

MANDAN REMEDIATION TRUST (MRT)
March 4, 2014

Meeting: 245th Official Meeting
Date: March 4, 2014
Location: Mandan City Hall, 205 2nd Ave. NW
Time: 1:30 P.M.

The MRT meeting was called to order by Jim Neubauer. Dave Glatt and Fritz Schwindt were present; Scott Radig and Marilyn Mertz, North Dakota Department of Health, and Ellen Huber, city of Mandan were present. Also, Tim Kenyon, LBG, was present.

Minutes. Schwindt has reviewed February 4, 2014 minutes and provided amendments.

Motion. Schwindt moved to approve the February 4, 2014 minutes; second by Schwindt. All ayes. Motion carried.

BND Statement. The bank statement was acknowledged for the period ending January 31, 2014 which shows an ending balance of \$7,243,889.51. Payments have been paid for January.

Pay Request. Received a payment request from Underground Soaking Systems, Inc., which is a carryover from last month for Schwindt's time from Jan. 1, 2013 through December 31, 2013 for 69.5 hours for a total of \$6,950.

Motion. Glatt moved to approve the payment of \$6,950 to USSI; second by Neubauer. All ayes. Motion carried.

Pay Request. Received the invoice from city of Mandan for wastewater treatment charges of \$810.56 which was billed out on February 28, which would be for the January 1 through January 31, 2014 for wastewater treatment charges.

Motion. Motion by Schwindt to pay the city of Mandan \$810.56 for wastewater treatment charges; second by Glatt. All ayes. Motion carried.

Pay Request. Discussed LBG's invoice dated February 20, 2014 in the total amount of \$13,624.75.

Radig noted the billing is lower than recent months because there haven't been any sludge shipments up to Clean Harbors and there haven't been any major repairs. It was almost entirely for just operation and maintenance.

Motion. Schwindt moved to approve payment to LBG in the amount of \$13,624.75 for their February 20, 2014 invoice; second by Glatt. All ayes. Motion carried.

Note: Neubauer did get a request from Heidi Froelich with Brady Martz as her initial email indicated the State Auditor's Office wanted our 2012 Income Tax Return. He had signed a Consent to Disclose to Brady Martz to give that information to the State Auditor's Office. Actually, they came back and said now we didn't need your tax return, we need your 2012 audit so he has since emailed Ron Tolstad with the State the audit of 2012 for the MRT. That is taken care of.

Site Closure. Tim Kenyon provided the contract for 2014; several copies for signing and a signature page. What we did for 2014 because of closures and who knows what's going to happen. We billed it out as though we would run the system all year, and scaled back from that.

Well Closure. The Closure Report we sent you back in January I just wanted to see where you are all at with that. We counted up all the wells and we are looking at 322 to be abandoned; 55 to be retained after remediation...and provide monitoring wells. And there are five that we have to take a look at to see if they are still there-- just to find out what is going on and then decide on those spots. It's time to abandon them. The decisions—there is a decision that fits into that as well as we track their recoveries. We are still recovering methane. If we look at the graph (this is the graph I will be showing tonight) methane is still going up. The project wasn't a methane recovery project. If you ran this for another couple of decades you will still recover a lot of methane because it should be recovered as it is generated. That's one of the factors you all have to figure out or decide or incorporate into your decision. Relative to the product criteria that's what we use for the decision on these wells. The vast majority of those wells didn't have product in them. Remember when we installed the system we installed it on the perimeter of the historic occurrences of free-product on the safe side. Some of the wells never had product and they can certainly be gone. A number of the wells had product and that is gone. The reason there are 322 to be abandoned is because everybody in the world drilled wells here and that includes all those extra that we know of including monitoring wells.

Neubauer – There are 322 known holes in the ground.

