

GARY KRAHMER

TAPE 9, Side 1

February 21, 1996

M.O'R.: This is Michael O'Rourke for the Oregon - excuse me - Washington County Historical Society today, and this is a continuation of the interview with Gary Krahmer. It's February 27th and today's interview is in his home.

I wanted to talk to you a little bit about what happened for you after the lawsuit and the dust settled and everything and just sort of how you spent your remaining years at USA and some of the things you've up to since. But before we get into that, let me just ask you one or two follow-up questions from our conversation last week.

One was that we talked a little bit about the violations that, you know, got you into Judge Hogan's courtroom, and if I remember correctly they numbered in the thousands, between 6- and 12,000 or something depending how you counted them ...

G.K.: Right.

M.O'R.: ... and what you considered a violation, and you explained to me that at least part of the problem was the way that the regulations were written, that they didn't account for the higher stream flows, higher storm drain contribution during winter time, and that that made it more difficult for any sewage plant, regardless how modern a design it was, to cope with just because of capacity problems. What I was a little confused about, though, was that it seemed like you were saying that you had argued somewhat in vain to get the regulations changed and then later on I think you

said that the regulations were changed. So I was wondering, you know, if you could clarify that, and also just let me know whether or not USA today is still experiencing a pattern of violations as a result of these kinds of problems.

G.K.: Sure. We were actually concerned about the causes and conditions of our waste discharge permit as opposed to concerns about the regulations *per se*. And we recognized, as everybody else in the state of Oregon who operate under a waste discharge permit, that there were clauses and conditions in the permits that were unachievable during heavy rain periods and high flow periods where we have infiltration of storm water into the sanitary sewer overloading the treatment plant and causing it to violate certain conditions in the permit. And in working with the DEQ staff who oversaw the conformance with the permits, at that time they were lenient in recognizing this and took no action against anybody so far as I recall in the state of Oregon for these so-called violations. We used to quite frankly call them "excedences" of the permits - terminology, you know, being what it is.

But because the State took no action and also these monitoring reports would go to the Environmental Protection Agency and they took no action to cause any of the municipalities to either change the way they operate in order to meet all the conditions - we all felt reasonable comfortable with those who were overseeing the permits, being the State and the EPA. So we never worried about these various clauses in the permits because nobody was doing anything to chastise us or penalize us for those intermittent excedences that occurred when we had those heavy rain periods.

That, however, resulted in these thousands of so-called violations over a ten-year period, and it was that that brought the lawsuit on and it also resulted in the municipalities in the state of Oregon to negotiate with the State and EPA to change the permits in order to allow certain exceedences during these wet-weather periods. And all of those changes have been successfully made for all of the municipalities in the state of Oregon. And currently insofar as I know all treatment plants, for the most part, are meeting their permit requirements - not necessarily because they're doing a better job of treating the wastewater, but because the conditions set forth in the permit allow some flexibility which we didn't have previously.

M.O'R.: So these changes that were made, then, in the permits did allow USA specifically to operate within your permit all the time, then?

G.K.: Yes. That is correct. And insofar as we know USA is continuing to operate within its permits all the time today.

M.O'R.: Now, was this worked out with DEQ, then?

G.K.: Yes. As a matter of fact, it was worked out with DEQ, and it was also worked out with the plaintiffs in the lawsuit, so it was a three-party approach to rewriting these permits.

M.O'R.: Okay.

G.K.: See, the plaintiffs also recognized that the sewer systems, municipal sewer systems, and probably private sewer systems, all have certain leakage and that when you have so much rainfall and so much leakage that those treatment plants can't meet strict conditions, so there's some flexibility provided there to allow some exceedences.

M.O'R.: And then - let's see - I had another question, too, that was following up on that, but it's escaped me now momentarily.

But this was State DEQ that did this? Do you know if there had been any ripples outside the state on this front? Because apparently EPA also had - was letting this slide by without taking action either by changing the permits or by ...

