Summary Statement for Deposition Publication

submitted pursuant to Order Granting Appellant's Motion to Publish Depositions of Ecology Managers and CR 30(b)(6) Designated Witnesses dated March 19, 2002

ACC & CASE v. Dept. of Ecology & Port of Seattle, PCHB No. 01-160

Deponent: KEVIN FITZPATRICK

Date of Deposition:

JANUARY 16, 2002

1. Admissibility

- A. Purpose used for or what it will be offered to prove: lack of reasonable assurance for 401 with respect to water quality, fill, and low flow. Mr. Fitzpatrick is one of the Ecology personnel who has been explicitly cited by Gordon White (the 401 signator) and others as providing a basis for reasonable assurance.
- B. Specific designation (if CR 30(b)(6) deponent): Mr. Fitzpatrick is the Section Manager of the Water Quality Program in Ecology's Northwest Regional Office. He is designated as an Ecology witness concerning, among other matters, water quality, fill and low flow.
- C. Basis for admissibility if challenged by objection: If an objection is attached pursuant to provision 4 below, ACC's and CASE's response is also attached.
- **Excerpting:** The following portions of the FITZPATRICK deposition are offered by ACC and CASE:

START		<u>END</u>
Page 1, line 1	through	page 7, line 7
Page 10, line 7	through	page 10, line 24
Page 11, line 25	through	page 13, line 16
Page 15, line 14	through	page 53, line 17
Page 54, line 23	through	page 58, line 7
Page 60, line 8	through	page 72, line 14
Page 79, line 12	through	page 80, line 10
Page 82, line 2	through	page 89, line 11
Page 94, line 9	through	page 95, line 20
Page 99, line 24	through	page 110, line 1
Page 116, line 24	through	page 119, line 12

Page 122, line 17	through	page 126, line 22
Page 135, line 24	through	page 150, line 17
Page 151, line 13	through	page 172, line 18

- 3. Counter Provisions of Respondents: See attached.
- 4. **Objections of Respondents:** See attached.

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ACC & CASE v. Dept. of Ecology & Port of Seattle **PCHB No. 01-160**

Department of Ecology's Designation of Additional Portions of Deposition and Objections Entered Pursuant to the Board's Order of March 19, 2002 and Port of Seattle's Joinder in those Objections and Designations

Deponent:

Kevin Fitzpatrick

Date of Deposition: January 16, 2002

Counter Excerpts by Respondent Department of Ecology:¹ 3.

END START page 94, line 8 Page 91, line 23 page 132, line 1 Page 128, line 16 Completed Correction and

Objections to Designations by Appellants: 4.

Signature Page

A deposition is admissible in this hearing only to the extent that the same testimony would be admissible in this hearing if the deponent were then present and testifying as a witness. CR 32(a); WAC 371-08-300(1) and (2). Therefore, Ecology renews its objection to publication of this transcript and submits the following objections to particular portions of the transcript.

General objections: Mr. Fitzpatrick has testified before the Board in this matter and Ecology has not had the opportunity to review the hearing transcript. Mr. Fitzpatrick's deposition was used during his testimony. To the extent ACC and CASE now designate those portions of the deposition referenced during his testimony, Ecology objects to those portions of the transcript as asked and answered.

Inadequate foundation laid regarding witnesses specific areas of technical expertise.

START	<u>END</u>	<u>OBJECTION</u>
Page 22, line 23	page 23, line 20	Calls for legal conclusion (objection made on record by Gil Reavis).
Page 23, line 21	page 24, line 20	Calls for legal conclusion.

¹ By designating counter excerpts, Ecology does not waive its objections to ACC's and CASE's publication of this transcript. Those objections are reflected in Ecology's Response to Appellants' Motion to Publish and in argument before this Board. Further, Ecology does not waive its objections to ACC's and CASE's use of particular portions of the transcript. Those objections are identified in subsection 4 of this document.

