



# City of Madison

## Meeting Minutes - Final

### BOARD OF WATER COMMISSIONERS

City of Madison  
Madison, WI 53703  
www.cityofmadison.com

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Tuesday, April 17, 2007

4:30 PM

119 E. Olin Avenue

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#### CALL TO ORDER

#### ROLL CALL

**Present:** Lauren Chare, Priscilla B. Mather, George E. Meyer, Jonathan H. Standridge, Gregory W. Harrington and Thomas Schlenker

#### PUBLIC COMMENT

Jim McCormick, Water Utility Leadworker, said he had questions about Well 29. He said, regarding what is on the internet, you make it sound like the filter would be so cheap to operate and maintain. An example of upkeep is ½ hour a week, but he said it takes over ½ hour to get from the Operations Center to Well 29. The cost of the treatment of the backwash is cited as \$1.13 per thousand cubic foot, and he thinks it's actually \$1.13 per 100 cubic feet. Ken Key said right now for water it's 97 cents and the sewer is \$1.13-that is the cost for 100 cubic feet to go to sanitary sewer. Jim asked where they came up with the quantity for solids of 11pounds a day. How much of that is sand? Jim said it says changing the filter once every eight years, and would that be under ideal conditions? As much sand as that well pumps out, wouldn't that filter be changed much more frequently? It was pointed out that the media is much more dense than sand is, so by backwashing, it will remove the sand from the media and the sand will go down the sewer. Jim asked if they've been looking for other spots to place a well, that he gets the idea that we are getting a consultant who says, do you really want to put a filter on here instead of checking out another way to go? For \$50,000 you could have a test well. Al said it would be closer to \$100,000. He said they've looked around for potential well sites. Jim said he was talking to people who were doing Larkin Street and they said they could do one for \$54,000 going down 800 to 900 feet. Al said the Larkin well only has a casing down about 40 or 50 feet . This casing would have to go down 300 to 400 so there's a different construction technique and it would be different than the Larkin Street well. Jim asked if they shouldn't look at a test well to make sure there is good water before going ahead with the filter; asking if it wouldn't that be less expensive. Al said you'd drill a test well and find out if there was good water, and then drill a production well. Jim said the test well wouldn't be \$100,000. Al said he thinks by the time all of the costs were added up, it would be. Jim asked what we've spent looking at the different filters. Al said probably \$50,000 and the Montgomery Study is \$50,000. Jim asked if that was part of the filter issue, and Al said no.

#### APPROVAL OF MINUTES

1. Approve minutes of the special meeting of March 8 and the regular meeting of March 20, 2007.

Percy said where the minutes say "absorbs" they should all say "adsorbs."

Lauren made a motion to approve the minutes of March 20 with the noted correction. George Meyer seconded; unanimously passed.

Percy mentioned that there would be a change in the timetable for agendas, saying that Wendy will get the agenda out on the second Wednesday rather than second Tuesday, since there is a Team Meeting on Wednesday morning and often agenda items come out of that meeting. The Board asked that Wendy prepare an SOP for the procedure for agendas and minutes.

George Meyer made a motion to approve the minutes of the Special Meeting of March 8. Lauren Cnare seconded; unanimously passed.

## INFORMATIONAL REPORTS

2. March Water Quality Report.
3. April Staffing Report.

Lauren asked what the Public Works General Supervisor does. Dan Rodefled said he leads crews who are doing repairs.

Jon said at the Communications Subcommittee meeting, they talked about the possibility of a new position that would deal with communication issues. He asked Gail if she has any information on that, and she did not. Dave said there is nothing to report yet, that he'll be working with EMA discussing needs, compiling example position descriptions and talking to HR.

4. Operations Report.
5. Engineering Report.

Percy mentioned that she noticed we took over the Town of Burke's well. Al said we took over the whole system. She asked if we're doing the testing on the well. Al said their temporary operator is now being paid by us instead of the Town of Burke so we maintain the same operation as before. He continues sampling twice a month. He reads the meters and is a fulltime employee of the Monona Water Utility. Percy asked if it is a self-contained system, and Al said yes. Al said until we actually take the well off line and bring our system in, that person will maintain the chemical feed, etc. Percy asked about the unidirectional flushing operation, there's a notation that he's working on the standard protocol, does that involve any cross connection work? Al said that is a concern and we are working with Joe and the cross connection control inspectors on that.

Al said there was a report done on Well 3 on whether we can abandon the well. The report from Black & Veatch says that we can abandon Well 3 provided we continue with our capital improvement program. There are a lot of charts, numbers and figures in this report. This will be discussed Wednesday night at the neighborhood meeting. Percy asked what it would mean if we abandon Well 3 and two additional wells go down. Al said we'd abandon Well 3 and if we lost two more wells due to breakdowns, we'd still be able to meet the demand provided we accomplish what is in the Master Plan. There are a lot of projects in that plan laid out over the next five years. He said it assumes Well 29 is in operation and assumes there is a connection made with Well 8 to transfer water from that zone to the other zone. Percy asked if fire protection would be compromised, and Al said it would not.

6. Customer Service Report.

Jon Standridge made a motion to accept the informational reports. Greg Harrington seconded; unanimously passed.

## FINANCIAL REPORTS

7. Fund Balance Report.
8. Capital Project Statement.
9. Income Statement.

Robin noted that he made an error on the Income Statement in forgetting to reverse the dates heading the columns to 2005 and 2006.

