Water, Sewer and Storm Drain Committee

REVISED

February 23, 2005
5:00 PM
City Hall

Attendees:

Paula Ford – Mayor
Judy Richards – Council Member
Rob Hickey – City Manager
John Linhart – Planning & Public Works Director
Bruce Nash – City Engineer
Michael Bohlander, P.E. – City Engineer
Satwant Takhar - Finance Director
Tracy Park – Sr. Administrative Assistant

----- Agenda Topics -----

1. Meeting Called to Order
2. Roll Call
3. Approval of Meeting Minutes for July 28, 2004
4. Reports/Updates:
   A. Arsenic Remediation Extension Request
   B. Repayment of Water Fund Loan
   C. Update for possible future site of a Water Tank on Live Oak Unified School District Land
   D. Replacing Water Line on Connecticut as part of the road project
   E. Update on the WWTP Construction Project
   F. Status of Water Meter Bid Documents
5. Items from Council Members
6. Comments from Members
7. Adjournment

CITY OF LIVE OAK

Application for Arsenic Exemption

1	System Name: **City of Live Oak**	2	PWSID: **5110001**
3	Contact Person: **Mike Bohlander**	4	Phone Number: **(530) 695-2112**
5	Address: **9955 Live Oak Boulevard, Live Oak, CA 95953**		
6	Number of people served: **6,500**	7	Date System Began Operating: **1951**
8	Have you received a variance for arsenic? *(Has your system previously installed a best available treatment for arsenic that still cannot meet the revised arsenic MCL?)*	☐Yes	√**No**
9	Is there an alternative source of water available with lower arsenic levels? **Live Oak could develop a program to purchase and distribute bottled water for its residents or develop a connection to the Feather River and construct a water treatment plant. These alternatives need to be evaluated along with treatment alternatives to determine the most effective implementation plan to meet the objectives of the Arsenic Rule's new MCL.**	√**Yes**	☐No

10 List Dates and results for arsenic samples collected over the past 5 years.

Date of Collection and Arsenic level

	6/04	*3/04*	*12/03*	*9/03*	*3/03*	*8/02*	*1/02*	*10/01*	*3/01*	*11/99*
Well #1	19.2 ug/l	36 ug/l	33 ug/l	33.8 ug/l	36 ug/l	20 ug/l	18 ug/l	22 ug/l	17.6 ug/l	24.5 ug/l
Well #2	42.5 ug/l	39 ug/l	34 ug/l	38.7 ug/l	39 ug/l	22 ug/l	16 ug/l	25 ug/l	21.0 ug/l	
Well #3	12.4 ug/l	15 ug/l	.	16.3 ug/l	19 ug/l	18 ug/l	12 ug/l	14 ug/l	14.1 ug/l	11.5 ug/l
Well #4	13.1 ug/l	16 ug/l	16 ug/l	14.3 ug/l	17 ug/l	17 ug/l	43 ug/l	33 ug/l	9.27 ug/l	7.93 ug/l
Well #5	21.1 ug/l	22 ug/l	23 ug/l	20.7 ug/l	23 ug/l	25 ug/l	18 ug/l	22 ug/l	22.8 g/l	19.1 ug/l

11 Summarize your current treatment process: **The City of Live Oak pumps groundwater from five wells. Each well unit is basically the same. The units consist of a pump, motor, sand separator, 5,000-gallon hydro-pneumatic storage tank to maintain system pressure, water meters, on/off pressure switches connected to the hydro-pneumatic tank, electrical panels and gages. Drinking water is supplied to the distribution system from the wells upon demand. The City's well sources have not historically needed treatment to meet most drinking water standards. However, hypochlorite is used to disinfect the raw well water. It is applied at the point of discharge for the well. Mixing takes place after injection. Each month city staff collects samples from various locations system wide. These samples are tested by staff to ensure effective disinfection of the system. Staff monitors the chlorine residual coming out of the hydro-pneumatic tanks to ensure that a residual of not more than 1.0 ppm enters the system. Samples are then sent to a certified laboratory for bacteriological testing.**

