, drawings, specifications, materials, tapes, and disks conceived, reduced to practice, created or originated by the Consultant, its employees, agents, and subconsultants, either individually or jointly with others in the performance of this master contract or any work order contract. Works includes "Documents." Documents are the originals of any databases, computer programs, reports, notes, studies, photographs, negatives, designs, drawings, specifications, materials, tapes, disks, or other materials, whether in tangible or electronic forms, prepared by the Consultant, its employees, agents, or subconsultants, in the performance of a work order contract. The Documents will be the exclusive property of the State and all such Documents must be immediately returned to the State by the Consultant upon completion or cancellation of the work order contract. To the extent possible, those Works eligible for copyright protection under the United States Copyright Act will be deemed to be "works made for hire." The Consultant assigns all right, title, and interest it may have in the Works and the Documents to the State. The Consultant must, at the request of the State, execute all papers and perform all other acts necessary to transfer or record the State's ownership interest in the Works and Documents.

**(B) Obligations**

1. **Notification.** Whenever any invention, improvement, or discovery (whether or not patentable) is made or conceived for the first time or actually or constructively reduced to practice by the Consultant, including its employees and subconsultants, in the performance of the work order contract, the Consultant will immediately give the State's Authorized Representative written notice thereof, and must promptly furnish the Authorized Representative with complete information and/or disclosure thereon.

2. **Representation.** The Consultant must perform all acts, and take all steps necessary to ensure that all intellectual property rights in the Works and Documents are the sole property of the State, and that neither Consultant nor its employees, agents, or subconsultants retain any interest in and to the Works and Documents. The Consultant represents and warrants that the Works and Documents do not and will not infringe upon any intellectual property rights of other persons or entities. Notwithstanding Clause 8, the Consultant will indemnify; defend, to the extent permitted by the Attorney General; and hold harmless the State, at the Consultant's expense, from any action or claim brought against the State to the extent that it is based on a claim that all or part of the Works or Documents infringe upon the intellectual property rights of others. The Consultant will be responsible for payment of any and all such claims, demands, obligations, liabilities, costs, and damages, including but not limited to, attorney fees. If such a claim or action arises, or in the Consultant's or the State's opinion is likely to arise, the Consultant must, at the State's discretion, either procure for the State the right or license to use the intellectual property rights at issue or replace or modify the allegedly infringing Works or Documents as necessary and appropriate to obviate the infringement claim. This remedy of the State will be in addition to and not exclusive of other remedies provided by law.

**11 Affirmative Action Requirements for Contracts in Excess of \$100,000 and if the Consultant has More than 40 Full-time Employees in Minnesota or its Principal Place of Business**

The State intends to carry out its responsibility for requiring affirmative action by its Consultants.

11.1 **Covered Contracts and Consultants.** If the Contract exceeds \$100,000 and the Consultant employed more than 40 full-time employees on a single working day during the previous 12 months in Minnesota or in the state where it has its principle place of business, then the Consultant must comply with the requirements of Minnesota Statute § 363A.36 and Minnesota Rule Parts 5000.3400-5000.3600. A Consultant covered by Minnesota Statute § 363A.36 because it employed more than 40 full-time employees in another state and does not have a certificate of compliance, must certify that it is in compliance with federal affirmative action requirements.

11.2 **Minnesota Statute § 363A.36.** Minnesota Statute § 363A.36 requires the Consultant to have an affirmative action plan for the employment of minority persons, women, and qualified disabled individuals approved by the Minnesota Commissioner of Human Rights ("Commissioner") as indicated by a certificate of compliance. The law addresses suspension or revocation of a certificate of compliance and contract consequences in that event. A contract awarded without a certificate of compliance may be voided.

11.3 **Minnesota Rule Parts 5000.3400-5000.3600.**

(A) **General.** Minnesota Rule Parts 5000.3400-5000.3600 implement Minnesota Statute § 363A.36. These rules include, but are not limited to, criteria for contents, approval, and implementation of affirmative action plans; procedures for issuing certificates of compliance and criteria for determining a Consultant's compliance status; procedures for addressing deficiencies, sanctions, and notice and hearing; annual compliance reports; procedures for compliance review; and contract consequences for non-compliance. The specific criteria for approval or rejection of an affirmative action plan are contained in various provisions of Minnesota Rule Parts 5000.3400-5000.3600 including, but not limited to, parts 5000.3420-5000.3500 and 5000.3552-5000.3559.

(B) **Disabled Workers.** The Consultant must comply with the following affirmative action requirements for disabled workers.

- (1) The Consultant must not discriminate against any employee or applicant for employment because of physical or mental disability in regard to any position for which the employee or applicant for employment is qualified. The Consultant agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified disabled persons without discrimination based upon their physical or mental disability in all employment practices such as the following: employment, upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.
- (2) The Consultant agrees to comply with the rules and relevant orders of the Minnesota Department of Human Rights issued pursuant to the Minnesota Human Rights Act.
- (3) In the event of the Consultant's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with Minnesota Statutes Section 363A.36, and the rules and relevant orders of the Minnesota Department of Human Rights issued pursuant to the Minnesota Human Rights Act.
- (4) The Consultant agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the commissioner of the Minnesota Department of Human Rights. Such notices must state the Consultant's obligation under the law to take affirmative action to employ and advance in employment qualified disabled employees and applicants for employment, and the rights of applicants and employees.
- (5) The Consultant must notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Consultant is bound by the terms of Minnesota Statutes Section 363A.36, of the Minnesota Human Rights Act and is committed

to take affirmative action to employ and advance in employment physically and mentally disabled persons.

- (C) *Consequences.* The consequences for the Consultant's failure to implement its affirmative action plan or make a good faith effort to do so include, but are not limited to, suspension or revocation of a certificate of compliance by the Commissioner, refusal by the Commissioner to approve subsequent plans, and termination of all or part of this contract by the Commissioner or the State.
- (D) *Certification.* The Consultant hereby certifies that it is in compliance with the requirements of Minnesota Statute§ 363A.36 and Minnesota Rule Parts 5000.3400-5000.3600 and is aware of the consequences for noncompliance.

## 12 **Workers' Compensation and Other Insurance**

Consultant certifies that it is in compliance with all insurance requirements specified in Exhibit D1.

Further, the Consultant certifies that it is in compliance with Minnesota Statute§ 176.181, subdivision 2, pertaining to workers' compensation insurance coverage. The Consultant's employees and agents will not be considered State employees. Any claims that may arise under the Minnesota Workers' Compensation Act on behalf of these employees or agents and any claims made by any third party as a consequence of any act or omission on the part of these employees or agents are in no way the State's obligation or responsibility.

## 13 **Publicity and Endorsement**

13.1 *Publicity.* Any publicity regarding the subject matter of a work order contract must identify the State as the sponsoring agency and must not be released without prior written approval from the State's Authorized Representative. For purposes of this provision, publicity includes notices, informational pamphlets, press releases, research, reports, signs, and similar public notices prepared by or for the Consultant individually or jointly with others, or any subconsultants, with respect to the program, publications, or services provided resulting from a work order contract.

13.2 *Endorsement.* The Consultant must not claim that the State endorses its products or services.

## 14 **Governing Law, Jurisdiction, and Venue**

Minnesota law, without regard to its choice-of-law provisions, governs this master contract and all work order contracts. Venue for all legal proceedings out of this master contract and/or any work order contracts, or its breach, must be in the appropriate state or federal court with competent jurisdiction in Ramsey County, Minnesota.

## 15 **Payment to Subconsultants**

(If applicable) As required by Minnesota Statute§ 16A.1245, the prime Consultant must pay all subconsultants, less any retainage, within 10 calendar days of the prime Consultant's receipt of payment from the State for undisputed services provided by the subconsultant(s) and must pay interest at the rate of one and one-half percent per month or any part of a month to the subconsultant(s) on any undisputed amount not paid on time to the subconsultant(s).

## 16 **Minnesota Statute§ 181.59** The vendor will comply with the provisions of Minnesota Statute§ 181.59 which requires:

Every contract for or on behalf of the state of Minnesota, or any county, city, town, township, school, school district, or any other district in the state, for materials, supplies, or construction shall contain provisions by which the Consultant agrees: (1) That, in the hiring of common or skilled labor for the performance of any work under any contract, or any subcontract, no Consultant, material supplier, or vendor, shall, by reason of race, creed, or color, discriminate against the person or persons who are citizens of the United States or resident aliens who are qualified and available to perform the work to which the employment relates; (2) That no Consultant, material supplier, or vendor, shall, in any manner, discriminate against, or intimidate, or prevent the employment of any person or persons

identified in clause (1) of this section, or on being hired, prevent, or conspire to prevent, the person or persons from the performance of work under any contract on account of race, creed, or color; (3) That a violation of this section is a misdemeanor; and (4) That this contract may be canceled or terminated by the state, county, city, town, school board, or any other person authorized to grant the contracts for employment, and all money due, or to become due under the contract, may be forfeited for a second or any subsequent violation of the terms or conditions of this contract.

**17 Termination**

17.1 **Termination by the State.** The State or commissioner of Administration may cancel this master contract and any work order contracts at any time, with or without cause, upon 30 days' written notice to the Consultant. Upon termination, the Consultant will be entitled to payment, determined on a pro rata basis, for services satisfactorily performed.

17.2 **Termination for Insufficient Funding.** The State may immediately terminate this master contract and any work order contract if it does not obtain funding from the Minnesota legislature or other funding source; or if funding cannot be continued at a level sufficient to allow for the payment of the services covered here. Termination must be by written or fax notice to the Consultant. The State is not obligated to pay for any services that are provided after notice and effective date of termination. However, the Consultant will be entitled to payment, determined on a pro rata basis, for services satisfactorily performed to the extent that funds are available. The State will not be assessed any penalty if the master contract or work order is terminated because of the decision of the Minnesota legislature or other funding source, not to appropriate funds. The State must provide the Consultant notice of the lack of funding within a reasonable time of the State's receiving that notice.

**18 Data Disclosure**

Under Minnesota Statute § 270C.65, Subdivision 3 and other applicable law, the Consultant consents to disclosure of its social security number, federal employer tax identification number, and/or Minnesota tax identification number, already provided to the State, to federal and state agencies and state personnel involved in the payment of state obligations. These identification numbers may be used in the enforcement of federal and state laws which could result in action requiring the Consultant to file state tax returns, pay delinquent state tax liabilities, if any, or pay other state liabilities.

**19 E-Verify Certification (In accordance with Minn. Stat. §16C.075)**

For services valued in excess of \$50,000, Consultant certifies that as of the date of services performed on behalf of the State, Consultant and all its subconsultants will have implemented or be in the process of implementing the federal E-Verify program for all newly hired employees in the United States who will perform work on behalf of the State. Consultant is responsible for collecting all subconsultant certifications and may do so utilizing the E-Verify Subconsultant Certification Form available at <http://www.mmd.admin.state.mn.us/doc/EverifySubCertForm.doc>. All subconsultant certifications must be kept on file with Consultant and made available to the State upon request.

**20 Schedule of Exhibits**

The following exhibits are attached and incorporated into this Master Contract.

Attachment 1: Service Categories & Descriptions

- Exhibit A: Sample Work Order
- Exhibit B: Fee Schedule
- Exhibit C: Consultant's Qualifications
- Exhibit D1: State Insurance Requirements
- Exhibit E: Affirmative Action Certification
- Exhibit F: Certification Regarding Lobbying
- Exhibit G: Not Used
- Exhibit H: Not Used
- Exhibit I: Affidavit of Noncollusion

IN WITNESS WHEREOF State has caused this Agreement to be duly executed in its behalf and the Consultant has caused the same to be duly executed on its behalf.

**1. CONSULTANT – Angstrom Analytical, Inc.**

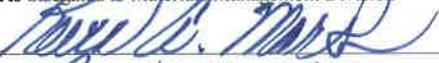
The Consultant certifies that the appropriate person(s) have executed the contract on behalf of the Consultant as required by applicable articles or bylaws.

By:   
Printed Name: CHARLES TYE  
Title: PRESIDENT  
Date: 6/13/12

**2. STATE AGENCY – Department of Administration**

By:   
(with delegated authority)  
Printed Name: Gordon Christofferson  
Title: Project Operations Manager  
Date: 6/14/12

**3. COMMISSIONER OF ADMINISTRATION**  
As delegated to Materials Management Division

By:   
Date: June 19, 2012

# Attachment 1

## Service Categories & Descriptions

Category #	Service Name	Description
1	<b>Asbestos Air Sampling</b>	Air sampling and analysis of samples collected. All sampling is to be conducted by companies and individuals credentialed by the Minnesota Department of Health (MDH) and by use of the requirements provided in Minnesota Rules 4620.3592 to 4620.3598. The State requires that air samples collected at project sites are done by a third party, and that, other than educational facilities, they are analyzed utilizing Phase Contrast Microscopy at the project site. Responder is required to have the equipment for this work. Asbestos air samples collected for educational facilities must use Transmission Electron Microscopy analysis, and will be analyzed off-site.
2	<b>General Air Monitoring</b>	Includes but is not limited to pre-site analysis and on-site project management, testing and analysis (excludes asbestos air monitoring).
3	<b>Asbestos Bulk Material Analysis</b>	Analysis of bulk material collected as part of an inspection. Analysis must be conducted by laboratories accredited according to Minnesota Rules 4620.3460.
4	<b>Fungal Investigation and Sampling</b>	Investigation, sampling, evaluating, reporting, and providing corrective recommendations for fungal organism concerns.
5	<b>General Environmental Condition Evaluations</b>	Evaluations of workplace issues that could include regulatory requirements of the EPA, Minnesota Pollution Control Agency, or Minnesota Department of Labor and Industry's Occupational Safety and Health Administration (OSHA). Examples of these conditions could include, but are not limited to, the evaluation of suspect chemical fluids, PCB (Polychlorinated Biphenyl) containing items, hazardous materials, mercury and underground storage tanks (USTs).
6	<b>HVAC Evaluation</b>	Investigation, sampling, evaluating, reporting, and providing corrective recommendations and designs for HVAC system conditions that could adversely affect indoor air quality in state buildings. Such recommendations could include the measurement and certification of local ventilation exhaust units.
7	<b>Indoor Air Quality Assessment</b>	Investigation, sampling, evaluating, reporting, and providing corrective recommendations for indoor air quality concerns. Such sampling is required to be done using recognized Industrial Hygiene standards, and could include, but not be limited to, noise, volatile compounds, particulates, chemical compounds, fumes, and other workplace contaminants.
8	<b>Lead in Paint Sampling</b>	Investigation, sampling, evaluating, reporting, and providing corrective recommendations for lead concerns. Such sampling is to be conducted by companies and individuals credentialed by the Minnesota Department of Health and by use of the requirements provided in Minnesota Rules 4761.2550 through 4761.2570.
9	<b>Hazardous Material Surveys</b>	Conduct surveys for suspect asbestos containing, or other hazardous materials, building and site materials and provide

# Attachment 1

## Service Categories & Descriptions

	<b>with Electronic Database of Information</b>	corrective recommendations. Information must be put into an electronic format, and electronic data must be converted to portable document format (pdf) on CD-R media. Asbestos surveys and management plans are to be performed by individuals credentialed by the Minnesota Department of Health and by use of the requirements provided in Minnesota Rules, parts 4620.3460 and 4620.3470.
10	<b>Not Used</b>	Not Used
11	<b>Other Hazardous Material Industrial Hygiene Services</b>	Investigation, sampling, evaluating, reporting, and providing corrective recommendations for other hazardous material concerns.

