
INTERVIEW OF:

GARY ISTA

TAKEN OCTOBER 31, 1997 AT 9:15 A.M.

ORIGINAL

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INTERVIEW OF GARY ISTA, taken pursuant to agreement of and between parties at, Koch Industries, Inc., P.O. Box 64596, St. Paul, Minnesota, at approximately 9:15 a.m. on Friday, October 31, 1997 before Milo Ballingrud, Notary Public, County of Hennepin, State of Minnesota.

APPEARANCES:

Present from the Minnesota Pollution Control Agency:

DON L. KRIENS, P.E.

MARY L. MAYES

GREGORY BERGER

BYRON A. ADAMS

Present from Koch Industries:

JAMES K. VOYLES, Attorney at Law

Present from the law firm Green Espel:

JODEEN A. KOZLAK, Attorney at Law

SUSAN K. WIENS, Attorney at Law

I N D E X

MR. BERGER: Just a little introduction, Gary. As you probably know, we're conducting a civil investigation that is focusing on Koch Refinery operations and a number of pollution slash environmental related issues that have surfaced since April of this year. We are seeking your cooperation in obtaining some information about these operations through some questions. And we want you to know that you do not have to answer these questions if you do not want to, you're not obligated to, it is voluntary. The information that we obtain in this investigation may be used in administrative, civil or criminal enforcement action in the future. And the MPCA is free to choose either of these actions, and if we do choose one it does not preclude us choosing another one in the future. Do you have any questions about at that?

THE WITNESS: No, I don't.

BY MR. KRIENS:

Q. Gary, I'm Don Kriens, and I think we met last April when we were here in that inspection. If you would, please, give us information on

what your position is here and how long you've been here, particularly what you did, where you worked for the last few years.

A. Few years meaning two years?

MS. HAYES: Five.

MR. KRIEMS: Yeah.

THE WITNESS: Safety emergency response coordinator is my current title, and we're involved with the safety issues out in the refinery, day-to-day problem solving in process units, also emergency response. If we would have a fire or if we had a leak we have a team, full-time staff and also a volunteer fire department, that we train and have them available for any of the emergencies for the refinery.

BY MR. KRIEMS:

Q. Okay. I have the organizational chart, so you would report to Larry Barnett?

A. Correct, for about the last year and a half I report to Larry Barnett.

Q. Before then?

A. Steve Christianson.

Q. Was he the former manager of that department then?

A. Yes.

Q. Okay. We want to ask you questions primarily about the flush, hydrant flushing activity. When we are here in April we had had some information that was brought to our attention that the company was -- the refinery was disposing of water and waste water via the hydrant system. Actually, we did become aware of it in January when we were notified of one incident, and then we wanted to learn more. When we were here doing the inspection we did discover at that time when we talked to you that there were more incidents.

As you recall in our termination interview that one day we talked to you that we got a little bit of conflicting information during the day, so that's why we wanted to clear that up. And we still would like to understand what went on. We reviewed some of the flushing logs and the operator logs, and since our inspection determined there were also additional discharges, so I want to talk to you about some of those.

The first one has to do with a green water hydrant -- what we call a green water

hydrant discharge in October of '94. This occurred as a result -- the hydrant flushing apparently as a result of green water in the system. Do you recall that incident or were you involved in that?

A. I don't recall anything with green water.

Q. Were you in the safety department at that time then?

A. In 1994, yes.

Q. Well, let me run through briefly what the log states. It begins actually September 21, '94, an operating log, this is the waste water treatment operating log. It states that there was a hundred thousand gallons to be dumped to the coker pond from the number three cooling tower. Then in October 8 there's a log, and these are all operating logs, that states the whole plant was green. That means the whole waste water system, the storm water ponds, the coker pond, channels in the coker pond, and that they notified the shift foreman. Again on October 9, it goes on to say the plant flow is green. The shifties set a game plan for the green water, the shifties talked to Steve David about color, and then it discussed

methods to break down the color. We talked to previous people about that, and apparently testing was done to see what could be done.

Then October 11 a log states there was high chromium, hexavalent chromium at the S7 sump, which is the sump, or affluent sump from the waste water treatment plant after the final clarifiers. It's describing green water in the system. October 11 through the 12th it goes on to say coker pond channel still green. Then on October 12 through 13 an operating log states at 1920 hours safety has orders to spray fire hydrants to get rid of green water. The log says, told them to pull from the south pond, B5 at normal level now. Do you know what that means when the statement is made safety has orders to spray fire hydrants to get rid of green water?

A. I can't recall a green water issue at all. Might be involved with the -- a green water issue?

Q. When they say that safety has orders to spray the fire hydrants, does that mean to open them up on land to get rid of it?

A. If they say to spray hydrants, whether it

would be on the land or in the units I don't know, what the call was made to us, if it was.

Q. Would somebody else have been involved with that then?

A. Well, in 1994 that was about the time -- we have a hydrant permit system in the refinery, so we would know when hydrants were used.

Q. An internal permit system you mean?

A. Yes. About three years ago we put that in place.

Q. Were you the safety emergency response manager then that would be in charge of the hydrants?

A. In '94?

Q. October of '94.

A. I might have been the fire and safety marshal. It's pretty much the same duties as far as the spraying of water or putting water out, flushing, it's a pretty common practice for us to go out and flush our mains.

Q. Yeah, I understand that.

BY MS. HAYES:

Q. I have a quick question. This has come up several times. I'm interested in what the permit process is. Can you plain that?

A. The actual permit, we have a written permit

that is filled out so people are trained on the use of a fire hydrant so we don't end up with the valves either being closed or broken. So it's in a ready state for us. If somebody uses it for hydroing or for water use, we go down there and make sure the person is trained on the actual use of a hydrant. A permit is filled out, and then when they're done using it they have to come back and talk to us about if they're done with the water usage and the hydrant done. Then we go down and make sure that the hydrant is in usable form again. What happens is if it's not when we go to use the hydrant, if somebody is just out using the hydrants arbitrarily, then we would use it for emergency it could be in a non-ready state.

