



PFAS AIRPORT GRANT AGREEMENT

BETWEEN THE

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

AND THE COUNTY OF LIVINGSTON

This Grant Agreement ("Agreement") is made between the Michigan Department of Environment, Great Lakes, and Energy (EGLE), **Remediation and Redevelopment Division** ("State"), and **The County of Livingston** ("Grantee").

The purpose of this Agreement is to provide funding in exchange for work to be performed for the project named below. Legislative appropriation of Funds for grant assistance is set forth in PA87 of 2021. This Agreement is subject to the terms and conditions specified herein.

PROJECT INFORMATION:

Project Name: Spencer J. Hardy Livingston County Airport

Amount of grant: \$58,750

% of grant state \$100 / % of grant federal 0%

Start Date (executed by EGLE):5/15/2025

End Date: 8/1/2026

GRANTEE CONTACT INFORMATION:

Name/Title: Marc Johnson

Organization: Spencer J. Hardy Livingston County Airport

Address: 3399 County Airport Drive

City, State, ZIP: Howell, MI 48855-8800

Phone Number: 517-546-6675

E-Mail Address: mjohnson@livgov.com

SIGMA Vendor Number: CV0133321

STATE'S CONTACT INFORMATION:

Name/Title: Rebecca Taylor

Division/Bureau/Office: Remediation and Redevelopment Division

Address: 525 West Allegan

City, State, ZIP: Lansing, MI 48933

Phone Number: 517-284-5160

E-Mail Address: Taylorr@michigan.gov

The individuals signing below certify by their signatures that they are authorized to sign this Agreement on behalf of their agencies and that the parties will fulfill the terms of this Agreement, including any attached appendices, as set forth herein.

FOR THE GRANTEE:

Signature	Name/Title	Date
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FOR THE STATE:

Signature	Name/Title	Date
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I. PROJECT SCOPE

This Agreement and its appendices constitute the entire Agreement between the State and the Grantee and may be modified only by written agreement between the State and the Grantee.

(A) The scope of this project is limited to the activities specified in Appendix A and such activities as are authorized by the State under this Agreement. Any change in project scope requires prior written approval in accordance with Section III, Changes, in this Agreement.

(B) By acceptance of this Agreement, the Grantee commits to complete the project identified in Appendix A within the time period allowed for in this Agreement and in accordance with the terms and conditions of this Agreement.

II. AGREEMENT PERIOD

Upon signature by the State, the Agreement shall be effective from the Start Date until the End Date on page 1. The State shall have no responsibility to provide funding to the Grantee for project work performed except between the Start Date and the End Date specified on page 1. Expenditures made by the Grantee prior to the Start Date or after the End Date of this Agreement are not eligible for payment under this Agreement.

III. CHANGES

Any changes to this Agreement shall be requested by the Grantee or the State in writing and implemented only upon approval in writing by the State. The State reserves the right to deny requests for changes to the Agreement or to the appendices. No changes can be implemented without approval by the State.

IV. GRANTEE DELIVERABLES AND REPORTING REQUIREMENTS

The Grantee shall submit deliverables and follow reporting requirements specified in Appendix A of this Agreement.

(A) The Grantee must complete and submit quarterly financial and progress reports according to a form and format prescribed by the State and must include supporting documentation of eligible project expenses. These reports shall be due according to the following:

Reporting Period	Due Date
January 1 – March 31	April 30
April 1 – June 30	July 31
July 1 – September 30	Before October 15*
October 1 – December 31	January 31

*Due to the State's year-end closing procedures, there will be an accelerated due date for the report covering July 1 – September 30. Advance notification regarding the due date for the quarter ending September 30 will be sent to the Grantee. If the Grantee is unable to submit a report in early October

for the quarter ending September 30, an estimate of expenditures through September 30 must be submitted to allow the State to complete its accounting for that fiscal year.

The forms provided by the State shall be submitted to the State's contact at the address on page 1. All required supporting documentation (invoices, proof of payment, etc.) for expenses must be included with the report.

(B) The Grantee shall provide a final project report in a format prescribed by the State. The Grantee must provide a draft final report 30 days **prior to the end date** of the agreement. The Grantee shall submit the final status report, including all supporting documentation for expenses, along with the final project report and any other outstanding products within 30 days from the End Date of the Agreement.

V. GRANTEE RESPONSIBILITIES

(A) The Grantee agrees to abide by all applicable local, state, and federal laws, rules, ordinances, and regulations in the performance of this grant.