Kenyon. To be abandoned. The process for abandonment for these wells—so far all the wells we have abandoned have been either dug up by construction kind of onesie, twosies kind of excavated out and gone. There are some exceptions to that. In order for the downtown, in order to do this right, what we really need to do is what should really be done is to excavate down along the well, cut the two pipes that come in and cap them. We will cap them and blind flange them on the other end. If it's a manifold that stays in operation to supply a couple of wells we will blind flange those as well. Blind flange is a cap on it. Put a cap on it so both ends are sealed. If it is where the manifold is gone, you will want the contractor to dig down to the point where it

comes in straight or at some level below grade—at least 4 feet. Maybe in some areas a little more depending on where it is at and cap all of those as well. If we just go into the well and pour the well full of stuff, a bunch of that stuff is going to run down that pipe and I'm not sure we will get a good well abandonment. A lot of these the vast majority of them are where the corners go across. And this is an abandonment that is going to have to last for the life of that pavement. I think we want to physically take the manholes out and do a structurally competent patch, if it is asphalt that is a little easier, but if it is in concrete. Some of those might even have to be pinned if they are in a traffic area. I would defer to a traffic engineer, but that is a possibility. I don't think in your town you want these patches popping up and turning into potholes, 322 potholes would be kind of rough. If possible, the greatest economy of effort would be to abandon all at once in one program throughout the summer.

Neubauer – So you are saying that here's my well, it should go down 4 feet at least, put a cap on it or plug it.

Kenyon – Go down below where the pipes come in because you are going to have to get down to that bottom pipe. That would be the best place to cut the well off. Pour the stuff in, put a cap on the well, put caps on the pipes, backfill it with compacted fill and do whatever traffic surface on the top that is necessary. South of Main Street, the very, very initial part we put in, those are 7 feet deep. You may want to reconsider that (laterals are all 7 feet deep). That was the first ones we put in. We put those in so they would be uninterrupted by frost. After that you all made a decision it would be OK to go to 4 feet. If we lose some in the winter time, we just wait it.... That hasn't happened that I know of.

Schwindt – I'm not aware of it.

Kenyon – So down there we may want to consider some other options like pumping things full of sandy mud or something. That expense—well the disruption to those parking lots would be pretty major. And that's not where the bulk of the system is at anyhow and it is not the bulk of the development is going to be. That property south of Main is now what is going to be for the reasonably foreseeable future. Certainly at the remediation systems those manifolds we will want to dig down the distance. Cut them off so when those properties are redeveloped they do not create an issue.

Schwindt – What about going into each of the manifold locations and pumping grout into each individual line?

Kenyon – You could do that. I think that would be really expensive.

Schwindt – Do you think that would be more expensive than going in and trying to dig and capping them all?

Kenyon – You still have to cap them off.

Schwindt – Even if you put grout in there?

Kenyon – You still have to dig down about three feet and cap them according to the North Dakota well regulations. You want to be down below any potential...level anyway.

Schwindt – I guess my concern with trying to dig each and every well that would be a lot of disruption downtown again.

Kenyon – There would be a lot of handwork.

Schwindt – That would be my concern in trying to do that. Whereas, if we went to the manifolds and just pumped grout back in the other way and we would have the hole where all the pipes are coming in and if you pump back in, you could fill the well and the pipes and everything else all at the same time.

Kenyon – The balance there is which one would be—they might both be the same. We have 22 miles of pipe. It is a lot of concrete.

Schwindt – We have some pipe out there that has been abandoned already, but it wouldn't receive that same kind of treatment.

Kenyon -- No, it wouldn't. Fortunately, those are kind of well they are up in the Library Square II. I noticed they are building a building on Collins and Main. That is nice. They are over in the Iverson territory.

Radig – The wells or the surface pipe will still have to be removed in most cases.

Schwindt – Yes, the surface pipe.

Radig – The manhole which is the large diameter is steel. The enclosure will have to be removed. The pipe underneath it for some distances will have to be removed anyway. I don't know if it is that much difference if you are going to cut out that manhole and then you go down 2 feet instead of 4 feet. Is that really much difference?

Kenyon – You are not going to want to just bust the manhole out. I think you will want to cut a square and at that point do some hand work with a spade to get down along side it. Especially, if you cut a whole row of wire on one side maybe about 6 or 8 inches.

Neubauer – Suck it out with a vac truck. I don't know if that would work.

Kenyon – We can make sure that all the lines are dry. We have vacuum on them.

Neubauer – I mean dig around them.

Kenyon – Oh, extract. A very good possibility.

Schwindt – Just to clarify. Did you say you were going to plug all the horizontal lines too or just cap them?

Kenyon – We will cap them. I don't see the need to fill them as long as you cap them. HVPE will be there for a long time. Granted it is a potential conduit to migration. Not anymore so than the trenches with the fill in them. That's a major conduit, if we just cap the pipes. I think that will work.