10. Presentation of the Annual PSC Report.

Robin noted on page 20, the return on rate base computation, our net rate base increased \$9.5 million, about 17.9%. Our net operating income increased \$165,000 or about 11%, but our actual return on the rate base went down from 2005 where it was 2.85%, to 2.69%. The PSC allows us to earn a 7.6% rate of return. The Income Statement and this rate case computation show that we need additional revenues. The last rate increase we got wasn't fully in place until the October 2006 bill, so we didn't have the effects of that rate increase for all of 2006. We have a rate case before the PSC right now for another rate increase. Percy said so there's always a lag and Robin said there is quite a lag when you bill every six months. He said that is something we need to look at to see if we need to do a more frequent billing because it takes so long to implement the new rate increase and we're falling further behind; it's difficult to raise the revenue needed with the lag time. Jon said if we get our next requested increase, when would we be back where we should be, how long would that lag be? Robin said if we get an answer from the PSC on the current rate case we have before them, he doesn't anticipate our being able to start the new rates. Even prorating the new rates until the August 1 bill, we won't even see the full impact until February of 2008. We're using 2007 as a test year, and we have that six to eight month lag between when we get the decision from the PSC and when our rates are fully in place. The other issue last year was that we pumped 5.7% less water meaning we sold less water. We didn't have the rates in place to capture the water that we sold the year before. Robin said the last time he spoke with the PSC, they said they are understaffed and they haven't started work on it. He hasn't talked to a rate analyst yet. They've had the rate case for about six weeks, and they have about six weeks before the normal turn around end time, so hopefully we'll hear something shortly. Robin said he spoke with both Dave Sheard and Kathy Butzloff and they hadn't opened up our rate case yet. Percy said there was a report on water conservation that was published by the PSC and is available online. Dave said he'll locate it and send it out. Lauren asked if we want to link it to our website since it talks about conservation. Percy said that is one of our identified priorities for the year. George asked what the timing is of the next filing. Robin said if we're filing on an annual basis, he'd want to file by February 1, 2008 to be about a year after this last one. That's when we anticipate our rates to be in effect in full, so that would be the timing. George said, with that in mind, in the near future we should put together a group to work on that. Robin said he's going to an AWWA conference in Boston next week about water conservation and water demand. Ken said he will be going to a conference on Thursday in

Milwaukee on some of these same issues at a state level. George asked if there is any progress on the Waukesha case. Their application is in and Robin said he hasn't heard that there is any progress yet. Ken may see some of the Waukesha people on Thursday. Robin has a quarterly meeting with PSC next Monday and they talk about rate cases and the status of some things. Dave Sheard was hoping to have their water conservation coordinator hired by the end of this month.

Percy suggested putting water conservation on next month's agenda. She also thinks it might be a good time to look at changing billing frequency. Robin said more frequent billing helps for revenues and for customers to see whether their efforts at conservation are working. It's difficult to wait six months to find out if what you're doing has any effect on your bill. Robin said at Operating Budget time we need to know if there is a need for increased staff, or additional postage costs and bill printing etc. Percy said it will be a huge effort to get staged in. George asked if it means ordinance changes if we increase our billing frequency. Robin said it would depend on what we try to put in our conservation plan. If it's going to be rate based or if there's going to be incentives, there might be some need for ordinance changes.

Jon said there was a Wisconsin Water Works Association training session this morning that he attended. There were PSC guys there that he talked to and they said they are hiring this person, that it all lies on that person's shoulders, and there is a lot of resistance. It might be a whole lot more than just an application from Madison to get a fair hearing of the concept. Jon said it didn't sound too promising to him. It was mentioned that there was a strong sensitivity to the industrial customers. Robin said Waukesha is looking at the conservation program for the residential customers, and since that's at least 50% of their water usage, they are not trying to affect the commercial and industrial customers, which is something you do have to keep in mind for a conservation program. Ken said from what he has read so far, the programs are not so much in the rate structure because that is a small component of getting conservation to different programs, that there is not much movement you can do in rate structure.

## ADMINISTRATION

11. Update on Mayor's 10-Point Water Quality Initiative and Water Quality Standards.

Dave said we're making progress on a lot of the items listed. Customer Service, the much awaited website function that allows customers to go in and type their address into a window and pull up specific information about the well(s) that serve their area, and from there they can go into general or specific water quality information about those wells. The most frequent questions we've been getting from customers asking are what well serves their area, and that information can be provided easily now.

Regarding progress on the Strategic Plan and Strategic Initiative, we have formed a steering committee and we are on our way to putting together design teams.

## NEW BUSINESS ITEMS

12. [05291](#) Approving the report of the Salt Use Subcommittee to the City's Commission on the Environment and adopting the recommendations of the report.