Q. So every time a hydrant is used, and you think it's been about three years, you would have a permit for it?

A. Correct.

Q. Do you have a log of those permits?

A. Yes. We keep those for a year.

Q. You just keep them for a year?

A. Right.

BY MR. KRIENS:

Q. So would you have -- you gave us the flushing logs, is that related to the permits?
A. No. If safety department is going to use the hydrants we don't write a hydrant permit because --
Q. Okay.
A. We are trained, we understand the use.
Q. I see. So can, like let's say the operations area, use a hydrants to let's say open up the hydrant, flush water out on land? They can actually do that if they get a permit from you, is that how it works?
A. Yes.
Q. Okay. Do you know what that means when they say safety was ordered? Who would order safety then to get rid of green water? I mean, who would be the person or department that would order the safety? And I assume they means safety department.
A. In '94 we didn't have control of the actual fire ponds as far as their level, so we could have been told to. If the levels are high in the ponds we could flow water, do flushing. We are in control of the ponds now, and it's very critical we keep those ponds within

certain levels so we have enough water for firefighting.

Q. So you would control the pond levels by flushing it on land?

A. Well, if the pond levels are high, it's a good opportunity when they're high for us to do flushing. If the pond levels are low we can't go out and do our fire main flushing because we wouldn't have enough water for the actual firefighting. So if pond levels are high --

Q. You do the flushing?

A. We can do the flushing.

Q. Flushing for what purpose then?

A. We have to maintain the integrity of the fire main for ourselves. As we built onto the refinery, enlarged the number of mains, then it becomes more critical that we do have more flushings that occur.

Q. When do you do those then?

A. Throughout the year, depending on what the activity is in the refinery, if we have shutdowns or turndowns, so it varies as to when and if we have the manpower available.

Q. Well, it is contradictory to what you've told us before. Before we were told, and actually

at our inspection and in our interview, that that was done in the fall.

A. That's the winterization on the hydrants, but the main flushing, we actually grid the system up. There's two activities that go on, there's the actual hydrant flushing or getting that specific hydrant ready for winterization, that is just a hydrant, and then you have your fire mains that are attached to that.

Q. And that's done through the year then?

A. It has been as we've taken over the actual pond levels and the size of the refinery has gotten bigger. We do a lot of training with the fire equipment, we've been doing that throughout the year.

Q. Okay. I guess that wasn't our understanding and that's not the information we received from the environmental department and from you.

MS. WIENS: You're not saying don't flush in the fall.

MR. KRIENS: He's saying they do.

MS. HAYES: We thought it was limited to the fall.

THE WITNESS: That's when we

winterize all 380 hydrants. So you flow the hydrants, you make sure it drains down, the valves are adjusted and then we put a tag around that hydrant so we know that's been winterised. That's the program for the -- we put a map together and we mark each hydrant. Each hydrant is numbered, and we mark each one that they have been winterized. So if somebody gets a permit they go out there -- we have to go out and check. There are some that don't drain down, so we have to go out and pump then down otherwise we end up with a frozen hydrant.

BY MR. KRIENS:

Q. Right. So why would you do it at other times of the year?

A. Just the amount of system that we have out there and the amount of limited manpower we have. We used to be able to go out and flush, maybe take a month and go out and flush, and with the tie-ins and the change in the main system there's more of an opportunity to spread that out throughout the year. We've got a board in our building that shows all of our activities.

Q. But what would be the purpose of doing it throughout the year?
A. If we do tie-ins onto the mains, and we have found some mains that have been -- had a lot of lay down, corrosion in them, so then that activity increased to make sure we flush that main out. If we would have a fire and we did have an incident where the actual nozzle plugged off when we were fighting the fire, that's what we're trying to avoid. It's very critical for us to have those lines clear to go to a high flow condition.
Q. Sure. How long of a period of time do you need to flush that, you know, to clear it or to make sure it's usable then?
A. It depends on the size of the main. They put together a flow chart according to the size, whether it's a 6, 8, 10, 12, 14 or 16 inch main as far as the amount of flow and velocity. And the length of the main, too, trying to get that velocity throughout the different mains.
Q. Can you give me a time in minutes how long?
A. I think it would depend on what they're seeing as far as the flow. Sometimes the flow is

water coming out that would contain whatever is laid down in the pipe and then it would clear up and then it would flow again, so it's kind of arbitrary as far as -- I couldn't say 10 minutes, 20, 30.

Q. Is it like an hour less? Would you go up to an hour on that?

A. Maybe on the larger mains. You wouldn't have to do that on a six or eight inch main. On main laterals you would want to flow longer because they are longer mains.

Q. So if you had something going -- there would be no reason to really have it going for hours then that I could see for that purpose?

A. As far as continually going?

Q. Right.

A. In our grid system --

Q. Say for 12 hours or whatever, or four hours of doing that.

A. As far as the flushing?

Q. Uh-huh, yeah.

A. If it didn't clear up we would.

Q. Have you ever done it where you've needed to do it for more than an hour?

A. We have flowed to maintain our pond levels,

make sure we didn't overflow our pond levels.
Q. Flowed where?
A. Flowed our mains on different end laterals.
Q. You mean moved the water back and forth?
A. No, flow it out like off our hydrants.
Q. Onto land areas?
A. Uh-huh (nods head).
Q. So you've done that to maintain the pond levels also?
A. Uh-huh (nods head).
Q. Okay. How often was that done?
A. I think we've talked before like five times or something in April when you were out. It was like five times I can remember that we had done that.
BY MS. HAYES:
Q. Is that five times over what time frame, do you remember?
A. I think we talked about like in a year's time, talking the year in April.
Q. That's kind of the way I remember it.
A. Like five times in a year.
Q. You said that in '94 safety wasn't in charge of pond levels?
A. Correct.

Q. Who was in charge of pond levels then?
A. Waste water treatment.
BY MR. KRIENS:
Q. So the waste water treatment plant operation controlled the fire water pond levels in '94?
A. Yes.
Q. So if we see a statement where safety is ordered at that time to get rid of water, that's what it says, it would have came probably from the waste water treatment plant operation since they were responsible?
A. For controlling the levels, yes.
Q. So who would be the unit -- I guess who would have been the unit supervisor in the chain of command there? Well, I guess that would be -- we got that from Eric Thraen.
A. In '94 I'm not sure.
Q. I guess that would have been Larry Klemetson or Rick Legvold and then to Eric Thraen. Okay. So let me try and finish this green water subject. Do you know where -- you don't apparently know anything about the green area in '94?
A. I don't recall anything about green water.
Q. Okay. Do you know of any other incidents or

episodes where the hydrants were used to dispose of water, let's say for getting rid of water like green water or upsets or anything like that?

