

TETRA TECH, INC.

October 07, 2009

Department of Administration, Purchasing Division 2019 Washington Street East PO Box 50130 Charleston, WV 25305-0130

RE: RFQ EHS10018: The Office of Environmental Health Services (OEHS) RFQ for Quotation on the Development and Implementation of a Centralized Data Node Exchange.

Tetra Tech, Inc. is pleased to submit our response to RFQ No. EHS10018: The Office of Environmental Health Services (OEHS). Julie Scarangella is the point of contact has extensive experience in managing government contracts, managing task orders and leading project teams. In addition, Tetra Tech has a large pool of highly qualified personnel it can draw upon to provide the information technology services desired by OEHS to execute the stated work.

We are excited about this opportunity to help support the State of West Virginia and are committed to providing the required technical services and products of the highest quality. Should you have any questions regarding this proposal, please feel free to contact Julie Scarangella at (703) 385-6000.

Sincerely,

Julie Scarangella Project Manager

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State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

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ROBERTA WAGNER

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HEALTH AND HUMAN RESOURCES
BPH ENVIRO HLTH SERVICES
CAPITOL AND WASHINGTON STREETS
1 DAVIS SQUARE, SUITE 200
CHARLESTON, WV
25301-1798 304-558-2981

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State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Request for Quotation

EHS10018

:PAGE 2

ADDRESS CORRESPONDENCE TO ATTENTION OF

ROBERTA WAGNER 804-558-0067

RFQ COPY TYPE NAME/ADDRESS HERE

HEALTH AND HUMAN RESOURCES
BPH ENVIRO HLTH SERVICES
CAPITOL AND WASHINGTON STREETS
1 DAVIS SQUARE, SUITE 200
CHARLESTON, WV
25301-1798 304-558-2981

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State of West Virginia Request for Department of Administration Quotation Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

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Response to Request for Quotation: EHS10018

Development of a Data Exchange Node

Submitted October 07, 2009

Prepared for

The State of West Virginia
Office of Environmental Health Services
1 Davis Square, Suite 200
Charleston, WV 25301-1798

Prepared by

Tetra Tech, Inc. 10306 Eaton Place, Suite 340 Fairfax VA 22030



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1 Introduction

Tetra Tech Inc., (Tetra Tech) is pleased to present information and cost quotation in response to the State of West Virginia, Office of Environmental Health Services' (OEHS) request for quotation for development and implementation of a Centralized Data Node Exchange. Tetra Tech understands that the OEHS's goal is to establish a centralized data node exchange that can be incorporated into the U.S. Environmental Protection Agencies exchange network. Tetra Tech also understands that the objective of establishing an exchange network is to improve the accuracy, efficiency, and real time access to critical data. This includes the

development of an exchange software component of Safe System/State version exchange to flow OEHS

Tetra Tech's suggested comprehensive, and reliable utilizing the open source CGI coupled with a functionally management approach. To The Inp 20
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interface to the Lab to State Drinking Water Information (SIDWIS/State) as well as an Monthly Operational Reports.

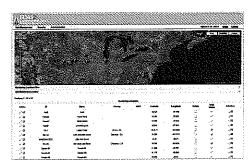
approach to establishing a flexible, exchange network consists of Exchange Network Node 2.0 aligned process-driven program help OEHS maximize the amount of

work that can be executed for the existing funding, Tetra Tech has provided cost break down per sub task.

2 Company Qualifications

In addition to Tetra Tech's proposed approach, this package also includes our qualifications to support the OEHS in implementing the data exchange node with the Source Water Protection Technical Help Program. Tetra Tech is a leading provider of consulting, engineering, environmental science, and technical services worldwide. Tt has become a leading provider of specialized management consulting and technical services for many market sectors in resource management, infrastructure, telecommunications, and IT. Tt has grown into more than 10,000 associates across 275 offices in the United States and internationally with over \$2.2 billion in total revenue and has received numerous recognitions for excellence in service. Our dedication to technical excellence and the complete satisfaction of our clients have contributed to the stability and continued growth of the company, to our national standings in major corporate lines and to our ability to retain existing clients and attract new clients. For the past six years, Engineering News-Record has recognized Tt as the leading water resources company in the United States as well as a leader in environmental documentation support and management.

