

Llano Wastewater Treatment Plant

Then and Now

Marc Sewell and John Ferguson

3/15/2013

The information in this document was garnered from actual City documents from 2007. This paper only uses that information to base conclusions on the business case presented at the time. There were other documents and data that could have been used had the City management been able to find them. There are still outstanding Freedom of Information Act requests that might shed more light on this subject.

Any corrections submitted to LlanoWatch.org will be immediately applied.

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Abstract

On February 21, 2013, the City of Llano mailed an “In the Know” newsletter, written by Lynda Kuder, which distorts the history of our sewer plant and our “plans” for necessary upgrades.

This paper will attempt to provide a more accurate picture of our sewer plant’s past and future. Only available documents and numbers available from 2007 and from the newsletter are used and presented here.

The hypothesis of this paper is that if Hejl, Lee and Associates’ and Lynda Kuder’s business case had been complete, then the City would not be facing millions of dollars of upgrades now. We are still on a path to make more bad decisions unless we change players and process.

The best available City documents lead to the following conclusion: the actual total cost for the 2007 plan of renovating the old sewer plant is **\$16.5 million**. The total cost of switching to state-of-the-art GE technology would have been **\$2.6 million**. This is in stark contrast to the business case presented by the City at the time.

The intent of this effort is to prevent the City from repeating the same mistakes made in 2007.

“Those who do not learn from history are doomed to repeat it”

George Santayana

Final Plant Cost Comparison from May 30, 2007 Special Council Meeting

This is the business case presented at a Special Council Meeting on May 30, 2007. There were two options being considered – Activated Sludge and MBR. This is the business case presented at that meeting. As shown below, the focus of the discussion at the time was a price comparison of **\$4,653,620** for Activated Sludge vs. **\$7,864,267** for MBR.

Activated Sludge and MBR Sewer Plant Comparison May 25, 2007

Activated Sludge Plant		Refer to footnotes symbols next page	
Annual Payments	Principal	Potential Impact on Rates	
178,900 RD Grant/loan pmt	4,335,000		
43,290 10 yr 6% pmt	318,620		
<u>222,190</u> Total annual payment/ project cost	<u>4,653,620</u> *		12.65 per customer per month
Associated Expenses:			
Note - continue \$50,000 annual sludge removal expense as included in current budget			
40,000 Increased operational costs - electricity			
20,000 annual pond repair expense			
30,000 annual irrigation system expansion		**	
<u>312,190</u> total annual payments for Activated Sludge plant, associated expenses, & increased O&M		@	17.77 per customer per month
For Future Consideration:			
88,298 tertiary treatment modifications	1,200,000	∞	
20 yr 4% TWDB financing			
<u>400,488</u> total annual payments for activated Sludge plant and associated expenses modified for tertiary treatment allowing for discharge into river		@	22.80 per customer per month
<hr/>			
MBR Plant			
Annual Payments	Principal	Potential Impact on Rates	
178,900 RD Grant/loan	4,335,000		
259,690 20 yr 4% TWDB financing	3,529,267		
<u>438,590</u> Total annual financing pmt/project for MBR plant	<u>7,864,267</u> #		
40,000 Increased operational costs - electricity		±	
<u>478,590</u> Total annual payment for MBR plant & increased O&M		@	27.24 per customer per month
Advantages of MBR plant over Activated Sludge plant:			
No annual expense for removing sludge from holding ponds			
No annual pond repair expense			
No project phase II for sludge removal /irrigation expansion			
No tertiary treatment modifications			
No irrigation of coastal fields			
Option - Sell farm acreage no longer needed for irrigation:			
sell 150 acres at farm for \$7,500/acre	(1,125,000)		
cost to build net of proceeds from sale of land	<u>6,739,267</u>		
178,900 RD Grant/loan pmt	4,335,000		
176,910 20 yr 4% TWDB financing	2,404,267		
40,000 Increased operational costs - electricity		±	
<u>395,810</u> annual pmt/project cost for MBR plant reduced by proceeds from sale of land	<u>6,739,267</u> @	@	22.53 per customer per month

Plant Cost Comparison from February 27, 2007 Council Meeting

This chart shows that similar cost comparisons were being presented as early as February 27, 2007.