A. Other than what we've been involved with in pond levels, no, and our flushing.

BY MR. ADAMS:

Q. I have a question. When someone notices the pond levels are high or about to spill over, they then notify safety that flushing might be needed to get the pond levels down?

A. Currently we are in charge, safety is in charge of the pond levels. So we monitor those and control the levels at this time.

Q. You're looking at the stage level markers, and let's say the coker pond, noting the elevation might be 13 feet 10 inches perhaps?

A. Not the coker ponds, just the two fire ponds. The north and south fire ponds are the ones.

Q. That you would control?

A. Right.

Q. And level control needed to be done you would spray then?

A. (nods head.)

Q. And not the west pond?

A. No.
Q. That's not part of that?
A. That's not within the safety departments. We just have the two fire ponds.
BY MR. KRIENS:
Q. Are there any flushing logs available for '94? We didn't get those, and I don't know if it was because we didn't ask for those or if they weren't available.
MS. WIENS: What do you mean by flushing logs?
MR. KRIENS: These are logs that the safety department keeps for when they flush hydrants for whatever reason, as I understand it.
THE WITNESS: Yeah. I think in '94 the only thing we would have still is a map that everybody marked off as to what they are -- I don't even think we had our hydrants numbered at that time.
MS. WIENS: Do you have a document called a flushing log?
MR. ADAMS: Do you have any example we could show her?
MR. VOYLES: You keep them for a

year?

THE WITNESS: Yeah, the hydrant permits we keep for a year. I don't know that they kept the maps as far as for '94. What it was, was to make sure that we were satisfied all of the hydrants had been taken care of and highlighted each one.

MS. WIENS: Are you talking about the safety audit sheets?

MR. KRIENS: No. These are actual logs. We have them back through December of '95.

THE WITNESS: Our daily logs?

BY MR. KRIENS:

Q. Right.

A. Our daily operational logs.

Q. Right. We call them flushing logs. I'm sorry.

A. Oh, that's our people who are on shift there, the log is the activity that has taken place, you know, throughout the shift.

Q. So that would be the safety --

A. The safety department shift log. It's just an ongoing log for each shift.

Q. Are those available for '94?

A. I'm not sure.
Q. We got them as early as November of '95, going back to November of '95, and I wasn't sure if they weren't available before that or if we just didn't ask for them, because we asked for a certain limited amount. Maybe we could check on that and see if they're there.
In any case, you weren't involved with that because at the time waste water treatment plant was in charge of the levels in the pond?
A. Correct.
BY MS. HAYES:
Q. I have a question. In terms of you being in charge now of the levels in the ponds, do you ever talk with waste water or environmental about the ponds, the quality of the water in the ponds prior to flushing them? Is that ever something you talk about before you do that? Are samples ever taken that you're aware of? Do you get involved in that, Gary?
A. We haven't taken samples as far as us as a department. Waste water is in charge of the sampling of the ponds.
Q. I guess I'm just wondering if there's any coordination there around the specific times

that you make the determination that those levels are getting too high, they need more freeboard, do you coordinate --

A. We do transfers back and forth north to south.

Q. I understand that, but don't you also flush -- don't you also let hydrants flush when you -- at times doesn't it go on land to deal with pond levels?

A. Uh-huh (nods head).

Q. In those cases do you ever coordinate with environmental or waste water, whoever you coordinate with, about the quality of the water in the pond prior to letting the water on the ground?

A. There wasn't an issue until January when there was -- they talked about an ammonia issue, and then there was some sampling done through waste water and environmental, and if we were to flush there were only certain quantities we could flush. That's the only time we've been involved with any, you know, changes as far as how much you can flush.

Q. That was communicated to you by environmental?

A. Uh-huh.

Q. But prior to that any time you would -- to get

enough freeboard you might flush hydrants, you wouldn't coordinate with anyone, no one would coordinate with you about checking on the quality of the water prior to it going on the ground?

A. I would say January was the first time there was anything as far as restrictions to us as far as flow.

BY MR. KRIENS:

Q. So before that, before January, you would flush, take water from the pond whenever it got high and you felt you needed to lower the pond level for safety purposes. And to your knowledge then you didn't analyze or nobody analyzed the water?

A. As far as the function of the safety group, no, we didn't have any --

Q. I mean your department was in charge of doing it, so prior to the point of which you did it, you didn't receive data on the characteristics or analysis of the pond?

A. No, we didn't.

Q. So was it just on the basis of the level then?

A. Right.

Q. Do you know how far back that went? Do you

recall since you've been -- your department has been responsible for managing the water level in those ponds?

A. Approximately two years that we've been.

Q. Doing it that way?

A. In charge of the actual levels of the ponds.

Q. I mean when flushing or disposing of it via the hydrants to land, do you recall when that began, when you began doing it to manage the pond levels that way?

A. I couldn't be specific before I was involved. I don't know as far as a time frame, you know, the flushing occurred. Up until January we would flush, you know.

Q. On land or -- up until January you would flush it on land to manage the pond levels?

A. January became the first time that there was an issue as far as volume amounts as far as flushing. That's the first time.

MS. HAYES: Do you know what raised that issue in January? Do you know what was different about that issue compared to other times?

THE WITNESS: Ammonia. They said that there was an ammonia issue and so we

could flush so much water.

BY MR. KRIENS:

Q. Because they had measured at that time?

A. Right.

Q. But prior to that you didn't really get data to determine any levels that you know of?

A. It wasn't an issue for us. Like I say, in January then the ammonia issue became something where they said you can only flush so much.

Q. So was it done before January then, of '97, where you flushed the hydrants on land to lower the pond levels?

A. Yes, because we had control of the pond levels before January of '97.

Q. Into '96, was it done in '96 and do you remember how early in '96 it was done?

A. We had talked about the five times we had done that.

Q. What would be the earliest one, do you recall?

A. You were here in April, and I think we talked about the year before that. I can remember about five times, so that would have been like back to April or around that time frame.

Q. April of '96?

A. '96, uh-huh.

MS. HAYES: What do you recall prior to that, the year preceding that?