## Exhibit A

### SAMPLE STATE OF MINNESOTA PROFESSIONAL AND TECHNICAL SERVICES WORK ORDER CONTRACT

This work order contract is between the State of Minnesota, acting through its \_\_\_\_\_ ("State") and \_\_\_\_\_ ("Consultant"). This work order contract is issued under the authority of Master Contract T-Number 13AIH, SWIFT Number \_\_\_\_\_, and is subject to all provisions of the master contract which is incorporated by reference.

#### Work Order Contract

#### 1 Term of Contract

1.1 *Effective date:* \_\_\_\_\_, or the date the State obtains all required signatures under Minnesota Statute § 16C.05, subdivision 2, whichever is later.

**The Consultant must not begin work under this contract until this contract is fully executed and the Consultant has been notified by the State's Authorized Representative to begin the work.**

1.2 *Expiration date:* \_\_\_\_\_, or until all obligations have been satisfactorily fulfilled, whichever occurs first.

#### 2 Consultant's Duties

The Consultant, who is not a state employee, will: \_\_\_\_\_.

#### 3 Consideration and Payment

3.1 *Consideration.* The State will pay for all services performed by the Consultant under this work order contract as follows:

(A) *Compensation.* The Consultant will be paid \_\_\_\_\_.

(B) *Travel Expenses.* Reimbursement for travel and subsistence expenses actually and necessarily incurred by the Consultant as a result of this work order contract will not exceed \$\_\_\_\_\_.

(C) *Total Obligation.* The total obligation of the State for all compensation and reimbursements to the Consultant under this work order contract will not exceed \$\_\_\_\_\_.

3.2. *Invoices.* The State will promptly pay the Consultant after the Consultant presents an itemized invoice for the services actually performed and the State's Authorized Representative accepts the invoiced services. Invoices must be submitted timely and according to the following schedule:

#### 4 Project Managers

The State's Project Manager is \_\_\_\_\_. The State's Authorized Representative will certify acceptance on each invoice submitted for payment.

The Consultant's Project Manager is \_\_\_\_\_. If the Consultant's Project Manager changes at any time during this work order contract, the Consultant must immediately notify the State.

**SIGNATURES AS REQUIRED BY THE STATE.**

## Exhibit B

### 2012/13 FEE SCHEDULE:

#### Industrial Hygiene Services for Asbestos and Other Hazardous Material Abatement Project Management, Testing & Surveys.

#### STATE OF MINNESOTA MASTER PROFESSIONAL / TECHNICAL SERVICES CONTRACT

#### Hourly rates for MN Licensed Lead, Asbestos, Mold and HVAC Decontamination Industrial Hygienists, by individual.

<b>Charles Tye</b>	<b>\$110.00</b>
<b>Darrell Potocnik</b>	<b>\$85.00</b>
<b>Kevin Hagen</b>	<b>\$85.00</b>
<b>Steve Wallinga</b>	<b>\$80.00</b>
<b>John Partlow</b>	<b>\$75.00</b>

#### Office / Admin Support

<b>Samantha Ferguson</b>	<b>\$50.00</b>
<b>Lisa Dunn</b>	<b>\$55.00</b>

## Exhibit B

**Subconsultant and testing services not provided by Angstrom will be invoiced at cost, on approval of RECS Project Manager.**

**Polarized Light Microscopy analyses (EPA/600/R-93/116 methodology) used for analyzing bulk materials for the presence of asbestos: \$30.00 each with 24 hour turn around time.**

**Mold sample analyses: bulk including physical, RODAC plate and tape lift, air, including Cyclex D, Air-O-Cell and Anderson Impinger \$80.00 each with 5 day turn around time.**

### **Instrument Time:**

**X-Ray Fluorescence Analyzer (XRF) used in the detection of lead in paint films, soils and air filters. \$325.00 per day – (8 or 10 hour shifts).**

**Lumex Zeeman Spectroscopy Analyzer used to detect mercury vapor. \$270.00 per day – (8 or 10 hour shifts).**

**Dust Track Particle analyzer used on mold abatement projects to measure real time spore counts \$200.00 per day – (8 or 10 hour shifts).**

## EXHIBIT C - QUALIFICATIONS

<p><b>STATE OF MINNESOTA REAL ESTATE AND CONSTRUCTION SERVICES (State) Qualifications and General Requirements Information</b></p> <p><b>2. RESPONDER'S NAME &amp; ADDRESS (include 9-digit zip code):</b>          Angstrom Analytical, Inc.          5001 Cedar Lake Road South          St. Louis Park, MN 55416-1618</p> <p><b>2a. COUNTY OF RESPONDER'S LOCATION:</b>          Hennepin</p> <p><b>2b. DATE FIRM ESTABLISHED:</b>          October 1993</p>	<p><b>1.a. PROJECT NUMBER (from RFP):</b> N/A  <b>1.b. PROJECT NAME (from RFP):</b> Professional Industrial Hygiene Services.  <b>1.c. PROJECT LOCATION:</b> Statewide</p> <p><b>2d. NAME, TITLE &amp; TELEPHONE NUMBER PERSON SIGNING PROPOSAL (see Section 8):</b>          Charles Tye, President. 612 865 2020</p> <p><b>2e. RESPONDER'S (CONTACT) TELEPHONE NO.:</b>          952 252 0405</p> <p><b>2f. RESPONDER'S FAX NUMBER:</b>          952 252 0407</p> <p><b>2g. RESPONDER'S EMAIL ADDRESS:</b>          CTyeAng@aol.com</p>
<p><b>3. RESPONDER'S STATEMENT OF INTEREST TO PERFORM THE SERVICES AS INDICATED IN THE RFP:</b></p> <p>Angstrom Analytical, Inc. is strongly interested and committed to continue working with the State of Minnesota, Department of Administration, Real Estate &amp; Construction Services as a Master Contract Holder for Professional Industrial Hygiene Services. Angstrom Has held a State of Minnesota "M" Contract for I.H. Services for 18 years.</p>	
<p><b>3a. RESPONDER'S STATEMENT ON AVAILABILITY TO START WORK PROMPTLY UPON EXECUTION OF CONTRACT AND TO PROMPTLY DELIVER SERVICES:</b></p> <p>Angstrom Analytical, Inc. has the available personnel, equipment and supplies to begin work within 24 hours of any Notice to Proceed being issued by RECS.</p>	
<p><b>3b. RESPONDER'S STATEMENT ON THEIR ABILITY TO WORK ON MULTIPLE PROJECTS SIMULTANEOUSLY: Three (3) or more employees AAR certified.</b></p> <p>Angstrom Analytical has five (5) bone fide employees on the AIHA - AAR listing. I am a member of the Board of Directors of the AIHA Field Registry Program which includes the AAR. We thus have the ability to staff and work on multiple RECS projects simultaneously.</p>	

4. RESPONDER'S STATEMENT ON ABILITY, QUALIFICATIONS & APPROPRIATE LICENSURE TO PERFORM ALL SERVICE CATEGORIES 1 THROUGH 11, including Responder's ability and experience to provide air monitoring, without the use of subcontractors, during asbestos abatement activities. (See Table of Service Categories): Include statement on compliance with Minnesota Rules 4620.3300 through 3724

[Skip this question and go to Question 4a if Responder is only seeking a master contract for Category 12 (Remediation/Abatement Design) services]

Angstrom Analytical Inc., can perform all aspects of this RFP, in-house, using our own laboratory, equipment and personnel. All qualifications and licensure both for the lab and the personnel follow in this response to all categories in the I.H. RFP. We do not use sub-contractors, all staff are our own employees. We comply with all aspects of MN Rules 4620.3300 through 3724.

4a. Not Used RESPONDER'S STATEMENT ON ABILITY, QUALIFICATIONS & APPROPRIATE LICENSURE TO PERFORM CATEGORY 12 (REMEDIATION/ABATEMENT-DESIGN): Include statement on compliance with MN Rules 4620.3350.

4b. RESPONDER'S STATEMENT ON SAMPLING AND LABORATORY ANALYSIS provided will be in accordance with MN Rules 4620 and Statement on sampling and that a National Institute of Science Voluntary Accreditation Program (NIST), Accredited by the National Voluntary Laboratory Accreditation Program (NVLAP), American Industrial Hygiene Association (AIHA) or comparable accredited lab will be used for laboratory work.

Angstrom Analytical, Inc. states that the above statement (4b) will be adhered to. All sampling and laboratory analysis will be in accordance with MN Rules 4620 and a National Institute of Science Voluntary Accreditation Program (NIST), Accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) or an American Industrial Hygiene Association (AIHA) or comparable accredited lab will be used for laboratory work. Angstrom Analytical, Inc. is an accredited Bulk Asbestos Lab via the MN DOH and AIHA listings. See following attachment.



**ngstrom Analytical &  
Environmental Services**

5001 Cedar Lake Road \* St. Louis Park, MN 55416  
952-252-0405 fax: 952-252-0407

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May 29, 2012

**Asbestos Bulk Material Analysis Compliance**

All asbestos bulk samples, collected by Angstrom Analytical licensed asbestos building inspectors, are analyzed by our in-house laboratory. Our laboratory is accredited per Minnesota Rules 4620.3460 (see attached document from MDH) and meets the criteria of Category #3. Angstrom Analytical, Inc. hereby states that we are in compliance with this requirement.

Sincerely,

Charles Tye, President  
Angstrom Analytical, Inc.



## Minnesota Department of Health

### Asbestos

### Accredited Asbestos Laboratories in Minnesota

The following laboratories located in Minnesota are accredited by the American Industrial Hygiene Association (AIHA) or National Voluntary Laboratory Accreditation Programs (NVLAP).

Disclaimer: This information is provided as a service and is not intended to be an endorsement by MDH of the companies named.

**Angstrom Analytical, Inc.**  
5001 Cedar Lake Road South  
Minneapolis, MN 55416  
952-252-0405

**Legend Technical Services, Inc.**  
88 Empire Drive  
St. Paul, MN 55102  
651-642-1150

**Braun Intertec Corp.**  
11001 Hampshire Avenue South  
Minneapolis, MN 55438  
952-995-2688

**Nova Consulting Group, Inc.**  
1107 Hazeltine Boulevard, Suite 400  
Chaska, MN 55318  
952-448-9393

**EMSL Analytical, Inc.**  
14375 - 23rd Avenue North  
Minneapolis, MN 55447  
763-449-4922

**Techtron Engineering, Inc.**  
640 East Main Street  
Anoka, MN 55303  
763-712-9502

651-201-5000 Phone  
888-345-0823 Toll-free  
651-201-5797 TTY

Information on this website is available in alternative formats to individuals with disabilities upon request.

Updated Wednesday, 07-Sep-2011 12:39:31 CDT

**5. QUALIFICATIONS OF RESPONDER'S KEY PERSONS AND SPECIALISTS - ADD ADDITIONAL PAGES IF NECESSARY. Following this section, Insert copies of employees' licenses, certifications, credentials.**

<p><b>a. NAME AND TITLE:</b> Charles Tye, President</p>	<p><b>a. NAME AND TITLE:</b> Steven Wallinga, Senior Industrial Hygienist, Office Manager.</p>
<p><b>b. PROJECT ASSIGNMENT:</b></p> <ol style="list-style-type: none"> <li>1) Asbestos Air Monitoring</li> <li>2) General Air Monitoring</li> <li>3) Asbestos Bulk Material Analyst</li> <li>4) Fungal Investigation &amp; Sampling</li> <li>5) General Environmental Condition Evaluations</li> <li>6) HVAC Evaluation</li> <li>7) Indoor Air Quality Assessment</li> <li>8) Lead in Paint Sampling</li> <li>9) Haz-Mat Surveys with Electronic Database of Information</li> <li>11) Other Haz-Mat Industrial Hygiene Services</li> </ol>	<p><b>b. PROJECT ASSIGNMENT:</b></p> <ol style="list-style-type: none"> <li>1) Asbestos Air Monitoring</li> <li>2) General Air Monitoring</li> <li>3) N/A</li> <li>4) Fungal Investigation &amp; Sampling</li> <li>5) General Environmental Condition Evaluations</li> <li>6) HVAC Evaluation</li> <li>7) Indoor Air Quality Assessment</li> <li>8) Lead in Paint Sampling</li> <li>9) Haz-Mat Surveys with Electronic Database of Information</li> <li>11) Other Haz-Mat Industrial Hygiene Services</li> </ol>

<p><b>c. NAME OF FIRM WITH WHICH ASSOCIATED:</b></p> <p>Angstrom Analytical, Inc. Full time employee.</p>	<p><b>c. NAME OF FIRM WITH WHICH ASSOCIATED:</b></p> <p>Angstrom Analytical, Inc. Full time employee.</p>
<p><b>d. YEARS EXPERIENCE:</b></p> <p>WITH THIS FIRM: 10 years WITH OTHER FIRMS: 9 years EnviroBate</p>	<p><b>d. YEARS EXPERIENCE:</b></p> <p>WITH THIS FIRM: 20+ years WITH OTHER FIRMS: 10+ years EnviroNet, Inc. (President &amp; CEO)</p>
<p><b>e. EDUCATION: DEGREE(S) &amp; CERTIFICATIONS / YEAR / INSTITUTION</b> [ insert copies following this page ]</p> <p>B.A. Russian Studies University of Minnesota 1988 A.A.S. Computer Network Administration Hennepin Technical College, Eden Prairie. (see attached Resume) 2000</p>	<p><b>e. EDUCATION: DEGREE(S) &amp; CERTIFICATIONS / YEAR / INSTITUTION</b> [ insert copies following this page ]</p> <p>BSc, MSc Pure &amp; Applied Physics with Industrial Studies (see attached Resume) 1983 University of Salford, UK.</p>
<p><b>f. LICENSES &amp; CERTIFICATIONS: YEAR / INSTITUTION</b> [ insert copies following this page ]</p> <p>MDH Asbestos Site Supervisor MDH Asbestos Inspector MDH Lead Assessor NIOSH 582 AAR Analyst XRF &amp; Lumex Operator</p>	<p><b>f. LICENSES &amp; CERTIFICATIONS: YEAR / INSTITUTION</b> [ insert copies following this page ]</p> <p>MDH Asbestos Site Supervisor - 1988 to date MDH Asbestos Inspector MDH Asbestos Management Planner MDH Asbestos Project Designer MDH Lead Assessor NIOSH 582 – McCrone Research Institute 1987 AAR Analyst Bulk Asbestos Analyst – McCrone Research Institute 1986 XRF &amp; Lumex Operator</p>
<p><b>g. EXPERIENCE AND QUALIFICATIONS RELEVANT TO THE WORK CITED IN THIS RFP:</b> [ List projects in next section -6 ]</p> <p>Categories 1, 2, 3, 4, 5, 6, 7, 8, 9, 11.</p> <p>Certs follow this section, Experience listed in Section 6.</p>	<p><b>g. EXPERIENCE AND QUALIFICATIONS RELEVANT TO THE WORK CITED IN THIS RFP:</b> [ List projects in next section -6 ]</p> <p>Categories 1, 2, 3, 4, 5, 6, 7, 8, 9, 11.</p> <p>Certs follow this section, Experience listed in Section 6.</p>

