

**WALKER CITY COUNCIL
PUBLIC HEARING MEETING MINUTES
WALKER FIRE HALL MEETING ROOM
Monday November 2, 2009**

CALL TO ORDER – Mayor Walhof

- Mayor Walhof called the regular scheduled meeting to order at 6:45 pm.
- Council members present: Fjelstul, Finney, Wilkening, Worth, Walhof
- Council members absent: None
- Others present during portions of the meeting included:

Terri Bjorklund, City Administrator
Wayne Tennis, Chief of Police
Travis Baker, Police Officer
Dave Nieman, MRWA
Shirley Mallory, Shingobee Twp.

Sylvia Bakker, City Employee
Edy Asell, Zoning Administrator
Dean Morrill, Pilot Independent
Robert Mallory, Shingobee Twp.

Mayor Walhof opened the Public Hearing to receive comments and concerns related to the Amended Well Head Protection Plan, and discuss any issues relative to such. At this time I will turn the meeting over to City Administrator Terri Bjorklund.

We have worked for a quite a long time on the amendment to the Well Head Protection Plan. The reason we are calling it an amendment is, because it is an amendment for the original of the two, of the wells in town, to add the wells outside of town in the Industrial Park. They kind of have never had to deal with something like this at the Agency, at Minnesota Rural Water, and State, so we were kind of a test pilot. It didn't take long for them, anticipated, due to some thought processes on were the ground water might leach too, throughout the lifetime of this, or the build out of the Industrial Park, so (inaudible) I have an ok'd amendment draft, and I have Dave Nieman, who I guess used to work for us, and Dave will explain the amendment, and we will ask questions after that.

Good Evening, my name is Dave Nieman with the Minnesota Rural Water Association, and believe it or not I started working with this Community back in 1996, 97, when we had some initial issues with the water supply system, and I was very involved in developing the first Well Head Protection Plan. Aaron Meyer who has been working with the City on this amendment, had a conflict with scheduling meetings so I'm here sitting in for him. I will attempt to answer your questions as well as I can. To just give you a quick background on the Well Head Protection Plan. The development of the Well Head Protection Plan, is to prevent contaminates from having an adverse effect on the public health, from entering the public water supply system, by managing the land surface area that supplies the recharge for the well. This is a program that is mandated by the State, it comes actually from the Federal Safe Drinking Water Act, that Congress required the States to draw up a plan to put towards the water supply systems, as part of the Safe Drinking Water Act. Minnesota has a Well Head Protection Rule, that was developed and

implemented in 1997, and we follow that rule in the development of a plan. There are two parts to a plan, the first part is the delineation of the Well Head Protection Area, the drinking water management area and that Map behind the Mayor shows the yellow line is your drinking water supply management area, it is not actually the area that we are going to manage and protect, I don't know if you can see the long skinny line in the middle, but the wells are located right here, and if you can see that long narrow blue line in the middle that actually shows the computer model of the land surface area that provides the recharge for those two wells over a ten year period. Because we can't identify exactly where that line is on the ground surface, what we are going to do is take that out to the nearest lone boundaries, that have to come through the protection area, and that is how we develop the boundaries for the drinking water management area. Your wells are sitting on the rim of a glacial outwash channel, as the glacial moved in and out of the area, meltwaters created channels in the earth, and as the glacial receded, those channels got filled up again with sand and gravels, and that is actually the soil or aquifer that you are charging your drinking water with. Your wells are very shallow, they are very susceptible to contamination, cause there really isn't any protective layer between the surface and the 70 or 75 feet where your drawing your water from, so anything that happens on the earth's surface is going to get into your water supply fairly fast. We know that because we've done some sampling, and one of the trace elements that we can sample for in public water supply systems is Tritium. Tritium is Nitrogen Hydrogen, it's been in the atmosphere every since God created the world, but in the mid 50's the United States started doing nuclear testing in the atmosphere, those Hydrogen Bombs, and one of those broke off particles that accrued when those bombs exploded in the atmosphere was Tritium, so if you followed the path of tritium since the creation of the earth it was way down here, but since the 50's it rose like this, and now it's been coming down slowly in a 12.5 year platform. All I can tell you is it's not harmful as far as we know, but if we find that in a ground water supply it's a good indication to us that there's been a major recharge of that aquifer since the mid fifties. That's real young water that you have at this time. Because of the levels of tritium that are in your drinking water supply, I would guess that your drinking water is probably no older than a couple of decades, so anything that could happen on the earth's surface is going to get under that aquifer pretty fast. As Terri said we have 5 wells, the original plan was written for the 3 downtown, by the park, This plan or the amendment just covers these 2 wells here in the Industrial Park. Basically you have these properties here, you've got several lots proposed for development within the Industrial Park. I think according to the plan we're not anticipating a lot of change, in the area, but we are planning on growth in the Industrial Park, so one of the things that you are going to have to consider is the Class 5 well, the Septic System that's out there. That is a major issue, the major concern is it's about three hundred feet away from the wells and the system's drainfield runs parallel to the well capture zone. We've been doing monthly sampling, the Department of Health has, and over the last year and a half to two years the Nitrate Levels in your Public Water Supply have gone from zero to three. There on a steady climb, both the nitrates and the chlorides, those are both trace elements that come from either fertilizer or human and animal waste. The Department of Health has advised us, that this well head protection area here, that the increase in the nitrates and chlorides is a direct result of leaching from that Septic System that serves the Industrial Park. So that is one of the major things that you are