12 What treatment options have you considered for reducing your arsenic levels below 10 ppb? **The City of Live Oak has reviewed EPA's Arsenic Treatment Technology Evaluation Handbook for Small Systems; Proven Alternatives for Aboveground Treatment of Arsenic in Groundwater; Arsenic Treatment Technologies for Soil, Waste, and Water; Small Systems Implementation Strategy & Exemptions; Compliance, Reporting, and Enforcement Issues; Mitigation Strategies; Water Treatment Plant Residuals; Technologies and Costs for Removal of Arsenic from Drinking Water; and a Case Study - Arsenic Treatment Technologies Southern California Water Company's Hollydale System in Paramount, CA. These documents indicate selection of an appropriate**

technology requires a level of effort that exceeds City staff expertise. The City recognizes the need to hire an engineering consultant with expertise in Arsenic remediation to develop a system to match our socio-economic situation. Therefore, the City has submitted a Planning and Technical Assistance Grant request for $35,000 with California's Department of Housing and Community Development.

13 Current water rate structure, date & amount of last increase: **A combination of flat rates and metered rates. The last rate increase was for flat rates only and occurred on June 7, 2003.**

Flat Rate increase by type

Description	Units	From	To	Incr.
Residence - Single Family	Per Month	$21.60	$32.18	49%
Residence - Multiple Family	Per Unit, Per Month	$15.00	$20.25	35%
Cabins, Mobile Homes & Motels	Per Unit, Per Month	$10.00	$15.00	50%
Nursing & Rest Homes	Per Bed, Per Month	$5.00	$6.25	25%
Churches & Lodges	Per Month	$25.20	$44.10	75%
Business - Retail	Per Month	$34.27	$58.26	70%
Restaurants & Bars	Per Month	$36.29	$65.32	80%
Service Stations	Per Month	$60.48	$181.44	200%
Day Care Centers & Pre-School Facilities	Per Month Up To 10 Children	$25.20	$44.10	75%
Day Care Centers & Pre-School Facilities	Per Month More Than 10 Children	$30.00	$52.50	75%

14 Does the system have a certified operator? √Yes ☐No

15 What steps have you taken already to meet the new MCL?

- **The City of Live Oak is building a foundation to develop an effective approach to accomplishing the new MCL for Arsenic. The first step was to review available documents from the EPA for the new Arsenic Rule requirements and tools for Arsenic remediation. We believe the next key aspects in meeting the new MCL is having all users within the City to be on water meters, have a rate structure established to provide for capital improvements, operation and maintenance of necessary facilities, complete construction of a regional storage facility, and hire an engineering consultant to provide the expertise necessary to develop an appropriate Arsenic remediation plan. To this end, the City has submitted a Planning and Technical Assistance Grant request for $35,000 with California's Department of Housing and Community Development.**
- **The City is currently working with a major developer for constructing a 1.4 million gallon water storage reservoir. We anticipate this reservoir as being a key point source for Arsenic remediation. The City has also obtained a $1.4 million loan from RUS for installing water meters throughout the City of Live Oak. And finally, the City is developing a procedure for implementing new water connection and user fees through an RFP process.**
- **Meanwhile, the City has been systematically accomplishing other objectives over the past three (3) years to meet requirements of the Clean Water Act. One example of the level of effort the City has been making is completing a $6 million dollar upgrade to the City's wastewater treatment plant to meet waste discharge requirements. Funding for these improvements substantially came from federal and state assistance grants and loans. The City obtained USDA Rural Utilities Service (RUS) grant and loan funding for about $3 million and a State of California grant for about $3 million.**

16 What capital improvements are needed, and how much will they cost? **The City of Live Oak plans to contract the services of a consulting engineering company to determine an appropriate treatment system for our water supply and distribution system. In light of this, the City has submitted a Planning and Technical Assistance Grant request for $35,000 with California's Department of Housing and Community Development. The City anticipates having an ultimate plan using regional storage tanks charging the water distribution system. We believe that treatment technologies for meeting drinking water standards will be developed for these facilities. According to EPA documentation, estimated costs to implement the new regulations for small community water systems (those serving fewer than 10,000 people), would increase between $38 and $327 per**