G.K.: That is correct. Yes, this actually became a national concern and issue, and I know that for a fact because we received a number of phone calls from municipalities throughout the United States after they became aware of the lawsuit and the reason for the lawsuit, and a lot of permits - I suspect most all the waste discharge permits in the United States have been modified to allow for the flexibility, as I mentioned.

M.O'R.: It's interesting that it's the high water that causes the sewage plant to not make the permit, because it almost intuitively seems like it ought to be the other way around, if you get all this good, clean water coming out of the sky it should be easier.

G.K.: Yeah. Unfortunately, it's not, because you just simply get too much flow and you overload the treatment facility so that it can't meet the requirements. In turn when you have the high water you have a large amount of dilution capacity within the receiving streams so the environmental impact is minimal if there's any at all during those periods. It's in the summertime when you want high-level treatment because the receiving stream has such a small amount of water you don't want to adversely impact that water, which could damage aquatic life, of course.

M.O'R.: Well, then the other - of course maybe almost the central result of the lawsuit was the imposition of these much more stringent phosphorus requirements which previous to this time you weren't having to meet such a tough standard, anyway, for phosphorus.

G.K.: Right.

M.O'R.: And I believe we talked a little bit about this. You said that initially that people thought it might not even be possible to make it, and then there were some engineering opinions that well, maybe you could do it, and I think Jack Smith was one of those that had said that. I'm just wondering now after the lawsuit was finished and you were faced with actually having to go ahead and make some capital investments and try to meet this new standard for phosphorus, how did that go?

G.K.: Well, initially we were advised by our consulting engineers that this was going to be extremely difficult, if not impossible. And of course that caused us great concern because we were looking at making an investment between 150 and \$200 million at our various treatment facilities in order to provide those facilities necessary for removal of phosphorus and ammonium nitrogen. And it was very discomfoting to think that we were going to make those investments and then still not be able to meet our permit requirements.

We worked with the State, again the DEQ, in that regard and there was agreement that we would go ahead and build these facilities and that if it was proven through operation that we could not meet those permit requirements then the DEQ would come back and renegotiate the permit requirements to provide a standard that they

felt and we felt that we could meet. So we had that out, if you will, available to us.

Fortunately after the facilities were constructed and we put them in operation we found that we could actually exceed the permit requirement by quite a lot, and of course that saved us from the necessity to go back to DEQ and try to change the permit requirements. We were very happy about that, of course, at that point in time. But it was a nervous time because of the huge investment we were making without certainty that we were going to be able to accomplish the goal.

M.O'R.: Well, this new capital equipment, then, this was installed, I assume, in the late 80's or ...

G.K.: Yes. It - there were certain deadlines set in our consent decree which was a result of our court activities, and it set certain deadlines that we had to meet in terms of designing the facilities, building the facilities and putting them into operation, and it was in the late 80's that most of the construction activity occurred. And as I recall we put those into operation very late 80's or early 1990's.

M.O'R.: And remind me again, what year was it that you retired from USA?

G.K.: I retired from USA on July 1, 1994.

M.O'R.: Oh, okay. So you were around for a little while after all of the dust settled from the lawsuit?

G.K.: Oh, yes. Matter of fact, the major contracts were approved during my tenure at USA for these various facilities. We had to - first we had to develop a facility plan, which is a plan that identifies this road you're going to go down, what you're

going to construct, where you're going to develop these facilities, provided estimated costs, provided time lines. So we went ahead and did this facility plan. We actually engaged three consulting firms to work on that, and that thing cost just a little over a million dollars, just the plan.

Then once you finish that then you proceed to design of the facilities, and of course we had a variety of engineering firms working for us in designing these various facilities. And then of course you go to bid and you award contract, and then you get on with the construction. And all that, of course, takes time. But we were able to do this as I recall from the day the consent decree was approved we had most of the facilities on line and operating in five years, which we thought was a pretty good accomplishment. Quite frankly an organization the size of USA at that time could only manage about \$40 million of construction during any one calendar year. Going beyond that you just lose control, and we felt pretty good about being able to put all this together in that period of time.