THE WITNESS: That's the five times I could really remember that we talked about. That pretty much fits in with us, you know, controlling the actual ponds. It's more critical for our operation. We want to know up and down as far as flows that we actually have enough fire water. That's part of the issue of us taking over the control of the system and that decision.

BY MR. KRIENS:

Q. So before that the waste water plant controlled that decision anyway, but safety, it appears anyway, in October of '94 that safety would have done the physical work to carry it out?

A. That's something that -- that green water issue, I don't recall anything on that.

Q. I'll go into the ones in '96 and '97, we have questions on those, so let's do that. I'll start off with the -- let's see if we've answered these general questions first. Well, one question ahead. We noticed in the shift

logs, your safety logs, some notation here and there of the hydrants being used in that fashion. Were there records kept of these incidents that you're aware of?

MS. WIENS: What fashion are you talking about?

BY MR. KRIENS:

Q. The disposal of water via the hydrants to lower the pond on land. Did you keep records of those activities?

A. The only records we would have kept about water would have been after January once there was an issue of ammonia.

Q. So before you may not have?

A. There wasn't a need for us to go out. I mean, we had to flow calculate how much was going out.

Q. So you wouldn't necessarily have kept records before?

A. No.

Q. We found some records here and there, but they're not consistent, so I just needed to understand that, if we missed something or whatever. Did anyone ever -- before January did anyone ever question the legality of that

practice, of lowering the pond levels via the hydrants to land areas?

A. (Shakes head.)

Q. Was there ever any meeting internally to discuss it before January of '97?

A. No.

Q. So at least do you know of any internal meeting where that was discussed?

A. As far as lowering the pond level and the legality?

Q. Right. Well, not lowering the pond levels, but doing it via the hydrants on land.

A. Like I say, the only issue that came to us as far as constraints on the flowing of water was in January when the ammonia issue came as a notice to us.

Q. When you did it before January, and I assume you notified the environmental department after because you had a reportable quantity method to deal with it, but before that when you flushed to land areas did you notify the environmental department or were they involved with that?

A. No.

Q. We have some specific ones that we did note in

here, and part of them are a result of a copy of logs given to us at that April inspection, and I've got to find it here. I'll get to that in a minute, but I want to talk about one in particular. This was in November of '96, and I'll read through quickly some logs that pertain to this and that led up to this flushing incident. In October 24 there is a memorandum from Heather Faragher to a number of people at the refinery.

MS. HAYES: It's number 2079.

BY MR. KRIENS:

Q. Right. That talks about the annual toxicity testing. It talks about the testing will be done by an outside lab, that we will be sending river samples and affluent samples, too. The sample collection will start on the 4th of November and last through the 7th. I'll skip a few, but November 3 there's an operating log from 700 to 1900 hours. At 16 hours -- I'm just paraphrasing, specials on the S7 to lab for TSS ammonia, it gives the result, 72 TSS and 110 ammonia. It also says drop off a copy of Heather's letter for the shifties for toxicity sampling and testing

starting Monday, November 4. Also it says cut flow to river to 1.7 units, and a units means so much flow as I understand it. Do you know what that actually means?

A. (Shakes head.)

Q. Okay. Then a November 3, '96 operating log, 1900 to 700 hours, specials to lab from north and south polishing ponds, 87 and tank 63. Then another log on November 3, memo from Dave Gardner with specials results, limit flow to river to two units and then a statement that says I hope these moves prove sufficient in light of tomorrow's annual toxicity testing.

Then on November 3 of '96 there's an operating log that states that safety to open three hydrants in west tank farm on ground to help get rid of water. Water flowed from 1900 hours November 3 to 700 hours November 4. There's no notation in your safety logs of that. This was obtained from an operating log and from other information that we have. Then on November 4 there is a safety log that states flowing water in west tank farm west side of I Street.

So my question is were you involved with

this particular instance, November 3rd through the 4th of '96 where beginning at 7:00 p.m. in the evening through 7:00 a.m. the next morning, which would have been Monday morning, and that was the date the toxicity test was to have begun, were you involved with that particular incident?

A. Yes. That would have been one of the five times that we were flowing.

Q. Do you recall why the water was disposed of during that period of time?

A. Other than pond levels, no.

Q. Was there any problem that you know of with respect to the operation of the waste water treatment plant at that time concerning high ammonia levels and difficulty meeting levels?

A. I don't recall any. As far as ammonia levels, the first time we knew of anything about ammonia was in January.

Q. I'm not talking about that, I mean actual difficulty meeting ammonia limits at the waste water plant for the discharge to the river.

A. That didn't mean anything to us until January for us being involved with the system. We're not involved with the testing, we're not

involved with the flows to the river, we have the responsibility of the ponds themselves.

Q. Do you know at that time who would have ordered or who took the initiative or was somebody ordered to dispose of water during that period of time, that evening?

A. I'm not aware of anybody being ordered to do that other than our flushing or flowing of water for level control.

Q. Why would the levels have been high enough at that time or why wouldn't you have just discharged it through the normal waste water system and out to the river?

A. We don't control that flow to the river, so it -- the pond levels, whatever waste water does as far as their low to the river can have an influence on our pond levels. If our pond levels are high we take care of them.

Q. As opposed to disposing on land, why wouldn't you just let it go to the river, increase the flow to the river? At the time the flow to the river was restricted by the waste water system apparently, so if the ponds were high why wouldn't you just let more go to the river?

A. That's not a function of our responsibility.
Q. So what you're saying is your department just took a separate action because the pond levels were high and it was coincidental to the other things?
A. As far as our control, yeah. We're interested in the pond levels.
BY MS. HAYES:
Q. Let me ask a real quick question. If January is the first time it came up that you had the high ammonia, that ammonia--
A. That ammonia was an issue for us.
Q. Does anybody ever stop to ask the question at that point, were you around when anybody asked the question if ammonia is high why are we discharging to the ground, why not discharge through the designated all fault? Were you around for discussions like that at all, Gary?
MS. WIENS: Are you talking about before January?
MS. HAYES: No, I'm talking about the January one, the one that Gary says he knows about, he knows about the ammonia being high. When that happens and you know that you're restricted in terms of how much you can

be flushing on the ground, it seems like an obvious question to me, that somebody somewhere -- you would be talking to people that would ask the question why, if there's an issue with the amount of ammonia in the storm pond, why are we discharging to the ground, why aren't we going through all faults? I mean, does that seem obvious that question would be asked? It just seems obvious to me. And I guess I'm --

THE WITNESS: We told that ammonia is an issue. And we didn't know ammonia was ever an issue, so now we have to follow that criteria, that ammonia is an issue for us flowing and we can't go over a certain amount of flow. As far as somebody digging in and going -- we have a thousands things to do out there running our own business.

