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INTERVIEW OF:

TOM BAILEY

TAKEN NOVEMBER 18, 1997 AT 2:45 P.M.

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INTERVIEW OF TOM BAILEY, taken pursuant to agreement of and between parties at, Koch Industries, Inc., P.O. Box 64596, St. Paul, Minnesota, at approximately 2:45 p.m. on Tuesday, November 18, 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. HAYES

GREGORY BERGER

Present from Koch Industries:

JAMES K. VOYLES, Attorney at Law

Present from the law firm Green Espel:

SUSAN K. WIENS, Attorney at Law

## I N D E X

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1 BY MR. BERGER:

2 Q. Tom, I want to read an introduction part we are  
3 doing for all the personnel we're talking to.

4 As you are aware, the Minnesota Pollution  
5 Control Agency is conducting a civil  
6 investigation that is focusing on Koch Refinery  
7 operations and on pollution, environmental  
8 related issues that surfaced from an April of  
9 '97 inspection that the PCA had out here. We  
10 are seeking your cooperation at this time in  
11 obtaining some information through this  
12 interview. We want you to know that this  
13 interview is totally voluntary on your part, you  
14 are not required or obligated to answer these  
15 questions if you don't want to.

16 The information we obtain in this  
17 investigation may be used in an administrative,  
18 civil or criminal enforcement action against  
19 Koch Refining Company. This investigation at  
20 this time is not focusing in on any individual  
21 at Koch Refinery at this time. Do you  
22 understand that or do you have any questions  
23 about that information?

24 A. No, I understand. It's previously been  
25 explained to me.

- 1 Q. Okay. Tom, would you please state your name and  
2 then give us a history, a brief history, of your  
3 work here at Koch? And be pretty specific with  
4 your last position, your current position.
- 5 A. Okay. My name is Thomas Bailey, B-a-i-l-e-y.  
6 Sometimes they leave off the E. I started at  
7 Koch in May of 1990. I spent less than a year  
8 in the loading department.
- 9 Q. Loading?
- 10 A. Yeah. That was with barges and the railroad.
- 11 Q. Was that done at the barge dock?
- 12 A. Right, barge dock and the rail rack. That was  
13 loading petroleum products and also the rail was  
14 sulfur and other products. I think it was --  
15 well, within a year I was transferred to waste  
16 water. Currently I'm the number one operator in  
17 waste water.
- 18 Q. Okay. There are a couple issues I want to talk  
19 to you about today, Tom, and one of them has to  
20 do with Koch Refining receiving materials,  
21 product, maybe waste, I'm not sure, whatever,  
22 from off site. I mean from outside the Koch  
23 Refinery here from other sites in St. Paul or  
24 wherever.
- 25 A. Okay.

- 1 Q. I have a waste water treatment plant daily audit  
2 log from 9/8/95, there's no number on it.
- 3 A. There should be a date.
- 4 Q. Yeah, 9/8/95. Your initials are on this log, I  
5 believe as the number two operator. I'm not  
6 sure.
- 7 A. It could have been at that time.
- 8 Q. Okay. The first three sentences of the log  
9 state environmental contacted us to sign  
10 manifest for pipeline truck to unload high  
11 benzene material to tank 63. Upon arriving to  
12 show driver how to unload there was a noticeable  
13 H2S odor. That last sentence isn't all that  
14 important, but the first one is the one I'm  
15 interested in (indicating). Is that your  
16 writing? Is that you on the log there, your  
17 initials?
- 18 A. That's -- no. My writing is down here  
19 (indicating). That's actually Dave Gardner when  
20 we were working together, '95. That's Dave's  
21 writing.
- 22 Q. I see. Okay.
- 23 A. And Dave was actually -- I don't know if you're  
24 familiar with how we operate, but he was  
25 covering the outside and I was covering the

- 1           inside.
- 2       Q.    I see. Okay. Do you know specifically what
- 3           that's about, signing a manifest with high
- 4           benzene material? Do you know --
- 5       A.    Specifically, you know, we receive a lot of
- 6           transports of different product. The
- 7           information there would have been passed on from
- 8           either the shift supervisors or whoever had
- 9           knowledge that the truck would be coming to us.
- 10          They would indicate what type of material we
- 11          probably would be receiving. That's usually how
- 12          it --
- 13       Q.    You would get that from the shift supervisor?
- 14       A.    I would say, or someone possibly in
- 15           environmental. We would -- they wouldn't call
- 16           us direct, whoever is shipping the product
- 17           wouldn't call us direct, the information would
- 18           get to us by someone in management.
- 19       Q.    Who would receive the information initially?
- 20       A.    Right, right.
- 21       Q.    You mentioned you received a number of products,
- 22           and can you give me a little more information
- 23           about that and what type of things you have
- 24           received that you are aware of?
- 25       A.    We received transported -- we receive trans-mix,

