



MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting of: March 21, 2019

TO: BOARD OF DIRECTORS

FROM: Clemens Heldmaier, General Manager 

SUBJECT: Review and Possible Action Concerning Nitrate Reduction System Purchase.

North Airport Well 2 and Airport Well 3 require Nitrate reduction systems. Each treatment plant consists of three treatment vessels. Two vessels remain active on site, one vessel is stored offsite ready to be rotate in use when needed. The existing North Airport Well system has been in use for over twelve years with rented vessels. The system vessels are still functional and show little signs of deterioration. However, the attached purchase quote is for the procurement of three new vessels for the site. The District is now completing a second treatment plant at the Airport Well 3 and in need for a total of six vessels. Whether to rent the systems or purchase them remains to be decided.

The vendor produced one quote considering equipment rental and another quote considering MWSD's purchase of the vessels. Assuming no cost increases and a life expectancy of the equipment of 20 years, annual equipment cost for renting the vessels would be around \$38,000 per year.

In case the District would purchase the vessels and associated equipment for a total of \$156,600, the annual cost spread over 20 years would be \$7,830 per annum. In other words, renting the equipment 5 years would cost more than owning the equipment outright, saving \$540,000 over 20 years.

Placing the order for the purchase with the current provider is recommended because the identical systems can then be operated and serviced more efficiently and economically than if a different vendor were selected for the Airport Well 3 system.

RECOMMENDATION:

Move to waive formal advertisement for bids for purchase of nitrate reduction systems for North Airport Well and Airport Well 3 based on the finding that purchase from the current vendor results in efficiencies and economies not attainable under formal competitive bidding and authorize the General Manager to execute a purchase order with Evoqua Water Technologies, LLC, in form approved by District Counsel for purchase of those systems.

Attachments.



Nitrate Reduction
System (Rental)

MONTARA, CA

Proposal: 1801-212. R3
3/14/2019

Confidentiality Statement

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Terms and Conditions

In the event Evoqua Water Technologies LLC is the selected vendor for the products and services contemplated in the subject bid, Evoqua Water Technologies LLC desires to negotiate a mutually agreeable set of terms and conditions to govern such transaction (including issues such as warranty, indemnity, appropriate limitations of liability and other substantive terms and conditions). Evoqua Water Technologies LLC will not be obligated to supply products or services pursuant to such bid unless and until the parties have entered into an agreement with terms and conditions mutually agreed in writing by the parties.



3/14/2019

Montara Water & Sanitary District
8888 Cabrillo Hwy
Montara, CA 94037

Attn: Julian Martinez

Re: Nitrate Reduction System – AW3 and Existing

Dear Julian,

Evoqua Water Technologies (Evoqua) is pleased to submit this revised proposal in reference to the subject project.

Thank you for this opportunity to provide this proposal. Please contact me at (916) 730-2384 if you have questions or if we may be of further assistance. We look forward to working with you on this project.

Sincerely,

Tom Morrical
Sr. Account Manager
Evoqua Water Technologies LLC
Mobile: 916-730-2384
Email: thomas.morrical@evoqua.com

DESIGN CRITERIA

The system treatment flow will be 100 gpm and provide nitrate reduction based upon the following inlet conditions. It is assumed that this water is for potable use. While equipment provided will be typical for use in drinking water applications, the system itself is not NSF certified for use in potable applications. Client will need to evaluate suitability of equipment for use in this application.

Source: Well Water

Flow Information	
Maximum Operating Pressure	100 psig
Minimum Flow Rate	25 gpm
Operational Flow Rate	75 gpm
Peak Flow Rate	100 gpm
Operational Schedule	4 hours per day
Daily Volume (ave)	18,000 gal

Please note: Evoqua has not reviewed any analytical data for influent water. No process or performance guarantee is offered in this proposal.

Two systems are proposed, one for the existing well site, and the other for the new well site. For the existing well site, Evoqua is proposing a new rental offer and exchange pricing for the existing three (3) IX vessel.

