

SBE TODAY

Vol 30, Edition 199 May 27, 2015

Diversity in Action Publish by SBE certified SBE/DBE/MBE

Turning Sewage into Drinking Water Gains Appeal as Drought Lingers



A sign encouraging people to save water is displayed at a news conference in Los Angeles. Water use restrictions in California amidst the state's ongoing drought have led to the phenomenon of "droughtshaming," or publicly calling out water wasters. (Nick Ut/AP)

By Monte Morin

It's a technology with the potential to ease California's colossal thirst and insulate millions from the parched whims of Mother Nature, experts say. But there's just one problem -- the "yuck factor."

As a fourth year of drought continues to drain aquifers and reservoirs, California water managers and environmentalists are urging adoption of a polarizing water recycling policy known as direct potable reuse.

Unlike nonpotable reuse -- in which treated sewage is used to irrigate crops, parks or golf courses -- direct potable reuse takes treated sewage effluent and purifies it so it can be used as drinking water.

It's a concept that might cause some consumers to wince, but it has been used for decades in Windhoek, Namibia -- where evaporation rates exceed annual rainfall -- and more recently in drought-stricken Texas cities, including Big Spring and Wichita Falls.

In California, however, similar plans have run

"You know, toilet to tap might be the only answer at this point"

**Donald Schultz.
Van Nuys activist**

into heavy opposition.

Los Angeles opponents coined the derisive phrase "toilet to tap" in 2000 before torpedoing a plan to filter purified sewage water into an underground reservoir -- a technique called indirect potable reuse.

In 1994, a San Diego editorial cartoonist framed debate over a similar proposal by drawing a dog drinking from a toilet bowl while a man ordered the canine to "Move over..."

Despite those defeats, proponents say the time has finally arrived for Californians to accept direct potable reuse as a partial solution to their growing water insecurity. With Gov. Jerry Brown ordering an unprecedented 25% cut in urban water usage because of drought, the solution makes particular

sense for large coastal cities such as Los Angeles, they say.

Instead of flushing hundreds of billions of gallons of treated sewage into the Pacific Ocean each year, as they do now, coastal cities can capture that effluent, clean it and convert it to drinking water.

"That water is discharged into the ocean and lost forever," said Tim Quinn, executive director of the Assn. of California Water Agencies. "Yet it's probably the single largest source of water supply for California over the next quarter-century."

The advocates' hunch that severe drought has changed long-held attitudes on potable reuse may be on the mark.

Recently, a leader in the effort to stop the Los Angeles project more than a decade ago said he still opposed it but might consider a new plan if officials made a sol-

Continued on page 4

SMALL BUSINESS EXCHANGE

SBE OUTREACH SERVICES

With 1.5 million businesses in our database, SBE is California's #1 source for diversity outreach.

Advertisements

Placed in the Small Business Exchange newspaper, SBE Today newsletter, and online at www.sbeinc.com

Faxed and Eblast Solicitations

Targeted mailings sent to businesses per your criteria.

Telemarketing

Telephone follow-up calls that follow a script of 5 questions you create.

Computer Generated Reports

Will fit right into your proposal, along with a list of interested firms to contact.

Contact Info:

703 Market Street, Suite 1000

San Francisco, CA 94103

Email: sbe@sbeinc.com

Website: www.sbeinc.com

Phone: (415) 778-6250, (800) 800-8534

Fax: (415) 778-6255

Publisher of
Small Business Exchange
weekly newspaper

California Sub-Bid Request Ads



Proven Management, Inc.

2000 5th Street, Berkeley, CA 94710
Phone: 510-671-0000 • Fax: 510-671-1000

Requests proposals/quotes from all qualified and certified Disadvantaged Business Enterprise (DBE) subcontractors, suppliers, and truckers for the following project:

I-680 EXPRESS LANES PROJECT

In Alameda & Contra Costa Counties on Route 680
MTC Contract No. BAIFA-100 / Caltrans #04-3G9504

Bids: June 5, 2015 @ 4PM
DBE's Highly Encouraged

Bonding, insurance, lines of credit and any technical assistance or information related to the plans & specifications & requirements for the work will be made available to interested DBE certified suppliers & subcontractors. Assistance with obtaining necessary equipment, supplies, materials, or related assistance or services for this project will also be offered to interested DBE certified suppliers, subcontractors, truckers.

100% Payment & Performance bonds will be required from a single, Treasury-listed surety company subject to PMI's approval. PMI will pay bond premium up to 1.5%. Subcontractors awarded on any project will be on PMI's standard form for subcontract without any modifications. For questions or assistance required on the above, please call.

We are an Equal Opportunity Employer



Proven Management, Inc.