**Attachments:** Salt Use Report

A motion was made by Standridge, seconded by Harrington, to Return to Lead with the Recommendation for Approval to the BOARD OF PUBLIC WORKS Jon is a chairman for the Commission on the Environment, and they work through subcommittees. Roger Bannerman was on the subcommittee and it was quite an interesting group of world-class experts on salt and toxicity in the lakes, how salt gets there and how you clear streets etc. The subcommittee came up with a list of things the City of Madison could do and brought that back to the Commission. The Commission then put it into ordinance form. We put way too much salt in our rivers, streams and lakes with road and parking lot salting. The ordinance goes to many committees before it goes to the City Council. The City Engineer and head of City Traffic don't like it, even though they are involved in the process. Roger is coming to the meeting tonight, based on last night's meeting, to request support from the Water Board because of the impact it's been having on our wells

Roger said in 1972-73 the City Council had a resolution to reduce road salt use in Madison. In 1977 the Council adopted that resolution. The Streets Department tried a lot of things. They had a policy where they did not salt residential streets. They tried to reduce the salt per lane mile. They bought the latest equipment to distribute the salt; a lot of good things happened, but the salt numbers didn't go down. He said they are using 9,000 to 12,000 tons per year, and that goes on most of the arterial streets and some of the intersections. Well 14 got shut down because of high sodium levels, and other wells had sodium levels going up. The shallow aquifers are going up. The levels in our lakes keep going up. It's not going to affect us as much as future generations. Canada has declared it a toxic chemical and we're getting to that point. There are now standards in Wisconsin for chloride. What do we do about the problem? We've made recommendations that are pretty easy to follow, maybe go for that 20-30% reduction. Al Schmacher of Streets was asked what he'd like to see and he made some recommendations. He said there are short-term things we can do next winter, mostly education, and long term is collecting data, doing long-term predictions and working on alternatives. In Minneapolis they are doing the same thing, doing more education. We can borrow some of their education programs at minimal cost. Our recommendations include things like having extra weather stations; that was our most expensive item. Understanding the weather is very important to salt application-the road temperature, the air temperature and so forth. Roger said Al Schumacher told him that with one more weather station they'd have that problem solved. They discussed having anti-icing, training our drivers and Al was very supportive of that, learning how to apply, how much to apply, adjusting to weather conditions. He said one of the biggest issues they talked about was the private applicators and just in Madison alone, how much salt do private applicators put on parking lots for example. A conservative estimate is the same amount of road salt that Madison uses for its streets, about 9,000 or 10,000 pounds a year. The education program in Minneapolis is working well. Roger got an email from one of the people there and they've cut their salt use in half, so just the City of Madison could have an affect with an educational program. That would cost about \$4,000 to \$5,000, and is one of the most expensive items in the plan, if you take that weather station out of there. Roger said wetlands suffer too. There is actually a species change and salt resistant plants are coming in. There has been some real concern on the part of Mayor's Office. In Madison, we've been trying for years to reduce our road salt, but our neighbors haven't joined us. There is interest now in raising this to the County level, and he's in favor of getting all of our neighbors involved in a salt reduction program. People have worked very hard gathering information and trying to come up with a recommendation that doesn't have a lot of cost but has a

high impact. The salt problem is a national problem.

George noted there has been much less snow in recent years and yet we've more than doubled our salt use. He said we'll use more in the future because of freezing and local warming. Roger said the prediction is that we'll use more road salt in the future because of global warming. Even though we don't have snow all the time, we still have enough precipitation causing icy situations that the City has to deal with. To expand on that a little, we had all that wet snow come down but it created ice potholes, and a smaller snowstorm caused a lot of accidents because of icy conditions. The weather was very cold and they couldn't do anything with it. It gets complicated when you're dealing with weather. We might need more road salt as Wisconsin's weather becomes more like Arkansas's. George asked if there is a lag time for a groundwater increase in salt? Roger said he understands it's extremely mobile and moves through the system rapidly in a few short years. Dave said you have to also consider that the groundwater is moving through the ground and getting to our wells, so in terms of lag time with respect to what levels we'd see in our wells, he thinks there is a significant lag time, and we could stop all salt use today and we would still be seeing salt, he predicts, for many many years if not decades. George asked what it takes to get a leveling off. Roger said it is leveling off a little but he doesn't know why. There is graphic showing how the levels keep going up. George asked what it takes to get the leveling off to decrease. Roger said it does flush out twice a year. When we use numbers like 80, we're thinking of a lake as a bathtub but if you go to where storm sewer pipes come in, it could be 500 or 800.

Jon Standridge made a motion to strongly approve and adopt the recommendations of the report. Greg Harrington seconded; unanimously passed

The motion passed by acclamation.

**Present:** Lauren Cnare, Priscilla B. Mather, George E. Meyer, Jonathan H. Standridge, Gregory W. Harrington and Thomas Schlenker

13. [06012](#)

Authorizing execution of a Municipal Revenue Sharing Agreement Between the City of Fitchburg and the City of Madison.

**Attachments:** Exhibit A (2) - Tri North.pdf, Revenue Sharing Agreement 030607 (2).pdf

A motion was made by Harrington, seconded by Cnare, to Return to Lead with the Recommendation for Approval to the BOARD OF ESTIMATES AI said this is a development in the City of Fitchburg that needs water and it's more convenient for us to serve them than for them to get water from Fitchburg. This has happened before. Dave said the area of Fitchburg is in a four boundary agreement between the two cities, that we'll continue to serve portions of it because Fitchburg would have to put water through the environmental corridor, and we have water lines coming right up to it. This is an extension of that, and there is an agreement about revenue sharing. Lauren asked about the 50/50 share of general property taxes, if it pays us sufficiently. Robin said any connection costs are paid by the customer and there shouldn't be anything coming out of our pocket for this.

George Meyer made a motion for approval. Lauren Cnare seconded; unanimously passed.

The motion passed by acclamation.

14. [06113](#)

reimbursement of certain capital expenditures from the proceeds of future waterworks system revenue bonds.

