GARY KRAHMER

TAPE 4, Side 1

December 20, 1995

M.O'R.: ... Gary Krahmer on - December the 20th, I guess we decided it was - 1995.

So it would plug up?

G.K.: Yes. This trickling filter would plug up because of the massive growth of bacteria, and my poor guys working at the treatment plant had to go out there in those trickling filters with these long iron bars and core down through in order to try to create openings in the filter and get the water to flow through. I saw that filter one time had at least a foot or a foot-and-a-half of water on top of the rock media simply because it wouldn't flow through it was so plugged up with these bacteria.

M.O'R.: Oh, so you had like - you're approaching two acrefeet of water on top of that?

G.K.: Yes. On top of that filter, right. And nowhere to go with what was coming in, you know, except through the filter.

M.O'R.: When you would do this coring operation, the water would hopefully drain through, but would it then be adequately slowed down and captured by the bacteria, or would it ...

G.K.: No. The water that flowed through - the bacteria had grown so much that the water that flowed through there was very little treatment given to that water as it went through the filter.

The good thing was that the pea processing season only lasted about two weeks. But then it was like another ten days before the bacteria would partially die off and flow through the filter to

where we could remove it in our settling tanks and we'd get back to normal operation.

But then we would have another event in the fall when they started the corn processing. They did a lot of sweet corn processing where they would cut it off the cob at the canneries and either freeze the corn or put it in cans, and we would get a strong waste load during the corn processing season. Fortunately, the load wasn't as heavy as the pea processing load, and it didn't smell as bad. We got a profuse growth of bacteria, but at least it didn't render these horrendous odors from the plant. So we were at least partially able to handle that reasonably well.

M.O'R.: And how many other people worked in the treatment plant?

G.K.: Right. I was in charge of the treatment plant and the waste collection system in Walla Walla. When I was at Hillsboro all we were involved in was the treatment plants. Another department handled the collection system. But I was in charge of both systems up there, the treatment plant and the pipes that collect the wastewater.

I had five employees plus myself, six total, in the treatment plant, and I had two employees who maintained the sewer collection system.

Another problem, if you will, with the Walla Walla sewer collection system, and it may still be that way today, is that a lot of the storm drains - not unlike the city of Portland - flow into the sanitary sewer system, and therefore the wintertime flows at Walla Walla would increase four-, five-fold of the normal dry

weather flow, and that would put quite a strain on the treatment plant, also.

But contrary to today, we operated that treatment plant 24 hours a day, seven days a week, with five people. Now, of course, some people worked more than a 40-hour week, no question about it. And they would rotate on shifts, and the graveyard and swing shifts there would only be one person at the treatment plant.

Well, today that would no longer - you could no longer do that because of safety reasons, and of course most of the people worked 44-hour weeks - or - yeah, 44-hour weeks in order to make all that work, and if somebody got sick, then I would have to fill in for them, because we didn't have any excess or other employees that could do that.

So it was a pretty tight operation, shall we say. Pretty conservative. But we were able to do really a good job, outside of when the cannery processing occurred.

M.O'R.: And who did you report to, then? Did you report to the City or ...

G.K.: Yes. I was an employee in the - what they called the Utility Department, and as I mentioned earlier the individual that I worked for was Paul Byer, who - a native Walla Wallan who had worked for the City for probably 35 years.

M.O'R.: What was the sort of - what should I say? - the politics of wastewater in Walla Walla? I assume the canneries had some clout, and ...

G.K.: Oh, indeed. Yes. Well, there wasn't a lot of concern by Walla Wallans regarding the wastewater or the wastewater treatment facility, or even what kind of job we were doing. Probably

the more concern on behalf of City officials was monetary: stay within your budget, don't do anything that you don't need to do, and you know, kind of like the bottom of the barrel, if you will, in terms of the various facilities that people had interest in. Kind of out of sight, out of mind, if you will.

The treatment plant was located probably three miles from the city, and out of the way where it was not visible to the general public unless you made an attempt to go there, and therefore it got very little interest.

M.O'R.: And obviously, then, if it was that distance out of the city, probably people weren't too bothered by the smell or the other aspects of it?

G.K.: No, they weren't, because, see, the odor was generated down there in this agricultural community, and they wanted the water, so therefore they felt it best not to complain about the odor.

The one area that had an interest in wastewater there was the education system. It was fairly constant during the spring that we would give tours to school children. We would have three or four tours every week for these youngsters in the fifth, sixth, seventh grade at the treatment plant. So there was that interest from the academic community.

M.O'R.: Any particularly memorable problems or any events at Walla Walla that stand out in your mind that you haven't already talked about?

G.K.: I think I - yeah, that cannery waste load was just - that was the memorable part of those operations.

Oh, I guess one other thing, and that is it gets awfully cold there at certain times of the year ...

M.O'R.: Oh, yeah. Right.

G.K.: ... and it was fairly treacherous, if you will, to work in the treatment plant and working out on these tanks full of water, and the sidewalks would get ice built up on them two, three inches high - or deep, and it was something we had to be very concerned about, let alone freezing pipes and those sorts of things. In fact some of the tankage would actually - the water in the tanks would actually freeze partially. Fortunately, sewage is fairly warm, 55 to 60 degrees in temperature, so therefore that wasn't a big problem. But just - all of the water systems and the piping, we had to be on top of it, if you will, when we got those really cold days up there.

M.O'R.: Now, you said that they had the trickling filter ... G.K.: Yes.

M.O'R.: ... tube. Was this after a settling process? Did they have a sludge digester process, too, then?

G.K.: Yes. Right. The first thing after removal of sand and - or the grit is you settle it. You go through a settling process, and then whatever will settle out goes into the digesters. Whatever you can take in terms of floating material goes into the digesters.

Then you go to the trickling filters, or the other word for bacteria is "activated sludge." And then you go to another settling process, after the water comes out of that secondary - or that bacterial process, because the bacteria are heavier than water, and therefore they'll settle. And then you remove whatever

you can from that tank, take that to the digesters, and then that goes through - those solids go through a digestion process.

The water, then, out of the secondary end is chlorinated to kill any pathogens and then discharged, either to a river or spray irrigated, whatever the case may be.

M.O'R.: Now, that's out of the filter or ...

G.K.: Okay. You go settling, filtering, settling, discharge.

M.O'R.: Okay. Okay. So you collect what comes off the bottom of the trickling filter and settle it again ...

G.K.: That's right.

M.O'R.: ... and then discharge it.

G.K.: That's right. Yeah.

M.O'R.: And you mentioned how nasty this cannery waste is?

G.K.: Yes.

M.O'R.: So was it more concentrated, then, than the Hillsboro waste that you dealt with, or was it just the volume of it?

G.K.: Basically a combination, but Hillsboro did not do peas. Pea waste for some reason is extraordinarily strong in terms of waste mode. So therefore the waste in the Walla Walla facilities was much more difficult to deal with, because Hillsboro didn't do peas. For whatever reason - I don't know why pea processing creates such huge loads on the sewer system, but it was a larger volume, too, up there.

M.O'R.: Okay. Well, maybe this is a good point to take a break here.

G.K.: Oh, okay.

M.O'R.: And then we'll take off from here and get into Aloha and USA period, I guess, next time.

G.K.: Oh, great. Yes. Well, that will be exciting.

M.O'R.: Okay. Well, good. Well, thanks for the interview.

G.K.: My pleasure always.

M.O'R.: And we'll continue next time.

[end of side one; end of tape]