Schwindt – That was one of the concerns that Dave and Jeff had about the pipe as it acting as some kind of a conduit for some kind of water main break or something like that in the future. If you end up with water some place that you least expect it.

Neubauer – (Looking at a sketch.) Therefore, the reason to cap these two guys, dig down to here I think is what you are suggesting. Go all the way down here and cap these two that are coming in to prevent any infiltration into there and fill this and cap it.

Kenyon – You have to fill it according to State rules. It doesn't necessarily have to be capped.

Neubauer – Then you compact and pave over.

Kenyon – Compact and do whatever kind of replacement—paving is good.

Schwindt – That's what we have been doing so far with the ones that we have been abandoning.

Neubauer – We've been going down and capping these two.

Schwindt – Except for capping the two side pipes. We have not been doing that. The wells themselves have been filled with bentonite. That's what we have been paying Roger Schmitt for.

Kenyon – If this is done all at once in a rolling you can get them done I think in a month depending on if you have 50 guys or 5 guys.

Schwindt – Would they have to be fused, welded on HVPE or what would you cap them with?

Kenyon – I would just put a cap on, just a PVC-type cap. We would need the HDPE welded. That would be really spendy. Alternately, you jam a cap on it and push that screw through it.

Schwindt – I don't know if there is enough coupling there in order to get a PVC cap on there—glued on to the PVC.

Kenyon – You just cut the pipe before it goes into that transition, the end of the well because what it is would be a T right on the well. They cut it off outside that T.

Neubauer -- So if we abandon the 322 wells what does it leave us for manifolds out there?

Kenyon – All but two manifolds that will be completely removed. All the rest have either one well or two wells.

Neubauer – There is probably no way of connecting.

Kenyon – You would spend a lot of money doing that. I think one of the manifolds had only one well so we could connect that. The rest of them have more than one.

Neubauer – So we take that pipe and drive it into the one that goes into the main building.

Kenyon – I think that is only one manifold.

Glatt – So we continue to operate the other five or so?

Kenyon – Yeah.

Neubauer – Do I get rid of mine—outside of my window?

Glatt – You mentioned methane production. Do we anticipate any issues with methane? Or is it (lack of a better term) will it just build up in the subsurface or when we discontinue the vacuum there will be less air moving so there will be less generation?

Kenyon – What we looked at there was no methane issues before.

Radig – You did the building surveys at the beginning of the project and there really weren't any impacts at that point.

Kenyon – It should have been and if there wasn't any I don't anticipate that there will be any now. Especially with the new construction the way it is being done. There is always that possibility. As the Health Department that is one of the ideas to consider. If that turns into a big factor you can run the system like forever.

Radig – It would take a long time to get all that out of the soil.

Kenyon – Functionally, forever from a human life scale standpoint.

Glatt – I think initially we had it just built up.

Kenyon – Because those bugs are so efficient at doing what they do the production in some of the other ones we have done the production stays kind of steady until all the food source dries up and they die or they go dormant. Until then, they are very aggressive in seeking out that food supply.

Glatt – What is the groundwater table like?

Kenyon – It is bouncing up and down at about 1630, 1631; 1629 was our target.

Radig – 1629 was our goal. The base of the LEC is where it really becomes a problem, but it is a lot lower than that.

Glatt -- And our new drain tile and all that stuff.

Radig – Even if it did come up, it should be taken care of.

Kenyon – It did and it was. That thing produced water last spring. It produced water so they didn't have any issues. That's one other issue to consider in all of this is right now the system is providing vacuum for LEC. The well out there in the LEC lot has still got a little bit of product on the sidewalk, east lawn. When that one is gone I think that is the only one keeping that manifold going and when that one is gone LEC will have to get their own.

Glatt – We may want to look at what it takes to fix their system. Have they been using the basement in the LEC?

Schwindt – As far as I know they are.

Glatt – So it is back to functionality.

Neubauer – The same thing that they have always had down there.

Kenyon – It doesn't smell. I was down there last year. I came to town and walked through.

Neubauer – I haven't heard anyone say anything.

Kenyon – It kind of boils down to, is the Health Department going to allow those wells to be closed according to the criteria that we supplied in that document last month keeping in mind that once the monitor well is gone the product is also gone?

Radig – It's not there, if you don't look for it.

Glatt – At the end of the day, we are reaching our goals for the limits of the system as far as removing product?