A motion was made by Cnare, seconded by Standridge, to Return to Lead with the Recommendation for Approval to the BOARD OF ESTIMATES Robin said this addresses the fact that we can't go out and sell our revenue bonds until after the audit is completed and we have a decision from the Public Service Commission on our rate case. The borrowing in June or July will be for the 2007 Capital Budget, and we've already started some of those projects so we're going to have to be making payments on those. This is something we'll probably see on a regular basis because we can't go out and borrow until the audit is done and the most recent rate case completed. This allows us to reimburse the money that we borrow from the City from the revenue bonds that we sell in the summer. Robin said if we didn't have this in place we wouldn't be able to pay that back from the revenue bonds we're selling, although we're paying for projects that are supported by those revenue bonds.

George asked if this is something that happens frequently. Robin said this is the second time we've had to do it because of our lag time again. We used to go out and borrow every two and three years but we're borrowing more frequently now in part because of the PSC's CIAC ruling where they took away some allowable depreciation expense on our part. They said in so doing that utilities would have to come in for more frequent rate increases and would have to borrow more money for capital projects. In conjunction with all of that, Robin said we're finding we need to borrow more money more frequently to keep up with the capital budget. George asked the financial impact of doing that. Robin said we borrow the money from the City at one-quarter percent interest above what the going rate is in their investment pool. If we compare that with what we'd go out and borrow on the bond market, we'd be pretty close.

Lauren Cnare made a motion for approval. Jon Standridge seconded; unanimously passed.

The motion passed by acclamation.

## CORRESPONDENCE AND SPECIAL INTEREST ITEMS

15. Approve a resolution directing Utility staff to proceed to [install a filter for removal of iron and manganese at] [locate a site suitable for a new well to replace] Well 29. (The Board will accept public input on this item at the meeting.)

Percy said this resolution directs the Utility staff to make a decision on Well 29. We've heard from the consultants and now are at the crossroads. Dave distributed copies of a draft board resolution that briefly describes the situation and the decision that the Board is being asked to make. There are two optional phrases the Board can choose from to complete the resolution, either a filter or continue looking for a well site. The second item is a summary of the public meeting of April 12 that Joe Grande put together. The final thing at the end is five items that are written input received on forms we provided people at the meeting. Al noted that Steve Quail from Earth Tech and Ken Quinn and Nancy Zolidis from Montgomery Associates are here to answer any questions. Jon asked if we're going to get an engineering cost analysis comparison of the two options. Dave said that was part of the presentation.. A new well and a treatment system capital costs were essentially the same, around \$2.1 million, and the cost of \$48,000 annual operating cost for the treatment system. The well would have an additional \$12,000 above and beyond what it would cost to operate a new well

and pump the water back to that pumping station, so there is a \$38,000 difference between the two. Jon said Water Utility staff was present at this meeting tonight and questioned some of the assumptions that went into \$48,000. He heard that from Mr. McCormick. Jim McCormick said it will take ½ hour to get to the well, let alone do any work on the filter and drive back. Jon asked how good the \$48,000 number is. Who came up with this number? Al said Earth Tech came up with the number. Jon asked what \$48,000 worth of payments a year would be, a million dollars, if you compare that to a capital cost. Robin said if our cost of capital is 5 %, if we have 5% bonds out there, you could borrow a million dollars at \$50,000 a year. Jon asked if for the cost of operating a filter, every two years we could buy a new well for that price. Percy said the construction costs would go up. Jon said if we saved the operation cost of a filter, \$50,000 a year, wouldn't that give us the ability to make payments on a new well every two years. Robin said that would cover the interest cost but not the principle so if you're borrowing for 20 years, you're paying back \$50,000 in principle and \$50,000 in interest. Jon said he's trying to understand, if we spent the \$50,000 in operating costs on new wells instead. He said Al said it takes five years to build a new well, from the day we decide to do it until it's operational. Al said no, five years to drill a new well only applies to Well 3. We said we could locate a well and have it online in five years for Well 3. He has always said a new well takes about 2-1/2 to 3 years to get online. Jon asked if we have a site replacement for Well 29 and Al said no. Jon said so the shorter time for putting a well in only applies to Well 29 because we have the reservoir in place. Al said the construction period is shorter and the transmission line to build a new reservoir and pump station, probably three to six months. Jon said he thought we were talking two years for a filter and five years for drilling a new well.

Al said starting at the same point, you'd get to the end of the project about the same time. He has always said that. Percy said doesn't that assume that you drill a well that has good quality. Al said what we are really talking about is how much risk we want to take because, if we drill a well and find out it's no different than what we've already got, you've lost that time and money. The question before the board is how much risk do you want to take? We have a known factor with a filter, and an unknown with drilling another well. George asked the cost of a new well. Al said roughly speaking, around \$2 million for a well including the pipeline. George asked what the risk is of finding the same problem at a new well . Ken said there are three wells that are seated in the lower sandstone aquifer, 28, 29 and 30 and 29 is the only one of the three with manganese issues. Looking at it from that perspective, you could say there is a 1 in 3 or a 1 in 2 chance-there are no guarantees on what you are going to find. George asked the treatment alternative, the pyrolusite option costs how much? Al said \$2.1 million. George said, so our choice is between \$2.1 million and \$4.1 million. Lauren asked how you get to \$4.1 million. Al said we could drill a test well for \$100,000, do all the testing and consulting fees. At that point you'd have water quality data and you'd have a better idea. Your risk would go down. The next step, you'd have to spend probably \$500,000 to \$600,000 to drill the production well with additional pumping and testing, and then you'd have another decision point at that time, whether to proceed with the well. George said part of the manganese problem was caused when putting Well 29 into production. Al said that is a theory but we don't know that for a fact. He said we had problems with the well and had to blast the well to get increased production, which released some sand. We had flowing sand in the well and the sand then released manganese. George said once again that is a risk. Al said we have 24 wells and the majority of them were blasted during production as standard operating procedure. Only 10 or 11 have manganese



above the 20 level.