M.O'R.: Now, were there any other major occurrences at USA that you had to deal with before you managed to wash your hands of the operation, so to speak?

G.K.: Well, there were some issues associated with some pipelines that we wanted to construct that became involved with land use issues. As an example, we wanted to construct a pipeline down what is known as Butternut Creek. Part of that creek is outside the boundaries of the urban growth boundary and would have traveled through rural or farmland areas, and there was great concern by certain citizen groups that if we constructed that line that would

give the land use planners, if you will, a tool to expand the urban growth boundary. We struggled with that particular issue for at least a year, having numerous meetings, night meetings, meetings with the board of county commissioners, trying to give them all the information they needed to make a decision.

Ultimately they decided rather than build this sewer line outside the urban growth boundary we built a large pumping station and a pressure line out of the pump station to the Rock Creek facility, which ended up being about four miles of pipeline and a pumping station the size of an average home, which is in operation right now. And it looks very nice, of course, but it - the reason we wanted to not build the pump station is because that requires energy, and it was a cost factor. That was probably the other large issue that I had to deal with other than of course the big construction program during that time.

M.O'R.: And so you wound up - the pump station was necessary to keep the line inside the urban growth boundary?

G.K.: That's correct. Yes.

M.O'R.: So it was built - so from a strictly engineering point of view, it would have been better to just built it along the creek, then?

G.K.: Yes, it would have. Then we could have used gravity to move the wastewater as opposed to pumping.

M.O'R.: So it was for political reasons you decided to keep it inside the boundary?

G.K.: That's absolutely correct. Right.

M.O'R.: So the trade-off was the politics versus lower cost and probably greater reliability?



G.K.: Right. Sure. Because if you have a power outage, you know, then you have an overflow, just unavoidable, although USA does have in its war chest, if I could use the term, several generators that are mobile, so if they experience power outages at various pump stations they can move a portable generator in and operate the pumps. But you simply can't afford to have the number of generators that you would need to operate all of these pump stations - they probably have in excess of 40 pump stations, and it's just not financially practical to have those generators sitting in reserve because they're quite expensive. But they do have for the major pump stations generators.

M.O'R.: Well, that's interesting. So apparently the decision was that there was some real cause to worry about the land use planners possibly extending the boundary, then?

G.K.: Apparently so, although there had been a change on the board of commissioners during this event, and some different thinking politicians came on board, politicians who were very concerned about the urban growth boundary being expanded, and they carried the vote, shall we say, to not build the line outside the urban growth boundary.

M.O'R.: Okay. So it could have gone another way?

G.K.: Sure. When it first became an issue, that board of county commissioners supported construction of the line outside the urban growth boundary. But there was a change in commissioners, and that switched the vote the other way.

M.O'R.: So what were the critical changes in terms of the board's makeup?

G.K.: Two new board members came on during that time, and they were pro-contained growth thinking individuals, contain it within the urban growth boundary and don't do anything outside the urban growth boundary in terms of urban services that could enhance the opportunity to possibly expand the boundary.

M.O'R.: And who were the ones that came on?

G.K.: Linda Peters, who is now chairperson of the board, and - I want to say Kathy Christie, but I'm not positive.

M.O'R.: Oh, yeah. I think that's right. Seems to me that's - I've got her name here somewhere.

One of the reasons I was interested in the specific personalities here was that I was going to ask you about - you mentioned a couple of people's names from the County Commission last time we talked.

G.K.: Yes.

M.O'R.: I don't remember exactly in what connection now, but I was going to ask you - one was - is it Joe Meek?

G.K.: Oh, John Meek.

M.O'R.: John Meek.

G.K.: Yes, John. Right.

M.O'R.: Now, he's got a reputation for being a colorful character, I guess.

G.K.: Yes, he is. Yes. I've experienced that a time or two. Right.

M.O'R.: How would you describe him?

G.K.: Well, John's an interesting individual. Very interesting in politics. Of course was a County Commissioner and was a

State Representative and now currently at least has indicated his interest in running against Congressman Furse for Congress.