going to have to be concerned about. Keep in mind that any growth of the area out there is going to put more use on wells, more use on the septic system, as you start pulling more water out of the aquifer, to supply additional drinking water, your going to start to most likely draw more gallons from that septic system. The goal of the Well Head Protection Plan is to maintain a good drinking water source for the community, a very simple goal. There weren't really any other major issues other than that, we did do a potential contaminants source inventory, there are a couple of private residences inside that area that have wells and on site septic systems. You have an irrigation well up in the northwest corner there, you this large septic system, you've got a demo landfill, you've got a hazardous waste generator at an industries out there, you've also got five on site storage tanks for petroleum products, you've got some issues, minor, with turf management, and with storm water ponds. Our reason for managing storm water ponds out there, is they are all natural, and one of the things the plan has indicated is that you should be sure when you do additional projects out there, that you handle storm water in ways that is appropriate. So in part one of the plan we developed this map in a determination of vulnerability, that was the part one, part two, the part that were here to talk about tonight, builds on the information in that part one. Now that we know where the water comes from we want to figure out where the major issues are so we did a potential contaminant source inventory, and as I mentioned in most of the things I just covered. Once we did the inventory we developed management strategy's to address each category of potential contaminant source, so you've got wells, other wells. You've got other septic systems. You've got transportation corridors to be concerned about. You have to think about all of the land uses out there, and the potentials for contamination to your water supply system, because of the high (inaudible) to your water supply out there. So the management strategy's addressed in this publication, Public Education, Tanks, Hazardous Materials, Other Wells, Transportation Corridors, Turf Management, your Storm Water issues. You have some additional recommendations for Data Collection, and Class V Wells, There are two kinds of Class V Wells. Class V Well is an EPA regulated well, that has the potential to eject foreign objects into an aquifer. Ejection wells are commonly found in the oil and gas industry. When they drill a gas well all the material that they pull out they put back into an ejection well back in the ground. Class V ejection wells are on site septic systems that serve manufacturing facility or a facility that serves more than twenty people, and Motor Vehicle. A garage that has a septic system has the potential to get petroleum products into the ground, so that's a Class V well. So that's one of the issues we have there. We also have a section in the management strategy to address recognition and plan, where by the council will take into account well head protection area, and make decision on that area. We want to get the County to think about it as other things happen out in the Township where you don't have controls. So we've put together a plan, it contains all of those things; in addition it also has a section that contains an emergency plan for your public water supply system, in the event that your source of drinking water is obstructed by natural or human made issues. The plan once it's adopted, will have a life span of ten years. During that time the City will be expected to implement the management strategies in Chapter 5 that I just briefly hit the categories of. We will be back, about year eight to start a revision, so that by year ten we have a new revised plan. So this is an ongoing thing the City will have a responsibility for. Forever. It's not going to go away. You're always going to have a wellhead protection team. You

will also have a budget item for wellhead protection, and you will always have that responsibility for implementing your plan. We will be here, along with the Department of Health to provide assistance and be involved with problem solving. A notice was sent to all Local Units of Government notifying them that the plan was completed. They had sixty days to submit comments, and as much as I know we have not received any comments.