BY MR. KRIENS:

Q. So prior to that January you just discharged whenever -- I'm not trying to put words in your mouth. Did you only discharge whenever the pond levels were high irrespective of any characteristics in the pond, it was just on the basis of the pond level only?

A. We also discharge for --
Q. I'm talking about hydrants onto land.
A. Well, when you do fire training with our equipment or testing equipment. So it wasn't just for the control of the pond levels.
Q. But I'm talking about that particular situation. When you did do that you didn't take into account ammonia levels or anything else, you just sprayed on land due solely to the level in the pond.
A. You're talking about the November date?
Q. No, in general before January.
A. Before January, right.
Q. Okay. Were you aware on November 4 there was a scheduled Bioassay testing to take place on the affluent?
A. No.
Q. Do you know at that time -- were you involved yourself with flushing on November 3rd through the 4th, do you recall that incident?
A. That really isn't part of my function, physically going out and doing it, people on shifts would.
Q. But were you aware of that or did you know about it?

A. I can't recall. You know, we talked about those five times and trying to put those to memory, but as far as physical dates, I don't recall.

Q. What we were given from the company did not include that one. I don't know if you recall that (indicating).

A. In our shift log?

Q. It wasn't in your shift log, that is what we received when we were out in April that was put together for us.

A. (Views document.)

MS. WIENS: Who put it together?

MS. HAYES: Somebody from Koch.

BY MR. KRIENS:

Q. My understanding is it was put together during the time we were there that day and meeting.

There is a shift log for November 4 that states flowing water in west tank farm west side of I Street. Would that be related to the November 3 one then, do you know?

A. On the 4th it said that?

Q. Yes.

A. Is that from a night shift or a day shift?

MS. WIENS: It's number 4472.

THE WITNESS: (Views documents) That's night there, so that could be 6:00 at night until 6:00 in the morning.

MR. VOYLES: Do you know who put that list together that's in front of you, Gary?

THE WITNESS: No.

MR. KRIENS: We had asked for a summary of that at the meeting in April, and I think either Steve David or Karen Hall went and got it put together. I'm not sure who put it together for them.

BY MR. KRIENS:

Q. So you weren't aware of the flushing during the November 3rd, 4th one?

A. I couldn't say specifically that date, recalling it specific to that date.

Q. Do you know -- our records and the report on the toxicity test shows then that it was changed. It was scheduled to be November 4, and I believe it was changed then to about November 10 of '96. Do you know anything about that, why it was changed?

A. No.

Q. Let me talk about these other ones starting in

January, because that was when you, as I understand, became more involved with reportability of these. We noticed in February that there were three hydrant discharges, and --

MS. WIENS: Which date?

BY MR. KRIENS:

Q. February of 1997. February 25 there was flowing hydrants, southwest hydrants, Highway 25 and so on, flow for ten minutes a total of 285,480 gallons. Apparently that was measured off the P dot reading and the pressure. On February 26 the day shift, a total of 284,665 gallons, and then on February 27 a total of 451,200 gallons. Do you know of any other hydrants discharges besides those three in February? Those are the ones we do have documents for.

A. After January if there's going to be any flowing it would have to be recorded. So if there isn't anything there -- people on shifts were told they would have to report.

Q. Would that be recorded in the shift log?

A. It should be in the daily shift log, yeah.

Q. Okay. Do you know why the water was then

discharged in this fashion on those three days at the end of February of '97?

A. No, I don't know.

Q. I made a chart which shows when these discharges occurred according to the documents in the logs (indicating). This chart is related also then to the ammonia influent that was in the waste water plant which we obtained from reports from our engineers. Let me briefly review it.

From our record on the shift logs, the first one occurred June 18 through 19 of '96 that we know of. Then this one we were talking about, the Bioassay, on November 3 and 4 of '96. This correlates with the ammonia pounds per day influent of the waste water treatment plant. On the November 3, 4 of '96 period when the hydrants were flushed from 7:00 p.m. to 7:00 in the morning November 3 through November 4 they also had a very high ammonia load to the system. In fact, it was the second -- I believe the second highest during this whole year and a half period. I wanted to point that out. It brings into question the basis or reason for discharging

the water at that time. We have another log we found that occurred November 16, November 17 from the shift logs. I don't know if that was in that copy that was provided to us. Then there's the January 4, '97 one when they flushed about 2.9 million gallons to wetland area. And then the February 25, 26 and 27. Do you know why on those dates it was flushed to land?

A. November?

Q. No, February 25, 26, 27, why safety would have done it three days in a row at the end of the month?

A. I would have to look in the logs and see if there's any -- our daily logs to see if there's anything, if were we doing laterals or flowings. I don't know of any specifics.

Q. Would the ponds have been so high that you would have to lower them three consecutive days?

A. We would have to look, you know, at what the levels were. I don't recall anything on those dates.

Q. That would be good if you could do that.

MS. WIENS: Do you have the logs

you're talking about?

BY MR. KRIEMS:

Q. No. We're talking about the pond level logs here.

A. The pond levels are listed on the logs.

Q. I don't think I brought those three along, but they're in the shift logs.

A. Are those the same three dates then that we had flowing, that it was recorded?

Q. Uh-huh. This is actually a summary taken from those.

A. So the 25, 26 and 27?

Q. Yeah. Actually I need to point out, and I can't remember which ones, one or so -- well, let's see. You have the 25th on here and the 27th (indicating), that were reported on this copy that was given during the inspection. They aren't, however, noted on your shift logs that I can recall. I might be wrong here, but I don't have them with me. I don't remember that they were exactly on the shift logs, but we did have them on this copy, so they must have came from somewhere. We don't know where that record came from. And the 26th, which is not noted on this one was obtained from your

shift log. So they may not be on your shift logs, but as you can see it was given to us at the inspection, two of these are information from there. I think one of them is not on your shift log.

MS. WIENS: It would be helpful to have the logs and look at, because I've seen those logs and they are cryptic.