Page 25, line 2	page 25, line 23	Calls for legal conclusion, lack of foundation.
Page 31, line 17	page 32, line 16	Calls for legal conclusion.
Page 32, line 21	page 33, line 3	Calls for legal conclusion.
Page 39, line 13	page 40, line 1	Calls for legal conclusion, vague and ambiguous.
Page 45, line 7	page 46, line 1	Calls for legal conclusion (objection made on record by Tom Young).
Page 46, line 2	page 46, line 10	Calls for legal conclusion.
Page 49, line 14	page 50, line 1	Mischaracterizes prior testimony.
Page 57, line 23	page 58, line 7	Foundation, speculation.
Page 62, line 19	page 63, line 1	Foundation, speculation.
Page 79, line 18	page 80, line 1	Foundation, speculation, vague and ambiguous.
Page 82, line 2	page 82, line 15	Argumentative.
Page 86, line 9	page 86, line 11	Calls for legal conclusion.
Page 86, line 12	page 86, line 18	Ambiguous, legal conclusion.
Page 88, line 15	page 88, line 21	Argumentative (objection made on record by Tom Young).
Page 88, line 22	page 89, line 11	Argumentative.
Page 94, line 9	page 94, line 23	Ambiguous.
Page 104, line 5	page 104, line 20	Relevance.
Page 106, line 6	page 106, line 17	Argumentative.
Page 124, line 21	page 125, line 9	Not posed as question, argumentative (objection made on record by Tom Young).
Page 138, line 17	page 140, line 1	Calls for legal conclusion.
Page 142, line 5	page 142, line 18	Vague (objection made on record by Gil Reavis).
Page 144, line 20	page 145, line 22	Foundation (objection made on record by Tom Young).
Page 145, line 23	page 146, line 10	Document speaks for itself (objection made on record by Tom Young).
Page 148, line 15	page 149, line 9	Foundation (objection made on record by Tom Young).
Page 149, line 10	page 149, line 19	Speculation.
Page 160, line 11	page 160, line 16	Foundation, ambiguous, speculation (objection made on record by Gil Reavis).
Page 160, line 17	page 160, line 20	Foundation, ambiguous, speculation.

Page 160, line 17 page 160, line 20 Foundation, ambiguous, speculation.

Page 169, line 22 page 170, line 4 Compound (objection made on record by Gil Reavis).

Page 170, line 20 page 171, line 13 Foundation

PORT JOINS ECOLOGY'S DESIGNATIONS AND OBJECTIONS

Counsel for the Port of Seattle have reviewed Ecology's designations and objections. The Port joins in all of Ecology's designations and objections.

Appellants' Responses to Objections Raised by Ecology and the Port To The Publication of Depositions of Ecology Managers and CR 30(b)(6) Witnesses

ACC & CASE v. Dept. of Ecology & Port of Seattle, PCHB No. 01-160

Deponent: Kevin Fitzpatrick, Water Quality Program Section Manager, Ecology

Northwest Regional Office

Date of Deposition: January 16, 2002

Responses to Ecology's Objections:

For the publication of the deposition of Mr. Fitzpatrick, Ecology raises fortyeight (48) specific objections. Ecology's objections are addressed below.

1. **Objection**: "Calls for legal conclusion." (10 specific objections, including two made on record.)

During the hearing, AAG Jeff Kray argued on behalf of Ecology that Ecology's employees are charged with interpreting and implementing Washington's water quality laws and regulations, and that they are therefore entitled to testify as to legal conclusions. The Board accordingly overruled objections that questions put to Ecology employees "called for legal conclusions," stated that Ecology employees could so testify, and indicated that responses would be given appropriate weight. This result is particularly appropriate here, where the deponent was previously the NPDES Facility and Permit Manager for Sea-Tac International Airport (page 13 lines 8-16), served as the Unit Supervisor for the Northwest Regional Office's Industrial Permit Unit for ten years (page 12, lines 21-23), and is presently the Water Quality Program Section Manager for Ecology's Northwest Regional Office (page 12, line 23 through page 13, line 7).

2. Miscellaneous Objections as to Form Where No Objection Was Made On The Record: Lack of foundation, vague, ambiguous, speculation, argumentative (23 objections).