2000 5th Street, Berkeley, CA 94710
Phone: 510-671-0000 • Fax: 510-671-1000

Requests proposals/quotes from all qualified and certified Disadvantaged Business Enterprises (DBE) subcontractors, suppliers, and truckers for the following project:

QUINT STREET BRIDGE REPLACEMENT SAN FRANCISCO

CALTRAIN #15-J-C-043

bids: June 18, 2015 @ 2pm

SUBCONTRACTING GOAL - DBE - 13%

Subcontracting opportunities include, but are not limited to the following: bridge removal; clearing & grubbing; concrete removal; concrete; structural, sidewalk, curb, curb ramp; construction staking; drainage; fencing; hydroseeding; precast concrete; signage; site preparation; excavation & backfill; structural steel; traffic control; trucking; construction material

100% Payment & Performance bonds will be required from a single, Treasury-listed surety company subject to PMI's approval. PMI will pay bond premium up to 1.5%. Subcontractors awarded on any project will be on PMI's standard form for subcontract without any modifications. For questions or assistance required on the above, please call.

We are an Equal Opportunity Employer

REQUESTING SUB-QUOTES FROM
QUALIFIED DBE SUBCONTRACTORS/
SUPPLIERS/TRUCKERS FOR:

Berryessa Station Campus Area and Roadways

Contract: C742 (15002F)

**Owner: Santa Clara Valley
Transportation Authority**

Engineers' Estimate: \$26,000,000.
BID DATE: June 3rd, 2015 @ 2:00 PM

Items of work include but are not limited to: Survey, Scheduling, Traffic Control, PCMS, SWPPP, Erosion Control, QCQA Program & Testing, Fencing, Construction Area Signs, Demolition, Clearing & Grubbing, Cold Plane AC, Topsoil, Lime Treatment, Asphaltic Emulsions, Lean Concrete Base, Concrete Pavement, CIDH Piling, Masonry Blocks, Concrete Sound Wall, Gabion Wall, Signs, Landscape, Rock Slope Protection, Minor Concrete, Misc. Iron & Steel, Bollards, Ornamental Steel Fence, Striping & Marking, Wheel Stops, Misc. Pipes, Fire Hydrants, Underground Utilities, Site Furniture, Traffic Signals & Lighting, Buildings, Bus Shelter, & Trucking.

Granite Rock Company 'Graniterock' is signatory to Operating Engineers, Laborers, Teamsters, Carpenters and Cement Masons unions. 100% performance and payment bonds will be required from a qualified surety company for the full amount of the subcontract price. Bonding assistance is available. Graniterock will pay bond premium up to 1.5%. In addition to bonding assistance, subcontractors are encouraged to contact Graniterock Estimating with questions regarding obtaining lines of credit, insurance, equipment, materials and/or supplies, or with any questions you may have. Subcontractors must possess a current contractor's license, insurance and worker's compensation coverage. Subcontractors will be required to enter into our standard contract. Graniterock intends to work cooperatively with all qualified firms seeking work on this project.

Granite Rock Company

120 Granite Rock Way, San Jose, CA 95136
Phone (408) 574-1400 Fax (408) 365-9548

Contact: Bob Williams

Email: estimating@graniterock.com

We Are An Equal Opportunity Employer

Shimmick Construction Company, Inc.

SBE/DBE/LBE Subcontractor/Supplier Bids Requested For:
Transbay Transit Center

General Contractor: Webcor/ Obayashi Joint Venture
TG12.1 Civil/Sitework at Grade/Ground Level Landscaping

Bid Date: June 9, 2015 at 2:00 PM

Fax all quotes to 510-777-5099

Requesting qualified SBE/DBE/LBE certified Subcontractor and Supplier Quotes on: **Contaminated Soil, Demolition, Earthwork, Landscape, Shoring, Traffic Control, Aggregate, Lumber, Trench Shoring, Concrete Contractor, Construction Clean-Up, Construction Staking, Geophysics, Flat Bed Trucking, Hazardous Substance Removal, Hazardous Substance Trucking.**

Bid Plans and Specifications that do not contain protected information may be purchased via ARC Northern California - (415) 495-8700 <http://www.e-arc.com> or may be viewed by appointment only at Shimmick Construction's Office: 8201 Edgewater Drive, Suite 202, Oakland, CA 94621, Phone: 510-777-5050

Subcontractors and Suppliers interested in this project may contact Kyle Nelson by phone at (510) 777-5086 or knelson@shimmick.com.