MR. KRIENS: They're very difficult to read.

MS. WIENS: When I looked at them I didn't get half of what they said, the people who authored them. And seeing exactly when is much more helpful than seeing your interpretation of them.

MR. KRIENS: Well, this is taken right off the logs.

MS. WIENS: I know, but there's a lot of stuff that go on the logs that you may not have picked up as important or relevant that he would pick up because he knows the abbreviations.

MR. KRIENS: That's why I'm asking him questions, to examine those. It seems peculiar to us that you would pump the water

out three days in a row over a million gallons.

MS. WIENS: You should let him look at the records to answer your question.

MR. KRIENS: Do you have those available here?

THE WITNESS: We should.

BY MR. KRIENS:

Q. The question I had was why it was done three days in the row at the end of February. The concern we have is that in February, February happens to be one of the highest ammonia loads. In fact, it exceeds the capability of the waste water plant to treat ammonia during these periods. It happens to be the highest ammonia loading, the second highest during the year and a half period. The first highest was in March of the '97, and then the other next highest was January of '97, and then November of '96 was a very high one.

A. These numbers and the flow amounts, they put them down as to the gallons according to what we were given for information.

MS. WIENS: If you want to take a break I can try and find them. I would rather

have him talk about something he could look at and know rather than speculate.

MR. KRIENS: Well, will you be able to determine -- is it going to enable you to determine why you discharged the water during those dates?

MS. HAYES: Is that on the log?

THE WITNESS: I don't know.

MS. HAYES: Sometimes it is and sometimes it isn't?

THE WITNESS: Right. Something maybe, here's why we did it, you know.

MS. HAYES: Let's take a break then.

(At this time a break was taken.)

BY MR. KRIENS:

Q. We have these logs now, and I think we left off wondering what the basis of those discharges were. So just to reiterate, you've got 285,000 the 25th, the 26th about 285,000 and 27th 450,000 gallons. Can you explain then why the water was discharged?

A. As I look at it, when you look at the lagoon outage we're seeing on the south 3.2 and the north 6 inches and the 11 inches, so the lagoons are right at the very top.

Q. What would be the top?
A. At zero, that's totally full.
Q. So when this says --
A. That says zero foot six inches.
Q. Okay.
A. And this one here is 11 inches from the top.
Q. On the north, and the south would be --
A. Three foot two and two foot six.
Q. Okay. Is the south -- go ahead and explain further.
A. It says fire pumps switch, south jockey off, which would be drawing off here (indicating), and the north big is -- it says north big electric on, so that would be drawing out of the north pond to bring that -- you don't want to be sitting --
Q. Right. And that would be drawing where, taking it where?
A. That would be pressurizing the system from the north. There's a 30 inch intake that draws into the pump, and then putting that out in our -- putting the pressure from that system, and the back pressure control would be open to allow the water to move to the south lagoon.
Q. So this was the 24th it was moving into the

south lagoon?

A. Correct.

Q. Because this was high?

A. Right.

Q. Then going to the 25th when there was a discharge of 285,000 gallons.

MS. WIENS: It's number 7668?

MR. KRIENS: Right.

THE WITNESS: We're showing the south lagoon one foot eight and one foot ten. They don't show a -- they still got the north big electric on there and they don't show a reading on the north lagoon.

BY MR. KRIENS:

Q. Where was this taken from?

A. The north big electric would be running, so that would be coming from the north.

Q. I mean as far as the hydrants.

A. Where it was flowing?

Q. Yeah.

A. I would have to look on the map.

Q. I guess what I'm trying to ask is if the north electric was on still transferring to the south, is that right?

A. Yeah.

Q. And so that was going on at the same time then that the hydrant was discharging out?
A. Correct. Then it says started putting water in the lagoon from west hydrant 24, so it was going into the west storm pond.
Q. What was going into the west storm pond?
A. The water. Not the south fire lagoon, but the west storm pond.
Q. Discharged out to land, and then you're saying after that it went to the west storm pond (indicating)?
A. That's why I want to see where hydrant 25 is. Hydrant 24 and 25. If they're together they were flowing to the west lagoon. Nothing says it's flowing to ground there.
Q. I'm trying to understand this one then, this says southwest hydrant Highway 25?
A. It's H-Y.
Q. H-y, I'm sorry. Would that be -- why would you -- would that be consistent for flowing ten minutes into the pond?
A. Well, yeah. Like it says here, flowing to the storm water lagoon, it doesn't say where the 1205, where it's flowing.
Q. The 1205 is before that. It stopped at 1330,

and then it says 1345 began flowing to the lagoon. Prior to that it says, you know --

A. PO'ed it at 3172.

Q. Right, and you had that flow out the hydrant 25.

A. Uh-huh.

Q. Then after that -- that says stopped 1330 and then after that you transferred it looks like. Is that correct?

A. Well, it's --

MS. WIENS: Did you write this?

THE WITNESS: No.

MS. WIENS: Do you know specifically what happened?

THE WITNESS: No.

BY MR. KRIENS:

Q. What I'm trying to get at, the information we were given is that it was discharged from the hydrants on land.

A. At the 1205?

Q. Yes.

MS. WIENS: Where did you get that understanding?

MR. KRIENS: From the information Koch gave to us.

MS. WIENS: From that summary?

MR. KRIENS: Right here (indicating), yes. That was given to us in April, that those were discharged to land. I think at the time we talked to you about that we looked at this and it was part of the five or six or whatever you recall that occurred.

THE WITNESS: Right. The way it's written here they didn't identify whether it was to the lagoon for both of them, but the one does say lagoon.

BY MR. KRIENS:

Q. The way it's written, the 1205 shows the 285,000 gallons stopped at 1330, and then it's written 1345 began flowing water to west storm pond lagoon, so I would read that as it was flushed to land and terminated at 1330 and at 11345 began transferring.

MS. WIENS: You can read it and -- you know, you can ask the people who wrote it.

BY MR. KRIENS:

Q. I would like to do that, too, but that's how it was given to us, presented to us.

MS. WIENS: Yes, and I can't explain it either, but I'm just -- he can do his best

interpreting that.

BY MR. KRIENS:

Q. When we did ask we specifically asked for incidents of flushing on land, and we talked about that and you recalled five to six, of which these were discussed at the time of being those incidents.