(B) All local, state, and federal permits, if required, are the responsibility of the Grantee. Award of this grant is not a guarantee of permit approval by the State.

(C) The Grantee shall be solely responsible to pay all applicable taxes and fees, if any, that arise from the Grantee's receipt or execution of this grant.

(D) The Grantee is responsible for the professional quality, technical accuracy, timely completion, and coordination of all designs, drawings, specifications, reports, and other services submitted to the State under this Agreement. The Grantee shall, without additional compensation, correct or revise any errors, omissions, or other deficiencies in drawings, designs, specifications, reports, or other services.

(E) The State's approval of drawings, designs, specifications, reports, and incidental work or materials furnished hereunder shall not in any way relieve the Grantee of responsibility for the technical adequacy of the work. The State's review, approval, acceptance, or payment for any of the services shall not be construed as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement.

(F) The Grantee acknowledges that it is a crime to knowingly and willingly file false information with the State for the purpose of obtaining this Agreement or any payment under the Agreement, and that any such filing may subject the Grantee, its agents, and/or employees to criminal and civil prosecution and/or termination of the grant.

VI. USE OF MATERIAL

Unless otherwise specified in this Agreement, the Grantee may release information or material developed under this Agreement, provided it is acknowledged that the State funded all or a portion of its development.

The State, and federal awarding agency, if applicable, retains a royalty-free, nonexclusive and irrevocable right to reproduce, publish, and use in whole or in part, and authorize others to do so, any copyrightable material or research data submitted under this grant whether or not the material is copyrighted by the Grantee or another person. The Grantee will only submit materials that the State can use in accordance with this paragraph.

VII. ASSIGNABILITY

The Grantee shall not assign this Agreement or assign or delegate any of its duties or obligations under this Agreement to any other party without the prior written consent of the State. The State does not assume responsibility regarding the contractual relationships between the Grantee and any subcontractor.

VIII. SUBCONTRACTS

The State reserves the right to deny the use of any consultant, contractor, associate, or other personnel to perform any portion of the project. The Grantee is solely responsible for all contractual activities performed under this Agreement. Further, the State will consider the Grantee to be the sole point of contact with regard to contractual matters, including payment of any and all charges resulting from the anticipated Grant. All subcontractors used by the Grantee in performing the project shall be subject to the provisions of this Agreement and shall be qualified to perform the duties required.

IX. NON-DISCRIMINATION

The Grantee shall comply with the Elliott Larsen Civil Rights Act, 1976 PA 453, as amended, MCL 37.2101 *et seq.*, the Persons with Disabilities Civil Rights Act, 1976 PA 220, as amended, MCL 37.1101 *et seq.*, and all other federal, state, and local fair employment practices and equal opportunity laws and covenants that it shall not discriminate against any employee or applicant for employment, to be employed in the performance of this Agreement, with respect to his or her hire, tenure, terms, conditions, or privileges of employment, or any matter directly or indirectly related to employment, because of his or her race, religion, color, national origin, age, sex, height, weight, marital status, or physical or mental disability that is unrelated to the individual's ability to perform the duties of a particular job or position. The Grantee agrees to include in every subcontract entered into for the performance of this Agreement this covenant not to discriminate in employment. A breach of this covenant is a material breach of this Agreement.

X. UNFAIR LABOR PRACTICES

The Grantee shall comply with the Employers Engaging in Unfair Labor Practices Act, 1980 PA 278, as amended, MCL 423.321 *et seq.*

XI. LIABILITY

(A) The Grantee, not the State, is responsible for all liabilities as a result of claims, judgments, or costs arising out of activities to be carried out by the Grantee under this Agreement, if the liability is caused by the Grantee, or any employee or agent of the Grantee acting within the scope of their employment or agency.

(B) Nothing in this Agreement should be construed as a waiver of any governmental immunity by the Grantee, the State, its agencies, or their employees as provided by statute or court decisions.

XII. CONFLICT OF INTEREST

No government employee, or member of the legislative, judicial, or executive branches, or member of the Grantee's Board of Directors, its employees, partner agencies, or their families shall benefit financially from any part of this Agreement.

XIII. ANTI-LOBBYING

If all or a portion of this Agreement is funded with federal funds, then in accordance with 2 CFR 200, as appropriate, the Grantee shall comply with the Anti-Lobbying Act, which prohibits the use of all project funds regardless of source, to engage in lobbying the state or federal government or in litigation against the State. Further, the Grantee shall require that the language of this assurance be included in the award documents of all subawards at all tiers.

