**RFP 23-74542**

**TECHNICAL PROPOSAL**

**ATTACHMENT F**

**Instructions: Please supply all requested information in the areas shaded yellow and indicate any attachments that have been included to support your responses.**

* + 1. **General Requirements and Definitions**
       1. Please list any additional terms and definitions used by your company or industry that you would like the State to consider incorporating in the contract. The State will not accept terms and definitions introduced after award during contract finalization and implementation.

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| None at this time |

* + - 1. Please confirm you have carefully reviewed all requirements listed in RFP Section 1.4. Should your company have any exceptions, substitutions, or conditions for the State’s consideration, please list them below. The State will not accept exceptions, substitutions, or conditions introduced after award, during contract finalization and implementation.

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| KERAMIDA has fully reviewed RFP Section 1.4 |

* + 1. **Overall Company Experience** 
       1. Please describe in detail your company’s experience providing Operations and Maintenance services for vapor intrusion mitigation systems. Provide specific examples and references of any experience managing Operations and Maintenance activities for such sites, especially those requiring the use of long-term vapor mitigation systems, the installation of VIMS, and the maintenance of VIMS for both commercial and residential properties. Additionally, please provide proof of VIMS or radon system installation certification as outlined in the Scope of Work (Attachment K).

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| As an environmental contractor providing vapor intrusion (VI) and radon assessment and mitigation services, KERAMIDA performs services related to VI/radon projects on almost a daily basis. As part of our VI and Radon services we provide Operation and Maintenance (O&M) regularly on multiple projects which include the mitigation / remediation methods of: sub-slab depressurization, vapor extraction, ozone injection, and passive vapor mitigation.  **Michael Devir, P.E., KERAMIDA Senior Project Manager**, is certified in radon measurement and mitigation by the National Radon Proficiency Program (NRPP) (Certification No. 109955-RMS & 109954-RMP) and licensed by the State of Indiana for measurement and mitigation (License No. RTM00924 & RTP00923). Mr. Devir has been certified by NRPP and Indiana since July 2018. He has over 33 years of experience as an environmental professional performing air sampling and monitoring, VI assessments, and design/build vapor mitigation and remediation systems. Mr. Devir is a registered member of the Association of Vapor Intrusion Professionals (AVIP), and an Indiana Licensed Professional Engineer (PE No. 10000147). Mr. Devir’s VIMS Credentials are included in Appendix F1 (attached).  **Example Project #1 (Commercial & Residential)** - For the Indiana Finance Authority (IFA), Project Manager Tracey Michael. KERAMIDA designed and installed a VI Mitigation System at the Former Standard Register Site, located in Terre Haute. The scope included assessment of sub-slab characteristics through completion of pressure field extension (PFE) testing as part of mitigation system design. The building was an 18,000 square feet (SF) section of a warehouse being used as a gymnastics facility. The VI Mitigation system included nine vapor extraction points, three in-line fans, with a flow control valve, manometer, and sample port at each extraction point. Following system installation PFE monitoring was performed to document operation characteristics and VI paired sampling performed to demonstrate VI was mitigated. KERAMIDA personnel completed all installation work with the exception of the electrical work and roof piping/conduit penetrations.  For two off-Site residential properties located over the downgradient plume from the Former Standard Register Site, KERAMIDA conducted VI sampling and/or assessment and repairs to two existing vapor mitigation systems installed many years prior by others. For both residential properties, KERAMIDA contacted the owner (phone, text, or email), coordinated sampling efforts, discussed with the owner any VI system operation issues, and scheduled an inspection. The inspection and sampling were completed within 3 to 7 days following owner coordination and depending on availability of sampling supplies. Following mitigation system diagnosis and authorization by IFA, repairs were typically completed within 1 to 3 days.  **Example Project #2** – For a commercial client and project enrolled in the Voluntary Remediation Program (VRP) – the Former Norge Laundry & Cleaners Site (VRP# 6130102), located on the south side of Indianapolis. KERAMIDA performed diagnostic testing, prepared a mitigation design, and following IDEM approval constructed a hybrid vapor remediation and mitigation system. The system design included soil vapor extraction (SVE) below the building along the building exterior to address vadose zone soil impacts, and additionally SSD to address VI within the commercial use building. The building is approximately 3900 SF and one story and at time configured as a teen softball training facility. The SSD system for the building included four sub-slab extraction points, with a flow control valve, manometers, and sample port at each point. The exterior mounted blower system (5-HP Rotron fan unit) is equipped with a remote monitoring/alarm system for notification of equipment/operation issues. Response to alarms is typically the next business day. O&M activities included weekly to monthly monitoring of sub-surface parameters, building interior SSDS operations, and blower operation parameters. Operation characteristics were periodically modified to optimize SVE vapor recovery and balance system flows.  **Example Project #3** – For a commercial property in Indianapolis, KERAMIDA initially performed a VI assessment of the one-story 7,800 SF building, and based on elevated results, recommended, and managed the design and installation of a VI mitigation system. The building was redeveloped into a medical facility for dialysis patients. KERAMIDA annually performs VI sampling and SSDS operation inspection. The VI mitigation system uses SSDS and includes three roof mounted blowers, and six vapor extraction nodes. Each extraction node is equipped with flow control, vacuum gauge (mini-helic) and sample ports. In 2022 system modifications included installation of flow monitoring visual / audible alarm indicators to be compliant with current AARST mitigation system standards. |