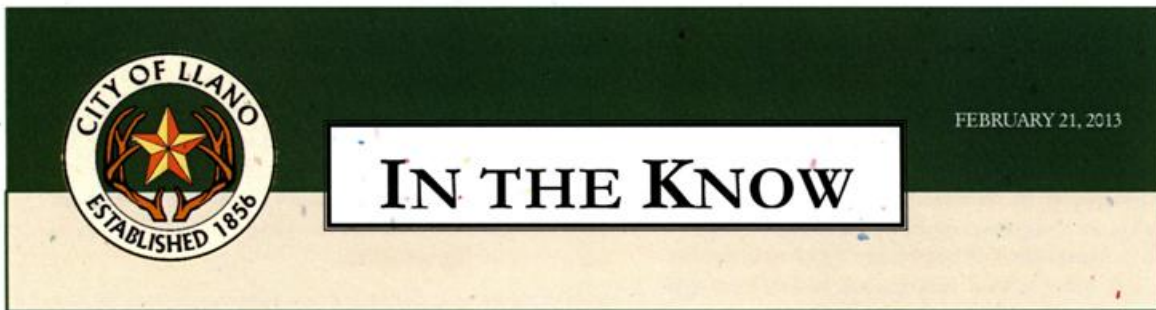
CITY OF LLANO WASTEWATER TREATMENT PLANT COST COMPARISON

February 27, 2007

	Option A Take No Action	Option B Activated Sludge	Option C MBR
Loan Amount		\$3,476,000 \$857,000 GRANT	\$6,860,000
Term		40 Years	20 Years
Estimated Rate		4.125%	3.50%
Funding Source		USDA-RD	TWDB CWSRF TIER II
Avg. Annual Payment:	\$0	\$178,900	\$482,677
Total Interest Paid:	\$0	\$3,679,992	\$2,793,540
Total Principal & Interest:	\$0	\$7,155,992	\$9,653,540
Paid from W/W Rates - 1214 Residential 250 Commercial Wastewater Connections			
Monthly debt service per residential customer	\$0.00	\$9.10	\$24.54
Monthly increase in operations & maint per residential customer	\$0.00	\$2.29	\$2.29
Total monthly base charge per residential customer	\$23.00	\$34.39	\$49.83

Lynda Kuder's 2013 Newsletter on the Sewer Plant History

The City's newsletter from this year reinforces that the comparison was based on a cost comparison of about \$4,335,000 and \$8,000,000.



CITY APPLIES FOR WASTEWATER PERMIT AMENDMENT

The City of Llano is working on a request to amend its wastewater permit from the Texas Commission on Environmental Quality (TCEQ). Our current permit, which expires on December 1, 2014, requires us to store our treated effluent in large lagoons, or ponds until it is used for year round irrigation of production crops in the fields at the City Farm. It also allows us to land apply the treated sludge (beneficial land application) from the plant so that we do not have to pay for its disposal at a Class A landfill. In 2011, the City requested and was granted a Type II reclaimed water permit which allows us to use water from the chlorine contact chamber at the wastewater treatment plant for construction or non-contact recreational purposes inside the city limits. We trucked this reclaimed water to the golf course and kept the greens alive during the summer when our drought contingency plan prohibited irrigation.

During the evaluation process of replacing our antiquated wastewater treatment plant, city officials were advised by engineers that the construction of an activated sludge wastewater treatment plant would still require the additional expenditure of approximately \$4,000,000 to meet TCEQ requirements to remove sludge and repair the lining of the ponds and expand the irrigation system before the expiration of our wastewater permit. These improvements were postponed as Phase II because the entire project was too expensive for USDA Rural Development to finance in one package.

Five years have passed since we built the plant and we are facing

the expiration of our permit in 23 months. Following a November workshop with Hejl, Lee, and Associates, Inc., our engineering firm of 20+ years, we engaged them to apply to TCEQ for an amendment to our wastewater permit. The amendment we have requested will allow the City to discharge our treated wastewater into the Llano River. It is anticipated that the application process for the permit amendment may take up to 18 months. Modifications to the plant could be required by TCEQ and cost upwards of \$1,000,000, but we will no longer have the expenses of relining our storage ponds, installing a 30 year monitoring system, or expanding the irrigation system for the fields.