- 1           that's a common.
- 2       Q.    Trans-mix?
- 3       A.    Yeah.  That's from the pipeline where they
- 4           switch products.  They have a slop tank from --
- 5           I think Griffon is one of the ones we
- 6           occasionally received not too long ago.  It's a
- 7           mixture of product shipped through the pipeline.
- 8           Could be a mixture of gasoline, fuel oil, you
- 9           know, and so forth.
- 10      Q.    That comes in tanker trucks?
- 11      A.    Comes in tanker trucks and we receive it through
- 12           to tank 63.
- 13      Q.    Which is a slop tank?
- 14      A.    It's a slop tank, yes.
- 15      Q.    Besides trans-mix, are there any other materials
- 16           that you are aware of in your work that comes in
- 17           from off site?
- 18      A.    Outside of the plant?
- 19      Q.    Right.  I'm not talking about inside movement of
- 20           materials from one end to another, I'm talking
- 21           about outside, a truck would have to come down
- 22           the highway to get --
- 23      A.    Occasionally there's spills that -- pipeline
- 24           spills, cleanup spills.
- 25      Q.    Okay.  And this material is liquid from a spill?



- 1 A. Right, water, gasoline and so forth.
- 2 Q. Water or gasoline?
- 3 A. Right, or a combination of them.
- 4 Q. Anything else that you're aware of, Tom?
- 5 A. Possibly some heavy oils. I know occasionally
- 6 there's some tank cleaning outside. Well, in
- 7 the past there was the old Koch terminal, the
- 8 NSP terminal, I think they received some tank
- 9 cleaning. There's, you know, water and oil and
- 10 sludge and so forth.
- 11 Q. Did that include sludge? Are you specifically
- 12 aware of sludge coming on site, too?
- 13 A. Well, whatever was in the bottom of the tank.
- 14 Q. And that's sucked out?
- 15 A. Yeah. Whatever accumulates in the bottom of the
- 16 tank from the cleaning is usually referred to as
- 17 a sludge. It's sort of a general term.
- 18 Q. Okay. So that's includes water?
- 19 A. Water, detergents, whatever we use to clean the
- 20 tank.
- 21 Q. Hydrocarbons in there somewhat?
- 22 A. Right.
- 23 Q. Okay. And again, what they're talking about
- 24 here, this high benzene material, you're not
- 25 sure what they're talking about here, you're not

- 1           aware of it?
- 2       A.    Other than, like I say, we would have been  
3           informed what the makeup of the product was.  
4           It's not our responsibility to determine what  
5           the makeup is. The lab, if they wanted a test  
6           run in the lab they would probably do a test on  
7           some product.
- 8       Q.    You said if shifties tell you that, and who --  
9           do you know who specifically would be a shiftie  
10          that would tell you that type of information?
- 11      A.    Whoever is on duty at the time. I mean, it  
12          was -- I couldn't even venture to tell you who  
13          it was that day, you would have to look back in  
14          the log.
- 15      Q.    How about just in general?
- 16      A.    There's different ones different times.
- 17      Q.    How about some names of the shifties that would  
18          be in that position to tell you that  
19          information?
- 20      A.    Now or in 1995?
- 21      Q.    Both.
- 22      A.    Gary Anderson maybe.
- 23      Q.    Gary Anderson?
- 24      A.    Could have been. Rick Legvold was -- well, wait  
25          a minute. '95, no, Rick was still at the unit.

1           It would have been Larry Klemetson, the  
2           supervisor at the time. Also that information  
3           possibly could come from the unit supervisor.  
4       Q.    Okay. How about currently?  
5       A.    Currently, well, Gary is still current.  
6           Actually Dave is -- well, I don't know, he's in  
7           transition now.  
8       Q.    Dave Gardner?  
9       A.    Dave Gardner. Mike Bishel. I'm thinking more  
10           of the people that would work during my crew  
11           because we rotate crew.  
12       Q.    Sure. That's what I want to know about.  
13       A.    Larry Klemetson would possibly be another one.  
14       Q.    Okay. I have a memo here from March 1, 1996.  
15           It's from Heather Faragher to Eric Askeland,  
16           that's the only two people involved, you are not  
17           on this. The subject of the memo is hazardous  
18           waste stuff, and number four item on the memo  
19           reads as follows: What is the operator's  
20           liability/responsibility concerning the signing  
21           of hazardous waste manifests? The ones from  
22           Otto Avenue were from state of Minnesota? This  
23           brought up specific questions from operators  
24           with regard to signing these forms and their  
25           liability (indicating).