George asked what staff recommendation is. Dave said based on his discussions, from a financial standpoint, a \$36,000 operating cost addition to the Utility for water quality, and the input he got from the public meeting, his recommendation is to move forward with the treatment option. It is a sure thing, and if we move to another well, there is significant risk and no guarantees. Even if we find another well site, it's very likely we're still going to have at least some manganese in the water. The option of installing a treatment system would pretty much guarantee that 99% of the manganese would be removed from the water permanently. Jon said one consideration is that our consumers want manganese free water right away and that is a strong reason to put a filter on. He still would like to understand the arithmetic of it-the risk of this dollar vs. that dollar. Dave said the difference in cost of the two options as he sees it is about \$36,000 on an annual basis. The capital costs are essentially a wash and the capital cost of relocating a well could actually be much higher if we don't get good quality water the first time we try. In the best scenario, the difference would be about \$36,000 annual operating cost. Robin and Dave had discussion on what a \$36,000 addition to our operating budget does in terms of impacting our rates, and maybe you can elaborate on what \$36,000 means in terms of an annual addition to our operating budget. Robin said it is a small amount as our annual operating budget is in the \$12 million range so \$36,000 wouldn't mean that we'd have to raise the rates. It would be the difference between a wet summer and a dry summer; \$36,000 is the fluctuation in the weather to us basically. Jon said to help him decide, if it comes down to \$36,000 a year, if we took that and invested it in new wells vs. the treatment system, how much would that gets us-like a new well every X years. A \$36,000 operating cost compared to \$2.1 million one time cost every 50 years or 100 years, whatever the life of the well is. George said the long-term value. Jon said that will help him decide if we should drill a new well or go with treatment, and that money would go toward drilling a well, that makes sense to him. George said \$2.1 million one way and a one out of three chance we'd end up in the same situation with a new well and having a \$4.1 million situation with a new well and filtering system. Greg said his opinion is that the water treatment option is the best option. If we're talking water treatment vs. drilling new wells and hoping they come out with a low manganese level, it is unlikely based on what he has seen from Montgomery before. Greg said he's say it's a very small chance you could drill a well anywhere in that neighborhood and find the manganese concentration lower than Well 29.

Ken said it comes down to the reason why manganese is present at Well 29, and based on our study, it is thought that because of the sand sloughing at Well 29, the water will dissolve manganese if it's available in the aquifer. At Well 29, we see manganese being dissolved in the water. At Well 30 for instance, you don't see significant concentrations of manganese being dissolved in the water. The differences between Wells 29 and 30 is the fact that Well 29 had the sand sloughing, which would make the manganese available to the water, which would then allow for it to be dissolved. Jon said so one educated guess is that one-half the time we're going to have a high manganese well. Ken said that is one educated guess. Dr. Schlenker said we don't have a lot of data as to what another well drilled in that area would produce, but he thinks it would be helpful for the Board to remember that the original hypothesis of the Montgomery study is that there was some connection between surface characteristics and the deep aquifer. Proving that hypothesis, they would be able to help the Water Utility spot a new well. They weren't able to confirm that hypothesis. They found no connection to surface conditions and how you protect the well with a casing. The purpose of

that was to reduce the risk of drilling another well that we would be just as bad. Dr. Schlenker said it was a nice hope but it wasn't fulfilled, and that's why we spent \$50,000 on the study. We have not been able to reduce the risk of drilling another well that is just as bad as 29. We have to remember where we were a couple of months ago when we started this process in order to make a decision. Percy said to her, it seems we have a well in 29 that gives us adequate volume of water and by moving ahead with treatment, it will remove manganese and give us good water quality. Why wouldn't we pursue that option vs. gambling on placing another well in the hopes we might get something better. We're going from a sure thing to a gamble. Lauren said it's all about taking another risk on behalf of the public and she thinks if we were a utility that hadn't gone through what we have gone through in the last year and half or two years, or ten years depending on what your particular issue is, there would be more power for us to try something. Lauren said we have a responsibility to do a sure thing. We are going to have issues siting Well 3; it won't be an easy process and everyone knows that. This is a project that we can do and do it right. She understands Madison isn't the first utility to do this, that most people with manganese problems pursue a filter option successfully. \$36,000 a year isn't cheap but we've spent \$150,000 on studies alone this year. \$36,000 in the great realm for what we get for this, the surety of that well being productive for our customers, feels like the right price. Lauren said she is supporting the filter option, but would also like us to be careful. She'd like to hear some best and worst case stories from Earth Tech such as, if something goes wrong with the filter, how much does repair cost, and what are the health implications, etc. Lauren said we need to make the decision quickly for if we continue to belabor the issue, it paralyzes us as a utility. We need to ask ourselves what other questions we want answered, and if not, we need to move on. Ken Key said regarding the cost issue, we're talking five cents per customer per month. Jon said he's been pushing hard to consider treatment and get this well treated, that it's not just this well but other wells also, that we need to consider treatment for. He said the reason he is asking all of these questions is because he's been getting calls from people who work at the Utility that say, "I don't know about this. There's all kinds of questions about this" and I ask, why are you telling me? There are all kinds of concerns within the Utility. Jon said he thinks these people are bothering to call me so there's got to be something I don't get here, because my sense tells me we need to put a filter on that well. Jon said he's not sure how to deal with that. We started the evening out with Jim McCormick from the staff adding suspicion from his standpoint that this is not a good decision to go forward with treatment. Jon asked Al and Dave what the dissension is within the Utility and are we missing something here? Dave said he doesn't know what the dissension is, that everyone got the same information and everyone has had access to the reports and the meetings where the reports were presented. It ultimately comes down to a decision by the Water Board, and if you need more information to make that decision, we'll get you the information you need to make it. Different people can look at different studies and come to different conclusions, people who are very intelligent can read the same report and come to various conclusions, so he thinks it's up to everyone to study the issue and make a decision on what your conclusions are. Dave said, as Lauren said, we need to make a decision and move forward. Jon said he wouldn't know what else to ask, asking if we've asked all the important questions. Lauren said she would invite anyone who works at the Water Utility who has questions, and told Mr. McCormick that it was good he brought those questions tonight and she hoped he got the answer. Lauren said she doesn't think we answered the 1/2 hour question properly, but it would be very helpful to me as a Water Board