Our entire State is facing critical water shortages and the current climate is such that our chances of obtaining a permit to discharge into the river have been greatly enhanced over our chances five years ago. The process is a lengthy one and there are numerous steps to perform. The LCRA has agreed to help with stream modeling- determining what impact the reclaimed water will have on the water in the river as it filters naturally through the sand along its path to Lake LBJ. This will help TCEQ determine water treatment requirements to protect the eco system of the river as well as drinking water sources in the Highland Lakes. TCEQ does not allow discharge within 10 miles of the lakes and it is to our advantage that we are over 18 miles (Continued on other side)

OUR NEW SEWER PLANT'S HISTORY

In 2007, after years of planning and deliberation, the City of Llano constructed an activated sludge wastewater treatment plant with financing from USDA Rural Development. The total project cost was \$4,335,000 with \$859,000 granted and \$3,476,000 loaned over 40 years at 4 1/8%. An MBR (membrane bioreactor) plant was given great consideration before the decision was made to build the activated sludge plant. Several engineers were consulted to help with the evaluation. The advantage of the MBR plant was that its effluent could be treated to meet Tier I standards and eligibility for permitting to discharge directly into the Llano River. Then removal of sludge, pond repair, and irrigation expansion would no longer be required. But the initial investment of almost \$8,000,000 required multiple financing vehicles. Operation and maintenance costs were similar to those of an activated sludge plant. Most municipalities used activated sludge technology citing operator friendly, proven treatment technology, availability of parts and equipment from multiple vendors, TCEQ familiarity with the technology, ability to meet discharge permit requirements, ability of producing sludge capable of meeting TCEQ requirements for beneficial land application, ease of expandability. For these reasons and hesitation on the part of Rural Development to change the technology included in the original application for financing, the activated sludge technology was chosen. Design features were included in the plant construction to provide for the future addition of filters to allow tertiary treatment of wastewater and discharge of reclaimed water into the river.

Final Plant Cost Comparison Issues

The major problem with the May, 2007 comparison is that significant costs/benefits were presented in textual form **but their dollar values were not enumerated or included in the cost analysis**. Text is normally used for intangible costs/benefits such as “no smell.” But, for example, a major \$2 million benefit of MBR - no new pond liners – should not have been buried in the text as “Phase II,” rather it should have been numerically included in the cost analysis.

Activated Sludge and MBR Sewer Plant Comparison May 25, 2007

Activated Sludge Plant		Refer to footnotes symbols next page	
Annual Payments	Principal	Potential Impact on Rates	
178,900 RD Grant/loan pmt	4,335,000		
43,290 10 yr 6% pmt	318,620		
<u>222,190</u> Total annual payment/ project cost	(1) 4,653,620	*	12.65 per customer per month
Associated Expenses:			
(2) 40,000	Note - continue \$50,000 annual sludge removal expense as included in current budget		
(3) 20,000	Increased operational costs - electricity		
(4) 30,000	annual pond repair expense		
	annual irrigation system expansion		
<u>312,190</u>		@	17.77 per customer per month
For Future Consideration:			
88,298	(5) 1,200,000	**	
<u>400,488</u>		@	22.80 per customer per month
MBR Plant			
Annual Payments	Principal	Potential Impact on Rates	
178,900 RD Grant/loan	4,335,000		
259,690 20 yr 4% TWDB financing	3,529,267		
<u>438,590</u> Total annual financing pmt/project for MBR plant	(6) 7,864,267	#	
40,000 Increased operational costs - electricity		±	
<u>478,590</u> Total annual payment for MBR plant & increased O&M		@	27.24 per customer per month
Advantages of MBR plant over Activated Sludge plant:			
(2)	No annual expense for removing sludge from holding ponds		
(3)	No annual pond repair expense		
(7)	No project phase II for sludge removal /irrigation expansion		
(5)	No tertiary treatment modifications		
(4)	No irrigation of coastal fields		
Option - Sell farm acreage no longer needed for irrigation:			
	(8) (1,125,000)		
sell 150 acres at farm for \$7,500/acre	<u>6,739,267</u>		
cost to build net of proceeds from sale of land			
178,900 RD Grant/loan pmt	4,335,000		
176,910 20 yr 4% TWDB financing	2,404,267		
40,000 Increased operational costs - electricity		±	
<u>395,810</u> annual pmt/project cost for MBR plant	<u>6,739,267</u>	@	22.53 per customer per month
reduced by proceeds from sale of land			

Real Sewer Plant Comparison Using Omitted Costs

Below is a simple business case using the exact data available at the time the City's business case was presented at the May 30, 2007 decision meeting. This spreadsheet uses the City's own quantified "benefit" information in place of the textual "benefit" information used in the Lynda Kuder prepared business case. This clearly shows the full cost of the Activated Sludge Plant.