Tt has supported the US EPA Central Data Exchange (CDX) for over 6 years by providing IT services to the US EPA and state environmental agency. EPA's CDX provides a conduit, using distributed data nodes, to submit data from state, tribal and local agencies to EPA. The data nodes are developed using open source Node specifications and are available for use by any agency. The CDX infrastructure and nodes allows exchange partners to expose and consume web service through the nodes which allows them to easily exchange data between the





partners. All exchanges or data flows are built on specific XML standards that provide the users of the service an easy way to translate the data. The nodes allow the data partners to easily exchange data between themselves and the US EPA for reporting and compliance purposes. Tt support for the program has included;

- Full lifecycle software development
- Node, Data Flow and Standards Development
- GIS / System Integration
- Node Flow integration
- Regional and Cross-Agency tracking and reporting
- Support to program office data flow CROMERR compliance process

Key Project Include;

- US EPA's Stormwater Construction and Industrial Notice of Intent support one of EPA's largest regulatory programs
- US EPA;s Vessels data flows
- Environmental Data Adapter supports submission of Superfund lab data through XML protocols
- Development of Tt open source EDAS2 to submit and share cross-media data using EPA CDX Node 2.0 currently being used by several regions and states
- eNPDES Permit Writing Tool uses ICIS data to help write NPDES Permits
- Support to key states data systems and flows;
 - California Permit Compliance System(IDEF) / RCRAInfo / ICIS / ATTAINS data flows
 - o Arizona Assessment System
 - o Oregon / California PCS data clean-up
 - o Utah STORET
 - Support to Chesapeake Bay NPSBMP data flow
 - Texas Water Quality Exchange data flow
 - Mississippi's, New Mexico, Tennessee and Alabama's Water Quality Exchange Support

In addition to Tetra Tech's company wide qualifications, EPA CDX capabilities, and experience specifically relevant to this current OEHS initiative, Tetra Tech also has a strong history of working with West Virginia and the state departments. This local experience and presence provides Tetra Tech with a unique ability to serve OEHS's needs, not just as it is relevant to the data exchange node effort but also with by staff with direct and relevant West Virginia, OEHS experience. We feel we can provide OEHS with unmatched experience in all of the skill areas required for successful completion and implementation of the data exchange node. Tetra Tech has demonstrated our strong local presence and qualifications in the following ways:

- Local office in downtown Charleston, WV, across the street from the DHHR office with six regional water resources office locations with staff focused in all facets of water resources and potential contaminant source surveys.
- Extensive experience documenting and presenting potential sources of contamination throughout West Virginia watersheds.
- Experience with developing SWAP plans and drinking water vulnerability studies throughout the country.
- Extensive experience with public stakeholder facilitation and conducting training in all facets water resources management.
- Proposed staff who have consistently worked on key West Virginia projects for many years and can provide a high level of experience and continuity.
- Proposed staff who are adept at utilizing Microsoft Access and Arc 9.2 GIS utilizing them as primary tools for data storage, collection, and manipulation for other large West Virginia projects.
- Ability to provide local service as well as draw upon regional and national experts.



Additionally, Tetra Tech is currently providing onsite assistance to WV DHHR Bureau of Public Health (BPH) to expedite processing and review of projects so they meet American Recovery and Reinvestment Act (ARRA) requirements for being under contract or construction on or before February 17, 2010. Tetra Tech developed an online tracking tool to follow the projects through the pre-bid process and then the pre-loan closing process.

Tetra Tech was recently awarded two additional contracts with WV DHHR Source Water Protection Technical Help Program. Tetra Tech will be implementing source water protection activities associated with the WV Source Water Assessment and Protection (SWAP) Program for community public water supply systems in the Beckley, Philippi, and Keameysville Districts. This effort will include stakeholder meeting and facilitation, field survey of potential contaminant sources, and preparation of management and contingency plans for each system. Tetra Tech is also developing a project management tool for WV DHHR and Tetra Tech staff to use in tracking the progress for each system.