- 1       A.    (Views document) I don't recall this.
- 2       Q.    My question is --
- 3       A.    As far as liability, I think that is -- this
- 4           specific one here I don't recall, but as far as
- 5           liability, I think that point has been brought
- 6           up, you know, because we do sign and receive
- 7           what's shipped. Some operators have questioned,
- 8           you know, what kind of liability do we have.
- 9       Q.    The operators receive and sign hazardous waste
- 10          manifests, is that what you're saying?
- 11       A.    Right.
- 12       Q.    How do you know they're hazardous waste
- 13          manifests?
- 14       A.    It's indicated on the manifest, the waste
- 15          manifest. It says what it is.
- 16       Q.    It says hazardous waste?
- 17       A.    It would say -- well, let me see. I'm not sure
- 18          on that, if that would be -- I'm just thinking
- 19          of manifests in general. Anything that's sent
- 20          to the waste water plant we would sign for, you
- 21          know, unless obviously there were questions for
- 22          some reason or we questioned it and thought
- 23          there was a problem with it. Usually we accept
- 24          it. And what we're doing is we're acknowledging
- 25          we received it.

1 Q. Right.

2 A. I think I indicated we're not necessarily in the  
3 position to determine what it is and how it's --  
4 we somewhat can determine how it's supposed to  
5 be handled, but we're also responsible for  
6 determining that the truck driver puts it in the  
7 right place and handles it safely. I think  
8 that's sort of where our responsibility lies.

9 Whether it's classified as hazardous  
10 waste I think -- no, in thinking back. The kind  
11 of products that we're receiving, that would go  
12 into tank 63 for example. Or if it's not a  
13 flammable material or combustible, it's  
14 basically water, then we can determine some  
15 other location for it.

16 Q. All right.

17 A. So back to your answer, in thinking about it,  
18 no, we wouldn't sign for any hazardous waste,  
19 that would be the environmental department's  
20 responsibility.

21 Q. Well, in general then, not specific to you, but  
22 do you know of that happening then, hazardous  
23 waste manifest loads coming in to Koch Refining  
24 from off site, from outside this facility, that  
25 hazardous waste manifests were with that load

- 1           and that somebody took that manifest and signed  
2           it or went to environmental? Do you know of  
3           that situation? Not personally but in general?
- 4       A.    I do not know.
- 5       Q.    Okay.
- 6       A.    And I think if you look at our manifest, and I  
7           don't have an example of it, everything on there  
8           that we sign for has certain classifications and  
9           is identified. We usually check that, but  
10          anything that's has hazardous would be the  
11          environmental group, they would handle that.
- 12      Q.    I'm not talking about your internal manifest  
13          system now. I know you do have one for that.
- 14      A.    No, I'm talking about something else, right.
- 15      Q.    So in regards to the first part of this number  
16          four here, what is the operator's liability,  
17          responsibility concerning the signing of  
18          hazardous waste manifests, you don't know what  
19          that's about then?
- 20      A.    No. And one thought is sometimes they refer to  
21          that manifest as a waste manifest in general,  
22          and I'm wondering if that might be a reference  
23          to the internal, the waste manifest.
- 24      Q.    Right.
- 25      A.    I think that could be a misinterpretation. I

1 don't know of anyone signing.

2 Q. Okay. It states the ones from Otto Avenue. Do  
3 you know where they mean Otto Avenue? Do you  
4 know where they're talking about? Have you ever  
5 heard Otto Avenue mentioned before?

6 A. Maybe a tank farm, but I'm not sure.

7 Q. Here on site?

8 A. No, it would be off site. I'm not sure if  
9 they're referring to the same one. There's  
10 different tank farms around.

11 Q. Okay. The last document I have regarding this  
12 issue is again from Heather Faragher, and I'm --  
13 I'll see if I can see your name on here, Tom.  
14 It's to a number of people. Yes, Tom Bailey,  
15 you were CC'ed on this or it was sent to you.