My hypothesis is that, had this business case been presented, the vote would have been in favor of MBR and the City would not now be faced with multi-million dollar expenses.

The City has not been able to locate the documentation on Phase II so the \$6,688,050 comes from a City Manger spreadsheet. From Lynda Kuder's Newsletter, Phase II would at least be \$6,000,000, but she can't find the documentation, either, and her numbers are flawed – see below. Either way, the difference is so lopsided; the decision would have been obvious – even without including the millions in interest.

Activated Sludge and MBR Sewer Plant Comparison

Activated Sludge Plant

Construction cost estimate	① \$4,653,620
Annual pond repair	③ \$800,000
Irrigation system expansion	④ \$1,200,000
Annual sludge removal	② \$2,000,000
Phase II	⑦ \$6,688,050
Tertiary treatment	⑤ \$1,200,000
Total	\$16,541,670

MBR Plant w/Hejl Costs

Construction cost estimate	⑥ \$7,864,267
Sell unneeded farm land	⑧ -\$1,125,000
Total	\$6,739,267

- not included: interest, electricity(same for both),benefit of reuse of water
- 40 year life

Real Sewer Plant Comparison Based on GE Zenon Quote

But, it gets worse. GE Zenon provided a packaged quote that was even more attractive - \$1.3 million plus local expenses. The City cannot or won't locate the detail of this proposal but we show in the following pages of the evidence that it existed and was well known at the time. So, if we take the \$1.3M cost of the GE Zenon package plus the articulated construction costs from the Hejl Lee Exhibit 2, the choice is obvious: **\$16.5 million** plus interest vs. **\$2.6M paid** for via a grant. There are no intangible concerns like "new technology" that would divert this choice – especially with the backing of GE.

Activated Sludge and MBR Sewer Plant Comparison

Activated Sludge Plant

Construction cost estimate	\$4,653,620
Annual pond repair	\$800,000
Irrigation system expansion	\$1,200,000
Annual sludge removal	\$2,000,000
Phase II	\$6,688,050
Tertiary treatment	\$1,200,000
Total	\$16,541,670

MBR Plant w/Hejl Costs

Construction cost estimate	\$7,864,267
Sell unneeded farm land	-\$1,125,000
Total	\$6,739,267

GE Packaged MBR Plant

Construction cost estimate	\$3,764,267
Sell unneeded farm land	-\$1,125,000
Total	\$2,639,267

- not included: interest, electricity(same for both),benefit of reuse of water
- 40 year life
- GE Packaged MBR Construction cost estimate from GE Quote & Hejl Lee Exhibit 2

Activated Sludge Plant Cost Estimate from May 30, 2007

This exhibit from the May 30, 2007 business case shows the detailed cost breakdown for the Activated Sludge plant. The same numbers were used in the MBR plant costing.