* + 1. **Team Structure / Qualifications and Experience** 
       1. The State requests detailed information about the team that would work with the State during the transition and implementation of a resulting contract.

Please describe in detail your company’s proposed team and leadership structure. Additionally, please describe in detail the qualifications and experience of the anticipated staff for the following:

* Installation of VIMS
* Maintenance of VIMS
* Troubleshooting VIMS issues
* Inspection of VIMS
* Vapor Intrusion Sampling
* Vapor intrusion reporting
* Subcontractor management

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| **Senior Management Team**  **Mr. Michael Devir, P.E.,** will be the senior project manager and the primary point of contact with IDEM /IDOA. Mr. Devir as acertified professional in radon measurement and mitigation would oversee all of the active projects for proper operation and the design and installation of any new VI mitigation systems. Mr. Devir will coordinate project personnel and resources for the scheduling of inspections and response to system operation issues. Mr. Devir will manage the subcontractors utilized on the project who will provide mitigation system installation assistance or specific services like roofing or electrical.  **Mr. Brian Harrington**, **Senior Vice President**, **Land Services Division**, will provide additional project execution support, coordination of resources and personnel scheduling as needed.  **Mr. Clinton Poynter, Senior Technician,** will be KERAMIDA’s lead technician for diagnosis of mitigation system operation issues, the field lead on building sub-slab diagnostic testing, system installations, and system maintenance and repairs.  **Ms. Chelsea McCammack (Conduitt), LPG, Project Geologist,** will lead KERAMIDA’s VI Sampling activities. She regularly conducts VI sampling projects in the Midwest.  **Field Technicians** – Project execution, system inspections, returning service calls, VI sampling, system installation oversight and implementation will be conducted by KERAMDIA field technicians and junior professionals. The staff of technicians routinely perform VI sampling at residential and commercial facilities, perform system O&M, operation diagnosis, and minor system equipment replacements.  **Subcontractors** – KERAMIDA’s project team will include DBE and non-DBE subcontractors which will provide project support services including: electrical and roofing services, utility locators, piping/mechanical services, radon/VI mitigation contractors, and concrete coring contractors. KERAMIDA has a mature and diverse network of subcontractors and suppliers who can assist with the various needs of the project throughout the four-year duration. |

* + 1. **Customer Service** 
       1. Please describe in detail your company’s capacity to respond to situations requiring immediate attention on a short notice.