<p><b>a. NAME AND TITLE:</b> Darrell Potocnik, Senior Field Industrial Hygienist</p>	<p><b>a. NAME AND TITLE:</b> Kevin Hagen, Senior Industrial Hygienist</p>
<p><b>b. PROJECT ASSIGNMENT:</b></p> <ol style="list-style-type: none"> <li>1) Asbestos Air Monitoring</li> <li>2) General Air Monitoring</li> <li>3) N/A</li> <li>4) Fungal Investigation &amp; Sampling</li> <li>5) General Environmental Condition Evaluations</li> <li>6) HVAC Evaluation</li> <li>7) Indoor Air Quality Assessment</li> <li>8) N/A</li> <li>9) Haz-Mat Surveys with Electronic Database of Information</li> <li>11) Other Haz-Mat Industrial Hygiene Services</li> </ol>	<p><b>b. PROJECT ASSIGNMENT:</b></p> <ol style="list-style-type: none"> <li>1) Asbestos Air Monitoring</li> <li>2) General Air Monitoring</li> <li>3) Asbestos Bulk Material Analyst</li> <li>4) Fungal Investigation &amp; Sampling</li> <li>5) General Environmental Condition Evaluations</li> <li>6) HVAC Evaluation</li> <li>7) Indoor Air Quality Assessment</li> <li>8) Lead in Paint Sampling</li> <li>9) Haz-Mat Surveys with Electronic Database of Information</li> <li>11) Other Haz-Mat Industrial Hygiene Services</li> </ol>
<p><b>c. NAME OF FIRM WITH WHICH ASSOCIATED:</b> Angstrom Analytical, Inc. Full time employee.</p>	<p><b>c. NAME OF FIRM WITH WHICH ASSOCIATED:</b> Angstrom Analytical, Inc. Full time employee.</p>

<p><b>d. YEARS EXPERIENCE:</b></p> <p><b>WITH THIS FIRM:</b> 15 years  <b>WITH OTHER FIRMS:</b> 9 Twin Cities Testing &amp; A.E.S.</p>	<p><b>d. YEARS EXPERIENCE:</b></p> <p><b>WITH THIS FIRM:</b> 6 years  <b>WITH OTHER FIRMS:</b> 8 years Brugan Environmental, Inc.</p>
<p><b>e. EDUCATION: DEGREE(S) &amp; CERTIFICATIONS / YEAR / INSTITUTION</b>  [ insert copies following this page ]</p> <p>Vermillion Community College – Water Resources Technology. 1985 / 6  St. Cloud Technical Institute - Water &amp; Waste Treatment Technology. 1986 / 7  Eveleth Technical Institute – Auto Mechanics. (see attached Resume). 1975</p> <p><b>f. LICENSES &amp; CERTIFICATIONS: YEAR / INSTITUTION</b>  [ insert copies following this page ]</p> <p>MDH Asbestos Site Supervisor  MDH Asbestos Inspector  NIOSH 582 – AES  AAR Analyst</p>	<p><b>e. EDUCATION: DEGREE(S) &amp; CERTIFICATIONS / YEAR / INSTITUTION</b>  [ insert copies following this page ]</p> <p>Graduated Stillwater High School 1985  U.S. Navy 1985 to 1989 – Atlantic Fleet.</p> <p><b>f. LICENSES &amp; CERTIFICATIONS: YEAR / INSTITUTION</b>  [ insert copies following this page ]</p> <p>MDH Asbestos Site Supervisor  MDH Asbestos Inspector  MDH Lead Assessor  NIOSH 582  AAR Analyst  Bulk Asbestos Analyst – MICA, Chicago 2010  XRF &amp; Lumex Operator</p>
<p><b>g. EXPERIENCE AND QUALIFICATIONS RELEVANT TO THE WORK CITED</b>  <b>IN THIS RFP:</b> [ List projects in next section -6 ]</p> <p>Categories 1, 2, 4, 5, 6, 7, 9, 11.</p> <p>Certs follow this section, Experience listed in Section 6.</p>	<p><b>g. EXPERIENCE AND QUALIFICATIONS RELEVANT TO THE WORK CITED</b>  <b>IN THIS RFP:</b> [ List projects in next section -6 ]</p> <p>Categories 1, 2, 3, 4, 5, 6, 7, 8, 9, 11.</p> <p>Certs follow this section, Experience listed in Section 6.</p>

<p>a. NAME AND TITLE:</p> <p>John Partlow, Industrial Hygienist.</p>	<p>a. NAME AND TITLE:</p>
<p>b. PROJECT ASSIGNMENT:</p> <ol style="list-style-type: none"> <li>1) Asbestos Air Monitoring</li> <li>2) General Air Monitoring</li> <li>3) N/A</li> <li>4) Fungal Investigation &amp; Sampling</li> <li>5) General Environmental Condition Evaluations</li> <li>6) N/A</li> <li>7) Indoor Air Quality Assessment</li> <li>8) N/A</li> <li>9) Haz-Mat Surveys with Electronic Database of Information</li> <li>11) Other Haz-Mat Industrial Hygiene Services</li> </ol>	<p>b. PROJECT ASSIGNMENT:</p>
<p>c. NAME OF FIRM WITH WHICH ASSOCIATED:</p> <p>Angstrom Analytical, Inc. Full time employee.</p>	<p>c. NAME OF FIRM WITH WHICH ASSOCIATED:</p>
<p>d. YEARS EXPERIENCE:</p> <p>WITH THIS FIRM: 14 years WITH OTHER FIRMS: 6 years A.E.S.</p>	<p>d. YEARS EXPERIENCE:</p> <p>WITH THIS FIRM: WITH OTHER FIRMS:</p>
<p>e. EDUCATION: DEGREE(S) &amp; CERTIFICATIONS / YEAR / INSTITUTION [ insert copies following this page ]</p> <p>B.S. Biology. Winona State University. 1988. (see attached Resume)</p>	<p>e. EDUCATION: DEGREE(S) &amp; CERTIFICATIONS / YEAR / INSTITUTION [ insert copies following this page ]</p>

<p>f. LICENSES &amp; CERTIFICATIONS: YEAR / INSTITUTION [ insert copies following this page ]</p>	<p>f. LICENSES &amp; CERTIFICATIONS: YEAR / INSTITUTION [ insert copies following this page ]</p> <p>MDH Asbestos Site Supervisor MDH Asbestos Inspector NIOSH 582 – AES AAR Analyst</p>
<p>g. EXPERIENCE AND QUALIFICATIONS RELEVANT TO THE WORK CITED IN THIS RFP: [ List projects in next section -6 ]</p>	<p>g. EXPERIENCE AND QUALIFICATIONS RELEVANT TO THE WORK CITED IN THIS RFP: [ List projects in next section -6 ]</p> <p>Categories 1, 2, 4, 5, 6, 7, 9, 11.</p> <p>Certs follow this section, Experience listed in Section 6.</p>

# STAFF



**Angstrom Analytical &  
Environmental Services**

# Charles Tye



**Angstrom Analytical &  
Environmental Services**

## C.V. of Charles Tye

4345 North Shore Drive, Orono, MN 55364. (952) 472 6002 or (612) 865 2020

### Principal Areas of Expertise:

Physical properties of coal and coal-derived materials. Modes of moisture inclusion in low-rank coals. Research, development and manufacture of chemical products for use in asbestos & lead paint abatement industry. Hazardous material identification, assessment and removal. In depth Knowledge of U.S. EPA, OSHA, SARA (Title III), RCRA and Superfund rules and regs, plus in depth knowledge of European Health and Safety Executive's regulation series. Senior management of analytical laboratories, especially those involved in the identification of asbestiform minerals by recognized PLM, PCM, XRD, SEM and TEM techniques and also lead based paints by XRF, AAS and ICAP. Upper management of hazardous material abatement and professional service companies. Consultant to U.S. Dept of Commerce / National Institute of Standards and Technology (formerly NBS) with NVLAP (National Voluntary Lab Accreditation Programs), on site assessor, implementing laboratory QA/QC Programs. ISO 9000 Lead Assessor.

### Education:

M.Sc. (B.Sc. Honors) Applied Physics with Industrial Studies, University of Salford, Manchester, U.K.

### Professional Experience:

- 1989 - Present      General Manager, **Angstrom Analytical**, Eden Prairie MN. Consulting Company initially set up as a vehicle to contract with the U.S. Dept of commerce in order to accredit asbestos analysis labs countrywide under the NIST NVLAP program, later expanded into the analysis of asbestos and lead samples and to general contract the removal of underground storage tanks. Consulting services offered to asbestos, lead & haz-mat abatement contractors.
- Dec. 1988 - Dec. 1991      President and Chief Executive Officer, **Environet, Inc.**, Edina, Minnesota.  
Responsible for the overall direction of all aspects of a \$4 million per year asbestos, lead based paint, underground storage tank and other hazardous material abatement / removal contractor. Responsibilities included obtaining contractor / consultant licencing in more than 20 states of the union.
- Jan. 1988 - Nov. 1988      Director, Industrial Hygiene and Analytical Services, **Environet, Inc.**, Edina, Minnesota.  
Responsible for the direction of the industrial hygiene activities associated with asbestos and other hazardous materials abatement. Also responsible for the overall direction of the analytical services offered, principally, but not limited to, the fields of asbestos identification and quantification by polarized light, phase contrast and transmission electron microscopy techniques.
- March 1987 - Jan. 1988      Research Scientist/Operations Manager, **Certified Technologies Corporation**, Eden Prairie, Minnesota.  
Responsible for the research, development and production of fire retardant, non-toxic products used in the encapsulation and/or removal of asbestos and mineral wool containing materials. Further, responsible for the organization and presentations of technical training seminars for sales personnel assigned to sell these products through general safety or insulation distributors.

- 1986 - March 1987      **Research Supervisor, Special Projects Branch, University of North Dakota Energy Research Center, Grand Forks, ND.**
- Responsible for the designing and implementation of specific asbestos hazard assessment and abatement programs. These include on-site surveys, representative bulk and air sample collection, analysis by accepted PLM, PCM, XRD, SEM and TEM methods and hazardous material abatement consulting.
- 1983 - 1986      **Physicist, Coal Science Division, University of North Dakota Energy Research Center, Grand Forks, ND.**
- Involved in relating observed mechanical and physical properties to the 3-D structural arrangement of the coal macromolecules; investigating the porous structure and determining the distributions and modes of incorporation of water in low-rank coals; developing approaches for the measurement of porous volume, surface area, and moisture in ways meaningful for low-rank coal utilization.
- 1982 - 1983      **Physics Dept., University of Salford, Manchester, U.K.**
- Research technician, involved in laboratory research studies on the toxicity of ingested lead using mathematical and computer modeling techniques. Researched potentially new methods for the analysis and identification of asbestos-containing samples, in addition to routine analysis.
- 1981 - 1982      **Research and Development Division, Avon Rubber Co., U.K.**
- Laboratory Research Assistant. Formulated rubber compounds for auto and aero industries. Tested resultant products on rheometers, wear testers, friction-measuring devices. Also involved in wave energy project for U.K. D.O.E.

### Lead Based Paint and Related Haz-Mat Experience

- 1991 - Present      **Licensed & registered MN Underground Storage Tank Contractor, Consultant and Site Supervisor.**
- 1990 - Present      **Instructor for the Minnesota Safety Council, in the fields of asbestos and lead based paint abatement programs.**
- 1989 - Present      **Chemist and Chief Consulting Analyst.. ARC Laboratories Inc., Grand Forks ND and Colorado Springs, CO.**
- 1989 - Present      **Advisory Board Member for Abatement News, Stevens Publishing, Waco TX. Monthly published trade journal for lead, asbestos and UGST testing & remediation.**
- 1990 (May)      **Underground Storage Tank Training, Albert Lea Technical College, Albert Lea, MN. In accordance with Minnesota rule chapter 7105**
- 1990 (October)      **Lead Abatement Workshop, Environmental Control Group, Inc. Princeton, NJ.**
- 1990 (December)      **Lead Inspection Training, Institute for Environmental Education, Boston, MA. In accordance with Massachusetts Dept of Public Health 105CMR460.000.**
- 1991 (December)      **Deleading: How to successfully conduct business with Public Housing Authorities. Sponsored by Facility News Magazines, Sanibel Island, FL.**

## Asbestos Related Experience

1982-1983                    **Asbestos Analyst, Baines Environmental Consultants, Manchester, U.K.**  
Performed routine analysis of bulk asbestos containing samples using polarized light microscopy techniques.

1982 (July)                    **Polarized Light Microscopy Course, McCrone, London, U.K.**

1986 (September)            **National Asbestos Technical Conference, N.A.C. New Orleans, Louisiana, U.S.A.**

1986 (October)                **Microscopical Identification of Asbestos Course, McCrone, Chicago, Illinois, U.S.A.**

1986 (December)             **Asbestos Management in Buildings Course, Tufts University, Medford, Massachusetts, U.S.A.**

1987 (January)                **Asbestos Fiber Counting Course (NIOSH 7400) McCrone, Chicago, Illinois, U.S.A.**

1987 ( June)                    **Applied Safety Considerations for Supervisors and Managers, Georgia Institute of Technology, Atlanta, U.S.A.**

1987 (October)                **Third Annual Asbestos Abatement in the Federal Government Conference. Hall-Kimbrell Environmental Services, Kansas City, Missouri, U.S.A.**

1988 (March)                 **Building Inspection and Management Planning Course – AHERA Accreditation. License # B2238 & B2158. Midwest Asbestos Information Center. The University of Illinois at Chicago, U.S.A.**

1988(May)                     **Asbestos Abatement in the North Central Region - Hall Kimbrell Environmental Services, Kansas City, Missouri, U.S.A. Conference held in St Paul, Minnesota, U.S.A.**

1988(June)                    **Practices and Procedures for Asbestos Control - AHERA Accreditation for Asbestos Supervisors. License # VIKU87040-14. National Asbestos Training Center, The University of Kansas, Overland Park, Kansas, U.S.A.**

1988(July)                    **Transmission Electron Microscopy Asbestos Analysis** An intensive hands-on lecture and laboratory course conducted by the R.J. Lee group of Monroeville, Pennsylvania with JEOL at the JEOL Training Center in Peabody Massachusetts, U.S.A.

1988 - Present                **National Institute for Standards and Technology National Voluntary Lab Accreditation Program (NIST NVLAP) Technical Expert / Laboratory Inspector. Inspector of laboratories that request accreditation under the NVLAP for bulk asbestos analysis by Polarized Light Microscopy and air asbestos analysis by Analytical Electron Transmission Electron Microscopy. Involved in development of analyses of lead based paint for future Lab Accreditation Program(s).**

Current                        **Accredited in all five (5) AHERA disciplines - Asbestos Worker, Asbestos Site Supervisor, Building Inspector, Management Planner and Project Designer. Fully licensed in Minnesota and North Dakota.**

### Professional Memberships:

- National Asbestos Council  
Committee Member of the Electron Microscopy Methodology Task Force
- Certified Environmental Assessor (CEI)
- American Association for the Advancement of Science
- American Chemical Society, Division of Fuel Chemistry
- Minnesota Asbestos Abatement Contractors Association (MAACA). Vice President 1990 & 1991.

