

BILL NO. 18-08

ORDINANCE NO. 18.08

AN ORDINANCE OF THE CITY OF OSAGE BEACH, MISSOURI, AUTHORIZING THE MAYOR TO EXECUTE A CONTRACT WITH EVOQUA WATER TECHNOLOGIES, LLC TO PROVIDE ODOR CONTROL CHEMICALS.

WHEREAS, the Board of Aldermen has determined it is in the best interests of the City to authorize a contract with Evoqua Water Technologies, LLC to provide odor control chemicals.

NOW THEREFORE, BE IT ORDAINED BY THE BOARD OF ALDERMEN OF THE CITY OF OSAGE BEACH, MISSOURI, AS FOLLOWS, TO WIT:

Section 1. The Board of Aldermen authorizes the Mayor to execute on behalf of the City a contract with Evoqua Water Technologies, LLC to provide odor control chemicals as indicated on the attached contract titled City of Osage Beach Full Service Odor Control Program ("Exhibit A").

Section 2. Total expenditures or liability authorized under the contract shall not exceed Ninety Thousand Dollars (\$90,000.00).

Section 3. The City Administrator is hereby authorized to take such further actions as are necessary to carry out the intent of this Ordinance and Contract.

Section 4. This Ordinance shall be in full force and effect from date of passage and approval by the Mayor.

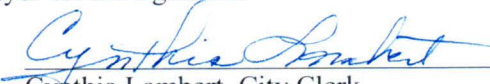
READ FIRST TIME: February 15, 2018 READ SECOND TIME: March 1, 2018

I hereby certify that the above Ordinance No. 18.08 was duly passed on March 2, 2018, by the Board of Aldermen of the City of Osage Beach. The votes thereon were as follows:

Ayes:	6	Nays:	0
Abstentions:	0	Absent:	0

This Ordinance is hereby transmitted to the Mayor for his signature.

March 2, 2018
Date

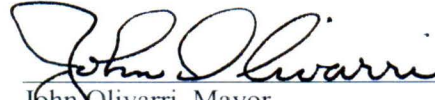

Cynthia Lambert, City Clerk

Approved as to form:


Edward B. Rucker, City Attorney

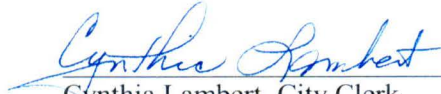
I hereby approve Ordinance No. 18.08.

March 5, 2018
Date



John Olivarri, Mayor

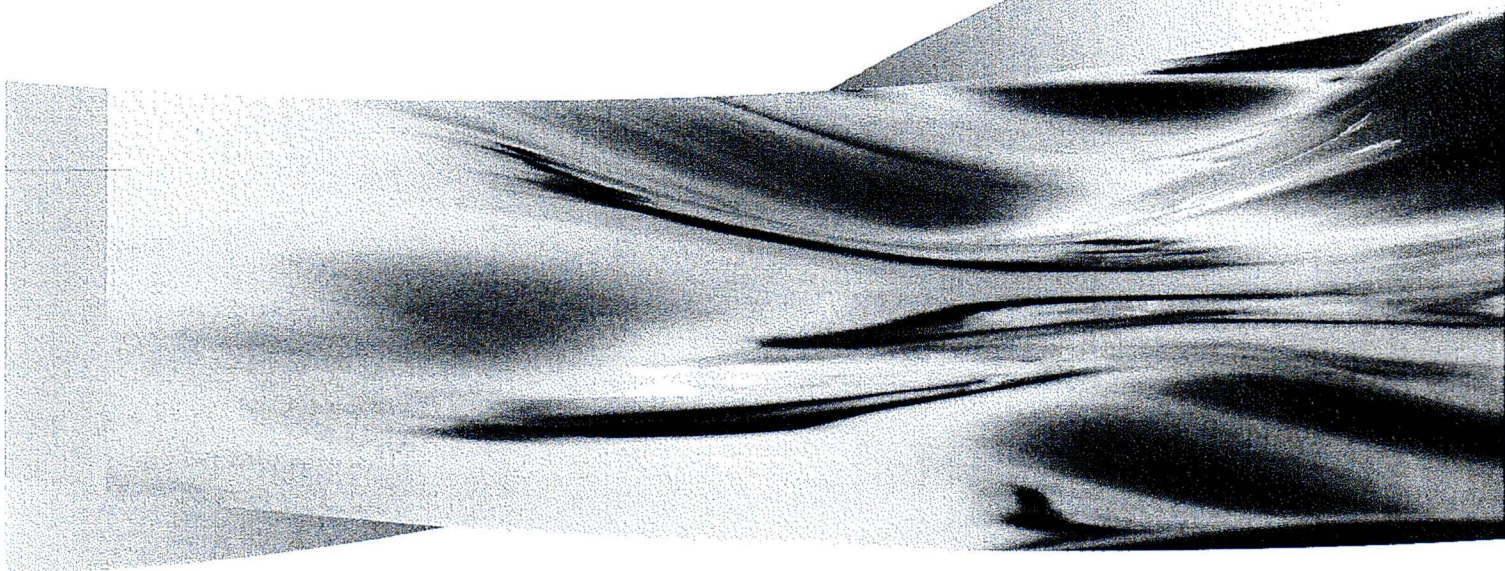
ATTEST:



Cynthia Lambert, City Clerk



eVOQUA
WATER TECHNOLOGIES



FULL SERVICE ODOR CONTROL

OSAGE BEACH, MO

Quotation #2018-241264R2

February 6, 2018

Sales Representative

Mark McGuire

Evoqua Water Technologies, Sarasota, FL

Mobile: (618) 616-1552

Email: mark.mcguire@evoqua.com

SCOPE OF SERVICES

Liquid Phase Odor Control Solutions

Evoqua shall continue to provide a supply of Liquid Phase Odor Control Technologies, as well as adding a new site and providing improvements to existing sites, as listed in Table 1.

- a. Bioxide® Solution in minimum 3500 gallon loads
- b. Odophos® Plus CL Solution in minimum 3500 gallon loads
- c. This program may be extended to include additional Liquid Phase Odor Control Technologies by mutual agreement between the program provider and the City.

EXISTING LIQUID PHASE ODOR CONTROL LIFT STATIONS AND EQUIPMENT

Location	Technology	Storage Tank	Feed Equipment	New or Existing	Improvements
Tan-Tar-A LS	Odophos Plus CL	5000 gallon Single Wall in a Building	Duplex Davis Feed System	Existing	Replace Pumps with Peristaltic
KK1-14 LS	Bioxide	4400 Gallon Double Wall outside	VersaDoseLT Feed System	Existing	None
Dude Ranch	Odophos Plus CL	6000 gallon Double Wall Underground	Duplex Davis Feed System	Existing	Replace Pumps with Peristaltic & New Leak Detection
Passover Road	Odophos Plus CL	6000 gallon Double Wall Underground	Duplex Davis Feed System	Existing	New Leak Detection
Sands LS	Bioxide	4400 Gallon Double Wall outside	VersaDoseLT Feed System	New	Install New Storage and Feed System
Rockaway LS	Bioxide	4400 Gallon Double Wall outside	Duplex Davis Feed System	Existing	None

TABLE 1 - Equipment Table

EQUIPMENT – NEW ODOR CONTROL SITE

Location: Sands Lift Station

Sands Lift Station collects flow from the majority of the lake area. From here, it travels by forcemain and gravity until it reaches the D Road Manhole. During a demonstration in the summer of 2017, it was determined that adding Bioxide at this location had a profound effect upon the odor at D Road Manhole. For this reason, a permanent feed site will be established to facilitate this control.