The purpose of the meeting tonight is to take comments from anyone here, and then the Council, I'm asking the Council to take action to approve this plan, so that then you can submit it to the Department of Health. After it's approved, we will send another letter to local units of government indicating implementation of the plan, and we will hold an implementation meeting to set up a work plan for the next couple of years.

Are there any questions?

Mayor Walhof, asked, "How often are samples going to be taken for Nitrate study?"

Dave Nieman, "Well the Department of Health, because of the new ground water rule that's coming on-line from EPA, what we have is to pick a number of community's as sample community's to do some testing to see how big of an issue this is State wide for this new ground water rule, and Walker was one of the community's that was selected. As near as I know there going to keep doing this for at least another year on a monthly basis. Now your Nitrates have gone from zero to three in a fairly short period of time. Your plan does contain some pretty specific management strategy, related directly to that on-site septic system. If the Nitrates hit five, your going to have to have some kind of action to address that issue of the septic system before it has an impact on your water supply. Before you get bacteria in it, so far you haven't had any bacteria in it. That typically something we would see from septic systems. We can't explain why you haven't, but if the trend continues it's just a matter of time before we see some. I would encourage the community to look seriously at the alternatives you've got, and have a plan in place if something happens.

Mayor Walhof, asked "Our there like mechanical Nitrate removal systems available to remove Nitrate's from water?"

Dave Nieman, "there are, and they are very expensive, tremendously expensive, not only the initial development and construction costs, but the ongoing operation and maintenance is very expensive. We have a couple of community's that are operating Nitrate removal plants, and they are just finding out how expensive they are to operate." "The Department of Health is not, I won't say it's exactly true, the implementation of Nitrate removal systems, but they consider that as putting a band-aid on for test removal, you really haven't gotten to the source, all you've done is put a band-aid on it, and the purpose of well head protection is to get to the source, so you don't have to do that. It would be a whole lot cheaper to do something else, besides putting in a Nitrate removal plant."

Mayor Walhof, asked, "How about if we moved the wells were moved from here to up here, and the plant was left there and the water was piped."

Dave Nieman, "That's a possibility, I think Nick had talked one time about the possibility of locating the wells on the ridge over on the west side. They would probably be better even over here, over further. See your ground water source is from southwest to northeast, so following the aquifer it's going this direction. So if you do move those wells you want to get them up grade from the septic system. Right now the septic system up

grade from your wells. More discussion ensued on the moving of the wells. Dave Nieman said you might want to work with Jim Walsh. Jim Walsh is the Hydrologist with the MN Department of Health to see what his feeling is. More discussion ensued and Dave Nieman explained that the aquifer is a mixture of sand and gravel, so it's just like a sponge, I mean if you have a sponge in your hand that was full of water and you turned it a little bit it would run out, am I not correct. Well your aquifer actually has a slight grade to it, and water can actually move to it, just like water flows down a river. Now if you stick a well here and start to draw water from it, you can actually alter that flow, because your inducing vacuum, and the wells start to draw water into that, and I think that's what's probably happened to that septic out there, it's close enough that it's drawing. Cause there wasn't any there when the wells were put in, it had zero for Nitrates and now it's at three. Your NCL, your Federal limit is 10, and I think it's just a matter of time before you have a major issue.

Gary Wilkening, asked, "you refer here in section one about Class V ejection wells, we don't have any of them do we?"

Dave Nieman, "Your Septic System is considered a Class V ejection well, because you have the potential from manufacturing facilities to have some kind of foreign object, mechanical to be disbursed into the ground and getting into the septic system, and this is where you are picking up the Nitrates. Right now we don't have mechanical contaminant, manufacturing as such, we've got the Nitrates. Nitrates come from one of two places, manufacturing fertilizer or human and animal waste. It's not rocket scientist to figure out were it's coming from. So I just ask the council to take action on this tonight."

ADJOURNMENT – Mayor Walhof

Mayor Walhof adjourned the Public Hearing at 7:08 p.m.

Bradley J. Walhof, Mayor

Attest: _____
Terri Bjorklund, Administrator