MS. WIENS: He didn't put that list together though.

MR. KRIENS: We talked to people at Koch here that put it together.

BY MR. KRIENS:

Q. The lagoon then, the stages --

A. First thing is the pump, it tells you which pump is running, the time it's checked and then the lagoon outage. And they normally put north lagoon and south lagoon so you know which one.

Q. Would this correspond to that transfer then, the 1340, is that what you're talking about?

A. The north big electric continued to say on for both of those.

Q. To transfer?

A. We had that fire pump running, so if it would have said south then we know we were pumping

out of the south. This says north, so we have north fire pump on.

Q. So you were transferring from the north pond?

A. Pressurized the fire system from the north side.

Q. So you could transfer south or west?

A. Well, if there was no transfer you just have back pressure controllers running and you were just circulating water back into the lagoon.

Q. Okay. So before those were three foot two and now one foot eight or so, is that right?

A. Also three, two and two (indicating).

Q. So the next day it was -- that would be the result then of the transfer I presume?

A. The change in the levels (nodding).

Q. The next day then, the north, is that shown there? I assume the north would be showing more?

A. It looks like 11 inches north, 8 inches north, 1 foot ten south and one foot four south.

Q. So the north freeboard is increasing as a result of moving water out of there?

A. It was 11 inches and it still is here, then it went down to eight inches, so it's decreasing.

Q. I guess really the question I had was why was

the water released on land via the hydrants? I guess that's the question. Is the freeboard in the south pond, the three foot two and the two foot five, is that -- where should that normally be or where do you try to keep that at?

A. Because the south pond itself collects storm water, rain water, we like to keep a few feet in each one so we do have the capability of collecting all the -- if we have a two, three, four inch rain so we don't overflow those. If we overflow the sides, the southbound is just basically a big baggy sitting with earthen dikes, if we overflow that it's like washing a dam out, you lose the whole lagoon.

Q. Three foot would be quite a bit of freeboard I assume though?

A. They have dedicated levels, we can look at what the maximum is.

Q. What you want to keep it at?

A. Yeah.

Q. I think we have that.

A. I'm not really sure exactly the low and the high.

Q. Okay. So going to the 26th day, that was for

285,000 gallons. I think the copy I had showed it better. Well, I guess it didn't. Anyway, it says flushing hydrant north of -- maybe you can interpret that better than I can.

A. Flushing hydrant north at -- he's using that as a tank insignia, either tank 57 or 87.

Q. Okay. What does that mean, tank wherever, to you?

A. Just a location of a tank.

Q. So would that be flushing on land then?

A. If it was around a tank.

Q. Was there a need --

A. It doesn't even say north or south.

Q. What's it give for the names there?

A. Jerry Davern and Russ Hawkinson.

Q. So that was the 26th during the night -- no, day shift. So flushing hydrant north, does north mean on the north end of the plant by the B5 or some other area?

A. North of tank 57 or 87. I would assume we don't have a tank 57, so that would be 87 there.

MR. ADAMS: Is that on the northwest corner?

THE WITNESS: Yes, inside the railroad tracks.

BY MR. KRIENS:

Q. Would that be taking it from the north pond then?

A. The south jockey is running 1640.

Q. Does that mean it's pulling from the south pond?

A. Yeah. We show a pump running in the south, so that would be drawing out of the south pond and a pump running in the north drawing from the north.

Q. Okay. How much flow would that represent in terms of freeboard in the pond, 285,000 gallons?

A. The south pond?

Q. Yeah.

A. It's a 22 million gallon pond.

Q. Yeah, I was thinking it's a big pond. The question is if you remove 285,000 how much depth in the pond does that actually represent?

A. That's what I'm saying, it's broken down in inches and the pond goes like this (indicating), so it would depend on the level

of the pond.

Q. Do you know the acreage on that?

A. No.

Q. I'm wondering if that's going to make a big difference in the freeboard of the pond, 285,000?

A. If I get the chart that shows what the inch is --

Q. Well, we probably can figure that out. I'm trying to get at that issue, if it makes a big difference discharging this water. If the purpose was to lower the storm water ponds, does that really make any difference at all in terms of safety issues?

A. It doesn't list what other activities are going on in terms of water use either. The staging is set for the height differential on the pond and so it's shown to be relieving to the south.

Q. Coming back to the south?

A. There's a back pressure control there. The pump runs at full pressure and what's not used out in the system then there's a pneumatic back pressure control set at a certain pressure that allows it go back down into that

pond.

Q. But on this occasion it went out to land by or near this tank apparently, tank 87?

A. Flushing hydrant north of tank, yeah, whatever, for 25 minutes. It looks like 25.

Q. Well, maybe 85. It looks like 2247.

A. Well, I'm not sure if that's 22 or 32 there.

Q. Okay. It has to be around that.

A. If it's 85 minutes it would be around three.

BY MR. ADAMS:

Q. Gary, I have a more general question. Without trying to figure out how much inches of draw down occurred on the south pond for a 285,000 gallon discharge, are you looking at pond levels after you've discharged the 285,000 gallons to see what the elevation is? You draw off some water discharge and come back and see how much has been removed and then decide okay, that's enough?

A. We have the safety health specialist go to the lagoons and monitor that, and they transfer water back and forth north to south. If both of them are full then they flow water. As far as them going and, you know, flowing 285,000 and coming back and looking at the lagoons, I

couldn't say that for them, if that's the -- you know going out there and -- you know, flow the water and then come back and looking at the levels. They're not monitoring it every two hours, they monitor it every six hours or if they're flowing they know the level is going down.

Q. It's going the right direction?

A. Right.

Q. Your objective is to reduce the level at some point to get the pond --

A. To a comfortable level, right.

Q. The way to do that is continue to pump out of that pond and send it to the north one, you'll keep doing that until you get to the elevation with the proper amount of freeboard?

A. Well, we have to keep the pump running, but then if you want to keep the water circulating at that lagoon you set your back pressure control for that lagoon rather than having it move to the north or the south. We can adjust the back pressure control and it will go north or south and then by starting and stopping pumps.

Q. And you make that decision based on the

elevation you saw in the pond?