But John - the interesting part about John that I observed during my eight years working with him was his history in the Tualatin Valley.

[interruption]

John's ancestors were one of the first people to move into the Tualatin Valley, and John has all of the information regarding the history of his family and his kinfolk back then, and oftentimes John would actually dress up in his frontier-type clothing, leather clothing and so forth, and he has one of these guns that you put the powder in and the ball, and oftentimes he would do that. He's actually done a slide show on the history of his family in the valley, and it's really quite interesting. That's the thing I remember most about John is his talking about the history of the valley.

M.O'R.: Well, I heard a little bit about this gun from somebody else. I believe the story that I heard was that there was a tour that was on the Tualatin.

G.K.: Well, I'd just as well share that, unless you ...

M.O'R.: I didn't get a very good description of it.

G.K.: Oh, you didn't? Well, okay. I can share that, certainly.

Shortly after the - actually before the lawsuit was filed, the USA wanted to show its interest in the Tualatin River, thinking people thought we didn't care about the river. So the public relations person for USA at that time arranged for a canoe trip down the river, and arranged to have all the canoes delivered to a

point in the lower river, and all of County Commissioners were invited, and folks who we felt were friends of USA. Mike Houck was invited and did go, and there were probably ten canoes, 20 people, something like that.

John Meek showed up in his frontier outfit along with his rifle. And we were standing on the riverbank and Mike Houck was explaining what wildlife we could expect to see, and Roy Rogers was also there. Roy showed an interest in this rifle that John had. So they were off maybe 20, 30 feet from where Mike had us gathered around telling us about what we might expect to see in terms of wildlife, and all of a sudden this gun goes off. Well, come to find out Commissioner Rogers was so interested in it, John said, "Well, shoot it." And he raised it up and he pulled the hammer back and doggone if he didn't have it loaded. [laughs] Big, loud boom! Just shocked everybody.

M.O'R.: Probably scared away all those birds Mike was telling about then.

G.K.: Just prior to the gun going off, Mike had heard this bird - I think it was a woodpecker of some sort, and he said, "Hear that bird?" and Boom! Of course the woodpecker took off. But that's what occurred there.

Then we went on with the float trip down the river, and it was very nice. That's a real pleasant river to canoe in. And we saw a variety of wildlife: blue herons and ducks and a whole variety of things.

And then we got to the City of Tualatin park to take the canoes out of the river, and lo and behold, who shows up but Jack Churchill, and the television - we had two TV channels show up, and

it was rather interesting, to say the least. We didn't actually get into an argument, but we debated the condition of the river at that point.

M.O'R.: Oh, really? You and Jack?

G.K.: Yeah.

M.O'R.: On camera?

G.K.: On camera, yeah.

M.O'R.: Which is probably what he had hoped would happen?

G.K.: Yeah. Exactly.

M.O'R.: But you were willing to get into this debate with him?

G.K.: Oh, sure. Well, it's hard to say, "No, I won't talk on camera."

M.O'R.: Yeah, that makes you look bad, too.

G.K.: Exactly. That was an interesting event, shall we say. So you had heard about that previously.

M.O'R.: I hadn't heard about Jack Churchill meeting you. That's a new wrinkle here.

G.K.: That was the most outstanding event that I can recall in that whole situation.

M.O'R.: So what was the nature of the debate that you and Jack were having on that occasion?

G.K.: Oh, I suppose more related to his perception and view of the quality of the water in the river versus mine, where I was probably coming from history more so than he was, where I had seen the river in much, much worse condition during my youth and later on and how much better it was at that time.

M.O'R.: Right.

G.K.: But of course the concern over phosphorus and ammonia nitrogen was not a big issue prior to that time, and I think that's where he was coming from more so than anywhere else is this food source for algae, and I wasn't really into that issue to the extent that he was, of course. So that went on for about 15 minutes, as I remember it, and then everybody left.

M.O'R.: Did you see yourself on the evening news?