person if somebody could gather all of those questions and just bring them and we put them on the board and say, "Here's the question and what's the answer." Maybe Mr. Quail needs to come back and maybe everyone needs to take a little homework assignment because as far as the rest of us are concerned, you asked three questions and they got answered. If there could be a concrete list of questions that says we need to know the following, we could make an attempt as a group to answer them. She asked if that would be acceptable to Jim McCormick. Jim asked what the life expectancy of the well is, and what is the cost of having a filter every year, 25 years down the road, what is it going to cost to replace it? Dave said he thought these questions have been answered at previous meetings. Jon said in an effort to meet the needs of our customers, we need to go ahead with the filter, although we needed to have this discussion. Percy said regarding employee concern, there is a need for education. Jon said the most disconcerting part of the meeting tonight was the demonstration of the lack of communication that's been going on within the Utility related to this situation, and it concerns him, as it has for years. He thinks this is irrelevant to our decision on the filter. Lauren said with regard to our neighbors having filters and not telling us (Al said he knew), it would be nice to get a redesign team and take a tour of a utility that uses a filter, and ask what do you like about it and what don't you like, etc. She strongly recommends that.

Jon asked Dave if, at the regional meetings he's been having, this question ever came up. Dave said we haven't discussed it although he recalls talking to the Middleton utility director at a meeting somewhere and asking him, this is when the manganese was a big issue, if they had any manganese problems in Middleton and he said no. Dave assumed he meant they didn't have manganese in their source water. He didn't offer that they had filters on two of their wells. Jon said they probably see it as an iron problem, and Dave said that could be.

Lauren Cnare made a motion to approve the board resolution, taking out the phrase [pursue the data/information needed to locate a site suitable for a new well to replace Well 29] and keep the phrase "install a water treatment system for removal of iron and manganese at Well 29. Jon Standridge made a motion to amend the resolution to add: "Where the Madison water consumers have consistently and diligently expressed a desire for substantially reduced manganese in our drinking water." George Meyer seconded; unanimously passed. Lauren Cnare made a motion to approve the resolution. Jon Standridge seconded. A roll call vote was taken with all board members voting aye.

16. Discussion of Well 8 Chlorination Communication Issue.

Jon said he asked to have this item put on the agenda. One of the things that came up in his mind is we had Well 29 where we had the opposite happen, the chlorinator was turned off. We had a committee headed by Larry Nelson. We had a document that all of these changes were supposed to be made so that things like this don't happen. Jon asked if we've implemented Larry Nelson's suggestions. Dave said he's not sure if every one has been implemented, but the vast majority have been. We have a status report we keep with all of those recommendations and where we are with them; he will get a copy to Jon. Dave said Al has a spreadsheet that has all the recommendations on it and the dates that they were supposed to be done. Al said there is a Standard Operating Procedure in it that is not complete because he hasn't had time to do it. We haven't been successful in hiring a Water Supply Engineer. Jon said the deadline for that was January 31, 2007. Al said we haven't started the formal process. Jon asked if this would ease/reduce the problem, that he understands some material made the valve stick open and it pumped X pounds of chlorine into the well itself,

which wasn't operating. Al said this was totally the opposite of the Well 29 issue that went on for several weeks without being noticed. This was noticed immediately. The well went off at 4:40 in the afternoon and we discovered it at 8:30 the next morning, and it was dealt with at that time. From an operational standpoint, it was dealt with immediately.