Kenyon -- Correct.

Glatt – And that's where we are at. We have gone through two recharge cycles and if it continues to decrease. We have a few pockets that are very minimal of product.

Schwindt – Yes.

Glatt – So the question is, do we need to operate the rest of the system? From what I'm hearing is that for overall benefit we are not getting any additional benefit from those wells.

Radig – Other than removing the methane.

Kenyon – From the wells that we recommended to be abandoned, there is no additional benefit from running those. The wells that we recommended still be utilized, we have a couple feet of product or 1.8 feet in a couple of those.

Schwindt – What happens if we don't physically end all the wells right now? Say we agree with your recommendations in here and we shut those portions of the system down and we delay for another year removing any of the wells.

Kenyon – You just wouldn't operate them with a vacuum hose.

Schwindt – Technically, you could circulate what they do now, I think. You kind of rotate between the manifolds now on SVE, don't you?

Kenyon – Yes.

Glatt – Shut them down for a year.

Kenyon – You can only run the MPE on the wells where it is needed. The rest of them run as SVE and they kind of...but they are putting the most focus on the problematic area. We can run it just like you are running it now for another year.

Glatt – What I heard is turn the switch off....

Kenyon – What that would be is to go into programming and just take those wells out of the cycle.

Glatt – Just to see if there is anything in there from not running those anymore. And if there was, then you should be able to switch them back on. I kind of like that idea. We are abandoning those sites without abandoning. We are just shutting them off.

Kenyon – Your closure plan says you literally shut them down and wait for a while. The wells we looked at meet that criterion because they haven't had MPE running before.

Glatt – But they have a vacuum. I would propose not to even vacuum, just shut them off. Then they would be dormant. If something comes up in the year then do whatever.

Kenyon – Just so you are aware that when we do fire them back up again, we will get a ton of methane. Check those wells they will have 100 percent very likely.

Glatt – My concern is once we fill them in, ...there won't be any wells in there and we will be back to that point. After a year, we are not seeing any problems with buildings or concerns it gives me a better level of comfort that we would be able to permanently abandon them.

Schwindt – I guess for me, that's particularly beneficial not to abandon especially the stuff south of Main. That's where the biggest concentration of it was and all those kind of things so to go in and physically abandon a lot of that system gives me a little bit of a palpitation. I just am not sure that I would be ready to do that. I could agree, if we wanted to, try to do a little abandonment on some of the areas like right here by Jim's office and some of those things that we talked about last fall going and plugging those, but especially the stuff on the south of Main I feel really skittish about doing away with those. Overall, if we are looking at discontinuing operating a bunch of these I am OK with that. Let them sit for a year and see what happens.

Glatt – Would they be a conduit for methane?

Kenyon – If we shut them off, it can happen. A shutdown is almost a zero cause shutdown. You will just close the valve.

Glatt – Are any of those wells in basements? Would the wells themselves be a conduit?

Radig/Schwindt – They shouldn't be.

Glatt – It is just sealed now.

Kenyon – They are sealed, but we do have a vacuum on them so any....

Schwindt – If we were to continue to operate the system as you currently do where you just rotate the SVE periodically. Whatever it is every couple of weeks or couple of months and just keep doing that for another year, but we don't do a lot of the system monitoring that you guys are doing now for active operation would that make sense?

Kenyon – Sure. I think you shut them off, you don't monitor them. Except maybe one grand event in the spring of 2015. Are you saying to continue to monitor them or not?

Schwindt – No, not continue monitoring. These that they looked at already and they are saying they are good.

Glatt – Are you saying we would shut those down or continue to operate?

Schwindt – I'm saying it really doesn't hurt anything to continue to run SVE in those things on an intermittent basis kind of what they are doing now every couple weeks or every month.

Glatt – My viewpoint of that is I want to see LEC when it is all shut down. If anything shows up, continue to operate it, but not continue to operate to pull out the gas. I'm just saying shut it down, all sealed up, shut off the valve, and see what happens. If nothing shows up, no problems and then we can go in. For me it would give me a dry run for abandonment without actually abandoning.

Kenyon – And that's how it is written in that plan.

Glatt – I would like that.

Kenyon – If I would have your hat on that's what I would be doing. Shut it off and come back in spring of 2015 and do a monitoring event. If any product shows up then you can make that decision at that point.