### Publications and Presentations:

- Dollimore, J., Tye, C. Chippendale, P. and Jagasia, M. **The Toxicity of Ingested Lead. Parts I-IV.** International Environment and Safety, August 1982.
- Dollimore, J., Hayward, K.I., Anderson, M., Tye, C. **Geometric Reactivity**, 16th Biennial Conference on Carbon, ACS National Meeting, 1983, San Diego, California.
- Dollimore, J. Graham, S.C., Hossain, T., Hayward, K.I., and Tye, C. **Precursor Order in the Graphitisation of Simple Aromatic Molecules.** 16th Biennial Conference on Carbon, 1983, San Diego, California.
- Tye, C., Dollimore, J., Libberton, G., and Graham, K. **The Heats of Wetting of Coal-Based Activated Carbon.** Carbone 84, International Carbon Conference 1984, Bordeaux, France.
- Hauserman, W.B., and Tye, C. **Mechanical and Thermal Friability of Coals and Modes of Water Bonding.** International Coal Testing Conference, 1984. Lexington, Kentucky.
- Tye, C., Neumann, R. and Schobert, H.H. **The Uses of Dielectric Spectra and Immersional Calorimetry in the Characterization of Low-Rank Coals.** 1985 ACS National Meeting, Division of Fuel Chemistry, Miami, Florida.
- Tye, C., and Kinney, W.A., **The Effects of Different Wetting Liquids on the Heat of Immersion of Low-Rank Coals.** 1985 40th Annual Calorimetry Conference, Asilmoar, California.
- Tye, C., and Swanson, M.L. **The Uses of Heat and Immersion Calorimetry in Determining the Surface Areas of Some Supercritically Extracted Lignite Residues.** 1986, Thermodynamics in Industry, 41st Annual Calorimetry Conference, Annandale, New Jersey.
- Tye, C., Maas, D.J. and Swanson, M.L. **The Role of Heat Immersion Calorimetry and Gas Adsorption in Determining the Surface Areas of Thermally Treated Lignite and Supercritically Solvent Extracted Low-Rank Coal Residues.** 1987 ACS National Meeting, Division of Fuel Chemistry, Denver, Colorado.
- Tye, C., Stevenson, R.J. **The Collection and Analysis of Samples Potentially Containing Asbestos.** Waste Management for the Energy Industries Conference 1987, Grand Forks, North Dakota.
- Tye, C. **Some Technological Products Used in the Asbestos (Removal and Encapsulation) Abatement Industry.** Chiltons Industrial Safety & Hygiene. Volume 21 Number 7. July 1987.
- Tye, C., **A Developing Science: Asbestos Abatement Technology.** Insulation Outlook Magazine. October 1987.



# AIHA Registry Programs<sup>SM</sup>

## Asbestos Analysts Registry AAT Performance Results Report

Charles Tye  
Angstrom Analytical, Inc.  
5001 Cedar Lake Road South  
  
Saint Louis Park, MN 55416

4/25/2012  
Organization ID: 101099

### REPORT OF PERFORMANCE FOR ROUND # 101, ORGANIZATION # 101099

The following individuals have met all the requirements\* for Registration in the Asbestos Analysts Registry (AAR) and are listed as Registered Analysts:

ID	Name	RESULTS (#/mm2) FOR THE CURRENT ROUND (R101)								Outliers			Performance
		A1011	B1011	C1011	D1011	R101	R100	TOT					
2081	Potocnik, Darrell	604	246	417	624	0	2	2	Acceptable				
7337	Tye, Charles	588	254	390	642	0	0	0	Acceptable				
7711	Partlow, John	596	234	346	666	0	1	1	Acceptable				
8481	Wallinga, Stephen E.	612	263	403	616	0	1	1	Acceptable				
8863	Hagen, Kevin Paul	576	256	398	634	0	0	0	Acceptable				

The following individuals have applied for Registration in the AAR, but have not met all the criteria\* or they have lost their registered status due to non-proficiency or non-participation.:

ID	Name	RESULTS (#/mm2) FOR THE CURRENT ROUND (R101)								Outliers			Performance
		A1011	B1011	C1011	D1011	R101	R100	TOT					

The determination of outliers for the above results is based on the following performance limits:

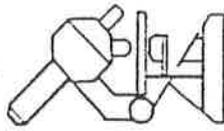
#### Reference Values for Round #101

Sample ID	Batch	Reference Mean	Lower Limit	Upper Limit
A1011	1	555	272	938
B1011	1	247	121	418
C1011	1	419	205	709
D1011	1	561	274	948

#### \*Criteria for listing as a Registered Analyst:

1. The organization's application shall be reviewed and approved by an AAR Subject Matter Expert and must meet all the requirements of the current AAR Policy and NIOSH 7400 method.
2. An analyst's application shall be reviewed and approved by an AIHA Registry Programs Staff Reviewer and must have completed two (2) consecutive AAT rounds with no greater than 2 outliers combined.

# MCCRONE RESEARCH INSTITUTE



MCCRONE RESEARCH INSTITUTE

*certifies that*

*Charles Tye*

*has successfully completed the course*

## ASBESTOS FIBER COUNTING

(NIOSH 582 - Sampling and Evaluating Airborne Asbestos Dust)

*January 30, 1987*



FOR OCCUPATIONAL SAFETY & HEALTH

*3.5 CEU's*

*W. J. ...*

*Walter C. McCrone*



**ASBESTOS  
SITE**

Certified by: **SUPERVISOR**  
State of Minnesota  
Department of Health

**Expires: 10/25/2011**

**Charles Tye**  
**4345 N Shore Dr**  
**Orono, MN 55364**

*Lynda S. Bremer*  
Director, Env. Health Div.

No. AS395

Issued: 11/02/2010

Certificate No: 5LM05231212SR

Expiration Date: May 23, 2013

This is to certify that

**Charles Tye**

has attended and successfully completed an

**ASBESTOS SUPERVISOR  
REFRESHER TRAINING COURSE**

permitted by

the State of Minnesota under Minnesota Rules 4620.3702 to 4620.3722

and meets the requirements of

Section 206 of Title II of the Toxic Substances Control Act (TSCA)

conducted by

**Lake States Environmental, Ltd.**

**White Bear Lake, MN on May 23, 2012**

**Examination Date: May 23, 2012**

Lake States Environmental, Ltd  
P. O. Box 645, Rice Lake, WI 54868  
(800) 254-9811

  
Training Inspector



*Freda S. Bremer*  
Director, Env. Health Div.



**ASBESTOS  
INSPECTOR**

Certified by:  
State of Minnesota  
Department of Health

Expires: **10/25/2012**

Charles Tye  
300 Wall St #201  
St. Paul, MN 55101

No. AI395

Issued: 10/28/2011



**ASBESTOS  
MANAGEMENT  
PLANNER**

Certified by: State of Minnesota  
Department of Health

**Expires: 10/25/2012**

**Charles Tye  
300 Wall St #201  
St. Paul, MN 55101**



*John Lee St.*  
Director, Env. Health Div.

No. AM395

Issued: 10/28/2011



**ASBESTOS  
PROJECT**

Certified by: **DESIGNER**  
State of Minnesota  
Department of Health

**Expires: 03/30/2012**

**Charles Tye**  
**300 Wall St #201**  
**St. Paul, MN 55101**

*Linda S. Bremer*  
Director, Env. Health Div.

No. AD395

Issued: 04/04/2011



*Funda S. Buschner*  
Director, Env. Health Div.



**LEAD**  
**Risk Assessor**

Licensed by:  
State of Minnesota  
Department of Health

**License No. LR317**  
**Expires 03/08/2011**

**Charles Tye**  
**4345 N Shore Dr**  
**Orono, MN 55364**



RA-0054

# Lead Risk Assessor Independent Examination

121 East Seventh Place, Suite 220 • St. Paul • Minnesota 55101 • (651) 215-0700

*This certifies that*

**Charles Tye**

*has successfully passed the required independent examination for:*

**Lead Risk Assessor**

October 25, 1999  
St. Paul, Minnesota

*This certificate is nontransferable.*

A handwritten signature in cursive script, reading "Patricia A. Blangren".

Director, Division of Environmental Health  
Jan K. Malcolm, Commissioner

**NITON**

CORPORATION

# *Certificate of Achievement*

*Charles Tye*

*Angstrom Analytical*

*has successfully completed the Manufacturer's Training Course for the  
NITON Spectrum Analyzer and is now certified  
in radiation safety and monitoring, measurement technology,  
and machine maintenance of the NITON XRF Spectrum Analyzer.  
(CII's - The ABHT awards 1 CM point, approval #5827)*

A0111044094

Certificate Number

05/11/01 Minn., MN

Date & Site of Course



*Richard J. J. J.*

Training Coordinator

Director of Training

# Environmental Assessment Association

hereby certifies that

Charles Tye

has been qualified for membership in the

Environmental Assessment Association

and has been admitted by its Board of Directors and declared to be a

CEI

Certified Environmental Inspector

and is hereby granted this certificate

under the conditions presented in its by-laws.

Signed and sealed this 17th day of October, 1991

Joseph M. Lacey  
Managing Director

# McCRONE RESEARCH INSTITUTE

certifies that

*Charles Tye*

has successfully completed an intensive course of instruction in

## *"Microscopical Identification of Asbestos"*

given by the McCrone Research Institute

Presented this 10th day of October, 1986

Peter W. Coble

3.5 CEU's

Walter C. McCrone

Steve Wallinga



# Steve Wallinga

---

## Skills

- Environmental Consulting
- Regulatory Compliance and Workman's Compensation Management
- Project Management
- Computer Networking / Wireless Networking
- Web Server, Email and DNS Administration

## Education / Certifications

### **Hennepin Technical College Eden Prairie, MN**

#### **A.A.S. Computer Network Administration GPA 3.93**

Installation and Administration of Network Operating Systems with courses in the following:

- Novell Netware, Windows, Unix/Linux, XHTML, JavaScript and Client/Server Theory

### **University of Minnesota Minneapolis, MN**

#### **B.A. Russian Studies**

An Inter-Disciplinary Major with courses in Russian History, Economics, Politics, Language and Literature

## **Certifications**

- Certified Asbestos Inspector, Asbestos Site Supervisor
- Certified Lead Risk Assessor
- Certified in Asbestos Air Sampling (NIOSH 582)
- Mold Identification, University of Minnesota, School of Public Health
- OSHA 10-hour training

## Work Experience

### **Angstrom Analytical, Inc. St. Louis Park, MN 2002-Present**

#### **Project Manager/Inspector/Network Administrator**

- Conduct On-site Environmental Surveys, analyze samples and conduct lead paint surveys utilizing an XRF instrument
- Perform Industrial Hygiene monitoring for hazardous material remediation projects
- Produce reports based on findings, offer recommendations and consulting services
- Offer guidance for regulatory compliance
- Manage, estimate and coordinate various environmental projects

**Infinetivity / Pixius Burnsville, MN 2000-2002**

**Network Engineer**

- Set-up, configure and troubleshoot hosted web sites on Apache and IIS web servers
- Create and administrate DNS records and email accounts
- Configured and troubleshoot DSL, T1 and ISDN accounts on Cisco and Netopia routers
- Provided 2<sup>nd</sup> level support to customers regarding Dial-up, DSL, ISDN, DNS, email and web issues
- Provide on-site support for ISDN/DSL customers
- Performed system wide back-ups and restored files using Amanda
- Network Support & General Administration of primarily Unix / Linux servers

**1991-1999 EnviroBate Minneapolis, MN**

**Project, Personnel and Safety Manager**

- Managed, estimated and coordinated numerous residential and small commercial projects
- Developed and implemented Policies & Procedures for Worker's Compensation claims, Safety Incentive Program and Hiring Policies
- Managed compliance to meet regulatory requirements
- Dramatically reduced Worker's Compensation Mod Rate 3.33 to less than 1.00 resulting in substantially reduced Worker's Compensation premiums



# AIHA Registry Programs<sup>SM</sup>

## Asbestos Analysts Registry AAT Performance Results Report

Charles Tye  
Angstrom Analytical, Inc.  
5001 Cedar Lake Road South

4/25/2012  
Organization ID: 101099

Saint Louis Park, MN 55416

### REPORT OF PERFORMANCE FOR ROUND # 101, ORGANIZATION # 101099

The following individuals have met all the requirements\* for Registration in the Asbestos Analysts Registry (AAR) and are listed as Registered Analysts:

ID	Name	RESULTS (f/mm2) FOR THE CURRENT ROUND (R101)								Outliers			Performance
		A1011	604	B1011	246	C1011	417	D1011	624	R101	R100	TOT	
2081	Potocnik, Darrell	A1011	604	B1011	246	C1011	417	D1011	624	0	2	2	Acceptable
7337	Tye, Charles	A1011	588	B1011	254	C1011	390	D1011	642	0	0	0	Acceptable
7711	Partlow, John	A1011	596	B1011	234	C1011	346	D1011	666	0	1	1	Acceptable
8481	Wallinga, Stephen E.	A1011	612	B1011	263	C1011	403	D1011	616	0	1	1	Acceptable
8863	Hagen, Kevin Paul	A1011	576	B1011	256	C1011	398	D1011	634	0	0	0	Acceptable

The following individuals have applied for Registration in the AAR, but have not met all the criteria\* or they have lost their registered status due to non-proficiency or non-participation.:

ID	Name	RESULTS (f/mm2) FOR THE CURRENT ROUND (R101)								Outliers			Performance
										R101	R100	TOT	

The determination of outliers for the above results is based on the following performance limits:

#### Reference Values for Round #101

Sample ID	Batch	Reference Mean	Lower Limit	Upper Limit
A1011	1	555	272	938
B1011	1	247	121	418
C1011	1	419	205	709
D1011	1	561	274	948

#### \*Criteria for listing as a Registered Analyst:

1. The organization's application shall be reviewed and approved by an AAR Subject Matter Expert and must meet all the requirements of the current AAR Policy and NIOSH 7400 method.
2. An analyst's application shall be reviewed and approved by an AIHA Registry Programs Staff Reviewer and must have completed two (2) consecutive AAT rounds with no greater than 2 outliers combined.



**ASBESTOS**

**SITE SUPERVISOR**

Certified by  
State of Minnesota  
Department of Health

**Expires: 05/02/2013**

**Steve E Wallinga**  
310 Deerwood Ln N  
Plymouth, MN 55441

*Frank S. Buschner*  
Director, Env. Health Div.