If all or a portion of this Agreement is funded with state funds, then the Grantee shall not use any of the grant funds awarded in this Agreement for the purpose of lobbying as defined in the State of Michigan's lobbying statute, MCL 4.415(2). "Lobbying" means communicating directly with an official of the executive branch of state government or an official in the legislative branch of state government for the purpose of influencing legislative or administrative action." The Grantee shall not use any of the grant funds awarded in this Agreement for the purpose of litigation against the State. Further, the Grantee shall require that language of this assurance be included in the award documents of all subawards at all tiers.

XIV. DEBARMENT AND SUSPENSION

By signing this Agreement, the Grantee certifies that it has checked the federal debarment/suspension list at www.SAM.gov to verify that its agents, and its subcontractors:

- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or the state.
- (2) Have not within a three-year period preceding this Agreement been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction, as defined in 45 CFR 1185; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.
- (3) Are not presently indicted or otherwise criminally or civilly charged by a government entity (federal, state, or local) with commission of any of the offenses enumerated in subsection (2).
- (4) Have not within a three-year period preceding this Agreement had one or more public transactions (federal, state, or local) terminated for cause or default.

- (5) Will comply with all applicable requirements of all other state or federal laws, executive orders, regulations, and policies governing this program.

XV. AUDIT AND ACCESS TO RECORDS

The State reserves the right to conduct a programmatic and financial audit of the project, and the State may withhold payment until the audit is satisfactorily completed. The Grantee will be required to maintain all pertinent records and evidence pertaining to this Agreement, including grant and any required matching funds, in accordance with generally accepted accounting principles and other procedures specified by the State. The State or any of its duly authorized representatives must have access, upon reasonable notice, to such books, records, documents, and other evidence for the purpose of inspection, audit, and copying. The Grantee will provide proper facilities for such access and inspection. All records must be maintained for a minimum of five years after the final payment has been issued to the Grantee by the State.

XVI. INSURANCE

(A) The Grantee must maintain insurance or self-insurance that will protect it from claims that may arise from the Grantee's actions under this Agreement.

(B) The Grantee must comply with applicable workers' compensation laws while engaging in activities authorized under this Agreement.

XVII. OTHER SOURCES OF FUNDING

The Grantee guarantees that any claims for reimbursement made to the State under this Agreement must not be financed by any source other than the State under the terms of this Agreement. If funding is received through any other source, the Grantee agrees to delete from Grantee's billings, or to immediately refund to the State, the total amount representing such duplication of funding.

XVIII. COMPENSATION

(A) A breakdown of costs allowed under this Agreement is identified in Appendix A. The State will pay the Grantee a total amount not to exceed the amount on page 1 of this Agreement, in accordance with Appendix A, and only for expenses incurred and paid. All other costs necessary to complete the project are the sole responsibility of the Grantee.

(B) Expenses incurred by the Grantee prior to the Start Date or after the End Date of this Agreement are not allowed under the Agreement.

(C) The State will approve payment requests after approval of reports and related documentation as required under this Agreement.

(D) The State reserves the right to request additional information necessary to substantiate payment requests.

(E) Payments under this Agreement may be processed by Electronic Funds Transfer (EFT). The Grantee may register to receive payments by EFT at the SIGMA Vendor Self Service web site (<https://sigma.michigan.gov/webapp/PRDVSS2X1/AltSelfService>).

(F) An amount equal to 5 percent of the grant award, or \$2,938, will be withheld by the State until the project is completed in accordance with Section XIX, Closeout, and Appendix A.

XIX. CLOSEOUT

(A) A determination of project completion, which may include a site inspection and an audit, shall be made by the State after the Grantee has met any match obligations, satisfactorily completed the activities, and provided products and deliverables described in Appendix A.

(B) Upon issuance of final payment from the State, the Grantee releases the State of all claims against the State arising under this Agreement. Unless otherwise provided in this Agreement or by State law, final payment under this Agreement shall not constitute a waiver of the State's claims against the Grantee.

(C) The Grantee shall immediately refund to the State any payments in excess of the costs allowed by this Agreement.

XX. CANCELLATION

This Agreement may be canceled by the State, upon 30 days written notice, due to Executive Order, budgetary reduction, other lack of funding, upon request by the Grantee, or upon mutual agreement by the State and Grantee. The State may honor requests for just and equitable compensation to the Grantee for all satisfactory and eligible work completed under this Agreement up until 30 days after written notice, upon which time all outstanding reports and documents are due to the State and the State will no longer be liable to pay the grantee for any further charges to the grant.

