

Engineering and Operations Committee Meeting

Minutes

January 31, 2013

Mr. Walden convened the meeting at 3:00 P.M., Thursday, January 31, 2013, at the Lakeway Municipal Utility District's office located at 1097 Lohmans Crossing, Lakeway, Texas 78734-4459.

The following Engineering and Operations (E&O) Committee members were in attendance:

Don Walden, *Chairman*,
Earl Foster, *General Manager (GM), Lakeway M.U.D.*,
Harvey Harrison, *Committee Member (Vice Chairman)*,
Bob Rives, *Committee Member (Secretary)*,
Pat Rossmiller, *Committee Member*.

Members not in attendance were:

Carl English, *Committee Member*
Jerry Hietpas, *Board Member and Board Liaison to Committee*.

The meeting's agenda had been distributed to all Committee and Board members from Mr. Loyd Smith on January 28, 2013. The designated Agenda for the meeting was:

1. Update on Pilot Project with More Aqua
2. Update on CIP Projects, Review Schedule
3. Questions about GM Report.

Mr. Foster asked that Mr. Harrison, Committee Member, give a presentation on industrial usage of interior pipe liners that repair breakage in expansion joints of pipes in hard-to-repair places such as under concrete building slabs. One particular cause of breakage can be high-heat fluids in pipes. To repair (and for preventive maintenance) one inserts a resin material sleeve (polyurethane Conathane™, one such product from Cytec) into the pipe covering the breakage then inflates the sleeve with pressure from a bladder. After the material is cured the bladder is deflated and removed and the pipe is sealed at the joint. The procedure can be used in PVC, stainless steel, or even clay pipes. The procedure can also protect pipe joints from root growth.

Mr. Foster distributed to the Committee a draft letter to TCEQ for the approval for an evaporation suppression pilot project by More Aqua, Inc. The committee had several questions in regards to the letter; however, Mr. Foster pointed out the letter was simply a justification letter

seeking approval from the TCEQ for a pilot project and that a detailed technical letter was not required. The committee, therefore, had no problem with the language or intent of the letter.

The next item on the agenda was an update on the Capital Improvement Project (CIP). Mr. Foster handed out a preliminary timeline sheet for the implementations of the proposed CIP from January, 2013, reaching out to early 2015. He stated that March of 2013 would be the Bond Application Submittal, then followed by Project A (Water System Improvements – New Clearwell; WUPP HSP and piping) in October of 2013. This would be followed by Project B (Reuse Water System Improvements) around June, 2014, followed by Project C (W-3 Chlorine Gas Safety – Scrubber System) and Project D (I-4 Chlorine Gas Safety – Sodium Hypochlorite System) in early 2015. Also mentioned was the L-1 Pump Project to replace a pump designed for some time between March and October of 2013. Committee members had several questions regarding bid packages and technical questions regarding the bidding specifications, especially soil borings and type of foundations that would be required for the tank. Mr. Foster indicated this type of information and/or requirements would be tabled and reviewed nearer the time when the bids go out.

The committee had a long discussion regarding the scrubber system. The problem is basically regarding the dropping of a chlorine tank during off-loading from a commercial delivery truck to our loading dock, whereby a leak might occur to either the tank's protected cover valve or even a possible break of the tank itself. Although the risk of dropping a tank and a leak occurring is problematic, Mr. Foster noted that such accidents have actually happened at other non-MUD sites. Most such leaks are small but there is the remote possibility of a tank rupturing causing a major leak. Since chlorine gas is heavier than air, any immediate danger to the local civilian population from the MUD's dock is remote; but, Mr. Foster noted that there still exists a potential danger and he believes it is prudent to fix the problem. Mr. Foster is asking for a purchase of a chlorine scrubber system and a covering building be put on the CIP timeline at a cost of approximately \$100,000 (considering a used scrubber is purchased and transported for around \$10-\$20,000; and the other money would be for building a structure to house the equipment and contain leakage). It was noted that off-loading of the tank would still occur outside and be subject to prevailing winds and temperatures, as such, a possible accident site would not be undercover thus making a scrubber system vulnerable to the full containment of leaking gases. Committee members asked if there were other methods of containment. One suggestion was the usage of a containment cover which basically wraps the leaking tank in a liner which contains any leakage; another idea was to build a sand area under the off-loading zone so the tank would not be dropped on a hard surface; another was to use an outdoor scrubber system that would have a connection to a flex-hose whereby the hose (with a possible cowl or hood to cover the cylinder) could be immediately placed near the leak and vacuum the gas into the scrubber's holding/treatment tank; and the last suggestion was to extend the dock platform so it would be easier to off-load a tank directly from truck-to-dock without incurring any long drops to pavement. The committee agreed with Mr. Foster that money needs be put in the CIP for a safety system; however, more thought and research needs to be given considering the scope of the project. It was again noted that the MUD personnel involved in handling chlorine tanks are fully HAZMAT and OSHA compliant and that MUD adheres to all required chlorine handling safety codes.

There were no questions regarding the General Manager's monthly report. The Committee felt that the report was well done and offered significant data and useful information to the Committee.

It was agreed that the next meeting would be on February 28, 2013, at 3:00 PM. The meeting was adjourned at 4:20 P.M.

The Minutes have been read and approved by e-mail:

These minutes approved this ___ day of _____, 2013.

Yeas _____. Nays _____. Abstain _____.

Robert Rives, Secretary, E&O Committee, Lakeway MUD