No. AS1880

Issued: 05/08/2012

THIS CERTIFIES THAT

**Steve Wallinga**

has completed the Asbestos course entitled

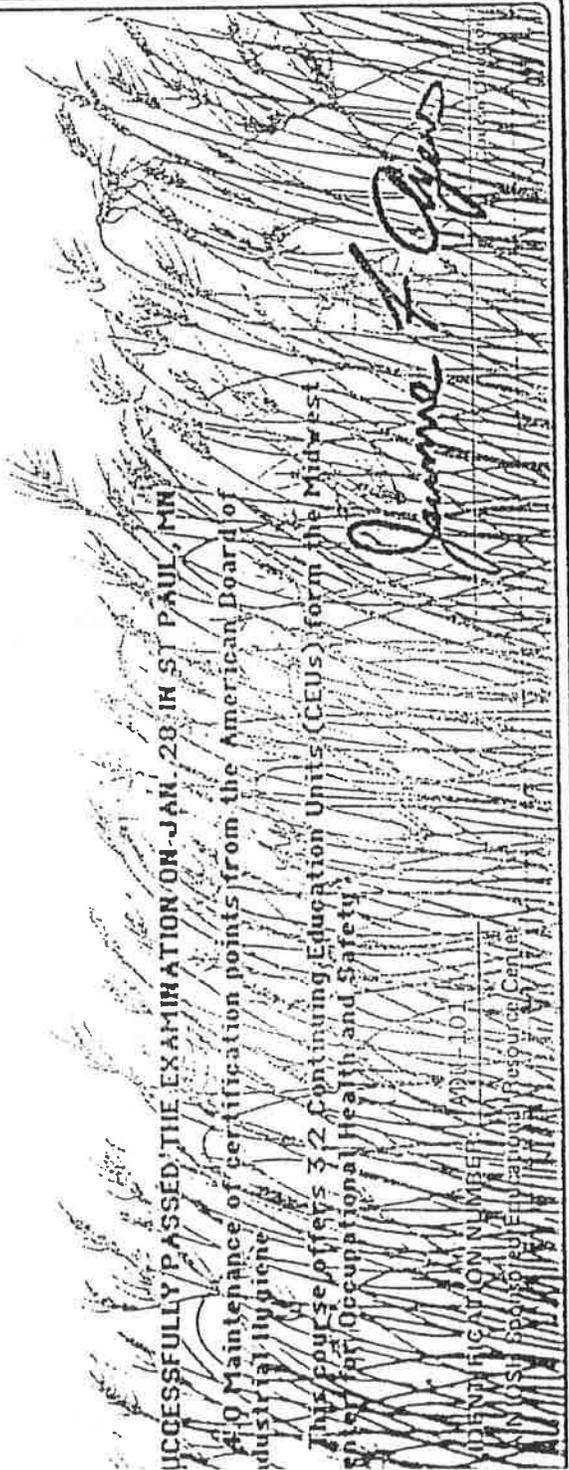
**NIOSH 582: Sampling & Evaluation Of Asbestos Dust**

**January 24, 1994 to January 28, 1994**

given by the

**Midwest Center for  
Occupational Health & Safety**

Program in Continuing Education — Occupational Health



SUCCESSFULLY PASSED THE EXAMINATION ON JAN. 28 IN ST. PAUL, MN

40 Maintenance of certification points from the American Board of Industrial Hygiene

This course offers 32 Continuing Education Units (CEUs) from the Midwest Center for Occupational Health and Safety

IDENTIFICATION NUMBER: 101  
NIOSH Sponsoring Occupational Resource Center  
ST. PAUL, MN 55101



*Linda S. Bremer*  
Director, Env. Health Div.



**ASBESTOS  
INSPECTOR**

Certified by:  
State of Minnesota  
Department of Health

**Expires: 05/11/2013**

Steve E Wallinga  
310 Deerwood Ln N  
Plymouth, MN 55441

No. A11880 - Issued: 05/16/2012



**LEAD**  
**Risk Assessor**

Licensed by:  
State of Minnesota  
Department of Health  
License No. LR1089  
Expires 08/15/2012

Steve E Wallinga  
310 Deerwood Ln N  
Plymouth, MN 55441

*Freda S. Bismeyer*  
Director, Env. Health Div.



# *Certificate of Achievement*

*Steve Wallinga  
Angstrom Analytical, Inc.*

*Has successfully completed the Manufacturer's Training Course  
for the NITON Spectrum Analyzer and is now certified  
in radiation safety and monitoring, measurement technology,  
and machine maintenance of the NITON XRF Spectrum Analyzer.  
(CIII's - The ABIII Awards 1 CM point, approval # 05-396)*

A5121963214

Certificate Number

12/15/05 Minneapolis, MN

Date & Site of Course



*Michelle J. J. Smith*

Training Coordinator

*Michelle J. J. Smith*

Director of Training

EMSL ANALYTICAL, INC.

certifies that

**Stephen E. Wallinga**

has completed 8 hours of training covering the cause, the mitigation, and the prevention of mold

## Understanding Mold Contamination in the Indoor Environment

EMSL Certificate No. 22-005555--215

**APPROVED FOR:**

ABHI - 1.0 Continuing Education Unit (CEU) - Approval # 02-3378  
BOMI - 8 Continuing Professional Development (CPD) points  
HCRC - 1.0 Credit in the Cleaning/Restoration Category or Mold Remediation Category  
ASIH - 2.0 Membership Renewal Credits (MRCs)  
NAIH - 3.0 Continuing Education Units (CEUs)

Course Date: 01/24/03  
Granted: 02/04/03

**COURSE INSTRUCTORS:** John Ireland, Ph.D., EMSL Analytical, Inc., Ph: 734-668-6810  
Wynn White, P.E., Wynn L. White Consulting Engineers, Ph: 225-761-9141  
Michael Bowdoin, Brown Sims, P.C., Ph: 713-629-1580

**Sponsored by:**

EMSL Analytical, Inc.  
107 Haddon Avenue  
Westmont, NJ 08108  
Phone: (800) 220-3675  
Fax: (856) 858-9551  
[www.emsl.com](http://www.emsl.com)



  
Jason Dobranic, Ph.D.  
National Director of Microbiology

Environmental, Mold, Bacteria, IAQ, Asbestos, Lead, Forensic and Materials Testing Since 1981

Kevin Hagen





# AIHA Registry Programs<sup>SM</sup>

## Asbestos Analysts Registry AAT Performance Results Report

4/25/2012  
Organization ID: 101099

Charles Tye  
Angstrom Analytical, Inc.  
5001 Cedar Lake Road South

Saint Louis Park, MN 55416

### REPORT OF PERFORMANCE FOR ROUND # 101, ORGANIZATION # 101099

The following individuals have met all the requirements\* for Registration in the Asbestos Analysts Registry (AAR) and are listed as Registered Analysts:

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7711	Partlow, John	A1011	596	B1011	234	C1011	346	D1011	666	0	1	1	Acceptable
8481	Wallinga, Stephen E.	A1011	612	B1011	263	C1011	403	D1011	616	0	1	1	Acceptable
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The following individuals have applied for Registration in the AAR, but have not met all the criteria\* or they have lost their registered status due to non-proficiency or non-participation.:

ID	Name	RESULTS (f/mm2) FOR THE CURRENT ROUND (R101)								Outliers			Performance
		A1011	604	B1011	246	C1011	417	D1011	624	R101	R100	TOT	

The determination of outliers for the above results is based on the following performance limits:

#### Reference Values for Round #101

Sample ID	Batch	Reference Mean	Lower Limit	Upper Limit
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D1011	1	561	274	948

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1. The organization's application shall be reviewed and approved by an AAR Subject Matter Expert and must meet all the requirements of the current AAR Policy and NIOSH 7400 method.
2. An analyst's application shall be reviewed and approved by an AIHA Registry Programs Staff Reviewer and must have completed two (2) consecutive AAT rounds with no greater than 2 outliers combined.

# Kevin P. Hagen

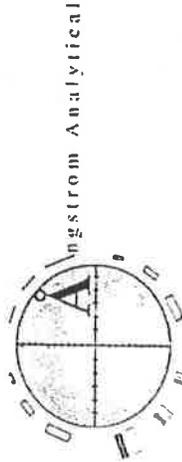
has completed the course

“Sampling and Evaluating Airborne Asbestos”  
NIOSH 582 Equivalent

August 28th - 31st, 1995

Conducted By:

Angstrom Analytical, Inc.  
Eden Prairie, Minnesota.



Charles Tye, Course Director  
August 31st, 1995

—[ M I C A ]—

*certifies that*

**Kevin P. Hagen**

*has successfully completed an intensive course of instruction in*

*Asbestos Identification Using Polarized Light Microscopy*

*given by Microscopy Instruction, Consultation & Analysis*

*presented this 23rd day of July, 2010*



—[ M I C A ]—

*Peter M. Cooke*

PETER M. COOKE



**ASBESTOS**

**SITE SUPERVISOR**

Certified by: State of Minnesota  
Department of Health

**Expires: 03/07/2013**

**Kevin P Hagen**  
7038 Upper 36th St N  
Oakdale, MN 55128

*Freda B. Bremer*  
Director, Env. Health Div.

No. AS2652

Issued: 03/13/2012



**ASBESTOS  
INSPECTOR**

Certified by:  
State of Minnesota  
Department of Health

Expires: 01/12/2013

Kevin P. Hagen  
7038 Upper 36th St N  
Oakdale, MN 55128

*Linda S. Bremer*  
Director, Env. Health Div.

No. A12652

Issued: 01/24/2012



*Jenelle S. Buschner*  
Director, Env. Health Div.



**LEAD  
Risk Assessor**

Licensed by:  
State of Minnesota  
Department of Health

License No. LR2036  
Expires 09/19/2012

Kevin P Hagen  
7038 Upper 36th St N  
Oakdale, MN 55128

# Darrell Potocnik



Darrell T. Potocnik  
3720 - 121st Ave NW  
Coon Rapids, MN 55433

---

## EDUCATION

Vermilion Community College, Water Resource Technology  
College level coursework in areas of water and wastewater technology, pollution control operations, laboratory analysis, maintenance program, safety, management, research, and water laws and regulations.

St. Cloud Technical Institute, Water and Waste Treatment Technology  
Training in the operation and maintenance of water-wastewater treatment plants, distribution/collection systems, lab skills, waterwell construction codes, and safety procedures.

Eveleth Technical Institute  
Basic Auto Mechanics, completed course.

## WORK EXPERIENCE

Applied Environmental Sciences, Minneapolis, Minnesota. Industrial Hygiene Project Supervisor. Four years of experience in industrial hygiene projects with involvement from project inception to completion. Responsibilities have included project supervision, data collection, program evaluation, report preparation and recommendations, inventory control, and equipment maintenance.

Twin City Testing Corporation, St. Paul, Minnesota.  
Industrial Hygiene Technician. Responsibilities included identification of asbestos-containing materials in buildings and characterization of materials. On-site industrial hygiene services during asbestos abatement including air monitoring and verification of compliance with project specifications.

City of Fridley, Fridley, Minnesota.  
Laborer. Responsibilities included equipment maintenance, ballpark maintenance, and ice rink maintenance.

Erie Mining Company, Hoyt Lakes, Minnesota.  
Plant Sampler/General Labor. Worked as a Plant Sampler, weighed and calculated hourly samples of taconite concentrate and kept records. Ordered and maintained inventory of paper products.

Duluth, Missabe and Iron Range Railroad.  
Engineering Operations/Track Maintenance. Maintained and operated equipment. Repaired rail, switches, and ribbon rail.

## LICENSES AND CERTIFICATIONS

State of Minnesota Licensed Asbestos Supervisor.  
State of Minnesota Certified EPA-AHERA Building Inspector.  
State of Minnesota Certified EPA-AHERA Management Planner.  
State of Minnesota Certified Asbestos Building Inspector.  
Minnesota Class 'D' Wastewater Operator License.  
Minnesota Class "B" Commercial Driver's License.



Charles Tye  
Angstrom Analytical, Inc.  
5001 Cedar Lake Road South

4/25/2012  
Organization ID: 101099

Saint Louis Park, MN 55416

**REPORT OF PERFORMANCE FOR ROUND # 101, ORGANIZATION # 101099**

The following individuals have met all the requirements\* for Registration in the Asbestos Analysts Registry (AAR) and are listed as Registered Analysts:

ID	Name	RESULTS (f/mm2) FOR THE CURRENT ROUND (R101)								Outliers			Performance
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7337	Tye, Charles	A1011	588	B1011	254	C1011	390	D1011	642	0	0	0	Acceptable
7711	Partlow, John	A1011	596	B1011	234	C1011	346	D1011	666	0	1	1	Acceptable
8481	Wallinga, Stephen E.	A1011	612	B1011	263	C1011	403	D1011	616	0	1	1	Acceptable
8863	Hagen, Kevin Paul	A1011	576	B1011	256	C1011	398	D1011	634	0	0	0	Acceptable

The following individuals have applied for Registration in the AAR, but have not met all the criteria\* or they have lost their registered status due to non-proficiency or non-participation.:

ID	Name	RESULTS (f/mm2) FOR THE CURRENT ROUND (R101)								Outliers			Performance
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**Reference Values for Round #101**

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1. The organization's application shall be reviewed and approved by an AAR Subject Matter Expert and must meet all the requirements of the current AAR Policy and NIOSH 7400 method.
2. An analyst's application shall be reviewed and approved by an AIHA Registry Programs Staff Reviewer and must have completed two (2) consecutive AAT rounds with no greater than 2 outliers combined.

# DARRYL POTOMAK

has completed the course  
"Sampling and Evaluating Airborne Asbestos"  
NIOSH 582 Equivalent

April 19-24, 1990

Conducted By  
Applied Environmental Sciences, Inc.  
Minneapolis, Minnesota

April 24, 1990

  
\_\_\_\_\_  
Course Director



**ASBESTOS  
SITE  
SUPERVISOR**

Certified by  
State of Minnesota  
Department of Health

**Expires: 10/24/2012**

**Darrell T. Potocnik  
6538 Deerwood Ln  
Lino Lakes, MN 55014**

*Linda S. Buechner*  
Director, Env. Health Div.

No. AS2219

Issued: 10/28/2011



*Faithful + Busch*  
Director, Env. Health Div.



**ASBESTOS  
INSPECTOR**

Certified by:  
State of Minnesota  
Department of Health

**Expires: 05/11/2013**

Darrell T Potocnik  
6538 Deerwood Ln  
Lino Lakes, MN 55014

No. AI2219 \* Issued: 05/16/2012

# Certificate of Award

This is to certify that Darrell Potocnik has  
successfully completed an 8 hour

HAZWOPER Refresher Training Course  
of 1910.120 per 29CFR on this

the 1<sup>st</sup> day of May, 2001



*Patrick J. Kempen*  
Patrick J. Kempen, PE, CSP  
MEI Safety Engineer

John Partlow



**Angstrom Analytical &  
Environmental Services**



# AIHA Registry Programs<sup>SM</sup>

## Asbestos Analysts Registry AAT Performance Results Report

Charles Tye  
Angstrom Analytical, Inc.  
5001 Cedar Lake Road South

4/25/2012  
Organization ID: 101099

Saint Louis Park, MN 55416

### REPORT OF PERFORMANCE FOR ROUND # 101, ORGANIZATION # 101099

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7337	Tye, Charles	A1011	588	B1011	254	C1011	390	D1011	642	0	0	0	Acceptable
7711	Partlow, John	A1011	596	B1011	234	C1011	346	D1011	666	0	1	1	Acceptable
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C1011	1	419	205	709
D1011	1	561	274	948

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2. An analyst's application shall be reviewed and approved by an AIHA Registry Programs Staff Reviewer and must have completed two (2) consecutive AAT rounds with no greater than 2 outliers combined.

**JOHN PARRIS**

has completed the course  
"Sampling and Evaluating Airborne Asbestos"  
MOSH 582 Equivalent

April 30 - May 8, 1980

Conducted by  
Applied Environmental Sciences, Inc.  
Minneapolis, Minnesota

May 8, 1980

Course Director



**ASBESTOS**

**SITE SUPERVISOR**

Certified by  
State of Minnesota  
Department of Health

**Expires: 02/16/2013**

**John M Partlow**  
**P.O. Box 305**  
**Chisago City, MN 55013**

*Judith S. Bremer*  
Director, Env. Health Div.

No. AS2226

Issued: 02/22/2012



ASBESTOS  
INSPECTOR

Certified by:  
State of Minnesota  
Department of Health

**Expires: 04/21/2012**

**John M Partlow**  
**P.O. Box 305**  
**Chisago City, MN 55013**

*Linda S. Buschner*  
Director, Env. Health Div.