16 The subject of this memo is hazardous  
17 waste issues and it's dated Tuesday, March 26,  
18 1996. The memo starts out from Heather, there  
19 were some questions concerning hazardous waste  
20 issues at the waste water treatment plant during  
21 class number three. Eric Askeland has put  
22 together a summary of the items that concern us  
23 at the waste water treatment plant. This  
24 summary is attached. And then the attached  
25 summary reads helpful hints for the hazardous

1 waste plant regarding hazardous waste issues.  
2 And it has about eight, nine issues here. The  
3 sixth issue is titled manifest and there's three  
4 parts to it, A, B and C. A reads the operators  
5 should not experience a significant amount of  
6 liability from signing hazardous waste manifests  
7 if one, Koch is able to take the waste, two,  
8 Koch manages the waste properly upon acceptance.

9 B states the operators should make sure  
10 that the environmental department is aware of  
11 any waste coming to the waste water treatment  
12 plant that is on a manifest other than a KRC-PD  
13 internal waste manifest. The operator should  
14 not accept any off site waste without prior  
15 approval from the environmental department. And  
16 then C is about training. It states the  
17 operators should receive training on manifesting  
18 if they have not already received such training.  
19 Are you aware of that document (indicating)?

20 A. I'm aware of that, yes.

21 Q. Do you know why that issue was discussed about  
22 manifests? Is manifested waste coming into  
23 Koch? I mean, do you know what that's about?

24 A. I think it was a question that came up. Like I  
25 said, I'm not aware of any -- anything that any



1 operators sign or receive. But I know this  
2 question did come up.

3 (Discussion off the record.)

4 BY MR. BERGER:

5 Q. Tom, we were talking about the attachment to the  
6 memo of Heather's about manifests. You don't  
7 know if this was a specific -- was a response to  
8 a specific situation?

9 A. No. I think it was -- in my opinion I think it  
10 was a question that came up, you know, if we  
11 did. You know, we were receiving a lot of  
12 different products, sometimes you don't really  
13 know.

14 Q. Do you know what a hazardous waste manifest  
15 looks like? Have you ever seen one? If there  
16 was a shipping paper and hazardous waste  
17 manifest here and some other shipping document,  
18 would you know the difference? Have you ever  
19 seen one? Has it ever been pointed out to you?

20 A. Yeah, I think we have -- there was a copy, I  
21 think, to the attachment there (indicating).

22 Q. Oh, to this?

23 A. Yeah, I think there was one. As far as  
24 remembering, I really haven't -- it's been such  
25 a long time since I really looked at one I

1           wouldn't -- I can't say that I really would. I  
2           mean, without -- if I saw the information on  
3           there I probably would, obviously, say yeah.

4       Q.    After reading it?

5       A.    Yeah. Because basically we deal with the  
6           standard manifest.

7       Q.    The internal?

8       A.    Internal.

9       Q.    Okay. Another issue I want to talk about is the  
10           oily water sewer and non-oily water sewer. This  
11           is a log from April 21, 1996. It's number 330.  
12           The operators here are Stevens and Aalto.

13                   Under the comments section there's two  
14           sentences here I'm interested in. The first one  
15           reads caustic, just that word, and then it says  
16           dash tank 304 to B5. Poly dumping 500 gallons  
17           per minute to Nows. Further down it states poly  
18           units done with tank dump, now sending H2O from  
19           tank (indicating).

20       A.    Uh-huh.

21       Q.    Can you tell me what your interpretation is  
22           there of what's going on?

23       A.    I would say the poly unit, either they had a  
24           problem and -- and had to dump the tank. That  
25           could be a possibility.

- 1 Q. And they dumped it where?
- 2 A. To the oily water sewer.
- 3 Q. To the oily water sewer?
- 4 A. Yeah.
- 5 Q. How come it says NOWS then? Isn't that the
- 6 non-oily water sewer?
- 7 A. Oh, okay, in this case, yeah. Okay, I'm seeing
- 8 the one here. Well, if they had a leak usually,
- 9 and if it was located close to a NOW sewer
- 10 that's how it would happen I would say. I don't
- 11 have firsthand knowledge of this, but that's
- 12 usually what would happen.
- 13 Q. But that memo doesn't discuss a leak, does it?
- 14 A. It doesn't. I would assume that's accurate,
- 15 what they wrote. Whatever reason, I don't know,
- 16 they could have had a problem, that's usually
- 17 the situation.
- 18 Q. Do you know what tank 304 is by any chance, what
- 19 it's used for?
- 20 A. I don't recall tank 304.
- 21 Q. Okay. Any questions you want to ask on that,
- 22 Don?
- 23 MR. KRIENS: No.
- 24 BY MR. BERGER:
- 25 Q. In general, with regards to the oily water sewer

1           system, what is your knowledge in regarding what  
2           that system is for, the OWS?