A. Right.

BY MR. KRIEWS:

Q. Do you know about how many acres it is?

A. Not really.

Q. This is real rough, but 3600 cubic feet per inch, acre inch, at around seven and a half gallons per foot cubed, it looks to me it would be about 27,000 per acre inch. So if you had ten aches you would be drawing down 270 -- if you drew down 270,000 gallons it would be the equivalent to drawing an inch off an acre pond. So that one is roughly how big do you think?

A. I don't know.

Q. All right. We can do it later. I'm just trying to get at that it doesn't sound like it's a lot of water for the purpose of drawing it down, it wouldn't translate down to much freeboard. How big is the north pond?

A. That's 12 million gallons total with 9 million available. We have a standpoint pipe that goes out off the southeast corner of it.

Q. Okay. The last one then, the 27th, it looks like that one is 2820 GPMs?

MS. WIENS: Number 7663?

BY MR. KRIENS:

Q. Right. For a total of 451,000 gallons. Would you run through what's going on with that one?

A. The north electric is on. It looks like you used one and a half feet for the north and in the south you've got 8 inches.

Q. That would be the freeboard remaining?

A. Right, at 6:30 in the morning. Then at 11:00 a.m. they started the south jockey, and we still had the north at one and a half and the south at eight inches relieving to the south. So they were pulling, drawing out of the south lagoon.

Q. Okay. What does it mean then, water flowing at the south flare area?

A. That would be the south end of the refinery, the dead end main.

Q. Off the hydrant there?

A. Uh-huh.

Q. So that would be out to the land area by the south flare area?

A. Uh-uh (nodding).

Q. And then shutdown hydrant, turn electric off. So this was drawing off from the south pond

when it says -- so that I understand it, it says relieving south, meaning it's pumped out of the south?

A. Yes.

Q. And at that point you had 8 inches of freeboard?

A. When the south pump is on and the back pressure controllers set lower than the north. It would be relieving back into the south pond.

Q. That one was 450,000 gallons. Are there prints here that we could find perhaps today how big the pond is?

A. Sure.

Q. Is it a three to one slope on the side, do you know what that is?

A. No.

MR. VOYLES: Eric is here and we can ask him.

BY MR. KRIENS:

Q. Okay, if it's easy to get, if not we can get it later. I appreciate that because it helps us to understand because some of this, as you mentioned, is very cryptic in here, so it does help to understand what's going on.

Going back to the original issue, why was it discharged on land during those three days? Was it to lower the freeboard -- increase the freeboard in the ponds because they were getting full or was it for some other reason, and why wasn't it discharged via the discharge instead?

A. With the 8-inch freeboard in the south lagoon and leaving a foot and a half in the north, if we were to take and flow a lot of water up in the north part of the plant, or even the southern part of the plant, if we had an incident and flowed a bunch of water it would return itself down the sewer system into that south lagoon. With an 8-inch freeboard we would end up overflowing that pond. It just don't flow out, it's an earthen dike built up.

Q. So if you had an incident and you had to use water it would eventually go back to there, is that what you're saying?

A. Right.

Q. And then it would overflow?

A. At some point, right. It's going to go down there and then actually end up overflowing the lagoon itself. That's why we kind of set

limits on the high and the low that the guys go by.

Q. Why wouldn't they just go over to the polishing ponds via the north pond?

A. We don't control those levels, we just -- waste water treatment plant controls how much water is sent to the river, we don't do that.

Q. Would they have came to you and notified you? Although safety is involved in managing the levels in those ponds, would they have came to you with a request to spray water out because the ponds were high or for some other purpose?

A. After January we had the criteria we could follow for flowing water.

Q. And that was measured?

A. That's why there's the entries you see there. Previously we would not have had any water amounts put in our log.

Q. I guess we'll need to look at that, what these flows represent in terms of actually improving the condition of the ponds to increase the freeboard, if it makes any difference or not. Maybe we can calculate that out and figure that out.

Would lowering the pond an inch or two

make a big difference? What I'm getting at, when you try to lower pond levels how far do you want to really lower it?

A. We want to get it within our operating guidelines that has been set up.

Q. Do you recall what those were?

A. I can get those numbers. Like I say, I don't deal with this every day as far as running the pumps, starting and stopping, that's the responsibility of the people on shift. There's been criteria put out there to keep the levels for the amount of water we have in the north and south so we have enough available water for firefighting and we don't have too much to overflow.

Q. At the same time this is going on was the water in the north pond increased in discharge to the polishing ponds, do you know?

A. We don't keep track of the amount going to the polishing ponds.

Q. If you observed in this case that the south pond showed eight inches of freeboard and you wanted to get it down to whatever level is prescribed to be safer, and you mentioned there is some level like that, would you first

instead of, you know, flushing out via hydrants, would you also ask the waste water plant if they could increase the discharge from B5?

A. We haven't been involved with asking them to regulate their flow to the river according to what we do in the management of the pond.

BY MR. ADAMS:

Q. Did you have any involvement with environmental in terms of them discussing with you how you are managing the spraying?

A. The first involvement we had with environmental was in January when the ammonia criteria came up, so we had to -- that's why we have the numbers listed in the log.

Q. You developed those guidelines then?

A. Right.

Q. Do you remember during the three-day period in February discussing the spraying with environmental?

A. Well, that's where -- according to the ammonia, that gives us how much water could flow. That's why the amount of water is logged there.

Q. There's a relationship between following the

concentration of ammonia and the relation to the guidelines used, there's some kind of formula?

A. Yeah.

MR. ADAMS: That's what I wanted to clear up. I don't think I have anything further on that.

(Whereupon, the interview concluded at 2:45 p.m.)

* * *

STATE OF MINNESOTA)
) Ss:
COUNTY OF HENNEPIN)

BE IT KNOWN, that I, MILO BALLINGRUD, Court Reporter, a Notary Public in and for the County of Hennepin, State of Minnesota, certify that the foregoing is a true record of the interview of GARY ETA, and reduced to writing in accordance with my stenographic notes made at said time and place.

I further certify that I am not a relative or employee or attorney or counsel of any of the parties or a relative or employee of such attorney or counsel;

That I am not financially interested in the action and have no contract with the parties, attorneys, or persons with an interest in the action that affects or has a substantial tendency to affect my impartiality;

IN WITNESS WHEREOF, I have hereunto set my hand on this 4th day of November, 1997.

MILO BALLINGRUD,
Notary Public, Hennepin County, Minnesota
My Commission Expires January 31, 2000.