EXHIBIT 1
CITY OF LLANO
WASTEWATER TREATMENT PLANT IMPROVEMENT PROJECT
PRELIMINARY ENGINEER'S OPINION OF PROBABLE COSTS

Updated 11-03-06

ACTIVITY	QTY	UNIT	UNIT PRICE	AMOUNT
CONSTRUCTION COSTS				
1. Influent Lift Station (Approx. 1,000 gpm)	1	L.S.	\$ 350,000	\$ 350,000
2. 12" Force Main	3,500	L.F.	80	280,000
3. Creek Crossing	500	L.F.	150	75,000
4. Extended Air Treatment Plant Equipment (600,000 gpd)	1	L.S.	975,000	975,000
5. Concrete Slab & Walls	1	L.S.	720,000	720,000
6. Underslab and Yard Piping	1	L.S.	275,000	275,000
7. Decant Lift Station	1	L.S.	55,000	55,000
8. Control Building/Lab & Equipment	1	L.S.	95,000	95,000
9. Instrumentation & Control Manuals	1	L.S.	35,000	35,000
10. Electrical Wiring and Controls	1	L.S.	240,000	240,000
11. Three Phase Power to Site	1	L.S.	30,000	30,000
12. Effluent Storage Lagoon & Irrigation Distribution Piping	1	L.S.	90,000	90,000
13. Existing WWTP Demolition	1	L.S.	60,000	60,000
14. Sludge Drying Beds	1	L.S.	150,000	150,000
15. Sludge Application Site Improvements	1	L.S.	25,000	25,000
16. Site Work, Fencing & Access Road	1	L.S.	50,000	50,000
17. Restoration of Disturbed Areas	1	L.S.	25,000	25,000
TOTAL CONSTRUCTION COST				\$ 3,530,000
				<i>x 1.1</i>
				<i>3,883,000</i>
NON-CONSTRUCTION COSTS				
1. Basic Engineering (Approx. 6.7% of Const. Cost)	1	L.S.	\$ 236,600	\$ 236,600
2. Preliminary Engineering Report	1	L.S.	14,500	14,500
3. Prepare Environmental Report	1	L.S.	12,400	12,400
4. Resident Engineer's Inspection	1	L.S.	75,000	75,000
5. Site Survey (Design Related Survey)	1	L.S.	10,000	10,000
6. Property Survey (Design Related Survey)	1	L.S.	2,500	2,500
7. Material Testing (Design Related)	1	L.S.	7,500	7,500
8. Material Testing (Construction Related)	1	L.S.	10,000	10,000
9. Construction Staking	1	L.S.	5,000	5,000
10. Operation & Maintenance Manual	1	L.S.	2,500	2,500
11. Contingency (Approx. 10% of Construction)	1	L.S.	351,000	351,000
TOTAL NON-CONSTRUCTION COST				727,000
				<i>x 1.06</i>
				<i>770,620</i>
ESTIMATED TOTAL PROJECT COST				\$ 4,257,620
				<i>5/16/07 \$ 4,653,620</i>
NOTES				
1. The engineer has no control over the cost of labor, materials or equipment or over the Contractor(s) methods of determining prices. The Engineer cannot and does not guarantee the proposals, bids or construction cost will not vary from the opinion of probable cost prepared by him.				
2. Opinion of probable cost does not include easement or land acquisition costs.				
				<i>3,976,000 RO Loan</i>
				<i>859,000 Grant</i>
				<i>4,335,000 total funding</i>
VMB, update_estimate_option2				
P.H	0910100000101	6669-908 (215)	31100008	\$ 0002-0001

MBR Plant Cost Estimate from May 30, 2007

Exhibit 2 shows the project cost estimate for the MBR Plant used in the May 30, 2007 business case. It is a gross estimate based on a per gallon cost. This is a “ball park” type of estimate used for initial discussion but should never be used in a final business case used for decision making. Contrast this with the details in the Active Sludge project cost estimate on page 10. There were more detailed estimates available at the time but Lynda Kuder and Hejl Lee chose this approach instead. Mr. Hejl, Mr. Lee, and Lynda Kuder all refused to meet to discuss this.

Exhibit 2

MBR Cost Estimate per telephone conversation with Dan Hejl 5-17-07

5,400,000	\$9.00 X 600,000 gallons
1,248,500	1,135,000 Other construction costs (Items 1-3 & 11-17 from Exhibit 1) inflated 10%
<u>770,620</u>	727,000 Non construction costs inflated 6%
7,419,120	Subtotal
<u>445,147</u>	Engineering to redesign plant (6% of project)
<u><u>7,864,267</u></u>	Estimated project cost

GE Zenon MBR Package Proposal from March 2, 2007

Below is the cover page and proposal number from the nineteen-page GE Zenon quote. The GE quote was \$1.3 Million for equipment and included 10 days of field service for setup and startup. The work to be done by local contractors such as foundation, HVAC, UPS, tanks, piping, and electrical was to be priced by Hejl, Lee and Associates as shown in agenda item #4 on the next page. The city cannot find this estimate. Hejl Lee refuses to meet to discuss this. The complete proposal is available at LlanoWatch.org

GE Water & Process Technologies
Proposal No. 07-1010

ZENON
membrane solutions

Treatment System for Llano, TX

Submitted to:
Mayor Pro Tem
Llano, TX

Submitted by:
Herschell Winfrey
1313 Rio Grande Drive
Benbrook, TX 76126
817-249-6941

Local Representation By:
Kent Guilbeau
Hartwell Environmental
1406 Camp Craft Road
Austin, TX 78746
512-347-7676

www.zenon.com

GE Zenon MBR Total Cost based on Hejl Lee

This agenda item shows that there was an active effort to get a complete, detailed, final quote for the GE Packaged MBR plant. Why would Hejl Lee and Lynda Kuder use a ball park estimate when accurate costs were apparently available? The City cannot find or will not produce any of this documentation – despite a Freedom of Information Act request. Hejl, Lee, and Lynda Kuder refuse to meet to discuss this.