MAJOR SYSTEM COMPONENTS

<u>Quantity</u>	<u>Item</u>
-----------------	-------------

- | | | | | | | | | | | | | | | | | | | | |
|---------|---|---------|--|-----|---|-----|--|-----|-------------------------------------|----|-------------------------|----|-------------------|----|--|----|--|----|----------------|
| 1- | 4,400 Gallon PPC, High Density Crosslinked Polyethylene, IT-2, Double-Wall Chemical Storage Tank, (10' 3" Diameter, 10' 3" Tall) | | | | | | | | | | | | | | | | | | |
| 1- | Each 316 SS Control Enclosures containing following: <table border="1"> <tbody> <tr><td>1-</td><td>Operator Interface with tank level readout</td></tr> <tr><td>2-</td><td>On/Off Switches with LED indicator lights</td></tr> <tr><td>2-</td><td>Dry contacts to receive digital inputs</td></tr> <tr><td>1-</td><td>Disconnect Switch</td></tr> <tr><td>1-</td><td>Ground fault receptacle</td></tr> <tr><td>1-</td><td>Disconnect Switch</td></tr> <tr><td>1-</td><td>1,000 mL Calibration Cylinder with Flow Control Valves</td></tr> <tr><td>1-</td><td>Pressure Transducing Level Probe for local display</td></tr> <tr><td>1-</td><td>Cellular Modem</td></tr> </tbody> </table> | 1- | Operator Interface with tank level readout | 2- | On/Off Switches with LED indicator lights | 2- | Dry contacts to receive digital inputs | 1- | Disconnect Switch | 1- | Ground fault receptacle | 1- | Disconnect Switch | 1- | 1,000 mL Calibration Cylinder with Flow Control Valves | 1- | Pressure Transducing Level Probe for local display | 1- | Cellular Modem |
| 1- | Operator Interface with tank level readout | | | | | | | | | | | | | | | | | | |
| 2- | On/Off Switches with LED indicator lights | | | | | | | | | | | | | | | | | | |
| 2- | Dry contacts to receive digital inputs | | | | | | | | | | | | | | | | | | |
| 1- | Disconnect Switch | | | | | | | | | | | | | | | | | | |
| 1- | Ground fault receptacle | | | | | | | | | | | | | | | | | | |
| 1- | Disconnect Switch | | | | | | | | | | | | | | | | | | |
| 1- | 1,000 mL Calibration Cylinder with Flow Control Valves | | | | | | | | | | | | | | | | | | |
| 1- | Pressure Transducing Level Probe for local display | | | | | | | | | | | | | | | | | | |
| 1- | Cellular Modem | | | | | | | | | | | | | | | | | | |
| 2- | M-15907-002 Evoqua Water Technologies Bellows Pumps with an adjustable feed rate from 12 to 120 ml/min and a maximum discharge pressure of 40 psi. | | | | | | | | | | | | | | | | | | |
| 1- | Single Wall Piping Kit shall consist of: <table border="1"> <tbody> <tr><td>(40 ft)</td><td>1/2" Schedule 80 PVC Pipe</td></tr> <tr><td>(1)</td><td>2" Stainless Steel Male Camlock</td></tr> <tr><td>(1)</td><td>2" Polyethylene Female Camlock Cap</td></tr> <tr><td>(1)</td><td>2" Schedule 80 PVC Tank Fill Piping</td></tr> </tbody> </table> | (40 ft) | 1/2" Schedule 80 PVC Pipe | (1) | 2" Stainless Steel Male Camlock | (1) | 2" Polyethylene Female Camlock Cap | (1) | 2" Schedule 80 PVC Tank Fill Piping | | | | | | | | | | |
| (40 ft) | 1/2" Schedule 80 PVC Pipe | | | | | | | | | | | | | | | | | | |
| (1) | 2" Stainless Steel Male Camlock | | | | | | | | | | | | | | | | | | |
| (1) | 2" Polyethylene Female Camlock Cap | | | | | | | | | | | | | | | | | | |
| (1) | 2" Schedule 80 PVC Tank Fill Piping | | | | | | | | | | | | | | | | | | |
| 1- | Installation Services | | | | | | | | | | | | | | | | | | |

SITE IMPROVEMENTS

Locations: Tan-Tar-A Lift Station, Dude Ranch Lift Station

Tan-Tar-A and Dude Ranch feed sites have existing Davis Duplex feed systems. The pumps at these locations will be replaced with manually operated peristaltic pumps.

MAJOR SYSTEM COMPONENTS EACH SITE

<u>Quantity</u>	<u>Item</u>
-----------------	-------------

- | | |
|----|----------------------------|
| 1- | Watson-Marlow Qdos 30 pump |
| 1- | Installation Services |

Locations: Dude Ranch Lift Station, Passover Lift Station

MAJOR SYSTEM COMPONENTS EACH SITE

<u>Quantity</u>	<u>Item</u>
-----------------	-------------

- | | |
|----|---------------------------------|
| 1- | Interstitial Leak Detection Kit |
| 1- | Installation Services |

Lift Stations: KK1-14 and Rockaway – No improvements needed at this time.