Glatt – Once we abandon them there is no going back. We probably wouldn't see anything.

Kenyon – It's a very conservative approach. And we came in and recommended the abandonment recognizing that we didn't want to come in and recommend keeping it running and your guys tell us to keep it running as opposed to.

Neubauer – From a standpoint of 322 wells so you just turn the valve at the manifold related to that well and done or electronically? I think those are all on automatic.

Kenyon – Yes. When I say turn the valve off I don't mean going in there with an engineer and take it out of the system.

Neubauer – Or just push the button that says close the valve. Any concern if that is a methane coming up and your sitting in the manifold building?

Kenyon – All sealed. The pipes on the bottom side of the valve are going to have methane in them. No doubt about that. The question is how much?

Schwindt – I wouldn't think there would be a significant amount there.

Neubauer – Enough so all of a sudden I turn the valve on and the manifold outside and you are not going to hear shush.

Radig – It is not going to pressurize.

Kenyon – If a low pressure system comes through atmospheric it can have pressure in it.

Radig – A little, but not a lot.

Neubauer – It's not going to blow my window out.

Glatt – Right now the preferential pathway usually is through the manifold, to the wells in the manifold. Once you shut those off, it will find another preference. Like it was doing before, they went out and MDU would detect gas leaks and they were all methane. It will just find another way to relieve itself of the methane.

Kenyon – It will just defuse out. There is the odd chance that somebody's trap dries out in the basement and the plumbing is bad. There are all those kind of possibilities, but if you are guarding against those, you can run the system.

Glatt – Where we had the vast majority of contamination we had very few complaints.

Kenyon – Every once in a while Furniture First and now it's gone. Berube, but that has a fix, LEC has a fix.

Schwindt – If you remember last year Starion went and redid some things in their basement and cut out a chunk of the basement floor. There were tremendous odors underneath that slab.

Kenyon – There is always going to be anybody that digs a hole down to the water table in downtown Mandan is going to find stinky stuff in their basement. I'm guessing they are down far enough very close.

Schwindt – I think they were probably down around 9 feet or 10 feet deep.

Kenyon -- They are going to be close to very high historic water table numbers.

Glatt – Didn't they have an old dry cleaners there at one time?

Neubauer – That is what one of the PRPs was a long time ago. Potentially the responsible party was a dry cleaner, solvents and fluids.

Schwindt – There is still contaminated soil throughout the whole area here.

Glatt – There will be. And that's where the institutional controls come in. What we have now is a lot less free-product.

Neubauer – I assume the operating costs will go down significantly if we are shutting, in essence, 300 wells down. Is that fair to say?

Kenyon – It's not going to change. That's the map I'm going to show the City Council tonight.

Schwindt – I don't think it's going to change dramatically because it is running those things intermittently the way it is now. I don't know if it is going to be a significant change in operation.

Motion. Glatt would feel more comfortable just to shut them down to not physically abandon them, but mechanically abandon them for lack of a better term. Let them sit for a year and see what happens.

Discussion.

Schwindt – I will second that motion.

Glatt – Unless there are any speed bumps there, I just think that is prudent.

Schwindt – To me that provides us an opportunity to see what happens in the future without incurring a lot of operational costs or trying to minimize the operational costs. Plus if there are issues, we still maintain the integrity of the system so we can go back in and do something if we need to.

Glatt – I think that is the way we should go.

Neubauer – If we say turnoff now, do we do then a monitoring or an event a year from now and determine OK we can abandon these 322 wells and maybe there are more or a little less and then you start and say alright now I need to hire a contractor to come in and do this work. So we start putting out the bid spec for that so it would be work done in the spring and summer or fall of 2015, but we would need a date to determine OK here's—I don't know what kind of event the Health Department or whatever you say we shut these 322 down.

Radig – One large monitoring event that basically covers everything in the spring.

Kenyon -- Natural fluid levels, free-product.

Glatt – I would add I think it would be wise to do a few surveys in the nearest building. The risky part there is you pick up a lot of stuff that might not be related.

Kenyon – That’s always a bad problem you run into.

Glatt – You run into solvents and everything else they are using to clean.

Neubauer – Monitor in the summer when the windows and doors are open and not in the winter when everything is closed up.

Kenyon – As well as raising a whole bunch of questions about why are you here.