For the new well site, Evoqua is offering a similar nitrate IX treatment system consisting of three (3) IX48 vessels, each containing 60 cf of Dowex1 resin. Two (2) IX48 vessels are operated in lead/lag and the third is part of the float for exchange. A portion of the water is to be treated and blended with a remaining untreated flow to obtain the targeted blended effluent. The lead/lag operation allows the lead bed to be spent while treatment is maintained with the lag bed. Blending piping/valving is the responsibility of the client.

Site operations will require the exchange of lead vessels with regenerated vessels when they are spent. The exhausted vessel will be regenerated off-site at our Milpitas CA facility once spent.

RENTAL SYSTEM MAJOR COMPONENTS: EXISTING SITE

Monthly Rental:

- Rental for three (3) IX48 vessels

Exchange Pricing (one vessel, per event):

- Regeneration of one (1) IX48 vessel with 60ft³ Dowex 1 resin at Evoqua's facility in Milpitas, CA. Freight to and from site is included.
- Bac-T and Nitrate test on regenerated vessel included
- Customer is responsible for forklift rental for tank exchange. Evoqua can provide this as an option for \$1,200/day

RENTAL SYSTEM MAJOR COMPONENTS: NEW SITE (Well 3)

Mobilization

- Three (3) IX48 Vessels. Lead vessels will contain 60ft³ Dowex 1, and the lag vessel will contain 60 ft³ Dowex 1. A total of 180 ft³ of resin is supplied.
- Four (4) Hoses (up to 16') with one (1) camlock fitting and one (1) flange fitting, suitable for potable use. Customer is responsible for determining hose length for Evoqua to fabricate.
- Vessels will be disinfected at Evoqua's facility, loaded with resin and delivered to the site.
- Freight to jobsite, offloading of vessels at job site.
- Piping, fittings and valves to and from Evoqua supplied vessels and hoses, is by customer.

Monthly Rental:

- Rental for three (3) IX48 vessels
- Rental for the four (4) hoses supplied under mobilization

Exchange Pricing (one vessel, per event):

- Regeneration of one (1) IX48 vessel with 60ft³ Dowex 1 resin at Evoqua's facility in Milpitas, CA. Freight to and from site is included.
- Bac-T and Nitrate test on regenerated vessel included
- Customer is responsible for forklift rental for tank exchange. Evoqua can provide this as an option for \$1,200/day

GENERAL INFORMATION

Additional inorganic data (TDS, alkalinity) needs to be evaluated as well to determine the scale potential of the water. It is possible that pre-treatment upstream of the IX bed may be required to reduce scaling potential. No chemical feed system has been included in this proposal.

RENTAL SYSTEM PRICING- EXISTING SITE

<u>Monthly Rent</u>	
Monthly rent for three (3) IX48 tanks. This is valid for a one-year term. (\$500/vessel/Month)	\$1,500
<u>Exchange Pricing (one vessel)</u>	
One (1) IX48 freight to/from Milpitas, regeneration. Client responsible for loading IX48 on Evoqua provided transport and receiving when regenerated.	\$2,441

Please note that while equipment has been offered on a rental basis, Evoqua can offer this equipment on a capital or rent-to-own basis if requested.

RENTAL SYSTEM PRICING - NEW SITE

<u>Mobilization</u>	
Supply of three (3) IX48 Rental Vessels, initial fill of Dowex 1 resin (180 ft ³ total). Freight and Offloading included. Installation by customer. Offer is subject to availability of vessels.	\$51,116
<u>Monthly Rent</u>	
Monthly rent for three (3) IX48 vessels. This is valid for a one-year term. (\$500/month/vessel)	\$1,500
<u>Exchange Pricing (one vessel)</u>	
One (1) IX48 freight to/from Milpitas, regeneration. Client responsible for loading IX48 on Evoqua provided transport and receiving when regenerated.	\$2,441

Please note that while equipment has been offered on a rental basis, Evoqua can offer this equipment on a capital or rent-to-own basis if requested.