100% Performance and Payment bonds with a surety company subject to approval of Shimmick Construction Company, Inc. are required of subcontractors for this project. Shimmick Construction will pay bond premium up to 1.5%. Subcontractors will be required to abide by terms and conditions of the AGC Master Labor Agreements and to execute an agreement utilizing the latest SCCI Long Form Standard Subcontract incorporating prime contract terms and conditions, including payment provisions. Shimmick Construction's listing of a Subcontractor is not to be construed as an acceptance of all of the Subcontractor's conditions or exceptions included with the Subcontractor's price quote. Shimmick Construction requires that Subcontractors and Suppliers price quotes be provided at a reasonable time prior to the bid deadline to enable a complete evaluation. For assistance with **bonding, insurance or lines of credit contact Scott Fairgrieve at (510) 777-5000.**

Shimmick Construction Company Inc.

8201 Edgewater Drive, Suite 202 • Oakland, CA 94621
Phone (510) 777-5000 • Fax (510) 777-5099

An Equal Opportunity Employer

REQUEST FOR DBE SUBCONTRACTORS AND SUPPLIERS FOR:

Rohnert Park Expressway Rehabilitation • City of Rohnert Park Project No. 2013-01

BID DATE: June 8, 2015 @ 2:00 PM

We are soliciting quotes for (including but not limited to): Trucking, Traffic Control System, Project Identification Sign, Adjust Utilities to Grade, Cold Plane AC, Pavement Reinforcement Material, Detector Loop and Handhole Replacement, Minor Concrete Curb and Gutter, Striping & Marking, Video Camera Traffic Signal Detection, and Construction Materials

O.C. Jones & Sons, Inc.

1520 Fourth Street • Berkeley, CA 94710 • Phone: 510-526-3424 • FAX: 510-526-0990

Contact: Jean Sicard An Equal Opportunity Employer

100% Performance & Payment Bonds may be required. Worker's Compensation Waiver of Subrogation required. Please call OCJ for assistance with bonding, insurance, necessary equipment, material and/or supplies. OCJ is willing to breakout any portion of work to encourage DBE Participation. Plans & Specs are available for viewing at our office.

Bid Requests from Certified LBE
Subcontractors and Suppliers for all trades

Hunters Point East West

This is a MOHCD project with construction workforce, prevailing wage & union labor provisions. This will also be a PLA.

Hunters Point East West

1000-1066 Griffith St, 1013-1187
Oakdale Ave, 1040-1152 Palou Ave (HP West)
740-798 Jerrold Ave, 707-763 Jerrold Ave,
716-792 Kirkwood Ave. (HP East)
San Francisco, CA 94124
Bid Date: 6/4/15 @ 2 PM

Voluntary Pre-bid Meeting & Job Walk on
5/19/15 at 10:00 AM at
HPEU West Site Community Center,
located at 1065 Oakdale Avenue.

CAHILL CONTRACTORS, INC.

Contact: Julie Park
estimating@cahill-sf.com, (415) 986-0600

California Sub-Bid Request Ads



591 Camino de la Reina, Suite 1250 | San Diego, CA 92108
 TEL: (619) 814-3705 | FAX: (619) 814-3770
 acale@pulice.com; kbell@pulice.com
 Equal Opportunity Employer

Invitation to Bid for:

SMALL AND MINORITY FIRMS, WOMEN'S BUSINESS ENTERPRISE AND LABOR SURPLUS AREA FIRMS

Subcontractors, Material and/or Suppliers, and Professional Services for:

RICHARD A. REYNOLDS DESALINATION FACILITY PHASE II EXPANSION

OWNER: Sweetwater Authority

Project No.: B.P. 20084022

LOCATION: Chula Vista, CA

Bid Deadline Date to: June 18, 2015.

The project generally consists of the following:

MODIFICATION TO AN EXISTING BRACKISH GROUNDWATER DESALINATION FACILITY, INCLUDING THREE REVERSE OSMOSIS TRAINS, IRON AND MANGANESE FILTRATION SYSTEM, DEGASSIFIER, FLUORIDE SYSTEM, CHEMICAL SYSTEM MODIFICATION, AND EXTENSIVE ELECTRICAL, INSTRUMENTATION, SCADA AND PUMP AND MOTOR INSTALLATION, CONSTRUCTION OF WELLHEAD FACILITIES AND WELL BUILDINGS AT FIVE NEW WELLS.