Neubauer -- From an operation standpoint, what then is really—you shut down 322, you have 55 that you want to continue to look at and 5 that you want to pay closer attention to. Schwindt said earlier are we still cycling through all of the 7 manifolds so now we have shut down completely 2 of those. I have 5 manifolds. I am going to cycle through those, but where I once had 10 wells or 15 wells coming in now we only have 6 or 3 wells that are being hit in that cycle. The pressure that you put on those wells, the vacuum, is that going to be more intense or is it just the same on each well going around?

Kenyon – We are already pulling a lot of vacuum so the vacuum won’t go up but it will go down. It is a cyclical force. What may happen and I don’t know what the impact will be is on the RTO. There is a possibility they could shut it off. There is a possibility on the other hand because of lower flows they may have to add some more gas. I don’t know how that is going to fall. I don’t think we will know until we do it.

Neubauer -- That’s a matter if we have to do a change in the air quality permit just off gas it.

Kenyon – Well, we’ve got the permit and it tells us how much. What concentration we can use in loading as well. We just have to do that and do the monitoring and see where it falls out. I can’t predict what that is going to do.

Schwindt – Do you guys have a comprehensive monitoring event scheduled in April or May of this year?

Kenyon – We weren’t doing a comprehensive event. We are just doing the wells where we need to.

Neubauer – Are you thinking establish the baseline and see what happens?

Schwindt – I guess it depends on what we want to do.

Glatt – See where we are today and see where we are at....

Schwindt – Then we would have another one in 2015.

Glatt – A snapshot now and a snapshot a year from now.

Kenyon – What we can do is maintain the status quo until a week before that event so you get a real snapshot of how it was when it was operating and then that will be sometime whenever it warms up April or May. And at the same time we will be able to assess those 5 wells that we don't know about to see if they are even there anymore.

Glatt – That makes some sense.

Schwindt – Is that something we should try to do this year?

Glatt – More data doesn't hurt.

Neubauer – Is that a big monetary? Is all this costing \$15 to \$20 grand a month to operate as it is today. We shut down 300. Is it going to save a bit on operating costs?

Kenyon – Instead of having Rusty Krikava and Jason Vanderlinden do it, just bring a couple of people up and have them do that. Those guys are already kind of busy and that way you could contemporaneous an event we could do in 3 or 4 days.

Schwindt – To me it doesn't make any difference if it takes a week or two to get it done versus two or three days. I don't think the groundwater is going to change that much.

Kenyon – Exactly, but we don't want to go over a month, our example. If Jason and Rusty do it, it will take that long. They both have full-time jobs.

Glatt – It makes some sense.

Neubauer – I guess we have a motion out there saying, in essence, shut it down for a year and then in addition to that do a base level monitoring this spring whenever it warms up enough to say this is where we are today. We are going to turn the key off, kind of walk away and come back in a year to see where we are at. If we are at the same, then we will start the next phase, which will be plugging and abandoning and things like that. Is that a fair?

Glatt – Yup.

Schwindt – Your monitoring events this year, are you planning on two or three?

Kenyon -- I think two.

Schwindt – We ask that you not do it in the winter time because of access to everything. We are OK with that. So you are looking at two: one in the spring and one in the fall?

Kenyon – This would replace one of them and then in the fall just under normal circumstances. Excuse me, the one in the fall would be very focused on just those wells that are still running.

Neubauer – We come back in a year next spring of 2015 and say now OK hit them all again.

Kenyon – The master event. I think we can do all this under the O&M budget. We have been consistently under it.

Motion. Glatt moved and second by Schwindt. All ayes. Motion carried.

Neubauer – I know the fire chief will ask tonight when can I get my bays? Is that one of the manifolds?

Kenyon – That is one of them that would still be going.

Neubauer – I mean even long-term.

Schwindt – I would guess a couple more years.

Kenyon – The wells that one is running doesn't currently have product, but they had product recently enough for a judgment call. I didn't think they came close enough to the criteria.

Neubauer – There were one or two wells that we kept on the sidewalk area and also right to the north of the new building going up, needless to say, because of product.

Kenyon – I try to be very conservative on which ones to abandon.

Neubauer – Really the message John Q. Public wants is one: We are going to do a measuring event this spring when it warms up a little bit with the intent that you do it as a baseline. The intent would be to shut down 95 percent maybe.

Kenyon – 322 out of 377.