COMMERCIAL TERMS
Delivery

- Rental assets quoted are subject to availability at the time of acceptance of PO by Evoqua.
- Shipment to be determined based on asset availability at the time of PO.

Prices Do Not Include the Following:

- Permits
- Site preparation including developing a concrete pad, grouting, weather protection, etc.
- Installation of equipment
- Piping system to and from Evoqua supplied equipment
- Foundation Design
- Anchor Bolts
- Please note: Evoqua excludes all other items not specifically listed in the proposal

Also Please Note:

Confidential

□ Proposal pricing valid for 30 days from date of proposal.



Proposal #1801-212.R3
Evoqua Water Technologies LLC

- Evoqua Water Technologies LLC standard lease terms and conditions are attached hereto and are incorporated into this proposal by reference
- Evoqua has not considered any client specifications in the preparation of this proposal. Equipment quoted will be provided in complete accordance with Evoqua internal standards only.
- For temporary system, terms are payment are net 30 days upon completion of each activity.
- Terms are payment are net 30 days; 100% on completion of each activity. Quoted terms are subject to credit approval
- FOB factory, freight allowed to jobsite.
- No throughput or performance warranty is provided with this proposal.
- Clear access is required for vessel exchange using forklift
- Evoqua recommends Influent water to be filtered down to 5 micron to prevent solids accumulation on resin
- Evoqua Water Technologies LLC's price does not include, and Evoqua Water Technologies LLC shall not be responsible for, any taxes, permits, tariffs, duties or fees (or any incremental increases to such taxes, permits, tariffs, duties or fees enacted by governmental agencies) unless specifically agreed herein or otherwise by Evoqua Water Technologies LLC in writing.

Attachments:

Scope of Supply Checklist
Standard Terms and Conditions
Product Bulletins

SCOPE OF SUPPLY CHECKLIST

No	Work Scope Item	Others	Evoqua
1	Equipment system(s) as proposed herein		X
2	Equipment quality assurance check on site	X	
3	Site(s) for the Evoqua Water Technologies LLC equipment/facility that comply with the requirements of the hydraulic profile, process flow, or special design requirements	X	
4	Permanent electrical services terminated at the control panels or instruments within the Evoqua Water Technologies LLC equipment/facility battery limit(s). Voltage & amperage TBD as specified by Evoqua Water Technologies LLC	N/A	
5	Valved supply of temporary pump test water to the Evoqua Water Technologies LLC equipment/facility battery limit(s), if applicable	X	
6	Discharge of effluent water(s) such as process return, outfall, wastewater, or sewer tie-in within the Evoqua Water Technologies LLC equipment/facility battery limit(s).	X	
7	Valved supply of permanent compressed and/or instrument quality air and/or potable water to the Evoqua Water Technologies LLC equipment/facility battery limit(s). Volume & pressure TBD.	N/A	
8	Instrumentation field calibration	N/A	
9	Supply and installation of piping to Evoqua Water Technologies LLC provided equipment boundary	X	
10	Supply of Interconnecting isolation valves, check valves, control valves, etc. between systems	X	
11	Offloading of vessels and piping, installation of vessels and Evoqua Water Technologies LLC supplied piping	X	
12	Supply of loose instrumentation in between equipment components	N/A	
13	Wiring of loose instruments to junctions boxes and/or control panels	X	
14	Interconnecting conduit and wiring between unit components and existing power and control distribution	X	
15	Installation	X	
16	Offloading of system (for new site)		X
17	Manual		X
18	Chemical sanitization, qualification	X	
19	Initial load of resin (for new site)		X
20	Initial TCLP of spent media	N/A	
21	Anti-Siphon Loop	X	
22	Grounding of Evoqua Water Technologies LLC provided equipment	X	



Nitrate Reduction System

MONTARA, CA

Quotation 1801-212/ rev 2
2/1/10

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February 5, 2019

Montara Sanitary District
8888 Cabrillo Hwy.
Montara, CA 94037

Attn: Julian Martinez

Re: Nitrate Reduction System for AW3

Dear Julian,

Evoqua Water Technologies (Evoqua) is pleased to submit this revised proposal in reference to the subject project.