Council Meeting: April 16, 2007

Agenda Item Number: 4

Agenda Title: Discussion Only – Wastewater treatment plant and USDA Grant

Origination of Request: Mayor Roger Pinckney, Mayor Pro Tem Carl Shannon and Councilman Tory B. Virdell

General Information: The current status of the project is as follows:

I have been working with Dan Hejl, the City's Wastewater Engineer and Zenon/GE representatives, Kent Guilbeau and Herschell Winfrey, over the past several weeks in an attempt to iron out the exact cost of the membrane bioreactor wastewater treatment plant. Zenon/GE has provided several pieces of documentation.

I am still working to make absolutely certain that all components needed to operate the MBR system are provide in the material cost estimate. I am hopeful that I will have this documentation from Zenon/GE by Monday, April 16.

Once I am comfortable that the proper gear and material list is complete, I will ask Dan Hejl to take this material supply list and get with two (2) different contractors to firm up the installation cost of this system.

Staff Recommendation: Currently, staff, Dan Hejl and Zenon/GE are working on this cost estimate and are not ready to provide the final cost of the MBR Wastewater Treatment Plant.

Current Plans for Wastewater Treatment Plant Upgrade

Thus, we are now faced with the Phase II costs, or the costs of a similar solution to MBR not chosen 6 years ago. The quality of the information available to us now is far worse than in 2007. There are the minutes from a November 29, 2012 City Council Workshop, Lynda Kuder's "In the Know" newsletter, and her terse responses to a few questions - below. No proposal, no detail, no financial analysis, no impact analysis, and no real discussion of possible options.

The City can't even find the descriptions of Phase II or III from the previous implementation. A \$4M to \$8M expense and the documentation is lost. Lynda Kuder presented a \$4M cost of Phase II but that didn't even include the cost of liners.

The alternative to finishing the 2007 project is stated as a "permit amendment" to dump into the river. The cost estimate for this is \$500,000 (Mike Reagor) or upwards of \$1,000,000 (Lynda Kuder) but there is no breakdown of these estimates or the equipment that is being proposed. And what about valve replacement and lift station work? Is that a part of this and was it anticipated 6 years ago?

We have already started down the path of dumping into the river. No other solution is being considered. Are you confident that we are on the correct path and that the price is known?

You might also be concerned that Mr. Hejl, Mr Lee, and Lynda Kuder refuse to discuss any aspect of the wastewater plant.

A request was made to present this paper at a City Council meeting but it was rejected by Mayor Reagor, Sherry Simpson, Lynda Kuder, as well as the other council members. Hejl, Lee will get all the time they want to present their views but concerned citizens are not allowed to present an alternative view. Wouldn't you think that the City Council would be anxious to hear alternate views?

Lynda Kuder can send out a misleading "In the Know" newsletter, but won't do the same for an alternative view.

When citizens hear both sides of an argument, that is information. When the City silences alternative views, that is propaganda.

prop·a·gan·da [pròppə gándə]

1. publicity to promote something: information put out by an organization or government to promote a policy, idea, or cause
2. misleading publicity: deceptive or distorted information that is systematically spread

Lynda Kuder Response to Newsletter Questions

Lynda Kuder refused to meet to discuss her newsletter and 2007 business case, but did provide the terse answers to questions below.