	customer. That would be in the range of $240,000 to around $2 million. These values appear to be in the range for planning purposes. However, until an engineering consultant with the appropriate expertise to meet Live Oak needs, the costs are currently unknown for the necessary measures to meet the new Arsenic Rule MCL.
17	Why can't these improvements be made before January 23, 2006? **The City of Live Oak does not currently possess the level of expertise necessary to develop an in-house alternative analysis. Although we have an application in for grant funding for an engineering consultant, implementation of a study's recommendations will be difficult under current funding mechanisms.** **The City has already raised water fees dramatically in the past two years as well as sewage fees. Both fees have increased about 50% for residents in the past two years. This has been a significant impact to the families living in Live Oak since the median household income for the City is less than $26,000 per year. In fact, 26% of families currently living in Live Oak live below the poverty level. Live Oak also has a high unemployment rate. The January 2005 unemployment rate for Live Oak was 28.6% according to the Employment Development Department.** **Therefore, the City needs an exemption to allow for a step-by-step approach to meet the new Arsenic Rule MCL.** **The City has recently acquired nearly seven and a half million dollars in funding through federal and state grants and loans to improve the wastewater treatment facility and install water meters citywide. The City has also submitted an application for a $35,000 technical assistance grant from California's Department of Housing and Community Development to hire an engineering consultant with the necessary expertise to develop a specific believes an effective implementation plan to meet the Arsenic Rule.** **The City believes that if an exemption is granted as requested, we will be able to implement an effective Arsenic remediation plan while minimizing the financial impact on current economically disadvantaged residents.**
18	If financial assistance is needed, which of the following describes your system (include documentation):

• You have entered into an agreement to get the financial assistance	☐Yes	√**No**
• You are already reasonably likely to get financial assistance from a Federal or State source	√**Yes**	☐No

19	Assistance source:	☐Drinking Water State Revolving Fund (DWSRF)	√**Rural Utilities Service (RUS)**	√Other: **Planning and Technical Assistance Grant from the California Department of Housing and Community Development.**
	Date Applied: **info coming**		Contact (Name & Phone Number): **info coming**	

20	Have you applied for (or received) any other grants for these improvements?	☐Yes	√**No**
21	Have you entered into a written and enforceable agreement to become part of a regional PWS?	☐Yes	√**No**

22	If you will begin operation after 1/23/06, why can't your system use another source of drinking water with lower arsenic levels? **There is no other readily available source of drinking water. The most expedient way of providing drinking water that meets the Arsenic Rule MCL would be providing bottled water to residents. Providing a gallon of drinking water per day to each resident would cost more than $2 million dollars a year. Another potential source of drinking water that may meet the new MCL target under the Arsenic Rule could be developed from the Feather River. However, the City would need to construct an inlet structure in the river, a water treatment facility for treating surface waters, and a pipeline to connect into the existing distribution system. This alternative would be a multi-million dollar project and would require processing an environmental impact report along with obtaining permits from the U.S. Army Corps of Engineers, California Department of Fish and Game, et. al. Acquisition of necessary permits and environmental documentation would typically take a minimum of one year and likely extend to between two and three years for this kind of project. Once permits and environmental documentation has been**

	approved there's final design and bid processing. Construction will likely take 18 months to 2 years and could start late 2008 or early 2009. Construction may be completed sometime between June and December 2010.
23	Please provide proposed dates for coming into compliance with the revised arsenic rule:

Activity	Target completion Date
• **Complete water fee assessment study**	**November 2005**
• **Complete citywide water meter installation contract**	**December 2005**
• **Acquire funds for consultant contract**	**March 2006**
• **Arsenic Remediation Consultant Study**	**March 2007**
• **Develop and implement pilot remediation program**	**September 2007**
• **Secure funding for citywide improvements**	**September 2008**
• **Finish the capital improvements**	**May 2009**
• **Testing and refining operations**	**December 2009**
• **Begin operating in compliance with the revised MCL**	**January 31, 2010**
Maximum time that you will need to come into full compliance	

Submitted by: _____

Date: _____

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Date application received by DHS:	Date application received by EPA:	Exemption request was	
		Approved	**Denied**
Date letter sent to system advising of decision:	Date of public hearing:	Date for compliance with revised arsenic MCL:	
Application package reviewed by:			
Date of review:			