REQUIREMENTS OF THE CITY FOR FEED SYSTEM OPERATION

Evoqua requests the City coordinate the provision of the following items in order to correctly operate the proposed equipment and utility and control tie-ins:

- Tank off loading and placement assistance
- 115V and 20amp power source for dosing controller
- Access to exposed wet well
- 12'x12' prepared level surface for site installation for dosing system
- Site security
- Discharge feed line trenching as required

VAPORLINK® HYDROGEN SULFIDE MONITORING EQUIPMENT

Evoqua has the capability to employ remote hydrogen sulfide monitoring. Hydrogen sulfide data is downloaded once per day from a remote device by cellular communications to a server. Data may also be made available via a 4-20 mA signal. Hardware can also be prompted through the internet to initiate a download such that up to the minute performance data is available at any time. Remote monitoring can provide the following benefits.

1. Optimized product dosage by remote adjustment.
2. Alarm emails can be generated for high loading
3. Better odor control performance with real time feedback of H₂S data
4. Remote availability of information
5. Less travel time to download H₂S data loggers
6. Less time involved to calibrate H₂S monitors

VAPORLINK® HYDROGEN SULFIDE MONITORING EQUIPMENT INSTALLATION LOCATIONS: (CURRENTLY IN PLACE)

- Lift Station 29-5
- Lift Station KK 1-14
- Lift Station 53-1 (Dude Ranch)
- Lift Stations Sands
- Lift Station Rockaway
- Campground Manhole or D Road Manhole
- Temporary Odolog at D Road Manhole

REQUIREMENTS OF THE CITY FOR VAPOR PHASE OPERATION

Evoqua requests the City coordinate the provision of the following items in order to correctly operate the proposed equipment:

- Access to Wetwell or manhole structure for service
- Site security

PREVENTATIVE MAINTENANCE AND MONITORING SERVICES FOR CHEMICAL FEED SYSTEMS

An Evoqua service technician will visit the odor control feed sites monthly to perform routine maintenance on the dosing equipment, optimize chemical dosing, conduct compliance sampling and provide a written report. On-site routine maintenance service will be scheduled in advance and include, but not be limited to the following:

- Check the equipment for proper operation
- Perform sulfide sampling at the control point.
- Perform scheduled preventative maintenance on equipment. This shall include an allowance of up to \$100 a month for misc. parts and appurtenances. Replacement parts greater than \$100 will be replaced on a parts quote basis.
- Submit a written report outlining services and observations during the routine service visit.
- Provide emergency service to the dosing equipment.

Month	Service Work Schedule
January	Service Upon Request with a Service Fee
February	Vaporlink Exchange – Field Work by Osage Beach Staff
March	Storage and Feed Equipment inspection and start up, Liquid Sampling, Scrubber Maintenance
April	Vaporlink Exchange, Equipment Inspection, Liquid Sampling
May	Equipment Inspection, Sampling
June	Vaporlink Exchange, Equipment Inspection, Liquid Sampling, Scrubber Maintenance
July	Equipment Inspection, Liquid Sampling
August	Vaporlink Exchange, Equipment Inspection, Liquid Sampling
September	Equipment Inspection, Liquid Sampling, Scrubber Maintenance
October	Vaporlink Exchange, Winterize Storage and Feed Equipment, Liquid Sampling
November	Service Upon Request with a Service Fee
December	Vaporlink Exchange – Field Work by Osage Beach Staff

TABLE 2 - Service Work Schedule

Odor Control Program Goals

The odor control program is designed to achieve the following goals at the designated control points:

Feed Location	Sample Location	Treatment Objective			
		Dissolved (mg/L)		Atmospheric (PPM)	
		Max Daily Average	Max Daily Peak	Max Daily Average	Max Daily Peak
LS 49 (Tan Tar- A)	LS KK1-14	<0.3	<0.5	10	20
LS KK1-14	LS Sands	<0.3	<0.5	30	100
Passover Road	LS 29-5	<0.3	<0.5	20	40
Dude Ranch	LS 53-1	<0.3	<0.5	10	20
LS Sands	LS Rockaway	<0.3	<0.5	20	40
LS Sands	Campground Air Release	NA	NA	30	60

TABLE 3 - Treatment Objectives

These values may be subject to change based upon changes in various treatment processes and objectives which will be mutually agreed upon by both parties.

SCHEDULE

Evoqua can proceed within 6-8 weeks of authorization depending on scheduling.