XXI. TERMINATION

(A) This Agreement may be terminated by the State as follows.

(1) Upon 30 days written notice to the Grantee:

- a. If the Grantee fails to comply with the terms and conditions of the Agreement, or with the requirements of the authorizing legislation cited on page 1, or the rules promulgated thereunder, or other applicable law or rules.
- b. If the Grantee knowingly and willingly presents false information to the State for the purpose of obtaining this Agreement or any payment under this Agreement.
- c. If the State finds that the Grantee, or any of the Grantee's agents or representatives, offered or gave gratuities, favors, or gifts of monetary value to any official, employee, or agent of the State in an attempt to secure a subcontract or favorable treatment in awarding, amending, or making any determinations related to the performance of this Agreement.

- d. If the Grantee or any subcontractor, manufacturer, or supplier of the Grantee appears in the register of persons engaging in unfair labor practices that is compiled by the Michigan Department of Licensing and Regulatory Affairs or its successor.
- e. During the 30-day written notice period, the State shall withhold payment for any findings under subparagraphs a through d, above and the Grantee will immediately cease charging to the grant and stop earning match for the project (if applicable).

(2) Immediately and without further liability to the State if the Grantee, or any agent of the Grantee, or any agent of any subcontract is:

- a. Convicted of a criminal offense incident to the application for or performance of a State, public, or private contract or subcontract;
- b. Convicted of a criminal offense, including but not limited to any of the following: embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, or attempting to influence a public employee to breach the ethical conduct standards for State of Michigan employees;
- c. Convicted under State or federal antitrust statutes; or
- d. Convicted of any other criminal offense that, in the sole discretion of the State, reflects on the Grantee's business integrity.
- e. Added to the federal or state Suspension and Debarment list.

(B) If a grant is terminated, the State reserves the right to require the Grantee to repay all or a portion of funds received under this Agreement.

XXII. IRAN SANCTIONS ACT

By signing this Agreement the Grantee is certifying that it is not an Iran linked business, and that its contractors are not Iran linked businesses, as defined in MCL 129.312.

If you need this information in an alternate format, contact EGLE-Accessibility@Michigan.gov or call 800-662-9278.

EGLE does not discriminate on the basis of race, sex, religion, age, national origin, color, marital status, disability, political beliefs, height, weight, genetic information, or sexual orientation in the administration of any of its programs or activities, and prohibits intimidation and retaliation, as required by applicable laws and regulations. Questions or concerns should be directed to the Nondiscrimination Compliance Coordinator at EGLE-NondiscriminationCC@Michigan.gov or 517-249-0906.

This form and its contents are subject to the Freedom of Information Act and may be released to the public.

**PER- AND POLY-FLUOROALKYL SUBSTANCE
GRANT APPENDIX A
October 2024 (revised February 2025)**

Project Name: Spencer J. Hardy Livingston County Airport

Project Location (County): Livingston

Contact for the Airport: Marc Johnson

Contact Phone Number: 517-546-6675

Contact Email: mjohnson@livgov.com

PROJECT DESCRIPTION

In January 2017, a Cessna Citation jet plane over-ran the runway and crashed into a field owned by the Spencer J. Hardy Livingston County Airport (Airport). The pilot was rescued and the City of Howell Fire Department used AFFF firefighting foam containing per and polyfluoroalkyl substances (PFAS) to suppress the jet fuel fire. Afterwards, a total of 540 tons of jet fuel and PFAS impacted soil was excavated and cleanup confirmation samplings were collected indicating contaminated soils remained. In March 2017, 5,600 gallons of shallow contaminated groundwater was removed by a vac truck and properly disposed. From April to August 2018, eighteen (18) shallow monitoring wells were installed to evaluate PFAS concentrations and evaluate groundwater flow direction. Based on the data, EGLE closed out the incident for the jet fuel impact, but not for the remaining PFAS contamination. Maximum concentrations of regulated PFAS include 59 ng/l (ppt – parts per trillion) perfluorooctanoic acid (PFOA), concentrations of combined PFAS were up to 24, 905 ppt. In the 2021 sampling event, PFOA was at 40 ppt. PFOA has been estimated to migrate over 100 feet in three years. Two years have lapsed since the PFAS in groundwater was last tested and the PFAS plume has not been determined to be stable or declining.

The goal of this additional work is to complete evaluation of the PFAS in groundwater released during the application of AFFF foam from the Cessna Jet crash in 2017.