No. A12226

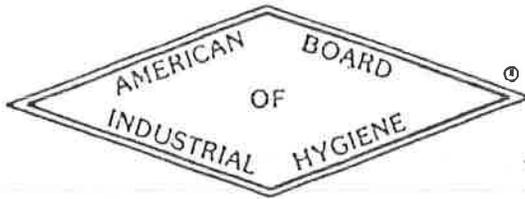
Issued: 05/03/2011

Norbert J. Norman, CIH



**Angstrom Analytical &  
Environmental Services**

The  
American Board of Industrial Hygiene®



organized to improve the practice of Industrial Hygiene  
proclaims that

**Norbert John Norman**

having met all requirements through  
education, experience, and examination,  
is hereby certified in the

COMPREHENSIVE PRACTICE  
of  
INDUSTRIAL HYGIENE

and has the right to use the title and designations

CERTIFIED INDUSTRIAL HYGIENIST

CIH

date **July 20, 1987**

*Charles E. Adkins*  
Chairman ABIH  
Charles E. Adkins, CIH



certificate  
number **3631**

*Loren A. Anderson, Jr.*  
Secretary ABIH  
Loren A. Anderson, Jr., CIH

6. WORK COMPLETED BY RESPONDER IN THE PAST 5 YEARS WHICH ILLUSTRATES CURRENT QUALIFICATIONS RELEVANT TO THE "TABLE OF CATEGORIES OF SERVICE". (add additional sheets if necessary) Insert references from owners following this section. [ Note: If Responder has an existing master contract with the State, letters of reference from owners are not required, but you must insert a statement indicating such ]. If responding to Category 12 only, delete 1 through 11 and provide references from owners whom responder provided abatement design services. If possible, include at least one political subdivision (federal, state, county, or city) project. Provide the following for each reference: Project title, scope, and dates started and completed. Projects included in reference must have been started and completed during the 5 year period of July 1, 2007 to June 30, 2012 July 1, 2008 to June 30, 2011.

**Please also refer to the project category list for MNSCU and The City of Richfield, contained in Letters of Reference that follow this section.**

a. CLIENT NAME, LOCATION, PROJECT TITLE, CLIENT CONTACT PERSON, TITLE, PHONE NUMBER, EMAIL ADDRESS (Completed by A/E of Record)	b. ACTUAL FINAL COMPLETION DATE MONTH/YR	c. TOTAL COST OF PROJECT	d. PROJECT REPRESENTS EXPERIENCE IN:
1) State of Minnesota, Department of Administration, Real Estate & Construction Services.  Perpich Center for Arts Education Pre-Demolition of Alpha Building 6125 Olson Memorial Highway Golden Valley, MN RECS No. 25061GVL  Patrick Klaren, Haz-Mat Specialist 651 201 2384 Patrick.Klaren@state.mn.us	8/15/11	\$23,000.00	CATEGORY 1
1a) State of Minnesota, Department of Administration, Real Estate & Construction Services.  Minnesota Correctional Facility Shakopee – Segregation Wing Floor Tile & Adhesive Removal Project RECS No. 78917SHX  Patrick Klaren, Haz-Mat Specialist 651 201 2384 Patrick.Klaren@state.mn.us	10/12/11	<\$2,000.00	CATEGORY 1

<p>2. State of Minnesota, Department of Administration. Real Estate &amp; Construction Services.</p> <p>State Admin Building 50 Sherburne Avenue St. Paul, MN PCB Caulk Removal Project RECS No. 02641 ADX</p> <p>Patrick Klaren, Haz-Mat Specialist 651 201 2384 Patrick.Klaren@state,mn.us</p>	<p>12/10/10</p>	<p>\$24,980.00</p>	<p>CATEGORY 2</p>
<p>3. State of Minnesota, Department of Administration. Real Estate &amp; Construction Services.</p> <p>Minnesota Correctional Facility St. Cloud Pre-Demolition Surveys of two OK Houses 2505 Minnesota Boulevard St. Cloud, MN. RECS No. 25061GVL</p> <p>Jerome Ryan, Project Manager 651 201 2393 Jerome.ryan@state,mn.us</p>	<p>3/29/12</p>	<p>\$2,900.00</p>	<p>CATEGORY 3</p>
<p>4. MNSCU – Ridgewater College.</p> <p>Ridgewater College Lower Level Corridors, Athletic Staff Offices and Associated Classrooms Fungal Investigation and Sampling</p> <p>Vernon E. Johnson, Owner's Representative 651 644 8224 kjasp@aol.com</p>	<p>February, 2010</p>	<p>\$9,500.00</p>	<p>CATEGORY 4 See following letter of recommendation from Kane &amp; Johnson Architects, Inc.</p>

<p>5. MNSCU - Winona State University.</p> <p>Winona State University  Pasteur Hall Science Lab Renovations  Mercury Contamination Survey, project design  and subsequent abatement I.H. Monitoring  Winona, MN.  RECS No. 25061GVL</p> <p>Vernon E. Johnson, Owner's Representative  651 644 8224  kjas@aol.com</p>	<p>August, 2008</p>	<p>\$17,000.00</p>	<p>CATEGORY 5</p> <p>See following letter of recommendation from Kane &amp; Johnson Architects, Inc.</p>
<p>6. City Of Richfield</p> <p>Dave Conrads, Buildings Operations Manager  City of Richfield  612 861 9180  dconrads@cityofrichfield.org</p>	<p>May 2010</p>	<p>\$2,500.00</p>	<p>CATEGORY 6</p> <p>See following letter of recommendation from Dave Conrads at the City of Richfield.</p>
<p>7. State of Minnesota, Department of Administration. Real Estate &amp; Construction Services.</p> <p>State Admin Building  50 Sherburne Avenue  St. Paul, MN  PCB Caulk Removal Project  RECS No. 02641 ADX</p> <p>Patrick Klaren, Haz-Mat Specialist  651 201 2384  Patrick.Klaren@state.mn.us</p>	<p>12/1/10</p>	<p>\$24,980.00</p>	<p>CATEGORY 7</p> <p>Indoor air quality assessment for PCB components while workers were removing the PCB containing caulking from the exterior of the building at night.</p>

<p>8. State of Minnesota, Department of Administration. Real Estate &amp; Construction Services.</p> <p>Minnesota Department of Corrections St. Cloud, MN Industries Building – Third Floor. RECS No. 78SC0023</p> <p>Patrick Klaren, Haz-Mat Specialist 651 201 2384 Patrick.Klaren@state.mn.us</p>	<p>May, 2012</p>	<p>\$16,060.00</p>	<p>CATEGORY 8</p> <p>Lead Based Paint Investigation using XRF and Certified MNDOH Lead Paint Assessors.</p>
<p>9. State of Minnesota, Department of Administration. Real Estate &amp; Construction Services.</p> <p>Minnesota Department of Corrections Faribault, MN</p> <p>Pre-Demolition Surveys for Asbestos, Lead, PCB containing materials, Mercury, CFCs, etc. Committed to .pdf on CD-ROMS. Cedar, Spruce &amp; Redwood Buildings RECS No. 7800FAL</p> <p>Patrick Klaren, Haz-Mat Specialist 651 201 2384 Patrick.Klaren@state.mn.us</p>	<p>June 8<sup>th</sup>, 2009</p>	<p>15,850.00</p>	<p>CATEGORY 9</p>
<p>10. Not Used</p>	<p>N/A</p>	<p>N/A</p>	<p>CATEGORY 10</p>

<p>11. State of Minnesota, Department of Administration. Real Estate &amp; Construction Services.</p> <p>Pre-Design Site Assessment of Bayport Township Rifle Range  Bayport, MN  Adjacent to MCF-Stillwater  RECS No. 78706SWX</p> <p>Patrick Klaren, Haz-Mat Specialist  651 201 2384  Patrick.Klaren@state,mn.us</p>	<p>10/20/08</p>	<p>\$24,875.00</p>	<p>CATEGORY 11</p> <p>Generated Phase 1 Environmental Site Assessment. Completed Soil Borings, collected samples, dug out berms with a bobcat, collected more soil samples at various depths, analyzed for lead and other RCRA heavy metals plus GRO &amp; DRO hydrocarbons for soil contamination study.</p>
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Please note that Angstrom has an existing Master Contract with RECS and therefore the projects / categories cited in section 6 above that are attributable to RECs do not have letters of reference / recommendation associated with them.

7. UNIQUE QUALIFICATIONS

Provide information on any unique qualifications of your firm or key personnel. Insert any supporting documentation.

Please refer to the following seven (7) pages:



Angstrom Analytical &  
Environmental Services

5001 Cedar Lake Road \* St. Louis Park, MN 55416  
952-252-0405 952-252-0407 fax

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Sherry Van Horn, Construction Supervisor  
Real Estate & Construction, Department of Administration  
309 Administration Building, 50 Sherburne Avenue  
St. Paul, MN 55155

May 29, 2012

Dear Ms. Van Horn,

Angstrom Analytical, Inc. (Angstrom) has been in business for in excess of 20 years as a provider of environmental consulting, analytical laboratory services and general contracting. In its early years, the company was more oriented towards providing environmental laboratory services to abatement and remediation contractors, than providing on-site monitoring and CM (Contract Management) services. These services were added in 1993. We primarily provide Asbestos, Lead in Paint, Hazardous Material and Phase I Environmental surveys. We believe that we adhere to strict business ethics in a highly regulated area of commerce. Our company and individuals, as necessary, are all licensed by the Minnesota Department of Health (MNDOH), all of our field based industrial hygienists are Board Approved by the American Industrial Hygiene Assoc. (AIHA), and appear individually on the Asbestos Analyst's Registry, in accordance with the MNDOH regulations. Our in-house lab is also AIHA approved for analyzing bulk asbestos samples and we utilize the analytical services of an AIHA approved lab for lead dust and soil testing. We are also well versed with other potential hazardous materials, commonly found in residential and commercial building settings including mercury, PCB's, CFC's, other heavy metals and radon. In the 20+ years that Angstrom has operated, neither the company, nor any employees or individuals associated with the company have been cited by a regulatory agency. We seek advice from and derive variances from some of the regulations on behalf of our clients on a weekly basis. Indeed, we are prepared to list any of the departmental heads of the regulatory agencies, as references for our work. We enjoy a very positive relationship with our regulators. We perform a good deal of work in Federal and State Correctional Institutions, Regional Treatment Centers, and at FAA installations, such as airports. All require high levels of security clearance, background (criminal) history checks, and strict adherence to an institution's particular rules. Our personnel are all very experienced hygienists, all with at least 10 years of experience.

During our 20 years in business, only three employees have left, one of which was to return to University. We feel that our field hygienists are amongst the most knowledgeable in the environmental consulting and field services business. The average age of our employees is 44, the average employment tenure 10 years. We feel that this lack of turnover of employees and

the maturity afforded there gives a value-added approach to our clients. The clients can rely on the same individuals for their needs year after year. Some of our clients ask for a specific individual from our staff for their projects. Charles Tye has been involved with committees that draft the Minnesota Statutes relevant to asbestos and lead in paint related activities. Our services are available on a 24 hour, 7 day per week basis and we pride ourselves on being almost instantaneously available to our clients, in the first instance by phone. Our office phone lines are, out of normal business hours, forwarded to one of many cellular phones, so that a live person (a direct employee of the company) always answers and is capable of responding quickly to a service request.

Our record archiving and storage is impressive. Being a consulting company, we generate a colossal amount of paperwork. We store originals of all reports, letters and other communications, both electronically on removable hard drives, CD-RW, plus magnetic or optical media and in hard copy format. Records are archived in chronological order and Angstrom's project number for ease of retrieval. Laptop computers, used in the field can be connected to the head office server. All staff have individual e-mail addresses.

**We own and directly control our analytical laboratories.** The vast majority of the samples we collect, we analyze at one of our two facility locations. Our in-house laboratory is accredited by the AIHA, in accordance with MNDOH regulations for Polarized Light Microscopy of bulk, wipe and tape samples, to determine the presence of asbestiform minerals. All of our field based industrial hygienists are Board Approved by the AIHA, and appear individually on the Asbestos Analyst's Registry, again in accord with the MNDOH regulations. We can utilize XRF (De-byer Sherer Camera) can be used for confirmation of asbestos in bulk material analysis. In the area of lead in paint, soil and water analysis, we again utilize our own in-house laboratory, to ensure quick, accurate and repeatable analytical results. Primarily, field portable XRF instruments, both direct reading and spectrum analyzer types are used to determine the lead presence and content in paint. Soil, water, paint chips and dust wipes are analyzed using one or other (or both) of Atomic Absorption Spectrophotometry (AAS) or Inductively Coupled Plasma (ICP). Waste characterizations, used for determining the ultimate fate of the waste stream, via the Toxic Characteristics by Leachate Process or TCLP are also performed. In the area of Underground (fuel oil) Tank (UGST) testing and remediation, all relevant tightness testing (vacuum, pressurization or inoculation techniques) and hydrocarbon contamination of the soil / water is performed by ourselves or a sub-contracting laboratory, with which we have developed a relationship (see later). These analytical methodologies include DRO, GRO, BTEX, etc. All analyses are provided on a rush, i.e. less than 24 hour turn-around, which when we perform the majority of the analyses ourselves, is a controllable and achievable goal, provided the methodology allows for this time period. Furthermore, Angstrom Analytical, Inc. owns a Niton XL-309 (300 Series). This instrument is a portable, non-destructive, in-situ testing and measurement instrument that renders an average precision of +/- 0.3 milligrams per square centimeter ( $\text{mg}/\text{cm}^2$ ) depending upon the length of time the sample point is tested. Specific precision limits are established by the National Institute of Standards and Technology (NIST). This instrument contains a radioactive isotope, Cadmium-109, with a maximum activity of 10 m Ci. The manufacturer of the sealed source is Niton Corporation, the source model is XFB3205.

This instrument is registered with the Minnesota Department of Health and is operated by licensed lead inspectors.

Sampling protocols recommended in HUD's "Lead-Based Paint: Interim Guidelines for Hazard Identification and Abatement in Public and Indian Housing." May 1991 revision, were used to determine the presence or absence of lead-based paint. Where conclusive results were not obtained by XRF testing, confirmatory paint chip samples were or can be collected for laboratory analysis.

We also perform indoor air quality studies for mold (spore counts) and physical parameters, such as temperature, air flow, relative humidity, carbon dioxide, carbon monoxide, etc. Again, we have the facility to analyze all IAQ related samples in our own facilities. In high-rise buildings we have experience with evaluating and diagnosing problems associated with the HVAC system(s). Once evaluated we recommend various remediation actions including filter modifications, damper adjustments, temperature set-back changes, duct cleaning scenarios, and routine preventative maintenance. We are also well versed with other potential hazardous materials, commonly found in residential building settings. We own and operate a Lumex mercury analyzer which can test for mercury vapors. Angstrom also inventories other hazardous materials such as PCB's, CFC's, and other heavy metals.

Our field oriented Industrial Hygiene Monitoring services, include, using suitably licensed and accredited hygienists, asbestos, lead in paint and UGST remediation projects. Specific licensing disciplines for our hygienists are listed later and copies of some certifications are included in the green section. Suffice to say that hygienists will only perform testing or project functions that they are duly trained, licensed and accredited to perform.

Angstrom has considerable prior experience in sub-contracting the environmental haz-mat remediation work (after developing a suitable scope of work and specification) to abatement contractors. See references. Angstrom will adhere to any and all MN DOT regulations, Statutory MN Law, Affirmative Action Policies, etc. procurement rules and regulations when soliciting the services of sub-contractors.