G.K.: Oh, yes. Yeah. That happened more than once. Yeah, we had quite a number of interviews from local TV channels, Channels 2, 4, 6 or whatever - 8. During those early times after the lawsuit was filed before it was settled several interviews from TV channels wanting to know what we were going to do and this sort of stuff, you know.

[end of side one]

GARY KRAHMER

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G.K.: If I could continue on with that ...

M.O'R.: Sure. Go ahead.

G.K.: We also during those times made a number of presentations to various civic organizations such as chamber of commerces and what-have-you explaining the situation so people could understand what we were doing and why their sewer bill was going to increase significantly.

I was going to say those were probably - during those times the TV coverage, all the presentations we had to make, the lawsuit, were probably without the question the most stressful times I spent at USA. Once we got over that and we got going on making the improvements, those were exciting times and not horribly stressful but really exciting times because of what we were able to accomplish.

M.O'R.: Now, I think you have already described a little bit your relationship with the Board of Commissioners here in Washington County, and it sounded like it was a fairly amicable relationship most of the time.

G.K.: Yeah, that's a fair term. Mm-hmm.

M.O'R.: During these tumultuous times were you able to keep the Board satisfied that USA was doing its - the best it could to tread through this mine field?

G.K.: Yes, I feel very certain that we were able to do that. They demonstrated their satisfaction through strong support for the

various programs in the capital improvement plans that were presented to them, and I continuously had a good working relationship with all the board members during those times, and I was very thankful for that, of course, but certainly there could have been some pretty difficult times had there been some lack of support on behalf of any board member.

M.O'R.: And there was one other person I wanted to ask you just a little bit about, too, and that was Stan Leseur at USA, because I know he was, for instance, in Judge Hogan's courtroom with the rest of you, and it sounds like he was definitely involved in kind of implementing the things that USA did to meet the challenge of the 80's. So can you tell me a little bit just about what sort of person he is and what he was like when confronted with all these problems and ...

G.K.: Yeah. Stan is a very, very honest down-to-earth individual. He started his career in wastewater treatment in California, and then moved to Utah, and I'm not sure exactly where in Utah, but continued his involvement in the business, also attended college, has three years of engineering out of some college, which I don't remember which one. But a good background in terms of his knowledge of wastewater treatment.

And yes, he was involved intimately in the settlement of the lawsuit, and the reason for that was because I relied on him to assure me that we could do what was specified of us through the consent decree. So he was definitely closely involved, still at USA today, serving as Assistant General Manager now, but still very much involved in treatment plant processes. Good person.



M.O'R.: And what was his take on these new requirements that you had to make? Did he feel positive about meeting the challenge or was he a little nervous about it?

G.K.: He certainly left me with the impression that he felt reasonably positive that we could do this, given the fact that he spent more time researching what others had done, not only in laboratory-type research but actual research of this one facility that I mentioned back in New York that was actually doing this.

M.O'R.: Oh, that's right. We did talk a little bit about this before.

G.K.: Yes. He spent time with those folks and was reasonably comfortable after spending that time that we could do this. I think the one thing that concerned him more than anything else was the time line: Can we do these things within the time allotted? And I felt reasonably comfortable that we could. However, if - in my view if we saw for reasons unbeknownst to us at the time that we were laying out this program that we couldn't meet certain deadlines, I was not apprehensive about going to back to the DEQ and the Environmental Quality Commission and asking for time extensions. Fortunately we never had to do that, but I was comfortable in doing that if we had to.

M.O'R.: So looking back on it all now - I think I already know the answer to this question because you touched on it several times in the interview - but in retrospect do you think - what do you think about all of this emphasis on water quality and so forth in the Tualatin? Has it turned out to be as good a thing as the environmentalists claimed it would be, and has it been difficult in

term of the finances in terms of what people have to pay for their sewage rates and all the rest of it?