PROJECT OBJECTIVES

- Complete a Phase I Environmental Site Assessment, with focus on historical/current uses of per and polyfluoroalkyl substances (PFAS) on the property and in the surrounding area
- Collect Samples from at least 10 existing monitoring wells
- Re-survey existing monitoring wells to confirm groundwater flow direction
- Complete delineation of PFAS in the groundwater at the crash site by vertical aquifer sampling (VAS)
- Install new monitoring wells based on VAS sample results
- Sample and survey new monitoring wells after installation
- Determine if additional investigation is necessary to delineate PFAS groundwater impacts
- Prepare and Complete a Report of Findings

WORK PLAN

Task 1: Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment (ESA) will be completed on the Livingston County Airport property, including a specific focus on the potential historical/current uses of per and polyfluoroalkyl substances (PFAS) on the property and in the surrounding areas.

Estimated Cost:

Professional Services	\$ 3,000.00
Task 1 Estimated Cost.....	\$ 3,000.00

Task 2: Groundwater Sampling & Aquifer Testing

Initially, a site reconnaissance will be conducted effort to locate each of the previously installed monitoring wells (up to 18). Once located, each well will be inspected and a depth to water measurement will be obtained using an electronic water level indicator. All measurements will be referenced to the top of well casing. Subsequently, each well will be purged and sampled utilizing low-flow sampling techniques. The following field parameters will be monitored using field meters and recorded on field log forms during sampling activities: pH, specific conductance, temperature, turbidity, dissolved oxygen, and oxidation-reduction potential. If the well does not purge dry using the low-flow technique, groundwater parameters will be continuously recorded, and sampling will be conducted once three consecutive readings are within the following limits:

- pH ± 0.2 standard units
- Specific conductance $\pm 10\%$
- Temperature $\pm 10\%$
- Turbidity less than 10 NTUs
- Dissolved Oxygen $\pm 10\%$

All purge water generated during sampling activities will be collected and managed as investigation derived waste (IDW).

Groundwater samples will be collected in pre-cleaned, appropriately labeled, laboratory provided containers, and then packed in a cooler with ice to maintain a temperature of approximately 4° C. The sealed cooler will then be transported, under chain-of-custody, to Merit Laboratories, Inc. (Merit) for analysis. All samples including the necessary QA/QC samples will be analyzed PFAS.

A vertical elevational survey will be completed for all site monitoring wells. The monitoring well survey will be tied to a relative on-site control point with an arbitrary, assigned elevation or another selected elevation datum. The monitoring well survey results will be utilized to determine a relative elevation of the groundwater at each well location and these results will allow for the creation of groundwater contours/groundwater flow direction diagrams.

For cost estimation purposes, we have assumed that up to 15 groundwater samples will be collected from existing monitoring wells plus the necessary QA/QC samples.

Aquifer Testing

In addition to additional groundwater monitoring, aquifer testing will be completed to determine parameters for chemical fate and transport. Slug testing will be completed at three monitoring well locations. Well construction logs will be reviewed to determine a subset of wells screened in material which provides a good representation of the aquifer. Prior to the slug tests, the static depth to water will be collected and recorded and a pressure transducer will be installed in the well to monitor and log water levels during the test. The slug will be installed into the well until it is fully submerged, and water levels will be monitored until they are within 90 percent or more of the initial level. The slug will be removed and the rise in water level will be monitored until it is within 90 percent of the level prior to removal of the slug. The change in water level over time will be used to calculate hydraulic conductivity of the aquifer. The aquifer hydraulic conductivity will be used to determine groundwater flow velocity and potential fate and transport of impacted groundwater. The aquifer characteristics can also be used to assist with the design of groundwater remediation, as deemed necessary.

Aquifer testing will take place after completion of the groundwater sampling event. Results of the aquifer testing and hydraulic conductivity calculations will be included in the final summary report and sent to EGLE upon receipt from the lab.

Estimated Cost:

Professional Services	\$ 6,720.00
Analytical Testing.....	6,985.00
Waste Disposal	550.00
Field Equipment, Supplies, etc.	1,445.00
Task 2 Estimated Cost.....	\$ 15,700.00

Task 3: Groundwater Delineation

Based on that data presented, up to three Vertical Aquifer Sampling (VAS) borings and three horizontal delineation borings will be completed at the site. Three sampling intervals will be selected from the VAS Borings with an approximate 5 to 10 feet vertical separation between samples. Work will be completed using a hydraulically driven, direct push probe (i.e. Geoprobe®). For costing purposes, it is estimated that this work can be completed within two days, with 12 groundwater samples collected for analysis plus the necessary QA/QC samples. Groundwater samples will be retained for analysis following the procedures outlined in Task 2 above.