Dr. Schlenker said he wonders if that is adequate because he and Al and some others toured the Well 8 pump house a few days ago, and what happened was that the chlorine injector continued to operate for approximately 12 hours overnight, by mistake, and was discovered the next morning. He's wondering if there should have been a higher level of surveillance. There are only two things that we add to our water: chlorine and fluoride so it's not a real complex system. Wouldn't you want to know in real time if there is a malfunction of either of those additives-either they are going when they aren't supposed to be going, or vice versa. Dr. Schlenker said it doesn't seem to him that it would be all that difficult to connect some wire and an electronic switch that would come to the central area and you'd have a red light on and someone would notice it, rather than coming the next day and doing the whole process manually. Jon read, "By November 30, 2006, software and/or hardware will be installed that will provide operators with a separate computer screen dedicated for the displaying viewing. It will be programmed such as is visible when a warning is triggered on the screen." Jon said someone is watching it 24 hours a day so that is supposed to be there; is it? Al said yes. Jon said it didn't get seen until the next morning? Al said it is set up for low doses, not high doses. Jon said it says it should show inappropriate chlorine or fluoride, and he would think that overdose, particularly of fluoride, is critical. The main employee responsible is the Principal Engineer. Dr. Schlenker asked if there is any reason that that kind of system couldn't exist at every well. Al said no, it is set up already for low doses. George asked how long it would take and what expense to make the modifications for high dosage also. Al said he didn't know but he would think a few thousand dollars. Jon said in Larry Nelson's report it states it was supposed to be done by November 30, 2006, and he is concerned that it hasn't been done. We agreed to do these things and we didn't do it and that concerns him. Dave said it is all being done. Some of the issues have not met deadlines, but all of the issues are being addressed. Jon said so you're less worried about this than me. Dave said he's worried about it, but doesn't know what level Jon is worried about it. Jon asked that the document be forwarded to him and the Board. George asked if we can get something underway soon, and build in for high dosage. Jon said to George that there are many items similar to this in the report to add protection, and any one of them, if they are not done, could result in a problem. These were fixes to a number of old problems. Jon thinks we should do them all. Jon said once again he's brought up an unpleasant subject but he has an obligation.

Lauren said if the Board desires, make a resolution that the appropriate staff at the Water Utility to bring this parameter settings, high or low, to the forefront and come back with an estimate of what it would cost to accomplish that in 15 or 30 days. That way, it's a directive and assumes we'd authorize the funds to get that done. If we need to hire someone to do it and we believe it's important, then we should authorize the money to do it. She asked if it's a two-week project or what. Al said that sounds right. Lauren suggests he drop everything else he is doing in the course of a day and get this done. Jon said we did this in October of 2006. Lauren said she knows, but we're here today and perhaps it needs to be reiterated, and that's the only way she knows how to get around this.

George said this happened around noon on a Wednesday, the phone call came into the station on Friday. Obviously they'd found out about it from someone;

there are no secrets in government. It was in the paper on Saturday. From his perspective, if everything was going great in terms of public relations, this would be a minor blip on the screen, but that's not the situation. George would recommend that, as soon as a situation is stabilized physically and some preliminary assessment done, it should have been released to the media. When the media finds out about it, you are automatically suspect and that's what happened here. It is always better to be out there ahead of them, even if it's considered to be a minor situation. George said he hopes to never see this happen again. Dave said he agreed. Dr. Schlenker said he agrees but would like to go a couple of steps back. He thinks two crucial steps that needed to be taken right away—one was risk assessment and the other was risk communication. The Water Utility has a partner in Public Health here in Dane County; that is just natural, but we are now formal partners—he is a member of this board and we have been working very closely and intimately together for over a year now. When it comes to risk assessment, Dr. Schlenker said that is something Public Health does every day, environmental contaminants, infectious diseases, etc. That is something we are used to, trying to figure out what is and is not a big deal, but it takes some work. Dr. Schlenker said when he first heard about it at 4:00 on Friday afternoon, sitting all alone in his office without any staff there to help him, he tried to figure out how bad dumping 25 pounds of chlorine down a well is, that it is not an easy thing to figure out at the last minute. If we had been notified Wednesday morning and had time to figure this all out and to come to the conclusion that we ultimately did late on Friday after doing a lot of calculations, we would have arrived at the same conclusion that no, it's not a big deal in terms of a health risk and this is why, in a very quantitative way. Let's do it in a proper way, and right away. He said the second step is risk communication, after you figure out what the risk is, how do you communicate that in a way that people can understand. That is something Public Health does every day as part of our job. We have worked with the Water Utility to formulate the best way to communicate with the media and the general public. He thinks this has to be part of a routine, and he kind of assumed it was. Certainly, from now on, that has to be part of a routine. George said the media will be a lot more forgiving if you give them preliminary information, that the element of timing is very important.

Percy asked if it's fairly routine to dose private wells with chlorine. Al said we routinely dump 50 pounds plus down our wells to disinfect them, so this is not unusual. George said part of the communication, that it happened abnormally but it is something that is also part of the treatment process. We're not in a situation where we cannot do it. Percy said something that would seem normal to us is not to people who are not familiar with the process.

Dave said he looked at the matrix of the communication subcommittee, after this incident, and he doesn't think this type of situation is addressed in this plan and that is something we need to talk about at the next meeting. We have triggers with respect to health related issues; this was not considered to be a health related issue, but it certainly is considered a health issue by people who don't understand that this is the kind of thing we might do as a treatment process. We really need to address that as part of the communications plan, how to deal with issues where even though the Utility staff realizes through their vast experience in doing these types of things, we still need to follow through with communication to those people who don't have that understanding and could perceive it as a health issue.