G.K.: Short-term it was difficult, but long-term I'm totally convinced that people will look back on this and say what a wonderful thing was done at that time, because based on our futurizing, if you will, it appears to us as though USA will have met its long-term responsibilities much sooner than many, many other cities and municipalities in the United States. Therefore the cost to the customers in the long term is going to be less, plus we're going to have an improved Tualatin River much earlier than many of the other organizations throughout the nation that will be required to eventually do this.

So I feel really good about what actually occurred. I'm sorry it took a lawsuit to cause that, but that's not all that uncommon, quite frankly. You see that across the nation pretty consistently. But in the long term the river quality has improved significantly.

I'm not totally satisfied with the non-point sources and the controls that need to be implemented there: storm water runoff, agricultural activities. More work needs to be done there in order to further improve the quality of the river, and that will come eventually. Hopefully it won't take another lawsuit, but you never know. But I'm certainly very pleased with what USA was able to accomplish.

M.O'R.: You retired in '94. Was that - you were 65 then?

G.K.: No. No. I was 60 - actually 59.

M.O'R.: Okay. So you took a somewhat early retirement?

G.K.: Well, no, actually under the State public employees, we were under the State retirement program, and under that program an

individual can retire at age 58 without penalty. And initially I had planned to retire in January of 1994. However, the board asked me to stay on for the additional six months because that was the time line with certain conditions in our permits, and they wanted me to stay on through those particular time lines, and I agreed to do that. So I was actually 59- $\frac{1}{2}$  when I retired.

M.O'R.: And had the board already set up a search for your replacement? How was the transition?

G.K.: Well, I had hired who is now the current General Manager of USA from the City of Portland about four years prior to my retiring, and I did that openly with him being in mind, in my mind at least, to succeed me at USA.

The board wasn't totally convinced that he was the individual they wanted, the board at that time. So they did a national search and went through about a four-month period, as I recall, before they agreed that Mr. Gaffey would be the General Manager of USA. So it took them a while to agree with what I had told them originally, of course. But on the other hand, when you have a position of that nature and that responsibility, I think it's appropriate to try to get the very best candidate possible, be it throughout the United States. So it's appropriate, I think, to go through the process of seeking applicants from the nation in hopes that somebody might show up better than what you think you've got.

So anyway -.

M.O'R.: When you hired Bill Gaffey into that position that would possibly have been one that he could succeed you from, how did you make that decision? Did he come - had you known him already for some time before that or ...

G.K.: Yes. Bill had been with the City of Portland for approximately 20 years, and I became acquainted with him through the business organizations that we belong to. And we had hundreds of applicants for the position that I was hiring him for, which was the director of the planning and engineering department for USA. And Bill was one of the applicants of many hundreds, and having known him previously and his work ethic and work history, he became one of the finalists for that position. And when he and I negotiated his coming to USA, I shared with him at that time that I felt that he certainly was well qualified to become General Manager while I retired. So he was aware of my goal, anyway, that he would be one of the serious candidates for the position.

M.O'R.: And he was doing what kind of work for the City of Portland?

G.K.: He was with the Bureau of Environmental Services, work associated with sewer and sewer-related projects. And he is an engineer by background, but he's rapidly becoming an administrator. But actually he's done a lot of management work. Even at Portland he was pretty much a manager as opposed to doing engineering-type work.

M.O'R.: And how would you describe him, just his personality? What kind of person is Bill Gaffey?

G.K.: He works harder than anybody I have ever met to try to negotiate as opposed to fighting, if you will. He works very, very hard to bring parties together to settlement as opposed to butting heads, if you will. And he spends endless hours at his work. When I was there and he was there it was not uncommon to see Bill in the office at nine o'clock at night - and I'm not sure this is good,

but Bill spent whatever time was necessary in order to get the job done. I used Bill a lot to negotiate permit conditions with DEQ, negotiate property acquisitions that we needed to acquire, a lot of things that resulted in agreements with different parties. He's very good at that.

M.O'R.: And was it this style, was that one of the reasons that you thought he might make a good successor to yourself?