PASSIVE CARBON RENTAL AND SERVICE CONTRACT (VSC-400)

The C35 system is packed with VOCARB® 36C Carbon, manufactured by Evoqua Water Technologies LLC. VOCARB® 36C is a virgin, activated carbon derived from coconut shell, and provides excellent control over both sulfide and organic related odors. The C35 system has been optimized for both hydrogen sulfide and organic odor control. A summary of the services being provided is described below:

SCOPE OF SERVICES

Vapor Phase Odor Control Equipment

<u>Quantity</u>	<u>Item</u>
(1)	C35 Odor Control Carbon Adsorber • Design Avg. H₂S Loadings: ≤ 10 ppm • Max Airflow Rating: 400 cfm • 480 VAC, 3 PH
(605 lbs.)	VOCARB® 36C Coconut Shell Activated Carbon

Evoqua will maintain spare parts for the equipment for emergency replacement.

Preventative Maintenance and Carbon Change Out Services

Routine service and maintenance of the C35 system is included in the rental price of the unit. Details of the existing service program are as follows:

- Evoqua will visit the site on a quarterly basis to check operating parameters and perform routine maintenance, ensuring the system is operating within the design conditions. Any necessary process adjustments will be made and will be followed up as needed with no additional charge for visits.
- Evoqua will provide replacement carbon media and change out the system on an annual basis at no additional charge to the City of Osage Beach.
- Evoqua will provide repair or replacement of any malfunctioning parts/components.
- Evoqua will troubleshoot odor problems (i.e., complaints) within 24 hours and correct any malfunctions in the treatment system.
- Evoqua will include data for this site on a periodic report.



PRICE

Evoqua Water Technologies LLC is pleased to offer the following price for equipment, chemicals and services as described above, effective April 1, 2018 through March 31, 2019. Scope of work and supply in the agreement are subject to the City appropriating funds during each budget cycle.

Bioxide® Solution:	<u>\$3.04/gallon</u> delivered in minimum 3,500-gallon bulk loads. All deliveries require 5-7 business days' notice from receipt of purchase order. Price includes delivery, Prepaid (PPD).
Odophos® Plus CL Solution:	<u>\$2.62/gallon</u> delivered in minimum 3,500-gallon bulk loads. All deliveries require 5-7 business days' notice from receipt of purchase order. Price includes delivery, Prepaid (PPD).
VersadoseLT System:	Included in program at no charge
Peristaltic Pumps:	Included in program at no charge
Leak Detection Kits:	Included in program at no charge
C35 Carbon Scrubber:	<u>\$1,025.00 per month</u>
Monthly Service Fee:	<u>\$750.00 per month</u>

NOTE: Evoqua Water Technologies shall retain ownership of all above listed equipment.

Terms of payment are NET 30 days from date of invoice. These prices do not include any applicable taxes.

The previously negotiated Evoqua Water Technologies LLC/City of Osage Beach Terms and Conditions are considered part of this proposal and shall prevail.

Should a purchase order result from this proposal, please return the entire proposal, signed where indicated below, and address the order to:

Evoqua Water Technologies LLC
2650 Tallevast Road
Sarasota, FL 34243

If you have any questions or need additional information, please contact Mark McGuire at (618) 616-1552.

Prepared by:

Elsa Wright

Elsa Wright
Applications Engineer
Municipal Services

Evoqua Water Technologies LLC



eVOQUA

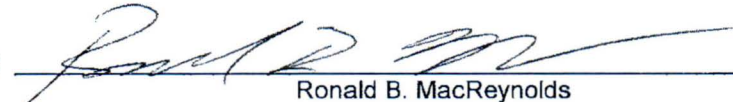
WATER TECHNOLOGIES

RE: FULL SERVICE ODOR CONTROL PROGRAM
OSAGE BEACH, MO
Evoqua Quote # 2018-241264R2

Evoqua will process your order when we receive acceptance of this proposal, by signing below and returning to sheri.whalen@evoqua.com or via fax to: (941) 359-7985.

Company Name: Evoqua Water Technologies LLC

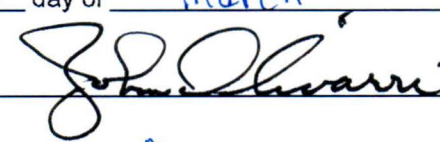
This 2nd day of March Month, 2018 Year

By: 
Ronald B. MacReynolds

Title: Commodity/Purchasing Manager

Company Name: City of Osage Beach

This 5th day of March Month 2018 Year

By: 

Title: Mayor

P.O. Number