Under the Civil Rules, Ecology and the Port waived these objections by failing to make them at the deposition, when the questions could have been revised to cure any infirmity. CR 32(b) enables respondents to make objections to admissibility, but this authority is explicitly subject to the provisions of "subsection (d)(3) of this rule" -- CR 32(d)(3). Under CR 32(d)(3)(B),

"Errors and irregularities occurring at the oral examination in the manner of taking the deposition, in the form of the questions or answers, in the oath or affirmation, or in the conduct of the parties, and errors of any kind which might be obviated, removed, or cured if promptly presented, are waived unless seasonable objection thereto is made at the taking of the deposition."

CR 32(d)(3)(B) (emphasis added). Respondents failed to seasonably present these objections to the form of the question at the taking of the deposition, thereby deprived appellants any opportunity to cure any defects, and thereby waived the objections.

3. **Specific Objection:** Page 39, line 13 through page 40, line 1 (Calls for legal conclusion, vague and ambiguous).

Appellants withdraw their designation of the cited lines (Page 39, line 13 through page 40, line 1)

4. **Specific Objection:** Page 88, line 15 through page 88, line 21 ("Argumentative (objection made on the record by Tom Young)"):

Appellants withdraw their designation of the cited lines (Page 88, line 15 through page 88, line 21)

5. Specific Objection: Page 104, line 5 through Page 104 line 20 (Relevance):

The question and answer are directly relevant to the 401 appeal. The author of the 401, Ann Kenny, testified that she relied on Mr. Fitzpatrick for the water quality sections of the 401. (Kenny Dep. page 42, lines 6-7; page 43 at 20-22.) Thus, Mr. Fitzpatrick's understanding of Ecology's obligations under the Clean Water Act are probative of legal and factual issues on appeal. Specifically, Mr. Fitzpatrick's understanding of the extent to which the Clean Water Act requires Ecology to impose effluent limits on concentrations of copper in the Port's stormwater discharges affects Ecology's ability to assure that the Port's stormwater discharges comply with water quality standards. This is particularly so because Ecology has asserted that the 402 NPDES Permit helps give Ecology reasonable assurance that the proposed third runway and MPU projects will not result in violations of water quality standards. If Mr. Fitzpatrick believes that Ecology has no obligation beyond requiring the Port to apply basic BMP's regardless of their effectiveness in removing dissolved copper from stormwater, this indicates that future NPDES Permits likely will not assure the Port's compliance with water quality standards.

6. Specific Objection: Page 124, line 21 through page 125, line 9 (Not posed as question, argumentative (objection made on record by Tom Young):

Appellants withdraw their designation of the cited lines (Page 124, line 21 through page 125, line 9)

7. Specific Objection: Page 142, line 5 through page 142, line 18 ("Vague (objection made on record by Gil Reavis)"):

As the transcript plainly reflects, Mr. Reavis's only objection was to the question posed at page 142, line 5. There was no objection to the revised question posed at page 142, line 8. Respondents waived any objection to the form of the revised question (i.e., vagueness) by failing to object to the revised question. CR 32(d)(3)(B).

8. Specific Objection: Page 144, line 20 through page 145, line 22 ("Foundation (objection made on record by Tom Young)"):

Appellants withdraw their designation of the cited lines (Page 144, line 20 through page 145, line 22)

9. Specific Objection: Page 145, line 23 through page 146, line 10 ("Document speaks for itself (objection made on record by Tom Young)"):

Appellants withdraw their designation of the cited lines (Page 145, line 23 through page 146, line 10)

9. Specific Objection: Page 148, line 15 through page 149, line 9 ("Foundation (objection made on record by Tom Young)"):

As the transcript plainly reflects, Mr. Young's only objection was to the question posed at page 148, line 15. There was no objection to the revised question posed at page 148, line 24. Respondents waived any objection to the form of the revised question (i.e., foundation) by failing to object to the revised question. CR 32(d)(3)(B).