Tetra Tech has played a substantial role in Total Maximum Daily Load (TMDL) development in West Virginia, initially supporting U.S. Environmental Protection Agency (USEPA) to meet strict consent decree deadlines for more than 400 waters impaired by acid mine drainage throughout the state. Since 2002, Tetra Tech has worked closely with West Virginia Department of Environmental Protection (WVDEP) to undergo a successful transition from a supporting role in the USEPA TMDL development efforts into full programmatic responsibility. During this time, WVDEP and Tetra Tech have found a unique way to integrate large-scale, watershed based TMDLs with fine-scale, highly technical methodologies that produce "implementable" TMDLs in a cost-effective manner. Tetra Tech has completed over 1060 West Virginia TMDLs, in addition to nearly 400 TMDLs currently under development. By coupling these TMDL development efforts with a fully-integrated watershed management program, West Virginia's has grown into one of the nation's premier TMDL programs.



3 Bid Sheet

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		XML Sampling & Lab to State
which already exists within the WV DHHK environment.		\$130,000 - creation of CROMMER
		compliant manual data entry interface.
DELIVERABLE #3: Development of an exchange interface and software for public water Within the first 9	he first 9	Option 1: \$4,800 –
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eurier by upload of by frailing, or-date line entry unough a web form, transfer this information through the Node into SDWIS/State and be CROMFRR compliant		Supported by Lab to State and XIVIL.
		Option 2: \$45,000 – development of
		new XML schema and CGI Node
		Import plugin for UHHK Monthly
		Operational reports data
		\$135,200 – creation of CROMMER
		compliant manual data entry interface
		limited to the Monthly Operational
		reports data elements and that are
		Supported by XML Sampling & Lab to
DELIVERABILE #4: / Deductive Alternate) Development of an exchange interface to allow	bo firet 11	&D BOO
ers and pump installers, to view the	of contract	000,00

developed interface that establishes an individual user name and password for the	anasaya AAAA ka ayaa aa	The state of the s
operators, drillers and pump installers. Note: This deliverable will be a deductive		
alternative. In the event that the total cost of completed project exceeds the funds		
available, this deliverable may be deducted to complete the previous three deliverables.		
	Total cost of	\$364,440
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	Project	

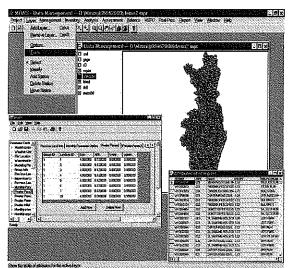


4 Past Performance

The following is a summary of relevant past performance that demonstrates Tetra Tech's ability to successfully help OEHS achieve their goal to establish a centralized data node exchange.

West Virginia Department of Environmental Protection

Over the past eight years, Tetra Tech has supported West Virginia Department of Environmental Protection (WVDEP) and Environmental Protection Agency Region 3 (EPA) in developing and fine-tuning a Total Maximum Daily Load (TMDL) methodology to address various water quality impairments caused by



numerous point and nonpoint sources in West Virginia. The innovative resulting modeling approach, the Mining Data Analysis System (MDAS), was developed by Tetra Tech to simulate hydrologic and water quality conditions throughout large watersheds. MDAS is a comprehensive GIS, dynamic modeling, and analysis package that provides the ability to overcome the difficult simulation of a large-scale watershed while maintaining a great level of detail

Since 2003, Tetra Tech has been the exclusive TMDL contractor for WVDEP and as an ongoing effort, Tetra Tech staff routinely work with WVDEP staff to identify hydrologic and water quality characteristics of pollutant sources such as mines, harvested forest, oil and gas wells, acid mine drainage seeps, and failing

septic systems throughout West Virginia. Furthermore, Tetra Tech has a great deal of experience querying WVDEP's databases (LUST database, WABbase, AML database, oil & gas database, mining permit boundaries, mining and industrial permit outlets), which we have access to through a virtual private network connection from our Charleston, WV, office.