- ① Who made the request? *City Council*
- ② Where is this \$4,000,000 in the 2007 business case? What is the breakdown? *Sludge removal \$2m +
pump repair \$1m +
irrigation \$0.5m +
expansion*
- ③ Where are Phase II and Phase III described? *unknown*
- ④ If this amendment is approved, is the only choice available to dump into the river? If rejected, will there be time to get a permit for an alternative? *discharge, unknown alternative*
- ⑤ What are the requested amendments? Would this be for Type I permit? *discharge, no*
- ⑥ Where is this \$1,000,000 in the 2007 business case? What is the breakdown? How much "upwards"? *unknown*
- ⑦ How much would tertiary treatment cost? Is this included in the other costs mentioned? *unknown*
- ⑧ Is this actual cost? Total cost including non-construction costs like engineering and inspections? Did this come from actual invoices? *No, yes, no*
- ⑨ Is this considered maintenance costs referred to in #10? *no*
- ⑩ What document shows this detailed comparison? Does it include valve replacement? *Eco Resources*
- ⑪ What document substantiates these statements? *Hq Lee memo*
- ⑫ Is there a document to substantiate this? Otherwise, who from Rural Development said this?
No *Marvin Crabtree*

November 2012 Wasterwater Workshop Minutes



City of Llano
Regular Called City Council Minutes
November 29, 2012 – 5:30 p.m.

A. CALL TO ORDER

Mayor Reagor called the meeting to order at 5:30 p.m. Those in attendance were Mayor Pro-Tem Hazel, Alderwoman Simpson, Alderwoman Tudyk, and Alderman McLeod. Alderwoman Puryear was absent

B. CALL TO ORDER

C. WORKSHOP AGENDA ITEMS

1. Discussion regarding the consideration of amending the sewer plant permit to allow discharge.

Mayor Mike Reagor/Lynda Kuder, Interim City Manager/Director of Finance

Mayor Reagor began the discussion with an explanation of permitting to allow discharge into the Llano River. Currently the City is using the lagoons to hold water, but the City has until 2014 to either line the ponds with leak detection or make an application with TCEQ to discharge into the River. To reline the ponds would cost the City approximately \$3,000,000.00, and to amend the sewer plant permit to allow discharge would cost the City approximately \$500,000.00. Acquiring the permit for discharge would be easier if we were not in a drought. Alderman Hazel expressed concerns about medical waste in the system. Chen Lee, with Hejt, Lee Engineering advises that a pre-treatment would be required if medical waste were to be put into the system which would require notification to TCEQ. Mayor Reagor stated the stream modeling would or could be done by LCRA. Chen Lee advises the City is currently permitted as a Class I type effluent. Mayor Reagor asked if we amend the discharge permit at the sewer plant, would the City need the ponds. Chen Lee advises no. Mayor Reagor believes 100% discharge is the way to go. Chen Lee advises it will be critical for the City to ask LCRA to do the modeling. Chen Lee stated the City could use the ponds as an emergency stock pond on a temporary basis. Mike Hazel has concerns about the ponds in the future having to be lined again. Josh Becker advises that in the future the City could cover up the ponds provided TCEQ allowed for it and if a reclaim plan was already in place it would help. Mayor Reagor advises to continue to irrigate. Mr. Chen Lee also stated the pond would serve better than a water tank or ground storage tank. Ms. Tudyk asked if the permitting process would get any easier in the years to come. Mr. Becker stated the permitting might get easier but the discharging would get harder in his opinion. The City is permitted as a Class II, meeting the requirements of the State; however, the City is almost meeting the requirements of a Class I and an expansion would not be needed for a while. Ms. Simpson asked if any research had been done on endangered species. Mr. Chen Lee advises yes, however, one mile downstream property owners would have to be notified. According to TCEQ, they are not aware of any endangered species but that would be included in their permitting process. Ms. Simpson stated we need the discharge permit but not necessarily have to discharge. Mr. Becker stated you must show TCEQ where you are going to store the discharge. For discussion only, no formal action taken.

Conclusion and Recommendation

CONCLUSION

1. The conclusion of this study is that the business case presented at the May 30, 2007 Special Council Meeting Workshop on Wastewater Treatment Plant Options was seriously flawed and misled the council members who voted against the GE MBR Solution.
2. There was incomplete information presented to Council in 2007 and again in 2012.
3. The same engineering company (Hejl, Lee) and business case preparer (Lynda Kuder) are now planning the upgrade to the Wastewater Treatment Plant from 2007.
4. We are on a path to making the same mistakes from 6 years ago.

RECOMMENDATION

1. I suggest that a new engineering firm be hired.
2. I suggest that a skilled Citizen Task Force be formed on Wastewater Treatment to take over the study and plan and then report to Council.
3. I suggest that a new "In the Know" City newsletter be mailed to inform citizens of the real history and new direction.

"Those who do not learn from history are doomed to repeat it"

George Santayana