The integrity of underground storage tanks is of growing importance from a regulatory standpoint. Angstrom has tested literally hundreds of tanks (tank tightness tests) to determine their propensity to leak. Angstrom is a certified UGST contractor (closure) and we have two UGST site supervisors on staff. Since UGSTs and AGSTs are registered and regulated by the MPCA, owners of tanks are regularly audited for compliance with the regulations. The MN Petro-Fund is in effect to reimburse owner / operators for any soil contamination, not caused by direct negligence. Angstrom is well versed in dealing with MN Petro-Fund issues.

Angstrom Analytical, Inc. is uniquely qualified to fulfill the intents of this Request for Proposal:

- 1) We are not so small as to have little to no reserves of staff, equipment or funding to react to emergencies or to large scale projects. Indeed, we have proven to our client base

(see References Section 4.1.4, above) that we have the personnel, equipment and general resources to take on and complete the most difficult, challenging and large scale projects in the State. Angstrom provided asbestos testing and Industrial Hygiene Air and Compliance Monitoring services for the U.S. Dept. of the Army through its operating contractor Federal Cartridge, Inc. at the Twin Cities Army Ammunition Plant from 1994 to 1997 at the largest asbestos abatement project at that time in the State of Minnesota. Five asbestos abatement contractors were used to abate literally hundreds of buildings in preparation for their demolition. Asbestos abatement costs alone exceeded \$10,000,000.00. Our fees exceeded \$500,000.00, with involvement by approx. 8 of our field personnel. This is one of two Federal Super-Fund Sites in this state.

2) We are also not a large business concern, dominant in our field of expertise. We are therefore able to respond quickly, without the hindrance of layers of management decision making. Commitments of time, effort and finances are made quickly and decisively. We are certainly not an impersonal large corporate machine.

3) Our personnel are all certified in their relevant environmentally associated disciplines by the MN Dept. of Health and accredited through the AIHA, as appropriate and our field personnel are college graduates, the principals of the company hold advanced degrees in scientific backgrounds.

Our **in-house** accredited environmental support laboratory can quickly analyze the vast majority of all samples generated in our surveys. Accreditations for lead and asbestos analyses have been successfully maintained for many years. Unusual or unique analyses will be submitted to a suitably qualified laboratory, with which, Angstrom has developed a relationship, on a better than 24 hour turn around basis. These laboratories will include AMA Analytical, Inc. and EMSL, Inc.

## **Key Individuals**

Main Contact(s): Charles Tye or Steve Wallinga  
Office: 952-252-0405  
Fax: 952-252-0407  
Email: [ctyeang@aol.com](mailto:ctyeang@aol.com); [steve@angstromanalytical.com](mailto:steve@angstromanalytical.com)

## **Related Experience**

Angstrom Analytical has performed Phase I Environmental surveys, for various clients, throughout the state including:

Sheldon Prozinski, Project Manager  
Minnesota Army National Guard  
Facilities Management Office  
Camp Ripley, 15000 Highway 115  
Little Falls, MN 56345-4173

Angstrom is currently a Master or "M" contract holder, actively engaged in exactly the same services being solicited by this environmental proposal, for the last 18 years. This is an on-going project where Angstrom Analytical, Inc. provides on-site Industrial Hygiene (I.H) monitoring during hazardous material abatement projects and hazardous material building surveys throughout the state.

State of Minnesota, Department of State Building and Construction  
Contact: Mr. Pat Klaren 651-296-4651  
State Administration Building  
50 Sherburne Avenue  
St. Paul, MN 55115

Contract Period: On-going since 1992, current period 12/2007 to 6/2012  
Contract Amount: \$1,000,000.00

Angstrom Analytical, Inc. also performs hazardous material surveys and I.H. monitoring at state colleges throughout the state for:

MN State College & Universities

Contact: Mr. Vern Johnson 651-644-8224  
Kane & Johnson Architects  
2469 University Avenue  
St. Paul, MN 55114

Contract Period: current period 1/2008 to 6/2013  
Contract Amount: \$1,000,000.00

### **Personnel**

**Charles Tye**, President-Owner  
MN licensed Lead Risk Assessor  
MN licensed Asbestos Building Inspector/Management Planner  
MN licensed Asbestos Project Designer  
MN licensed Asbestos Site Supervisor  
Niton XRF Certified  
Phase I Environmental Surveys

Charles has B.S and M.S. degrees in Physics

Charles has over 25 years experience in the environmental field with experience in environmental contracting and consulting including, working on a lead based paint study when he was president of EnviroNet, Inc. Out of this study came the Dewberry & Davis Standard Specifications for lead in paint abatement that is now the HUD accepted model specification guide. This was the very first wide scale study of its type done in the United States and its possessions.

**Steve Wallinga**, I.H., Asbestos Supervisor & Inspector, Lead risk Assessor, Mold Assessment  
OSHA 10-hour  
MN licensed Lead Risk Assessor  
MN licensed Asbestos Building Inspector  
MN licensed Asbestos Site Supervisor  
Niton XRF Certified  
Mold Identification & Assessment

Steve has been with Angstrom Analytical, Inc. for six years and has AAS and BA degrees in Computer Network Administration and Russian Studies, respectively.

Steve has over 18 years of experience in the environmental field with most of his experience being in Environmental Contracting. As a contractor he was responsible for managing thousands of residential and small commercial abatement projects. He has completed numerous Lead Based Paint inspections and Asbestos inspections, performed lead in dust sampling and conducted lead risk assessments.

**Kevin Hagen**, IH, Asbestos Inspector  
MN licensed Lead Risk Assessor  
MN licensed Asbestos Building Inspector  
MN licensed Asbestos Site Supervisor  
Niton Certified

Kevin joined our staff nearly six years ago. Kevin has over 20 years of experience in the abatement industry, as a contractor. He has successfully managed and performed thousands of asbestos abatement projects. He has completed many Lead Based Paint and Asbestos inspections as well as on-site industrial hygiene monitoring during abatement projects.

**Darrell Potocnik**, IH, Asbestos Inspector  
MN licensed Asbestos Building Inspector  
MN licensed Asbestos Site Supervisor

Darrell has over 20 years of experience in the Industrial Hygiene field and has been with Angstrom Analytical, Inc. for over 10 years. He has performed numerous asbestos surveys and on site industrial hygiene monitoring during abatement projects.

**John Partlow**, IH, Asbestos Inspector  
MN licensed Asbestos Building Inspector  
MN licensed Asbestos Site Supervisor

John has a B.S. in Biology and has been with Angstrom Analytical, Inc. for 14 years. He has been in the Industrial Hygiene industry for approximately 20 years. He has performed numerous asbestos surveys and on site industrial hygiene monitoring during abatement projects.

Respectfully,

A handwritten signature in blue ink that reads "Charles Tye". The signature is fluid and cursive, with the first name being the most prominent.

Charles Tye  
Angstrom Analytical, Inc.



**KANE AND JOHNSON ARCHITECTS, INC.**

2469 University Avenue West • St. Paul, MN • 55114  
651/ 644-8224 • Fax 651/ 644-8084 • email [kjasp@aol.com](mailto:kjasp@aol.com)

May 24, 2012

Sherry Van Horne, Contracts Supervisor  
Real Estate and Construction Services  
Department of Administration  
309 Administration Building  
50 Sherburne Avenue  
St. Paul, MN 55155

**Re:- Owner's Representative, Letter of Reference – Angstrom Analytical, Inc.  
MNSCU Projects.**

Dear Ms. Van Horne:

This letter of reference / acknowledgement is in support of Angstrom Analytical Inc's (Angstrom) Professional Industrial Hygiene Services Master Contract proposal, due May 30<sup>th</sup>, 2012.

Kane and Johnson Architects, Inc. acts as Project Designer and provides professional Owner's Representative services to MNSCU. In that capacity we work closely with Angstrom who provides Industrial Hygiene services on most of the MNSCU projects we are involved with.

Angstrom holds a valid MNSCU Master contract valid through 6/30/13. Angstrom has held a MNSCU Master contract for well in excess of the five-year look back period.

Angstrom produces timely and professional services in all of the (10) listed I.H. categories. I support their application for a continued State of Minnesota Professional Services Master Contract. I have personal knowledge of the following "Services" and Projects as listed below. The Category numbers are per your Professional Industrial Hygiene Services RFP.

1. **Asbestos Air Sampling.**  
Hennepin Technical College – Brooklyn Park & Eden Prairie Campuses  
Onsite Air sample collection and analysis by AIHA AAR listed personnel.  
January through March, 2012. \$19,000.
2. **General Air Monitoring.**  
Winona State University  
Science Lab renovations. Mercury evaluation of sink traps and lab cabinets using portable Atomic Absorption Spectrophotometer and subsequent onsite monitoring and clearance in accord with MPCA directives.  
Summer 2008. \$17,000.

3. Asbestos Bulk Material Analysis.  
MNSCU System Wide  
Analysis of collected suspect asbestos containing bulk samples in Angstrom's in-house accredited lab according to Minnesota Rules 4620.3460.  
On-going 6/30/07 – 5/23/12. \$16,000.
4. Fungal Investigation & Sampling.  
Ridgewater College – Willmar, MN.  
Investigation, sampling, evaluating, reporting and providing corrective recommendations for mold and moisture intrusion.  
February 2010. \$9,500.
5. General Environmental Condition Evaluations.  
Winona State University  
Science Lab renovations. Pasteur Hall. Mercury evaluation of sink traps and lab cabinets using portable Atomic Absorption Spectrophotometer and subsequent onsite monitoring and clearance in accord with MPCA directives.  
Summer 2008. \$17,000.
6. HVAC Evaluation.  
Ridgewater College – Willmar, MN.  
Evaluating, reporting and offering corrective actions for the re-design of HVAC systems to remediate excessive moisture conditions in the commons areas. Use FLIR camera, moisture tester, hydrometer, sychrometer, vaneometers, etc.  
March 2010. \$4,500
7. Indoor Air Quality Assessment.  
South Central Community & Technical College, North Mankato.  
Investigation, sampling, evaluation, reporting and providing corrective recommendations for welding fume in welding / auto repair shop of SCC & Technical College.  
September 2008. \$3,750
8. Lead in Paint Sampling.  
Bemidji State University - Auditorium  
Lead in paint survey using an XRF Analyzer (Angsrtom has two instruments) in accord with MN 4761.2550 to 4761.2570 and HUD Title X. June 2009. \$3,500
9. Hazardous Material Surveys with Electronic Database of Information.  
Winona State University, Winona, MN.  
Asbestos, Lead Paint and Elemental Mercury survey of Wabasha Hall converted to .pdf format and delivered via CD-ROM as an electronic data base in accord with MN Rules 4620.3460 and 4620.3470. July 2008. \$4,800
10. N/A.
11. Other Hazardous Material (Industrial).  
St. Paul College – New multi story parking lot construction.  
Investigation, sampling & characterizing of hydrocarbon (GRO & DRO) contaminated soils in excess of 200,000 cubic yards that required demo / haz-mat landfilling.

Reporting of results, remediation design and Remedial Action Plan (RAP) delivered on  
CD-ROM to client  
November 2011 through February 2012. \$40,000.

If you have any questions concerning the above projects or this letter of recommendation, please  
contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Vernon E. Johnson". The signature is written in a cursive style with a large, stylized initial 'V'.

Vernon E. Johnson, Project Designer/Manager  
Kane & Johnson Architects, Inc.



## Administrative Services Department

Sherry Van Horne, Contracts Supervisor  
Real Estate and Construction Services  
Department of Administration  
309 Administration Building  
50 Sherburne Avenue  
St. Paul, MN 55155

**MAYOR**  
DEBBIE GOETTEL

**CITY COUNCIL**  
PAT ELLIOTT  
TOM FITZHENRY  
SUZANNE M. SANDAHL  
FRED L. WROGE, JR.

**CITY MANAGER**  
STEVEN L. DEVICH

May 25<sup>th</sup>, 2012

**Re:- Owner's Representative, Letter of Reference – Angstrom Analytical, Inc.  
City of Richfield Projects.**

Dear Ms. Van Horne:

This letter of reference / acknowledgement is in support of Angstrom Analytical Inc's (Angstrom) Professional Industrial Hygiene Services Master Contract proposal, due May 30<sup>th</sup>, 2012.

The City of Richfield has, since 2007, retained Angstrom to perform Environmental Industrial Hygiene Services. During this period Angstrom has performed testing, design and monitoring services on City owned properties including single family homes, liquor stores and the complete demolition of Richfield City Hall, last year. A partial breakdown of projects, times, costs and services provided, with reference to the 10 listed RFP-categories follow.

Angstrom produces timely and professional services. I support their application for a continued State of Minnesota Professional Services Master Contract. I have personal knowledge of the following "Services" and Projects as listed below:

1. Asbestos Air Sampling.  
Richfield City Hall Demolition Project Onsite Air sample collection and analysis by AIHA AAR listed personnel. June through July, 2012. \$12,750.
2. General Air Monitoring.  
Richfield City Hall Demolition Project Onsite Elemental Lead Air sample collection and analysis by XRF & AA in Police Firing Range decommissioning. June through July, 2012. \$4,750.

*The Urban Hometown*

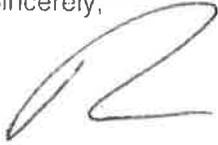
6700 PORTLAND AVENUE, RICHFIELD, MINNESOTA 55423 612.861.9700 FAX: 612.861.9749

[www.cityofrichfield.org](http://www.cityofrichfield.org) AN EQUAL OPPORTUNITY EMPLOYER

3. Asbestos Bulk Material Analysis.  
Many Single Family Homes and a Liquor Store Owned by the City of Richfield, Using Angstrom's in-house Accredited Bulk Asbestos Laboratory 2007 to present. Approx. \$5,000
4. Fungal Investigation & Sampling.  
N/A.
5. General Environmental Condition Evaluations.  
Collection, testing and reporting on Elemental Lead contamination from Police Firing Range of HVAC system, exterior soils, indoor IAQ and lead dust contamination in the range prior to decommissioning. May 2010. \$2,000
6. HVAC Evaluation.  
Collection, testing and reporting on Elemental Lead contamination from Police Firing Range of HVAC system, exterior soils, indoor IAQ and lead dust contamination in the range prior to decommissioning. May 2010. \$2,500
7. Indoor Air Quality Assessment.  
Collection, testing and reporting on Elemental Lead contamination from Police Firing Range of HVAC system, exterior soils, indoor IAQ and lead dust contamination in the range prior to decommissioning. May 2010. \$2,000
8. Lead in Paint Sampling.  
Richfield City Hall Demolition Project  
Lead in Paint Sampling using XRF Analyzers, throughout Richfield City Hall and Public Service Building (Police & Fire). May 2010. \$2,750
9. Hazardous Material Surveys with Electronic Database of Information.  
Richfield City Hall Demolition Project Complete asbestos, lead in paint and elemental lead survey produced. Converted to .pdf format and delivered via CD-ROM as an electronic data base in accord with MN Rules 4620.3460 and 4620.3470. May 2010. \$8,750
10. N/A
11. Other Hazardous Material (Industrial).  
Richfield City Hall. Collection and analysis of sludge samples from sub-slab sump for heavy metals (RCRA) sweep and GRO/DRO contamination. Collate and interpret analytical data and generate report findings. Jan 2011. \$1,500.

If you have any questions concerning the above projects or this letter of recommendation, please contact me.

Sincerely,

A handwritten signature in black ink, appearing to be the initials 'DC' or a stylized 'R'.