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| **KERAMIDA is headquartered in Indianapolis** and less than 15 minutes from the project Site. The project team from senior management through technician level regularly respond to external customer/client requests, O&M system alarms and internal clients responding to a variety of client and project types and sharing of resources across KERAMADIA’s divisions. KERAMIDA’s customer response network on a daily basis responds to web-based requests [www.KERAMIDA.com](http://www.KERAMIDA.com) (Quick Response Form) and calls to our 800 line (877-234-0179) typically with call backs within 24-hours or less during the work week. The Indianapolis headquarters is the base office for over 30+ professionals who perform field services and inspections on a daily basis. |

* + - 1. Please describe how your company would coordinate with the public to complete the inspection for both residential and commercial properties.

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| **KERAMIDA’s Public Coordination Plan** – The plan would be conducted by Indianapolis based professionals familiar with VI sampling and mitigation systems, reaching out to resident and commercial parties seeking access for the scheduling of sampling and property inspections. As indicated above, KERAMIDA’s office is less than 15-minutes from the project location, and if needed a project professional can quickly respond to a customer request. It is assumed that a component of the project transition would be the addresses and contacts of the 46 operating VI systems, and the initial inspection with IDEM will include an introduction to the address representative and providing of KERAMIDA contact information and personnel leads. |

* + 1. **Problem Resolution** 
       1. Please describe your company’s standard process for problem resolution, including standard response time. Please describe the escalation process if the standard resolution process cannot resolve an issue.

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| **Problem Resolution** – For this offering it is assumed the term ‘problem’ relates to operation of one of the 46 installed VI mitigation systems. Since each of the systems includes both mechanical equipment and a visual system monitor, it is assumed that a facility representative notices a malfunction in system operation and then reaches out to the VI contractor (i.e., KERAMIDA).  As indicated above, KERAMIDA has both web-based and an 800-number for customers to submit a request regarding their project issue. These messages are received and reviewed the same day as receipt or the next following business day. The messages would be sent by email to the project lead (i.e., Project Manager, Division Manager, and the Lead Technician, as applicable) requesting a call back to the customer. A response protocol would be established for the project and coordinated by the project manager, who would follow-up with the responsible party until contact is made with the customer.  Once contact is made with the customer, an inspection would be scheduled, if applicable. KERAMIDA is less than 15-minutes from the project Site. In the past, similar ‘VI System Issues’ have been resolved within typically 1 to 3 days. Standard replacement fan units are available from our supplier (RadonAway) located in Carmel, IN.  If the event that initial call is not addressed in timely manner and the customer places another call, the Project Manager again would be notified and re-initiate a determination of the customer response status and may contact the customer directly to determine the problem with the VIMS. |

* + - 1. Please describe how you would address the need to redo a VIM system that was previously installed, and how you would communicate the issues to the property owner and/or tenant.

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| **Redo of a VIMS** – This term for this offering is assumed to mean the replacement of equipment, instrumentation, and possibly replacement of some piping. It is assumed that the VIMS at the time of installation was installed correctly and effectively mitigating the VI. As a mitigation professional, changes to the structure (e.g., remodeling, building additions, floor changes and penetrations, etc.) can change the sub-grade characteristics and pressure field extension (PFE) of the SSDS. Changes to PFE performance may require the addition of additional suction nodes, increase of fan/blower flow rates, etc.  Following inspection and assessment of the installed VIMS by the mitigation professional, the findings, interpreted cause of the findings, and proposed changes will be explained to the property owner or tenant. The findings and causes will be provided as feasible and in layman’s terms describing equipment which has failed and requires replacement. Similarly, if the property conditions appear to have changed and modified the operation of the VIMS, this will be explained to the owner/tenant along with the planned path to restore the VIMS and mitigate any potential VI. Once the proposed scope is determined, a cost estimate will be prepared and presented to the IDEM project manager for review and approval for the installation/equipment replacement. |

* + - 1. Please describe your company’s Hazardous Waste Contingency Plan and Emergency Procedures during unplanned major events. Additionally, please describe how this information would be communicated to the Agency.