Upon completion of the work, borehole logs will be created, and data will be tabulated to help evaluate the need for additional monitoring wells. A meeting will be scheduled with EGLE to discuss the need and location for additional monitoring wells.

Estimated Cost:

Professional Services.....	\$ 4,150.00
Drilling Services	3,960.00
Analytical Testing.....	5,830.00
Waste Disposal	550.00
Field Equipment, Supplies, etc.	860.00
Task 3 Estimated Cost.....	\$ 15,350.00

Task 4: Installation and Sampling of Monitoring Wells

Based on the results from Tasks 1 & 2 above, additional monitoring wells will be installed to complete the delineation of PFAS impact. For costing purposes, it has been estimated that up to 6 additional monitoring wells will be installed. In addition, based on the actual depth of water encountered from Task 1 above, Triterra will utilize the most cost-effective method for installation of monitoring wells (i.e Geoprobe or Drill Rig). Generally, Geoprobe methods are effective to depths of 20-25 feet below ground level depending on soil conditions and Drill Rig methods are necessary for depths exceeding 25 feet. For costing purposes, it has been estimated that monitoring wells would be installed to a maximum depth of 20 feet below ground level.

Monitoring well borings will be drilled using hollow-stem augers (4.25-inch I.D.). All site monitoring wells will be constructed of 2-inch diameter PVC risers and slotted (.010–inch slots) screens. Each well screen will be five feet in length and will be vertically positioned to intersect the depth of the water table. Well screens will be sand packed and the annular space surrounding the well risers will be grouted with a mixture of cement and bentonite. Risers will be secured at the ground surface with a steel protective casing.

Each well will be developed to remove any residual drilling fluids and fines from the screen and sand pack. All drilling and development fluids and cuttings will be contained on-site in labeled, secured, steel drums pending final disposition.

Groundwater samples from monitoring wells will be collected after the water level in each well has stabilized. Approximately one week following installation and development, the monitoring wells will be sample following the procedures outlined in Task 1 above. Prior to sampling, a measurement of the depth to the static water level will be obtained using an electronic water level indicator at each well location. All measurements will be referenced to the top of well casing. Static water level measurements will be obtained from all permanent monitoring wells during two separate events.

A vertical elevational survey will be completed for newly installed monitoring wells. The monitoring well survey will be tied to a relative on-site control point with an arbitrary, assigned elevation or another selected elevation datum. The monitoring well survey results will be utilized to determine a relative elevation of the groundwater at each well location and these results will allow for the creation of groundwater contours/groundwater flow direction diagrams.

Estimated Cost:

Professional Services	\$ 5,240.00
Drilling Services	6,325.00
Analytical Testing.....	3,100.00
Waste Disposal	1,100.00
Field Equipment, Supplies, etc.	1,435.00
Task 4 Estimated Cost.....	\$ 17,200.00

Task 5: Quarterly Status Reports

Quarterly Status reports will be prepared and submitted within 30 days following the end of each quarter for the duration of the project, up to 12 months after the start of the grant (4 quarterly reports). All

quarterly reports will be prepared in accordance with EGLE guidance and will be completed on the following schedule:

- January to March - report due in April
- April to June - report due in July
- July to September - report due in Early October (due to fiscal year end)
- October to December - report due in January

Estimated Cost:

Professional Services	\$ 3,000.00
Task 5 Estimated Cost.....	\$ 3,000.00

Task 6: Final Summary Report

Upon completion of the scope of work described above, a final summary report for all work completed as part of this grant. The final summary report will include project background, a conceptual site model (CSM), a narrative summary of the work completed, including previous sampling conducted, site maps, and a tabular summary of the analytical results.

Estimated Cost:

Professional Services	\$ 4,500.00
Task 6 Estimated Cost.....	\$ 4,500.00

ESTIMATED COST FOR PFAS GRANT

The tasks described above will be invoiced on a time and materials basis. The following costs are estimated to complete the scope of work described above:

Task 1: Phase I Environmental Site Assessment.....	\$ 3,000.00
Task 1: Groundwater Sampling & Aquifer Testing	\$ 15,700.00
Task 2: Groundwater Delineation (Vertical Aquifer Sampling)	15,350.00
Task 3: Installation & Sampling of Monitoring Wells	17,200.00
Task 5: Quarterly Status Reports.....	3,000.00
Task 6: Summary Report.....	4,500.00
Estimated Total Cost.....	\$ 58,750.00