Dave Conrads, Buildings Operations Manager  
City of Richfield

8. PLEASE ANSWER THE QUESTIONS LISTED BELOW, TO CONFIRM SPECIFIC ELIGIBILITY REQUIREMENTS.

a. I have read and agree to the State's Standard Contract (  ) Yes (  ) No

9. CORPORATE SIGNATURE

This responses and information contained in this Exhibit C are current and accurate and this Exhibit C is hereby submitted by the sole proprietor or corporate officer.

Authorized Signature:



(Signature of person identified in Section 2)

(  ) corporate officer\* (  ) partner\* (  ) sole proprietor  
\* insert copy of corporate resolution or by-laws indicating that this person has authority to sign and enter into contracts on behalf of the company or partnership.

Firm is registered in Minnesota as a:

(  ) Corporation (  ) LLP (  ) Other \_\_\_\_\_

MN Tax ID No. 1335121 FED Tax ID No. 41-1763843

MN Vendor No. 128802003 00  
(required for contract)

\_\_\_\_\_ Charles Tye \_\_\_\_\_  
(Typed Name)

Date: 5/30/12

\_\_\_\_\_ President \_\_\_\_\_  
(Typed Title)

END OF EXHIBIT C

Table of Categories of Industrial Hygiene Services

Category #	Service Name	Description	Submittal Requirement
1	Asbestos Air Sampling	Air sampling and analysis of samples collected. All sampling is to be conducted by companies and individuals credentialed by the Minnesota Department of Health (MDH) and by use of the requirements provided in Minnesota Rules 4620.3592 to 4620.3598. The State requires that air samples collected at project sites are done by a third party, and that, other than educational facilities, they are analyzed utilizing Phase Contracts Microscopy at the project site. Responder is required to have the equipment for this work. Asbestos air samples collected for educational facilities must use Transmission Electron Microscopy analysis, and will be analyzed off-site. Includes but is not limited to pre-site analysis and on-site project management, testing and analysis (excludes asbestos air monitoring).	<p>✓ MDH License(s) (copies of )</p> <p>✓ Letter signed by company officer listing the company's equipment</p> <p>✓ Project Experience &amp; Reference(s)</p>
2	General Air Monitoring		<p>✓ Project Experience &amp; Reference(s)</p>
3	Asbestos Bulk Material Analysis	Analysis of bulk material collected as part of an inspection. Analysis must be conducted by laboratories accredited according to Minnesota Rules 4620.3460.	<p>✓ MDH License(s) (copies of )</p> <p>✓ Letter signed by company officer indicating compliance with this criterion</p> <p>✓ Project Experience &amp; Reference(s)</p>
4	Fungal Investigation and Sampling	Investigation, sampling, evaluating, reporting, and providing corrective recommendations for fungal organism concerns.	<p>✓ Project Experience &amp; Reference(s)</p>
5	General Environmental Condition Evaluations	Evaluations of workplace issues that could include regulatory requirements of the EPA, Minnesota Pollution Control Agency, or Minnesota Department of Labor and Industry's Occupational Safety and Health Administration (OSHA). Examples of these conditions could include, but are not limited to, the evaluation of suspect chemical fluids, PCB containing items, hazardous materials, mercury and underground storage tanks (UST).	<p>✓ Project Experience &amp; Reference(s)</p>
6	HVAC Evaluation	Investigation, sampling, evaluating, reporting, and providing corrective recommendations and designs for HVAC system conditions that could	<p>✓ Project Experience</p>

Category #	Service Name	Description	& Reference(s)
7	Indoor Air Quality Assessment	Investigation, sampling, evaluating, reporting, and providing corrective recommendations for indoor air quality concerns. Such sampling is required to be done using recognized Industrial Hygiene standards, and could include, but not be limited to, noise, volatile compounds, particulates, chemical compounds, fumes, and other workplace contaminants.	✓ Project Experience & Reference(s)
8	Lead in Paint Sampling	Investigation, sampling, evaluating, reporting, and providing corrective recommendations for lead concerns. Such sampling is to be conducted by companies and individuals credentialed by the Minnesota Department of Health and by use of the requirements provided in Minnesota Rules 4761.2550 through 4761.2570.	✓ MDH License(s) (copies of) ✓ Project Experience & Reference(s)
9	Hazardous Material Surveys with Electronic Database of Information	Conduct surveys for suspect asbestos containing, or other hazardous materials, building and site materials and provide corrective recommendations. Information must be put into an electronic format, and electronic data must be converted to portable document format (pdf) on CD-R media. Asbestos surveys and management plans are to be performed by individuals credentialed by the Minnesota Department of Health and by use of the requirements provided in Minnesota Rules, parts 4620.3460 and 4620.3470.	✓ MDH License(s) (copies of) ✓ Project Experience & Reference(s)
11	Other Hazardous Material Industrial Hygiene Services	Investigation, sampling, evaluating, reporting, and providing corrective recommendations for other hazardous material concerns.	✓ Project Experience & Reference(s)
12	<del>Design Services for Hazardous Materials Abatement</del>	<del>Survey and Scoping of abatement work; prepare bid/solicitation documents for removal of hazardous materials; Answer questions from interested abatement contractors during the bidding phase; prepare and issue addenda during the bid phase; Interpret and clarify design documents during the construction/remediation phase; coordinate with abatement contractor to accomplish the work. Collect and submit all closeout documentation. — Provide architectural and/or engineering services when needed as incidental to the remediation work. (Note: These services may be performed by another firm performing as your subconsultant).</del>	<del>Project Experience &amp; Reference(s) Licenses/Credentials</del>

**Exhibit D1**  
**State/Consultant Basic Services**  
**Insurance Requirements**

A. Contractor shall not commence work under the contract until they have obtained all the insurance described below and the State of Minnesota has approved such insurance. Contractor shall maintain such insurance in force and effect throughout the term of the contract.

B. Contractor is required to maintain and furnish satisfactory evidence of the following insurance policies:

1. **Workers' Compensation Insurance:** Except as provided below, Contractor must provide Workers' Compensation insurance for all its employees and, in case any work is subcontracted, Contractor will require the subcontractor to provide Workers' Compensation insurance in accordance with the statutory requirements of the State of Minnesota, including Coverage B, Employer's Liability. Insurance **minimum** limits are as follows:

\$100,000 – Bodily Injury by Disease per employee  
\$500,000 – Bodily Injury by Disease aggregate  
\$100,000 – Bodily Injury by Accident

If Minnesota Statute 176.041 exempts Contractor from Workers' Compensation insurance or if the Contractor has no employees in the State of Minnesota, Contractor must provide a written statement, signed by an authorized representative, indicating the qualifying exemption that excludes Contractor from the Minnesota Workers' Compensation requirements.

If during the course of the contract the Contractor becomes eligible for Workers' Compensation, the Contractor must comply with the Workers' Compensation Insurance requirements herein and provide the State of Minnesota with a certificate of insurance.

2. **Commercial General Liability Insurance:** Contractor is required to maintain insurance protecting it from claims for damages for bodily injury, including sickness or disease, death, and for care and loss of services as well as from claims for property damage, including loss of use which may arise from operations under the Contract whether the operations are by the Contractor or by a subcontractor or by anyone directly or indirectly employed by the Contractor under the contract. Insurance **minimum** limits are as follows:

\$2,000,000 – per occurrence  
\$2,000,000 – annual aggregate  
\$2,000,000 – annual aggregate – Products/Completed Operations

The following coverages shall be included:

Premises and Operations Bodily Injury and Property Damage  
Personal and Advertising Injury  
Blanket Contractual Liability  
Products and Completed Operations Liability  
Other; if applicable, please list \_\_\_\_\_  
State of Minnesota named as an Additional Insured

3. **Commercial Automobile Liability Insurance:** Contractor is required to maintain insurance protecting it from claims for damages for bodily injury as well as from claims for property damage resulting from the ownership, operation, maintenance or use of all owned, hired, and non-owned autos which may arise from operations under this contract, and in case any work is subcontracted the contractor will require the subcontractor to maintain Commercial Automobile Liability insurance. Insurance **minimum** limits are as follows:

## Exhibit D1

\$2,000,000 – per occurrence Combined Single limit for Bodily Injury and Property Damage

In addition, the following coverages should be included:

Owned, Hired, and Non-owned Automobile

#### 4. **Professional/Technical, Errors and Omissions, and/or Miscellaneous Liability Insurance**

This policy will provide coverage for all claims the contractor may become legally obligated to pay resulting from any actual or alleged negligent act, error, or omission related to Contractor's professional services required under the contract.

Contractor is required to carry the following **minimum** limits:

\$2,000,000 – per claim or event

\$2,000,000 – annual aggregate

Any deductible will be the sole responsibility of the Contractor and may not exceed \$50,000 without the written approval of the State. If the Contractor desires authority from the State to have a deductible in a higher amount, the Contractor shall so request in writing, specifying the amount of the desired deductible and providing financial documentation by submitting the most current audited financial statements so that the State can ascertain the ability of the Contractor to cover the deductible from its own resources.

The retroactive or prior acts date of such coverage shall not be after the effective date of this Contract and Contractor shall maintain such insurance for a period of at least three (3) years, following completion of the work. If such insurance is discontinued, extended reporting period coverage must be obtained by Contractor to fulfill this requirement.

#### C. Additional Insurance Conditions:

- Contractor's policy(ies) shall be primary insurance to any other valid and collectible insurance available to the State of Minnesota with respect to any claim arising out of Contractor's performance under this contract;
- Contractor's policy(ies) and Certificate(s) of Insurance shall contain a provision that coverage afforded under the policy(ies) shall not be cancelled without at least thirty (30) days advanced written notice to the State of Minnesota;
- Contractor is responsible for payment of Contract related insurance premiums and deductibles;
- If Contractor is self-insured, a Certificate of Self-Insurance must be attached;
- Contractor's policy(ies) shall include legal defense fees in addition to its liability policy limits, with the exception of B.4 above;
- Contractor shall obtain insurance policy(ies) from insurance company(ies) having an "AM BEST" rating of A- (minus); Financial Size Category (FSC) VII or better, and authorized to do business in the State of Minnesota; and
- An Umbrella or Excess Liability insurance policy may be used to supplement the Contractor's policy limits to satisfy the full policy limits required by the Contract.

D. The State reserves the right to immediately terminate the contract if the contractor is not in compliance with the insurance requirements and retains all rights to pursue any legal remedies against the contractor. All insurance policies must be open to inspection by the State, and copies of policies must be submitted to the State's authorized representative upon written request.

E. The successful responder is required to submit Certificates of Insurance acceptable to the State of MN as evidence of insurance coverage requirements prior to commencing work under the contract.

# Exhibit E

## State Of Minnesota – Affirmative Action Certification

If your response to this solicitation is or could be in excess of \$100,000, complete the information requested below to determine whether you are subject to the Minnesota Human Rights Act (Minnesota Statutes 363A.36) certification requirement, and to provide documentation of compliance if necessary. **It is your sole responsibility to provide this information and—if required—to apply for Human Rights certification prior to the due date and time of the bid or proposal and to obtain Human Rights certification prior to the execution of the contract. The State of Minnesota is under no obligation to delay proceeding with a contract until a company receives Human Rights certification.**

**BOX A – For companies which have employed more than 40 full-time employees within Minnesota on any single working day during the previous 12 months. All other companies proceed to BOX B.**

Your response will be rejected unless your business:

has a current Certificate of Compliance issued by the Minnesota Department of Human Rights (MDHR)

—or—

has submitted an affirmative action plan to the MDHR, which the Department received prior to the date and time the responses are due.

Check one of the following statements if you have employed more than 40 full-time employees in Minnesota on any single working day during the previous 12 months:

- We have a current Certificate of Compliance issued by the MDHR. **Proceed to BOX C. Include a copy of your certificate with your response.**
- We do not have a current Certificate of Compliance. However, we submitted an Affirmative Action Plan to the MDHR for approval, which the Department received on \_\_\_\_\_ (date). [If the date is the same as the response due date, indicate the time your plan was received: \_\_\_\_\_ (time). **Proceed to BOX C.**
- We do not have a Certificate of Compliance, nor has the MDHR received an Affirmative Action Plan from our company. **We acknowledge that our response will be rejected. Proceed to BOX C. Contact the Minnesota Department of Human Rights for assistance.** (See below for contact information.)

**Please note:** Certificates of Compliance must be issued by the Minnesota Department of Human Rights. Affirmative Action Plans approved by the Federal government, a county, or a municipality must still be received, reviewed, and approved by the Minnesota Department of Human Rights before a certificate can be issued.

**BOX B – For those companies not described in BOX A**

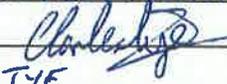
Check below.

- We have not employed more than 40 full-time employees on any single working day in Minnesota within the previous 12 months. **Proceed to BOX C.**

**BOX C – For all companies**

By signing this statement, you certify that the information provided is accurate and that you are authorized to sign on behalf of the responder. You also certify that you are in compliance with federal affirmative action requirements that may apply to your company. (These requirements are generally triggered only by participating as a prime or subcontractor on federal projects or contracts. Contractors are alerted to these requirements by the federal government.)

Name of Company: ANGSTROM ANALYTICAL, INC. Date: 5/29/12

Authorized Signature:  Telephone number: 612 865 2020

Printed Name: CHARLES TYE Title: PRESIDENT

**For assistance with this form, contact:**

Minnesota Department of Human Rights, Compliance Services Section

Mail: 190 East 5<sup>th</sup> St., Suite 700 St. Paul, MN 55101

TC Metro: (651) 296-5663

Toll Free: 800-657-3704

Web: [www.humanrights.state.mn.us](http://www.humanrights.state.mn.us)

Fax: (651) 296-9042

TTY: (651) 296-1283

Email: [employerinfo@therightsplace.net](mailto:employerinfo@therightsplace.net)

# Exhibit F

## CERTIFICATION REGARDING LOBBYING For State of Minnesota Contracts and Grants over \$100,000

The undersigned certifies, to the best of his or her knowledge and belief that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, A Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, Disclosure Form to Report Lobbying in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

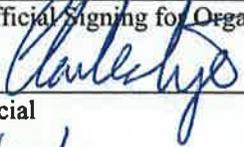
This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

ANGSTROM ANALYTICAL, INC.

Organization Name

CHARLES TYE, PRESIDENT

Name and Title of Official Signing for Organization

By: 

Signature of Official

5/29/12

Date

# Exhibit I

## STATE OF MINNESOTA AFFIDAVIT OF NONCOLLUSION

I swear (or affirm) under the penalty of perjury:

1. That I am the Responder (if the Responder is an individual), a partner in the company (if the Responder is a partnership), or an officer or employee of the responding corporation having authority to sign on its behalf (if the Responder is a corporation);
2. That the attached proposal submitted in response to the PROF. INV. HYGIENE SVCS Request for Proposals has been arrived at by the Responder independently and has been submitted without collusion with and without any agreement, understanding or planned common course of action with, any other Responder of materials, supplies, equipment or services described in the Request for Proposal, designed to limit fair and open competition;
3. That the contents of the proposal have not been communicated by the Responder or its employees or agents to any person not an employee or agent of the Responder and will not be communicated to any such persons prior to the official opening of the proposals; and
4. That I am fully informed regarding the accuracy of the statements made in this affidavit.

Responder's Firm Name: ANGSTROM ANALYTICAL, INC.

Authorized Representative (Please Print) CHARLES TYE

Authorized Signature: 

Date: 5/29/12

Subscribed and sworn to me this 29<sup>th</sup> day of May, 2012

  
Notary Public

My commission expires: 01/31/2015