Neubauer -- Whatever percent [85] that is. In essence, we thought 55 or 60 wells out there that we are continuing to do some more work on. We are going to hang tight

for a year and see how that goes. If it goes as significant or nothing is coming back into those wells, then we will plan to dismantle or do an event to plug them.

Kenyon – Do some system decommissioning.

Glatt – It is kind of a mechanical abandonment. Shut them down and if it all works out fine, it will be a physical abandonment.

Neubauer -- Mechanical abandonment now; physical abandonment would start the spring of 2015.

Kenyon – We shut those wells down so we can enter the one-year monitoring phase that is contemplated.

Neubauer – The building if you look long-term past. Long-term is next year at this time then we say OK we potentially still have—the Health Department is going to do a one-year monitoring event before any further wells then are scuttled.

Glatt – I think we will learn a lot from this go round and then we can take that under advisement of what we have learned from this and the next go round will be less time.

Neubauer – We anticipate some questions coming and saying OK. So if you do this for a year and you have nothing. You close up the 322 wells, but you still need the Remediation building, the two bigger substations and you need the manifold buildings out there yet at least for another couple of years.

Kenyon – A plausible scenario is we go through this year. We very heavily focus remediation on those problematic wells. In 2015, we shut those off and go a year and look at those in 2016.

Neubauer – And say OK, maybe I have some more manifolds. These wells are done. Maybe then I can start decommissioning some of the manifolds and then take a look at the other buildings.

Kenyon – And there is a possibility at that point that we are down to 1 well or 2 wells or 3 wells and you end up with a pickup truck with a suction thing in the back. And go back to that whole thing.

Neubauer – Back to where we started. Are you going to call Paul Weiss and ask him to come over.

Schwindt -- There was one well on the system over on the west end of Main down here, there was one I wasn't sure that we should abandon as of yet. I think it was 3108, but I'm not positive without going back through my notes. I think there was one

that showed stuff occasionally. You could include that one in some of your additional monitoring.

Kenyon – We sure could. We have specific recommendations and I keep looking in the spreadsheet.

Neubauer – MW 3108 is by the fountain area, south of there.

Schwindt – It's not listed in here because it was in the previous. I think that is the one I was concerned about because there was occasionally some data there. But if we are going to do a comprehensive system wide monitor event this spring that should include that one anyway. Right?

Kenyon – That's right next to 3212 that a little bit of product. I will put 3108 retain.

Schwindt -- Will your comprehensive monitoring event include the areas that we abandoned last fall that are still physically intact like the 3100s?

Kenyon – I would expect it would. Every available one, every monitor well.

Schwindt – Because some of those around the Iverson are gone.

Kenyon – They are gone completely. Every available monitoring. That brings me to a little longer range thing and maybe we all want to think about. Eventually, we will have equipment to surplus. Some of it is wearing out and being replaced, but some of it, the big chunks they are going to have salvage value. I don't know what process you all want to go through or have to go through to get rid of that stuff. It is something to think about.

Neubauer – The agreement was that we would have to follow the city's disposal rules as the city would be the beneficial owner of the system. We actually talked about this last week with our wastewater kids that we are doing potentially a new pretreatment building. These are some of the explosive, electrical stuff that could be utilized in that different facility. I know you are meeting with Steve or will chat with him today.

Kenyon – I just got into town.

Neubauer – Or do you have a market in your world?

Kenyon – There is a market, but it is not a constant demand. Someone has a big spill, they want to buy that stuff now. You buy used stuff and you end up replacing it anyway. Some of it is real specialized.

Jim asked me to do a briefing for the City Commission. What I planned on are those two maps and I have a table with numbers in it that shows recovery and the recovery graph and what we kind of talked about.

Neubauer – I think the questions will simply start after tonight. When are you going to turn loose some of the money?

Kenyon – How much is left, if you don't mind my asking?

Neubauer -- \$7.28.

Schwindt – My goal is to still have \$5 left.

Kenyon – That was part of my orientation behind this is to bring it to a close in an attempt to be responsible and professional. I just as soon run this thing full speed ahead.

Schwindt – Rusty and Jason probably have a different idea.

Kenyon – Captain Rusty was just a firefighter when we started.

Insurance. Glatt – I think after a year we shut down with that data saying there are no issues--give the insurance companies a better deal and hopefully a better rate that the risk is less. I think we still look at something like that.