Ecological Data Analysis System (EDAS) Version 2.0

Tetra Tech, Inc. developed the second generation, webbased Environmental Data Analysis System (EDAS2) as a free and open source project for management, analysis, and exchange of environmental data. It is targeted at organizations that need a focused and low-cost solution for managing, analyzing, and visualizing a wide range of environmental data. The current design focuses on adhering to EPA environmental data

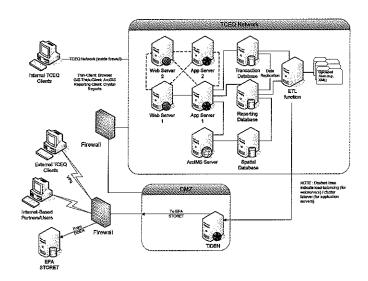


standards, provides functionality to exchange data following the EPA Water Quality Exchange (versions 1.0 and 2.0) specifications and allows you to exchange data among your partners using the Network Exchange Node 2.0 which can be bundled with EDAS2.

- Rich user interface speeds data management
- Easy to use, low/no cost to get started
- Provides core functions focused on managing environmental measurements
- Open source platform reduces costs for best-practice data management
- Records data and metadata in a secure and standard fashion
- Provides functions for data exchange and interoperability
- Supported through community portal
- See more at http://www.edas2.com

Surface Water Quality Monitoring Information System (SWQMIS)

Tetra Tech, Inc. designed and developed the Surface Water Quality Monitoring Information System (SWQMIS) for the Texas Commission on Environmental Quality (TCEQ). SWQMIS is a web-based application to support TCEQ's ambient surface water monitoring and assessment operations. This tool allows staff to track data associated with state-wide ambient water quality monitors, track water quality samples, and to prepare data for use by assessments. Other key components include a geographic information system (GIS) spatial interface, Internet-based reporting (for the public), Internet-based monitoring station request and update forms, water quality standards tracking and evaluation, and equipment tracking.



The SWQMIS interfaces include data exchange with EPA's STORET system, via the Texas Integrated Data Exchange Node (TIDEN), Assessment tools via SAS, reporting via Crystal Enterprise, and data transfer with other state, local, and lab systems via Oracle Warehouse Builder.

STATE OF WEST VIRGINIA Purchasing Division

PURCHASING AFFIDAVIT

VENDOR OWING A DEBT TO THE STATE:

West Virginia Code §5A-3-10a provides that: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

PUBLIC IMPROVEMENT CONTRACTS & DRUG-FREE WORKPLACE ACT:

If this is a solicitation for a public improvement construction contract, the vendor, by its signature below, affirms that it has a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the **West Virginia Code**. The vendor **must** make said affirmation with its bid submission. Further, public improvement construction contract may not be awarded to a vendor who does not have a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the **West Virginia Code** and who has not submitted that plan to the appropriate contracting authority in timely fashion. For a vendor who is a subcontractor, compliance with Section 5, Article 1D, Chapter 21 of the **West Virginia Code** may take place before their work on the public improvement is begun.

ANTITRUST:

In submitting a bid to any agency for the state of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the state of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the state of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the state of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership or person or entity submitting a bid for the same materials, supplies, equipment or services and is in all respects fair and without collusion or fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

LICENSING:

Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agencies or political subdivision. Furthermore, the vendor must provide all necessary releases to obtain information to enable the Director or spending unit to verify that the vendor is licensed and in good standing with the above entities.

CONFIDENTIALITY:

The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in

http://www.state.wv.us/admin/purchase/privacy/noticeConfidentiality.pdf.

Under penalty of law for false swearing (**West Virginia Code §61-5-3**), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

Vendor's Name: Tetra Tech, Inc., George Townsend, V.P.

Authorized Signature: Date: 10/7/09

Purchasing Affidavit (Revised 01/01/09)