1. DESIGN CRITERIA

The system treatment flow will be 100 gpm and provide nitrate reduction based upon the following inlet conditions. This is a potable treatment.

Source: Well

Flow Information	
Maximum Operating Pressure	100 psig
Minimum Flow Rate	25 gpm
Operational Flow Rate	75 gpm
Peak Flow Rate	100 gpm
Operational Schedule	4 hours per day
Daily Volume (ave)	18,000 gal

Two systems are proposed, one for the existing well site, and the other for the new well site. For the existing well site, Evoqua is proposing three (3) IX vessels for capital purchase. These will replace the existing rental vessels from Evoqua.

For the new well site, Evoqua is offering a similar nitrate IX treatment system consisting of three (3) IX48 vessels, each containing 60 cf of Dowex1 resin. Two (2) IX48 vessels are operated in lead/lag and the third is part of the float for exchange. A portion of the water is to be treated and blended with a remaining untreated flow to obtain the targeted blended effluent. The lead/lag operation allows the lead bed to be spent while treatment is maintained with the lag bed. Blending piping/valving is the responsibility of the client.

Site operations will require the exchange of lead vessels with regenerated vessels when they are spent. The exhausted vessel will be regenerated off-site at our Milpitas CA facility once spent.

2. SCOPE OF WORK

2.1. Existing Well Site:

- Three (3) IX48 vessels, standard Evoqua design
- Freight and offloading on site

2.2. New Well Site:

- Three (3) IX48 vessels, standard Evoqua design
- Four (4) Hoses (up to 16') with camlock fittings, suitable for potable use (optional)
- One (1) 2" PVC manifold, 3-tier, with four (4) 6' hoses (optional)
- Initial fill of 180ft³ of Dowex1 Resin
- Freight to the jobsite
- Installation supervision of all equipment outlined in this proposal, start-up and training. This is limited to 1 trip, 1 day on site. Additional service time can be provided at a per diem rate.

2.3. Exchange Pricing (one vessel, per event):

- Regeneration of one (1) IX48 vessel with 60ft³ Dowex 1 resin at Evoqua's facility in Milpitas, CA. Freight to and from site is included.
- Bac-T and Nitrate test on regenerated vessel included

2.4. Exchange Pricing (two vessel, per event):

- Regeneration of two (2) IX48 vessels with 120ft³ Dowex 1 resin at Evoqua's facility in Milpitas, CA. Freight to and from site is included.
- Bac-T and Nitrate test on regenerated vessel included

3. PRICING

EXISTING WELL SITE PRICING- (SECTION 2.1)



Nitrate Reduction System

Supply of three (3) IX48s vessels to site. Freight included. Resin, Installation not included.	\$62,526
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NEW WELL SITE PRICING- (SECTION 2.2)



Nitrate Reduction System

Supply of three (3) IX48s with 180 cf of Dowex1 Resin	\$88,570
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16' Hose Kits

Supply of four (4) 16' hose kits	\$5,508
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Manifold + Hose Kits

Supply of one (1) 2" PVC manifold with four (4) 6' hose kits	\$8,403
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Freight + Installation Supervision

Delivery of equipment described above and installation supervision of equipment	\$5,454
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EXCHANGE SERVICE PRICING (PER EVENT)- (SECTIONS 2.3 AND 2.4)



Exchange Pricing (one vessel)

One (1) IX48 freight to/from Milpitas, regeneration. Client responsible for loading IX48 on Evoqua provided transport and receiving when regenerated.	\$2,441
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Exchange Pricing (two vessels)

Two (2) IX48 freight to/from Milpitas, regeneration. Client responsible for loading IX48s on Evoqua provided transport and receiving when regenerated.	\$4,307
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4. COMMERCIAL TERMS

Delivery

- Delivery of three (3) IX48 vessels to existing site will be 10-12 weeks after acceptance of PO by Evoqua.
- Delivery of scope of supply to new site 3-4 weeks after acceptance of PO by Evoqua.