3       A.   The oily water sewer is -- it receives processed  
4           water from the coker ponds, from the -- product  
5           from all the sumps, the oily water sewer sumps,  
6           which could be any type of product, whatever is  
7           coming from the units, from washdowns, from any  
8           problems they might have.

9       Q.   Maintenance?

10      A.   Maintenance, yeah.

11      Q.   Are you aware that material received or that is  
12           released or the general stream of the OWS  
13           contains hydrocarbon waste or hydrocarbon  
14           material?

15      A.   Sure.

16      Q.   And what is your knowledge of the source of  
17           those hydrocarbons like naphtha or methanol?

18      A.   Usually if there's a leak or a problem that's  
19           one of the places that it ends up, in the sewer  
20           there.

21      Q.   Are you aware or have you ever heard of let's  
22           say not a leak, but let's say a maintenance step  
23           on a vessel that would contain some naphtha, and  
24           then that material was released to the oily  
25           water sewer system. Are you aware of that type

- 1 of situation?
- 2 A. Where maintenance would --
- 3 Q. Let's say a vessel was coming down and they
- 4 wanted to get inside it or clean it out or do
- 5 whatever, but they first had to empty it out.
- 6 And there's naphtha, for example, in that vessel
- 7 and then that material is released to the oily
- 8 water sewer system. Are you aware of that
- 9 happening?
- 10 A. Not directly, no.
- 11 Q. Are you aware of materials like high pH
- 12 caustics, high caustics or low pH like acids
- 13 being released to the oily water sewer system
- 14 from the units? Have you ever had that
- 15 experience?
- 16 A. Yes. Usually when the alky unit has a problem
- 17 with their neutralization pit it's released to
- 18 the oily water sewer. And tank 304, I think we
- 19 have a similar tank, that's a caustic tank.
- 20 Q. That's a caustic tank?
- 21 A. Yeah, that's what I recall. I had to think
- 22 about the numbers because there's a lot of
- 23 different numbered tanks and with different
- 24 units it's hard to remember all of them.
- 25 Q. When these releases are coming down the OWS you

- 1           are notified, you are given a phone call and  
2           told this material has been released and it's  
3           coming down the sewer system, is that generally  
4           true?
- 5       A.   That's the rules. They're supposed to.
- 6       Q.   Okay.
- 7       A.   It doesn't necessarily always happen. Sometimes  
8           they don't know. Sometimes we detect something  
9           is happening and we notify the unit, too, we're  
10          seeing a change here, and then they send out the  
11          investigation.
- 12      Q.   To see where the problem is?
- 13      A.   To see if someone has a problem somewhere.
- 14      Q.   How do you detect that? What are the ways?
- 15      A.   The pH, sometimes visual inspection, smell.  
16          Methanol, you can smell that.
- 17      Q.   Right. Is visual inspection or smell of the API  
18          separator one way?
- 19      A.   Very much so, yeah. LEL we can, naphtha, we'll  
20          see that, so and visual.
- 21      Q.   What's your knowledge about the API separator,  
22          what that is for?
- 23      A.   Primarily for skimming oil and also settling.
- 24      Q.   When you say oil, are you -- do you specifically  
25          mean just oil or could it mean other materials,

- 1           too?
- 2       A.    Skimming specifically oil.
- 3       Q.    Heavy oil?
- 4       A.    That's the primary goal, right.
- 5       Q.    Okay. We've noticed in a lot of these logs, and
- 6           we've gotten logs for '95, '96 and '97, and
- 7           there's been a lot of entries on the comments
- 8           here about oil showing up on the API separator,
- 9           lots of oil on the API separator, green gas oil,
- 10          oil, it's on these logs quite a few times. Is
- 11          that -- that's one thing you keep track of,
- 12          right? And you try to find out why that's
- 13          happening?
- 14      A.    Right, that's true. And usually the procedure
- 15          is we'll notify the shift supervisor and then
- 16          they can sort of look. And we would call
- 17          around. If it has a certain characteristic then
- 18          we can -- if it's green gas oil we usually call
- 19          the coker unit. It's more of a characteristic.
- 20          It's not necessarily so it's a -- they're having
- 21          a problem, but it could be one of the first
- 22          areas to look.
- 23      Q.    That's my next question. What generally do you
- 24          find out is the reason for that showing up on
- 25          the API like that?