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| **Hazardous Waste Contingency Plan and Emergency Procedures** – KERAMIDA has a Material Handling Policy that addresses accidental spills. Since KERAMIDA is not a generator or transporter of Hazardous Waste, a Waste Contingency Plan and Emergency procedures are not applicable. Hazardous materials generated at project Sites are managed according to federal and state regulations and disposed by licensed transporters and facilities. For the matter of ‘unplanned major events’ it is interpreted that KERAMIDA’s breadth and headquarters located in Indianapolis would not be significantly affected by a major event occurring with another client and hinder the ability to respond to a customer/property owner issue within a timely period, or sooner if necessary. |

* + 1. **Project Documents and Reports** 
       1. Please describe in detail your company’s reporting capabilities. What are the standard reports that your company provides to your customer for vapor intrusion sites with mitigation systems? Please include report examples as an attachment.

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| VIMS Reporting – KERAMIDA as part of each VIMS installation provides a VIMS/Radon Mitigation Report. The reports summarize the Site, the scope of work, VIMS design and diagnostic testing results, installation and start-up, post-mitigation of PFE and Radon or VI measurement, operation, maintenance, and monitoring requirements including periodic inspections and long-term monitoring, and conclusions and references. The report includes Tables of diagnostic testing and post- measurement results, figures of the system design, testing, sampling locations, etc., The report also includes Appendices which include manufacturer information on VIMS equipment, laboratory reports, testing forms, and O&M Data forms. Prepared reports meet the requirements outlined for Documentation of OM&M and described in the AARST guidance documents. Several example reports are provided in Appendix F2, F3, and F3. A brief summary of each is provided below.  **Appendix F2** – Summary Report SVE and HYBRID SSDS Installation Former Norge Laundry & Cleaning Village, Indianapolis, Indiana. This is the summary report for a 4-point SSDS in a 3,900 SF, single-story commercial building, which has a concurrently operated SVE system removing vadose zone vapors from below the building through four vertical wells.  **Appendix F3** – Radon Mitigation & Measurement Report, Parkside at Tarkington, Indianapolis, Indiana. This is a Radon Mitigation System summary report for a multi-story commercial building remodeled into a mixed-use facility with residences on the four upper floors. The mitigation system installed in the basement has six nodes and two blowers.  **Appendix F4** – Residential Indoor Air Sampling & SSDS Repair Letter Report, Terre Haute, Indiana. This is a VIMS installed in a commercial warehouse space converted into a gymnastics training facility. The VIMS includes nine nodes and three blowers. |

* + 1. **Implementation and Schedule** 
       1. Please submit a detailed description of the implementation process and schedule.

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| **Task 1 Meetings** – Within 30 days of contract award, a meeting with the IDEM project manager at the Site will be scheduled and conducted. The inspection of the 46 installed VIMS systems is anticipated to require one to three weeks to complete based on coordination with the property owners/tenants. Inspection assumes that KERAMIDA and the IDEM representatives will inspect each VIMS, as feasible and include locations for data collection. At the request of the IDEM Project Manager up to six one-hour teleconferences will be scheduled during each calendar year of the four-year contract period.  **Task 2 Operations and Maintenance** – KERAMIDA will schedule and conduct one annual inspection of each installed VIMS (46 for this offering). Each inspection will be completed as outlined in the project Operation and Maintenance Work Plan. The duration to complete all of the annual inspections is estimated to occur over a period of three to six weeks and based on scheduling coordination with owners/tenants. This overall inspection duration may be extended if multiple VIMS service calls are requested or necessary.  VIMS system installations or replacements are estimated to require one to three weeks depending on system complexity, equipment availability, and coordination with subcontractors (i.e., roofer, electrician, etc.). A straight-forward residential VIMS is estimated at 1 to 2 days to complete.  Replacement of in-line fans potentially can be completed the same day of inspection or within the following 1 to 3 days for commonly available fan units. Response to service requests is estimated at 1 to 3 days and will depend on scheduling coordination with the owner/tenant. A field service report or O&M Inspection Form will be completed as part of each service call.  **Task 3 Reporting** - On an annual basis, KERAMIDA will prepare an annual Operation and Maintenance Report for all activities completed. The report will be prepared based on the calendar year and prepared by the end of January and receipt of all laboratory reports. |

Appendix F – F1, F2 F3 and F4 included in jump drive.