11. Specific Objection: Page 160, line 11 through page 160, line 16 ("Foundation . . . (objection made on record by Gil Reavis)"):

Appellants withdraw their designation of the cited lines (Page 160, line 11 through page 160, line 16)

12. Specific Objection: Page 169, line 22 through page 170, line 4 ("Compound (objection made on record by Gil Reavis)"):

The question resulted in no response, and was revised upon objection. The question should be retained to provide context for the subsequent colloquy.

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DEPOSITION UNDER ORAL EXAMINATION OF

KEVIN FITZPATRICK

JANUARY 16, 2002

ACC VS. STATE OF WA, et al.

DIANE MILLS, CCR, RMR, CRR

Yamaguchi Obien & Mangio

520 Pike Street, Suite 1213

Seattle, Washington 98101

Phone: (206) 622-6875

Fax: (206) 343-4110

E-Mail: dmills@yomreporting.com

Website: www.yomreporting.com

KEVIN FITZPATRICK; January 16, 2002

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1	A P P E A R A N C E S	1 2	9:00 A.M.	
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2 3 4 5	A P P E A R A N C E S FOR THE APPELLANT: RICHARD A. POULIN	1 2 3 4 5 6	9:00 A.M. oOo KEVIN FITZPATRICK, sworn as a witness by the Notary Public,	
2 3 4 5 6	A P P E A R A N C E S FOR THE APPELLANT: RICHARD A. POULIN Smith & Lowney, P.L.L.C.	1 2 3 4 5 6	9:00 A.M. oOo KEVIN FITZPATRICK,	
2 3 4 5 6 7	A P P E A R A N C E S FOR THE APPELLANT: RICHARD A. POULIN Smith & Lowney, P.L.L.C. 2317 East John Street	1 2 3 4 5 6 7 8	9:00 A.Mo0o KEVIN FITZPATRICK, sworn as a witness by the Notary Public, testified as follows:	
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participated in?

- A. I believe it was five or six years ago.
- O. Well, in case it's helpful, I'd like to explain some of the instructions. I will ask questions and wait for a verbal response from you. We need to make a record today, so head shakes and noises other than yes or no may not be clear on the record.

It's important that you understand the question that I'm asking, so if you don't know what I'm getting at, please let me know. If you find anything confusing, I hope you'll bring it to my attention. Would you do that, please?

- A. Yes, I will.
- Q. Is there any reason you wouldn't be able to give clear answers today?
 - A. No.
- Q. Are you under any medications or prescription 17 18
- 19 A. No.

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- Q. Have you had any alcohol recently? 20
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- Q. Could you please explain what kinds of 22 23 preparation you've undertaken to get ready for today's deposition? 24
 - A. Could you explain that question just now?

the same way that I reviewed Dr. Strand's Declaration, that of Tom Luster. And these were Declarations that were made in support of ACC's Motion for Stay. And I think I did read through the recent decision from the PCHB.

- O. Is this the decision for the Motion for Stay?
- A. Correct.
- Q. Have you also read the Board's ruling on the Cross Motions for Summary Judgment in the NPDES permit modification appeal that CASE brought?
- A. Yes, I did. That was probably the most 11 recent thing. In that case I was more focused on, you 12 know, what our obligations were from the PC H B 13 decision in terms of the corrections that they're 14 asking us to make to the facts sheet. 15
- Q. What do you understand those obligations to 16 17 be?
- A. The way I interpret that is that the facts 18 sheet was remanded to Department of Ecology to include 19 the outfall locations for stormwater outfalls associated with construction activity.
 - Q. Do you know whether the Department plans to have a new public process as part of that facts sheet correction?
 - A. Whether we have -- what do you mean by "new

What do you mean by "preparation"? Do you mean -- -related to what?

- O. What documents have you reviewed to come up to speed for this session?
- A. I think in the past several weeks what I reviewed included a review again of the 401 Water Quality Certification that was issued plus the amended certification. I believe I also reviewed a Declaration 9 I gave earlier related to another case, actually, one 10 that was brought by CASE on the appeal of the major 11 modification to the NPDES permit.