Plans and Specifications are available free of charge online at:

<http://www.ebidboard.com/public/projects/index.asp?mbrguid=D0757BD8-8C21-406F-97F9-D160301A9BAF>

**Quotes for Services & Supplies are requested for the following items including,
 but not limited to:**

SWPPP, Landscaping and Irrigation, Masonry, HVAC, Sheetmetal, Doors & Louvers, Painting & Coatings, Composite Roofing/Insulation, Welded Steel Tank, Electrical & Instrumentation, Water Treatment Pumps and Process Equipment, Process and Waterworks Pipe & Valves, Reinforcing Steel, Concrete & Aggregates, Paving, Striping, Minor Concrete, Rough Carpentry, Fencing

Opportunities for quotations will be needed throughout the life of the project. Terms and conditions should be made part of the quotations. 100% performance and payment bonds may be required for the full amount of the subcontract price. Pulice Construction, Inc. will assist with obtaining bonding, lines of credit, and insurance by encouraging the subs and vendors to work with state supportive services programs. Responsive subcontractors must possess a current contractor's license, insurance, and worker's compensation coverage complying with Pulice Construction, Inc. requirements and will be required to sign a standard Subcontract Agreement.

Pulice Construction, Inc. will analyze and consider each quote received, including those that are broken down into economically feasible units to facilitate bidding. Quotes must be valid for the same period of time as specified by Owner for contract award. Any conditions or exceptions in Subcontractor's quote are expressly rejected unless accepted in writing.

Pulice Construction, Inc. is committed to ensuring that subcontractors and vendors have the maximum opportunity to successfully perform on this project, and to making good faith efforts to utilize small, minority, and women's business enterprises.

REQUEST FOR DBE SUBCONTRACTORS AND SUPPLIERS FOR:

**Hwy 84 Widening, Livermore
 Caltrans #04-297624**

BID DATE: June 17, 2015 @ 2:00 PM

We are soliciting quotes for (including but not limited to): Trucking, Lead Compliance Plan, Temporary Timer Construction Material, Ground Surface Monitoring Program, Construction Area Signs, Traffic Control System, Type III Barricade, Portable Delineator, Portable Changeable Message Sign, Temporary Creek Diversion System, SWPPP, Rain Event Action Plan, Rain Event Action Plan, Storm Water Sampling & Analysis, Storm Water Annual Report, Temporary Erosion Control, Temporary Check Dam, Temporary Silt Fence, Sweeping, Temporary Dewatering and Non Storm Waterdischarge Control System, Water Quality Sampling and Analysis, Treated Wood Waste, Noise Monitoring, Abandon Culvert, Abandon Inlet, Salvage Irrigation Facility, Adjust Utilities, Cold Plane AC, Sand Backfill, Bridge Removal, Clearing & Grubbing, Develop Water Supply, Structure Excavation, Structure Backfill, Ditch Excavation, Temporary Shoring, Subgrade Enhancement Geotextile Class A1, Planting & Irrigation, Imported Biofiltration Soil, Hydroseed, Rumble Strip, Data Core, AC Dike, Tack Coat, Soil Nail, Mechanically Stabilized Embankment, CIDH Concrete Piling, Prestressing Cast-In-Place Concrete, Seal Course Concrete, Structural Concrete, Minor Concrete (Minor Structure), Grape Vine Texture, Rounded River Rock Texture, Drill and Pressure Grout Reinforcement, Drill and Bond Dowel, Joint Seal, Bar Reinforcing Steel, Headed Bar Reinforcement, Structural Concrete, Roadside Signs, Prepare and Paint Concrete, Anti-Graffiti Coating, Underground, Concrete Backfill, Permeable Material, Drainage Inlet Marker, Automatic Drainage Gate, Inlet Depression, Rock Slope Protection, Gabion, Filter Fabric, Minor Concrete, Pre/Post Construction Surveys, Misc. Iron & Steel, Rigid Rail Fall Protection System, Misc. Metal, Abandon Sewer Line, Remove Gas Pipe, Sewer System, Cathodic Protection Test Station, Electrical, Architectural Concrete, Stone Veneer, City of Livermore Manhole, Fencing, Delineator, Object Markers, Midwest Guardrail System, Vegetation Control, Chain Link Railing, Wildlife Passage Way, Tubular Bicycle Railing, Cable Railing, Transition Railing, Crash Cushion, Concrete Barrier, Thermoplastic Striping & Marking, Painted Striping & Marking, Pavement Marke, Water, Polyester Concrete Overlay, Jack Pipe, Directional Boring, PG&E Conduit Boxes and Construction Materials

O.C. Jones & Sons, Inc.

1520 Fourth Street • Berkeley, CA 94710 • Phone: 510-526-3424 • FAX: 510-526-0990

Contact: Jean Sicard

An Equal Opportunity Employer

100% Performance & Payment Bonds may be required. Worker's Compensation Waiver of Subrogation required. Please call OCJ for assistance with bonding, insurance, necessary equipment, material and/or supplies. OCJ is willing to breakout any portion of work to encourage DBE Participation. Plans & Specs are available for viewing at our office or through the Caltrans Website at www.dot.ca.gov/hq/esc/oe/weekly_ads/index.php.