Prices Do Not Include The Following:

- Permits
- Site preparation including developing a concrete pad, grouting, weather protection, etc.
- Any interconnecting piping
- Blend piping/valves
- Foundation Design
- Anchor Bolts
- Please note: Evoqua excludes all other items not specifically listed in “Major Components” category

Also Please Note:

- Proposal pricing valid for 30 days from date of proposal.
- Evoqua Water Technologies LLC terms and conditions are attached hereto and are incorporated into this proposal by reference
- Evoqua has not considered any client specifications in the preparation of this proposal. Equipment quoted will be provided in complete accordance with Evoqua internal standards only.
- Separate purchase orders required for capital equipment and ongoing service exchange. For supply of equipment, terms of payment are net 30 days; 50% upon receipt and acceptance of order; 50% upon shipment (not to exceed 60 days after notice of ability to ship equipment); For service, terms of payment are net 30 days, 100% upon completion. Quoted terms are subject to credit approval. For exchange service, a separate contract with payment terms will be provided.
- Clear access is required for vessel exchange using forklift
- FOB factory, freight allowed to jobsite.
- No throughput or performance warranty is provided with this proposal.
- Evoqua recommends Influent water to be filtered down to 5 micron to prevent solids accumulation on resin
- Evoqua Water Technologies LLC’s price does not include, and Evoqua Water Technologies LLC shall not be responsible for, any taxes, permits, tariffs, duties or fees (or any incremental increases to such taxes, permits, tariffs, duties or fees enacted by governmental agencies) unless specifically agreed herein or otherwise by Evoqua Water Technologies LLC in writing.

Thank you for this opportunity to provide this revised proposal. Please contact me at (916) 730-2384 if you have questions or if we may be of further assistance. We look forward to working with you on this project.

Sincerely,

Tom Morrical
Evoqua Water Technologies LLC

SCOPE OF SUPPLY CHECKLIST

No	Work Scope Item	Others	Evoqua
1	Equipment system(s) as proposed herein		X
2	Equipment quality assurance check on site		X
3	Site(s) for the Evoqua Water Technologies LLC equipment/facility that comply with the requirements of the hydraulic profile, process flow, or special design requirements	X	
4	Permanent electrical services terminated at the control panels or instruments within the Evoqua Water Technologies LLC equipment/facility battery limit(s). Voltage & amperage TBD as specified by Evoqua Water Technologies LLC	N/A	
5	Valved supply of temporary pump test water to the Evoqua Water Technologies LLC equipment/facility battery limit(s), if applicable	X	
6	Discharge of effluent water(s) such as process return, outfall, wastewater, or sewer tie-in within the Evoqua Water Technologies LLC equipment/facility battery limit(s).	X	
7	Valved supply of permanent compressed and/or instrument quality air and/or potable water to the Evoqua Water Technologies LLC equipment/facility battery limit(s). Volume & pressure TBD.	N/A	
8	Instrumentation field calibration	N/A	
9	Supply and installation of piping to Evoqua Water Technologies LLC provided equipment boundary	X	
10	Supply of Interconnecting isolation valves, check valves, control valves, etc. between systems	X	
11	Offloading of vessels and piping, installation of vessels and Evoqua Water Technologies LLC supplied piping	X	
12	Supply of loose instrumentation in between equipment components	X	
13	Wiring of loose instruments to junctions boxes and/or control panels	X	
14	Interconnecting conduit and wiring between unit components and existing power and control distribution	X	
15	Field testing of unit assemblies	X	
16	Installation supervision (8 hours onsite)		X
17	Manuals (2)		X
18	Chemical sanitization, qualification	X	
19	Initial load of Media		X
21	Anti-Siphon Loop	X	
22	Grounding of Evoqua Water Technologies LLC provided equipment	X	