Percy said one thing this illustrated is how things get blown out of proportion or how the assumption that all of the things we hear are true and can lead to wrong conclusions. We need to rebuild trust with the public. Jon asked why our

existing document from October, 2006 didn't work, and the other was stated by Mr. Meyer, the breakdown in communication and the fact we didn't communicate. Jon said in his opinion with the bad press is not that we had a huge problem we covered up, but that we communicated poorly once again. Our Communications Subcommittee met Thursday night in putting this matrix together and the newspaper called me on Friday-the incident happened on Wednesday. That it didn't even come up at that meeting, saying do you think this would fit on the matrix, that's what really concerns me and led to my statement that the communication here is very bizarre. Jon said that still worries him a lot. He thinks that the plan Lauren has put together, the concept, is a workable matrix but it's going to be tough to implement it in the current culture, but we really need to reemphasize that. George asked if training was underway. Dave said the Water Utility management team has been through a one full day training session that was excellent and we'll probably follow up with more.

17. Report on the Implementation of the Design Team Based Management Structure.

Dave provided the board with minutes of the first steering committee team that was held on April 5, for one-half day, saying it was an excellent meeting. There was a lot of training involved and a lot of process questions that we covered. Looking at the minutes you can get a good feel for what was covered. Toward the end of the meeting we did start talking about actual strategy team process, those teams being referred to as design teams by EMA or strategy teams. Those are the specific teams that are put together to address a specific issue in the Utility. The teams would be made up of mostly employees of the utility, but could also include outside people with expertise in that particular issue. We set up an initial pilot strategy team and customer feedback forms. The next meeting will be on April 24. A subgroup of the steering committee will be reporting back on that strategy team process. That's not to say we don't already have some strategy teams underway which we sort of jump-started all of this with, in terms of the SCADA system strategy team. You can see the decisions that were made by the steering team at that first meeting, and the action items that were assigned.

18. Report on Communications Plan Subcommittee.

Lauren said we have one more meeting, next Tuesday at 4 p.m. The communication matrix has been eluded to, which is really about situations and how you want to communicate about them-to who and what avenues to be used. She said we'll be finishing those up. One big thing that came out of our last meeting is how really important it is that the job of communication to the public and to some extent, internally to employees, be taken by a professional. Lauren said as a subcommittee, we feel it is very important that we hire someone to do that. Many organizations in the city have someone who does their communication-Metro, Health Department. So much of that activity is taken up by staff members who need to be doing other things. They need to have input but when it comes to things like we're going to have a public meeting, it would be nice if the communications person finds the ideal site for that, takes care of writing the copy that might go for the news release, takes care of the mailings out . Lauren said someone who can do all of that, it's not support work alone but strategy and support work, and is critical to make a communications plan. As a follow up to that, we asked everyone on the committee if they've ever had a communications person in their organization and asked for job descriptions. Lauren said we got one from Carl, a committee member who works for the State Lab of Hygiene. We will write a job description so we can go out and shop for that person. Janet Piriano was part of that meeting and she indicated she

thought there would be support for it. Obviously we need to allocate funds for it. We do need to go through a typical city hiring process; it's not something that can happen overnight. We do believe it would have great benefit for the Water Utility so we'll be bringing that recommendation to you formally at a slightly later date. George asked if that is internal as well as external communication. Lauren said she thinks the person can do both. That person could do an internal newsletter, an employee only intranet site, taking care of agendas for general staff meetings, etc. Lynn Williamson said until there is a communication within the Utility to allow the worker in the field to notify the correct person immediately, you are going to have problems with the external communication. She said they can make all the matrixes in the world but until there is ownership and it is institutionalized within the Utility, the problems will arise. There has been a lot of mentoring and monitoring by the Mayor's Office, by paid media consultants, by volunteers in the community, and board members, but four months into it, things haven't changed. Jon said had we talked about it on Thursday night, and combined with Cap Times getting a call at some point, if those things would have been done, Mary ? wouldn't have had a story. It wouldn't have been blown out of proportion as it was. Lynn also thinks there's the issue that the Water Utility has to do things ten times better than any other agency at this point, and if that means there was a potential that over chlorinated water went into the system, then there should be some sort of plan to notify them as a precaution, and then the Utility looks like they are concerned. Percy said we still have some work to do . She noted that there is a public meeting on Well 3 scheduled for April 19 to be held at the Bashford United Methodist Church at 329 North Street. Lauren said she thinks it's important that board members attend those meetings because it's nice you can stay connected with members of the community. She said she knows everyone has many other meetings in the evening, but she thinks it makes a big difference when we are there.

#### APPROVAL OF NEXT MEETING DATE.

19. Approval of the next regular meeting date of May 15, 2007.

Lauren said she would like to see an update on the disposal of the Main Street property on the next board agenda. Dave said the city process for disposing of property is followed. Those in the Real Estate section of the City's Planning Department can do all of the behind-the-scenes work. They do appraisals on property, see if any other city agency is interested in the property, and then they market or negotiate a price. George asked if it's been on the market and Dave said since we moved here in May, 2005 or soon after. The property was declared surplus at that time.

#### [06135](#)

Attachments: Informational and Financial Reports 4-17-07 BWC Agenda

Attachments: Water Quality Rpt 4-17-07.pdf, Staffing Rpt 4-17-07.pdf, Operations Rpt 4-17-07.pdf, Engineering Rpt 4-17-7.pdf, Customer Serv Rpt 4-17-07.pdf, Fund Balance Rpt 4-17-07.pdf, Capital Project Statement 4-17-07.pdf, Income Statement 4-17-07.pdf

#### ADJOURNMENT

At 7:05 p.m. Jon Standridge made a motion to adjourn the meeting. George Meyer seconded; unanimously passed.