1 A. Usually having some type of problem.

2 Q. In the unit somewhere?

3 A. Right, in the unit somewhere.

4 Q. Is it ever a situation where it's just because  
5 of what they release, not from a problem, but  
6 just a release to the system, that you would  
7 have it showing up on the API? Is that a  
8 possibility?

9 A. I suppose it could be a possibility. All  
10 occasions that I'm aware of it's indicated they  
11 had some kind of problem, maintenance or process  
12 problem or something related.

13 MR. BERGER: Okay. That's about it  
14 for me.

15 MS. HAYES: I'm done.

16 BY MR. KRIENS:

17 Q. Tom, I'm Don Kriens. You were a waste water  
18 operator starting in '91, was it?

19 A. Yeah.

20 Q. About 1991?

21 A. Yeah, that's close.

22 Q. Were you aware of this past winter, this past  
23 spring and then the winter and the previous  
24 year, '96, that waste water was disposed of via  
25 the hydrant system, using the hydrants to flush



- 1 out and dispose of waste water on land?
- 2 A. Yes.
- 3 Q. Do you know -- could you elaborate on that, your  
4 knowledge of it?
- 5 A. I remember I guess procedurally the safety  
6 department flushed the hydrants, and that was  
7 one of the occasions. Also there was water that  
8 was -- because of the levels in the south -- the  
9 west storm pond water was also sprayed from the  
10 hydrants.
- 11 Q. Because the level was high in the pond you mean?
- 12 A. Yes, the fire ponds.
- 13 Q. Was it a result of the levels being high because  
14 of the backup of ammonia, or affluent from S7  
15 because of high ammonias in that, that safety,  
16 or whoever conducted the discharges, had it  
17 done?
- 18 A. As far as I know, you know, it's because of the  
19 high levels of water. If it's ammonia related I  
20 guess I'm not really aware that that was  
21 indicated as a reason.
- 22 Q. Okay. In November 3 and 4 of '96 there was one  
23 particular hydrant release during the nighttime  
24 at which a fair -- we don't know how much water,  
25 but water was released over the night period.

1           And that next -- that was a Sunday evening  
2           through Monday morning. On Monday morning a  
3           Bioassay testing, or the whole affluent toxicity  
4           testing was scheduled to begin, and during that  
5           night, as I mentioned, they discharged water  
6           through the hydrants on land. At the same time  
7           that day of the 3rd and 4th the plant received a  
8           very high load of ammonia because of the  
9           problems with the sour water strippers. And my  
10          question is do you know of that release in  
11          particular?

12        A.    I don't really recall, unless I was -- I would  
13           have to look back in the logs. I think that was  
14           someone else that was on. It was something I  
15           read in the logs about because we review the  
16           logs.

17        Q.    Yeah, you aren't on those logs. I looked at  
18           those time frames. Was there -- you were aware,  
19           I assume, of the high ammonia loadings coming  
20           from the refinery area impacting the waste water  
21           pond?

22        A.    Right, I believe so.

23        Q.    Was that a difficult problem to deal with  
24           through what time frame? My understanding was  
25           it began around June, July of 1996.

1       A.    Yeah, we had -- you know, just specifically  
2            identifying the overall time window, but from  
3            time to time there were problems because of the  
4            sour water stripper, that was one of the  
5            identified reasons.

6       Q.    What was the operational response to that?  How  
7            did you operate the waste water plant then to  
8            deal with that?

9       A.    One was to maintain the biological system to try  
10            and help take care of the ammonia.  The other is  
11            limit the outflows from the S7, stay within the  
12            limits.

13      Q.    By limiting -- go ahead, any others?

14      A.    Also, as far as backing any water into the  
15            system.

16      Q.    That was what you would have to do when you  
17            limited the S7 to the polishing ponds?

18      A.    Yes.

19      Q.    Back up to B5?

20      A.    B5 or the fire ponds, yeah.

21                   MR. KRIENS:    I don't think I have  
22            anything more.  Thanks a lot.

23                               (Whereupon, the interview concluded at  
24                               3:25 p.m.)

25                               \*       \*       \*

**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 TOM BAILEY, 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 21st day of November, 1997.

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