I recall reviewing the NPDES permit and the 13 facts sheet. But in both instances those were I think 14 during the holiday period, so my recollection of those 15 may be a bit fuzzy right now. I reviewed those in 16 anticipation of what was supposed to be my original deposition date which was back in December, and I haven't done that much preparation since that time.

- Q. Have you reviewed any of the transcripts of the other depositions that have taken place in this
- A. I think I also glanced through the 22 23 deposition -- or I'm sorry, the Declaration of 24 Dr. Strand, Dr. Jonathan strand, and I glanced 25 through -- did not review in detail, certainly not in

public process"?

- Q. Does the Department intend to give the public an opportunity to comment on the information that will now be included in the facts sheet pursuant to the Board's order?
- A. The way that we interpret this presently is that what the PCHB is requiring of us is not a major modification, therefore, we would not put this through the public notice on draft. Certainly when we do issue any modification, that action is subject to appeal within 30 days after we issue it.

But if your question is will we do a public process similar to what is done for major permit modification, the answer is no.

- Q. And understanding your point that the Board has not mandated a major modification, will Ecology use its discretion under the minor modification process to determine that public notice is appropriate since the Board determined that important information was withheld from the public?
- A. Using our Department discretion, we feel it's important to satisfy the Board's concerns here immediately, and so we don't want to weigh this down further or drag it out further through another lengthy round of public notice process which would not -- is

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1 not required, and as you rightly put it, is up to the discretion of the Department of Ecology, since this is a minor modification to the facts sheet.

- Q. Back to your preparation for today's deposition. Have you in fact reviewed any of the transcripts of other depositions that took place in this appeal?
- A. No. None of those have been made available to me.
- Q. Could you please tell me about your educational background.
- A. Certainly. My undergraduate degree is a bachelor of science from Loyola University in Chicago, 14 and I have a graduate degree, M.A. in zoology, at Southern Illinois University in Carbondale, Illinois.

In addition to that, I held a commission in

the United States Coast Guard completing Officer Candidate School in the United States Coast Guard back in 1980. And I retired from the United States Coast 20 Guard Reserve in December of 2000, retired as a 21 lieutenant commander in the United States Coast Guard 22 Reserve.

- Q. Do you recall the years of your degrees?
- A. Oh, certainly. My B.S. from Loyola
- 25 University was 1975, and my M.A. from Southern Illinois

University is in 1981.

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- Q. You stated earlier that you have been deposed before. Have you served as a witness in any appeal of a lawsuit?
- A. I have not served as a witness in any appeal of a lawsuit, no.
 - Q. Have you ever been qualified as an expert?
 - A. Yes.
- O. What were those circumstances?
- A. The instance that I recall was a Pollution Control Hearings Board series of cases in which some water rights decisions were being appealed, and I was called upon by Water Resources to act or to testify as 14 the water quality expert for water quality issues in 15 what we refer to the Cedar Green water quality management areas. Because at that time I was acting as a watershed lead for those water quality management areas.
- Q. And so you were qualified as a water quality 20 expert in that proceeding?
 - A. Yes. My recollection is is that I was presented and then qualified before the PCHB as being able to give expert testimony on water quality matters within those watersheds.
 - Q. Do you remember any of the names of the

parties in that appeal, or the year of the proceedings?

A. I remember that this may be -- my best recollection is that it may have been back in '94 or '95. It was at a time when our water resources prog. was putting out a number of decisions.

And I do recall what was being contested, and what was being contested was the agency's assertion on water continuity. And in particular I believe this was in the Issaquah Subbasin, Issaquah Creek Subbasin, what was being contested in the appeal by groups like the East Lake Sammamish Water District. They were trying to assert that there was no hydraulic continuity between the stream and groundwater.

- Q. I appreciate that. We don't really need to --
- A. Well, I do recall, though, that one of the witnesses for the East Lake Sammamish Water District who was trying to assert that there was no hydraulic continuity was one of the consultants for ACC right now, and that's Dr. Peter Welling. I thought that was very interesting.
- Q. And do you recall the ultimate decision in
 - A. Yeah. The agency was upheld by the PCHB.
 - Q. Thank you. Please tell me about your work

history with the Washington State Department of Ecology.