Looking for Subcontractors, Vendors, and Suppliers?

Advertise your Sub-Bid Requests in the
Small Business Exchange.

With a monthly readership of 75,000,
 SBE reaches a diverse audience, cutting
 across ethnic and gender lines as well as
 traditional industry segments.



Call 1-800-800-8534
 or visit us at www.sbeinc.com



FIND

Subcontractors, Vendors, and Suppliers

REACH

Diverse Audiences

ADVERTISE

Sub-Bid Request Ads
Public Legal Notices
Job Listings

Turning Sewage into Drinking Water

Continued from page 1

id case for it. He said one of the reasons he opposed the original plan was that “incompetent” officials failed to explain their rationale to residents in the first place.

“You know, toilet to tap might be the only answer at this point,” said Van Nuys activist Donald Schultz. “I don’t support it, but we’re running out of options. In fact, we may have already run out of options.”

To be sure, it will be years, or even a decade, before direct potable reuse systems begin operation in California -- if ever.

One reason for this is that there is no regulatory framework for the approval of such a system. Currently, a panel of experts is preparing a report to the Legislature on the feasibility of creating such rules. That report is due in 2016.

Potable reuse advocates insist the public’s distaste for the concept is based on ignorance. They note that more than 200 wastewater treatment plants already discharge effluent into the Colorado River, which is a primary source of drinking water for Southern California.

“That’s what I call de facto potable reuse,” said George Tchobanoglous, a water treatment expert and professor emeritus at UC Davis.

In an economic analysis last year, Tchobanoglous estimated that by 2020, potable reuse could yield up to 1.1 million acre-feet of water annually -- somewhat less than the 1.3 million acre-feet of water the governor hopes to save through mandatory reductions, and enough to supply 8 million Californians, or one-fifth of the state’s projected population.

In potable reuse systems, effluent from a wastewater treatment plant is sent to an advanced treatment facility, where it undergoes a three-step purification process.

First, the water is passed through a microfilter that blocks particles, protozoans or bacteria that are larger than 1/300th the thickness of a human hair. Next, it undergoes even finer filtration in the form of reverse osmosis, in which water is forced through a membrane that blocks fertilizers, pharmaceuticals, viruses and salts. In the third step, ultraviolet light and hydrogen peroxide are used to break down any pathogens or organic compounds that escaped the first two steps.

The result is a purified substance that is cleaner than most bottled waters, according to WaterReuse California, a group that advocates for water reuse and desalination. However, it is still sent to a traditional water treatment plant, where it is blended with other sources of water, processed and pumped to household taps.

In an indirect potable reuse system, the water is placed in an “environmental buffer,” such as an underground aquifer or surface water reservoir, where it is stored for a period of time before getting processed in a traditional water treatment plant. It is this type of system that was defeated in Los Angeles.

Although potable reuse advocates say opposition is often driven by a visceral response to the process, the so-called yuck factor, those who opposed the Los Angeles project said recently that they did so for a variety of reasons, including cost and the potential long-term effects of the trace quantities of drug compounds, hormones and personal care products found in wastewater and surface water.

“Personally I would not drink water that has been recycled through the toilet to tap process,” said Steven Oppenheimer, a biology professor at Cal State Northridge. However, Oppenheimer said he would use such water for irrigation, and even household cleaning and bathing.

The presence of so-called contaminants of emerging concern may prove to be one of the main barriers to direct potable reuse. Because of limited scientific knowledge, these compounds are unregulated, meaning that there are no government-prescribed methods for monitoring or removing them.

Tchobanoglous and others insist these substances exist in such small quantities that they don’t pose a significant issue.

To some, the contaminant issue argues in favor of using indirect potable reuse systems.

Such a system has been operating since 2008 in Orange County, where purified water is pumped into an aquifer and held for six months before being used as drinking water. Also, after its first failed attempt at establishing an indirect potable reuse system, San Diego approved a second demonstration project years later. It recently won approval to store treated water in an open reservoir as part of a pilot program.

Allison Chan, an environmental engineer who has studied the issue of why some potable reuse projects succeeded while others failed, said that an active public outreach campaign, as well as a crucial need for water, were key factors in projects that won approval.

Chan said that although education and outreach generally increased support for potable reuse programs, it also had the effect of hardening perceptions. In other words, supporters became even more supportive, while opponents became even more opposed.

Said Chan: “This just goes to show how the yuck factor can stick with some people.”

Source: (c)2015 the Los Angeles Times