G.K.: Well, frankly I didn't realize that he was such a good negotiator when I hired him, and I was more interested in his engineering and planning background, given his work at Portland, but that came as an added asset, as I quickly found out once he came to USA.

M.O'R.: And so then you retired in '94.

G.K.: Right.

M.O'R.: How did that suit you after so many years in the business?

G.K.: Oh, I was ready to retire. There was a change - another change, as I recall, of board coming in January of '95 - not that that would have been difficult, but I just felt that I had educated enough County Commissioners to that point in time that I was ready to go. No, I was looking forward to retirement, and I'm glad I retired. They're having fun up there, still, which is good, but I'm glad I retired.

M.O'R.: What do you mean "they're having fun up there"?

G.K.: Well, they're having fun at USA.

M.O'R.: I've heard some stories, actually from - heard a story from a completed unrelated source, not any kind of Tualatin research at all. It came up, as a matter of fact, during a ski

vacation, but somebody else who worked for Washington County, I managed to run across this person on this trip, and he said he remembered one of the meetings that had taken place in I guess the County Services Building there or something where you came into the meeting room with a number of tee shirts that said, "Your shit is our bread and butter," or something like that.

G.K.: [laughs] Yes. Yes. We've always - that's always been a statement in the business. [laughs] "It may be shit to you, but it's my bread and butter." Yes. Right.

M.O'R.: I thought then, "Well, this is an organization with a sense of humor."

G.K.: USA is facing some real challenges; there's no question about that. And I don't know if you want me to talk about that, but it could have an impact on the river if they are unable to meet this challenge, and that is the high-tech industries that are here and the new ones that are coming.

The industrial wastewater from those facilities contains a lot of dissolved salts, known in the business as Total Dissolved Solids, and that is one thing that you cannot remove through normal treatment processes in a wastewater treatment plants. Matter of fact, you would probably have to put in reverse osmosis, which is a horribly expensive venture, in order to remove those salts.

There are certain standards for Total Dissolved Salts set for the Tualatin River, and at times - currently at times it does exceed those numbers. It's not considered a significant adverse environmental issue, so DEQ has not done a lot about addressing that. But there will come a time, I'm convinced, and the folks at USA are struggling with this right now, where they're going to have

to figure out how to deal with those industrial wastes from those electronic firms. And I know they're currently looking at various alternatives to address that and make sure that the dissolved solids going into the Tualatin River do not exceed the standards. But that's a real challenge that they're facing.

M.O'R.: I'm just - that actually opens up a subject that we haven't talked about, I think, and that is - well, I've actually even heard a little bit of criticism on this point, that some people have expressed the idea that USA has been maybe perhaps almost too willing to shoulder the burden for new contaminants or new sources of sewage and that then sort of removes the burden from the shoulders of whoever is actually causing the problem.

G.K.: Right.

M.O'R.: And I'm just wondering about that issue. How do you decide whose responsibility it is to take care of these?

G.K.: Right. At least the theory is that an industry has some options, and that is that they can put in what is called pre-treatment, where they actually build a treatment plant at the industrial site, remove certain contaminants from the water, and then discharge it to the public sewer, and pay, then, a certain amount of money to the public corporation that receives the sewage. Or in many cases - although let me back up and say that pretreatment is required for almost any toxic material. They must remove that before they discharge to the public sewer. But take phosphorus, for an example. An industry can discharge large amounts of phosphorus and pay the bill, or they can put in pre-treatment and discharge less phosphorus and pay a lesser bill. That's the theory behind the dealings, if you will, with certain industries. Now,

whether that works out practically is difficult to say, but that's the idea.

Now, in terms of these dissolved salts, if we could talk about that for a moment, given the difficulty and the horrible expense to remove those salts, there's other alternatives perhaps that could be looked at. One would be to isolate that water, keep it separate from all the other waters coming out of the facility and then perhaps contain it in a lagoon and then dry it up at certain times of the year in order to remove the salt that's formed. How practical that is, I don't know.