A. I started working for the Department of Ecology in 1986, coming off of active duty in the U.S. Coast Guard. And my first job with the Department of Ecology, I was the agency's first environmental crimes investigator. At that time I was working for what was then in the agency called central programs as the agency's environmental crimes investigator. I did that job from '86 until '88.

And then from '88 until -- I think that was from '88 until 1990, I was a water quality inspector at Ecology's Northwest regional office. Then I went back for about a year and a half to serve on the -- again as the state's environmental crime investigator on a state/federal environmental crime task force that was headed up by EPA's Office of Criminal Investigation.

And then I returned in about '91 to Ecology's Northwest regional office to supervise the industrial permit unit in the water quality section at the Northwest regional office. And then from '91 until 2001, I was the unit supervisor for the industrial permit unit. And in February of 2001 I became section manager for the water quality program in the Northwest region.

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- O. What date in 2001 did that take place?
- A. February 18th.

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- 2 Q. And that was section head for the water 3 quality --
 - A. Program at Northwest region, section manager. I think it reads as section manager on my business
- O. Have you ever served as the permit or 9 facility manager for the Port of Seattle's NPDES permit at Sea-Tac International Airport?
- A. Yes, I did, on an interim basis. I'm trying 12 to recall when that happened. I think in late 1999 I took on those responsibilities because the facility manager that we had for NPDES permit, Lisa Austin, left the agency, and so as the unit supervisor, I inherited those responsibilities.
- Q. What is the relationship of unit supervisor 17 to a facility manager? 18
- A. Unit supervisor is -- the way we're organized 19 at Northwest regional office in our water quality section is the unit supervisor tries to do an $\operatorname{\mathsf{--}}$ or 22 does an analysis of what the workload is out there with 23 respect to permits and to equitably divide those up, 24 and also to rely on particular people's expertise let's 25 say in the industrial sector or stormwater engineering

1 expertise. And try to match up that workload and 2 manage that workload as best they can with the available human resources that we have, which are for 4 the most part what we have in the industrial unit, our

5 facility managers who are either environmental engineers or environmental specialists.

- Q. Is the unit supervisor involved in oversight of permit management?
- A. The oversight that they provide is only as much as -- well, I shouldn't say "only." The facility manager is the individual with the primary responsibility of tracking compliance with a given permit, whether it be an NPDES permit or a state waste discharge permit, and also has different regulatory and administrative requirements come on line like the expiration of an NPDES permit.

The unit supervisor works along with that facility manager to ensure that work deadlines are being met and that they'll do and manage peer review of a draft permit and ensure that public notice, you know, necessary public notice requirements are being met. And then that's all to prepare it for the actual issuance of that permit by the section manager. But the unit supervisor is a first-line supervisor.

O. And what does that mean, first-line?

A. Well, first-line supervisor is someone who is aware of the technical challenges that a facility manager is facing and, you know, tries to make the facility manager aware of program commitments that we have, work commitments that we have, and at the same time make management aware of the resource constraints and challenges that the facility manager is facing.

- Q. And in that sense, by "management" you mean upper management above the unit supervisor level?
- A. Well, you go the next chain up. You take that up to the section manager, and then the section manager in turn can relay that to the water quality program manager.
- Q. With respect to NPDES permits, are all aspects of permit management such as enforcement, compliance and review of required submittals, is that all handled within the section or are there other branches, other units that participate?
- A. In the case of the Northwest regional office, 19 that would all be handled -- if it is a permit assigned to the industrial permit unit, that would be handled within the industrial permit unit. 22
- O. Do I understand that there's recently been a 23 24 change in the name of the industrial permit unit; is 25 that right?

A. Correct. It's now the -- because right now, or we have recently reorganized the section because of growth in the section, and now that unit is the industrial permit and stormwater unit. And that's to reflect some additional engineering review responsibilities that they've taken on. And that we also have another unit group which will assist that industrial permit unit on enforcement activities.