Neubauer – So a long-term product.

Glatt – We were talking five or 10 years. I do think that year of mechanical shutdown with monitoring that is not significant it gives the underwriters some comfort level.

Neubauer – Have you seen that in the industry--insurance products?

Glatt – The longer the term.

Neubauer – For example, we have 60 wells out there. We don't want to operate them indefinitely, but we want a product we can purchase for the next five or 10 years where all transfer of liability to Fritz for "x" amount of dollars and in turn he takes it from there relatively cheap.

Kenyon – I don't know. They are all so specific.

Glatt – What that does for the State though is it gives that additional cushion out there. I think the longer you go without any issues, the less chance of having....

Neubauer – I guess that goes back to that question as far as is that information that any insurance company is looking for us to purchase insurance from they would need so we don't have to back and re-create the whole wheel. If we are spending money to save a penny the baseline monitoring event in the spring and we do another one in the spring of 2015 and then the fall of 2015 I start shopping for a product. This is the kind of stuff they would need so I don't have to go back and say I should have monitored this for the last.

Glatt – Is this something we go to the brokers in town and say this is what we are looking at doing. Who do we even talk to if we are doing the right thing or are we throwing money away?

Kenyon – About right now to sit down with those guys and say here is our plan. What additional things do you need that will impact the premium?

Glatt – We are hoping to give you a comfort level so this is what we think.

Kenyon – They may ask for a basement monitoring. They may ask for a sewer monitoring.

Glatt – Tell them what our plan is.

Neubauer – Do you have contacts in the Health Department?

Radig – We talked to the Risk Management Division--Mr. Olson. AON was the company. They were the broker.

Neubauer – Whatever we are doing now, it would be nice that we are in line and doing things that we need.

Kenyon – What we are doing now is in line with what they need. The question is what else do they think they want?

Schwindt – Maybe the only way they would be able to answer that is if they look at all the data we have. I don't know if anybody is going to do that without us actively buying.

Glatt – We are not going to buy until we know the prices. They are not going to give us a price until they know what is out there.

Radig – There will probably be an upfront sum whether you buy anything or not.

Glatt – There could be.

Kenyon – In some of our offices, that is what we do for the insurance companies like AIG. Just work the data and tell them what we think they need. In this case, it would be pretty much a conflict of interest.

Neubauer – But from your past experience, what we are doing is stuff that they need.

Glatt – Start of the closeout phase and beginning of.... Let's talk to Tag [Anderson].

Huber – Asked for a PDF copy of final presentation.

Neubauer – If LeeAnn is here and she wants them we would rather give her the electronic version rather than a copy.

Huber – We can present it through the actual PDF vs. the paper.

Schwindt – Jim, you should have that in PDF, right?

Neubauer -- If those are the same maps that you sent on.

Kenyon – You have it, too.

Neubauer – December 30.

Kenyon – Even if I have PDF they won't be able to see much of that anyway.

Neubauer – Anticipated questions for tonight might be alright so we go through spring monitoring event, close, shutdown and focus on the 60 wells we had questions on, come through and we will be back here a year from now telling you here is what happened with those 322 wells. Here is what our next plan is and if they ask at the end we really can't give them. In 2017, we plan to cut the cord and we will be done because it will all depend on the monitoring events that occur and how the system reacts to what is being done to it. The original plan was to be done in 5 to 7 to 10 years. We are sitting here now 9 years from when we entered the contract phase.

Kenyon -- We had about 3.5 years of construction and in some cases almost record high groundwater.

Neubauer -- Lots has been done. There is a little more to do.

Kenyon – It has been a tremendous amount of –2.-some million of hydrocarbons out of the subsurface.

Glatt -- Good benefits I see is that remediation, institutional controls are put in place, liability relief on the State level all that combined allowed for the development to

occur in downtown Mandan for a viable investment. We are hopeful to move out of here, but the State is cautious. We are not going to move before our time.

Other. Are there questions on the RTOs to see if we can discontinue operation on that too?

Kenyon – It will have to be about a month after we change the...,right? That thing is starting to age, too. It's been running a while. All of the things that are in that ... that has the most residual value.

Next Meeting. April 8, 2014 at 10:00 a.m.

Motion to Adjourn. Glatt moved to adjourn the meeting at 2:45 p.m.; second by Schwindt.