Another one would be to put in a separate piping system and take that water to a large water body, such as the Columbia River, where you get vast dilution of those waters. I strongly suspect after talking with some folks that that would be an acceptable means of dealing with those salts. Obviously you're talking about a fair amount of money to construct a pipeline from the Tualatin Valley to the Columbia River, but on the other hand, it probably would be less costly than building reverse osmosis facilities.

Whether the industry can find other means to produce their product, I'm not sure on that, but that may be a possibility, too, that they could have different manufacturing processes that would reduce the amount of salts that come from their facilities. So it's a real challenge.

But I can understand why people feel that USA may be going overboard to accommodate industry, and I can tell you that USA's facility plans take into account the growth within the urban growth boundary and the type of growth that is expected based on land use zoning and planning, and provides facilities to accommodate what is



expected from those various growth elements. Again, I can't say for sure that in practical terms that industries are being treated equally fair as residential properties or commercial properties. We spent money on consultants to come up with cost figures to apply to the various users, and the consultants would tell you, "Yes, these are fair and equitable fees and charges." So you know, it's always going to be a debate whether it's really fair, and is residential subsidizing industry or vice versa: those will always be fair arguments.

M.O'R.: I've heard you mention a couple of times that you're involved now with the City of Portland.

G.K.: Yes.

M.O'R.: I'm just wondering - maybe I'll just throw the question out more generally.

G.K.: Sure.

M.O'R.: In what ways do you spend your time now that you don't have to go in to USA every morning?

G.K.: Right. Right. Well, certainly I am involved in a consulting way, if you will, with the City of Portland, and I serve as a technical review consultant for them. Fortunately that doesn't take a lot of time, eight to ten hours a month. And that - I like that because that allows me to continue to be involved in the business and keep up with what's going on in the business.

I also like to fish, and I do as much of that as I can. I like playing golf, and I do as much of that as I can. And of course I like to garden; even though I have this small lot, I still do a little bit of gardening.

M.O'R.: I can see the plot back there.

G.K.: And I'm also involved with the Hillsboro Chamber of Commerce, serving on two committees there. One of them of interest is the Jackson Bottom steering committee, which is intertwined wildlife refuge / water quality facility, and that's been very exciting and a lot of fun, and there again I get to continue to be involved in the business because of its relationship with water quality.

Also I have - as I indicated last time my brother and I did float part of the Tualatin River in a boat here last year, and we intend to ultimately float the entire river, looking at the quality of the river and also looking for agricultural activities that could be improved to not cause damage to the river.

We also like to travel, and we did - we are going to go to Europe here in about two months for about 18 days. And of course we love to go to Hawaii when it's winter time here, you know.

M.O'R.: Sounds like you find things to occupy yourself.

G.K.: Yeah, pretty much so.

M.O'R.: I'm just curious: what precisely are you doing for the City of Portland?

G.K.: It's called - I'm serving on a three-person committee which is called a Technical Review Committee. And what we do is work with the City staff and the consulting engineers that they have retained to design and construct various projects, to give advice and make sure that the designers of the projects have looked at everything in relationship to that project to be sure that when the City ends up with its huge program that they will have a very workable project, if you will. And we are continuously questioning the consultants: Did you look at this? Did you look at this?

And it consists of three old guys, if you will, myself included, who have been in the business for a long, long time. I'm there primarily to look at facilities associated with operation, because I have operating background and have some sense of what operators need in terms of facilities in order to effectively and efficiently operate them. Another individual is a construction - has a construction background, so he's very familiar with big project construction, and the third person is an engineer who also has a lot of construction background and design background, and that's kind of what we're doing for the City.

M.O'R.: Okay. What are the names of the two other individuals?

G.K.: I have it right in the next room. [laughs]

M.O'R.: We can clarify that in the written record.

Well, okay. I could probably think of a couple more things to ask you here, but we're almost at the end of this tape, and I think that we've done a pretty good job of covering the history here. I want to thank you very much for giving so much of your time to this, and I think it's been a very successful interview.

G.K.: It's been my pleasure, and I have enjoyed it very much.

[end of tape]