- Q. And which unit is that?
- A. And that's called the compliance and technical assistance unit. But that's a change that 11 went into effect in September of 2001. 12
 - Q. And in what sense is that a new change? Is that a new unit or is that a new role for a unit that's been around for awhile?
 - A. It's a new unit.
 - Q. So prior to -- before September 2001, all of those permit functions were performed by the industrial permit unit?
- A. Correct, if it was a permit assigned to the 20 industrial permit unit.
- Q. And just to confirm, the NPDES permit for 22 Sea-Tac International Airport is assigned to the industrial permit unit?
 - A. Correct.

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- Q. Let's talk about your role in the recent 401 certification process. Could you please tell me when you first got involved in that process?
- A. My recollection is that I first became involved I believe in late 1999, in September of 1999.
- Q. And at that time what was your level of involvement?
- A. I became involved because we had -- Lisa Austin had left the agency. She previously had been the one who was serving as the water quality expert to the 401 water quality certification team. And with Lisa's departure and, you know, being Lisa's former supervisor, those responsibilities then fell to me.
- Q. Who else was on that 401 certification team at the time?
- A. The other folks at that time that I recall who were on it were Tom Luster from our headquarters office with the shoreline and environmental assistance program, Ray Hellwig as the regional director.
 - Q. And that's in the Northwest regional office?
- A. At the Northwest regional office. When I started I think those were the folks who made up that 22 23
- Q. So just the three of you? 24
- 25 A. Right. That's my recollection of what it was

in September '99.

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- Q. Did you write any part of the 401 certification?
 - A. No.
- Q. And is that answer equally valid for the August 10, 2001 certification and the amended September 21, 2001 certification?
- A. Correct. Now, you're referring to the -okay, the August 2001 and then the amendments; correct?
 - Q. Yes.
- A. And my role in that was to review proposed language, and as I recall, Ann Kenny was the primary 13 author of those documents, and as she would come up with draft language, she would ask for corrections. So I guess technically you might say that I did write 16 part of it because, you know, I would propose -- you know, I would make editing changes or suggest different language for her when it was going through its draft revisions.
- Q. In the case it's convenient, I think it will 21 be before we're finished here today, I'll introduce two exhibits. Exhibit 1 is the amended September 21, 2001 version of the 401 certification, and Exhibit 2 is the August 10, 2001 certification.

Are there any parts of the certification

decisions for which you had particular responsibility in your water quality role?

- **A.** The portion of the water quality certification that had the greatest amount of review and input from water quality program and water quality section are the portions of the certification that deal with clean fill criteria or what I believe is described as -- I'm sorry, it's described as conditions for acceptance of fill to be used in construction of the third runway.
- Q. And that would be Section E, beginning on Page 14 of the amended certification?
- A. Yes. And then the other section of that water quality program I had some review and input on was -- I'm trying to find the portions of this that deal with stormwater impacts. I'm sorry. And that would be Section J, operational stormwater requirements.
 - Q. That's Section J on Page 25?
- A. Yes, 25 of 33 in the September 21, 2001 document.
- Q. Were you personally involved in the water quality program's work on those sections?
- A. I was personally involved, and then as well as involved with an engineer in our section, John

Drabek, and also in working with an engineering consultant from King County who was working for Department of Ecology particularly on stormwater requirements, and that's Kelly Whiting.

- Q. How about the conditions for mitigation of low flow impacts in Section I which begins on Page 22? Was water quality involved in that section?
- A. Water quality had some involvement with that, but my recollection is that on much of this for the mitigation of low flow impacts, we were relying on modeling expertise and input from our consultant from King County, and that again is Kelly Whiting.
- Q. And when you say "we" were relying, do you mean the water quality program or --
 - A. No, I mean the Department of Ecology.
- Q. The Department generally. What do you understand the purpose of the 401 certification to be?
- A. Well, my understanding of any 401 certification is that it is certifying that a project and impacts from that project will comply with the state's water quality laws and regulations. Hence, they're called 401 certifications, because that's t. portion of the Clean Water Act that it comes from, that speaks to the state's having to issue one of these

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certifications in the federal permit. And the federal permit involved in this case is the 404 permit from the Corps of Engineers.

- Q. Is part of that compliance objective assuring compliance with the state water quality standards?
 - A. That's part of it, yes.
- Q. And which water quality standards apply to the Seattle-Tacoma International Airport?
- A. Well, we have both our state surface water standards which are in Washington Administrative Code 173-201A, and our groundwater standards which are Washington Administrative Code 173-200.
- Q. You'll see that Exhibit 5 is a copy of Chapter 173-201A of the Washington Administrative Code. 15 Is this the section or chapter of the code that you 16 identified as applying at Sea-Tac Airport?
 - A. Yes.

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- O. And where in this regulation do you find the specific standards that Ecology certifies compliance with under the 401 certification?
- A. There's several different places where the 22 standards are articulated in this regulation. There's 23 no one particular section.
- Q. Is Section 173-201A-030 one of the relevant 24 25 sections? It's on Page 477.

A. Yes.

- Q. Do you know whether the streams that flow through or originate at the Sea-Tac Airport vicinity are classified as Class AA or Class A?
 - A. They are classified as Class AA.
- O. Does that include Des Moines Creek and Miller Creek and Walker Creek?
 - A. Yes.
- Q. Is the 401 certification intended to assure 10 compliance with the NPDES permit governing Sea-Tac 11 International Airport?
- A. I'm not sure I understand your question. 13 When you say "ensure compliance," the 401 water quality 14 certification is, at least my understanding of it, is intended to determine if there is a suitable NPDES permit in place, an appropriate NPDES permit in place.

And to answer your question as to what 18 ensures compliance with the NPDES permit is the NPDES permit itself and how Department of Ecology then 20 manages that permit. We don't rely on the 401 21 certification to ensure compliance with our NPDES 22 permit.

Q. Does Ecology rely on the NPDES permit to certify compliance in the 401 certification?

MR. REAVIS: I'll just object to the extent

it calls for a legal conclusion.

A. Yeah, again, I'm not sure -- they're two separate animals, okay? One is a permit which is governing, and that is the NPDES permit. It is governing the stormwater -- the industrial-related stormwater discharges and the industrial wastewater discharges from the Port of Seattle's facility, Sea-Tac Airport.

The 401 water quality certification, as I stated before, is certifying the fact, I guess, that such a permit exists, you know, such a permit is necessary and it does indeed exist.

But in terms of one ensuring compliance with the other, my thinking is that they both have to stand on their own in terms of ensuring that their terms and conditions are being complied with. You know, they're certainly related to one another, but -- and again, I'm 17 not sure I'm completely understanding this question, so I'll just stop there. I don't understand this question.

- O. (BY MR. POULIN) Would you agree that the Port of Seattle's compliance with the NPDES permit does not assure that the purposes of the 401 certification are met?
 - A. Say that again.

O. Sure.

(Reporter read back as requested.)

A. No.

O. (BY MR. POULIN) And why not?

A. Because if the NPDES permit is being complied with, that means that -- if the Port of Seattle is complying with all the terms and conditions of its NPDES permit, that tells us that Department of Ecology has reasonable assurance that Port of Seattle's complying with that permit.

- Q. Do you mean to say that complying with the NPDES permit guarantees compliance with water quality standards?
- A. What I mean to say is that the way that the NPDES permit is structured right now is that -- and this is something that we're able to do through our water quality standards and through our NPDES permits -- is that through a compliance schedule built into the NPDES permit, we would in fact see compliance with those standards, with those water quality standards.
- Q. Does your reliance on a compliance schedule 22 indicate that the Port is not presently satisfying the water quality standards?
- A. Our reliance on a compliance schedule is a recognition of reality of when you're dealing with 25

DIANE MILLS, CCR, RMR, CRR dmills@yomreporting.com (206) 622-6875 *

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stormwater discharges.

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- Q. And is the reality that the Port is not presently complying with water quality standards?
- A. That is not my interpretation of -- in terms of their stormwater discharges, it is difficult to apply our standards, in particular the standards in WAC 173-040, to determine for a stormwater discharge whether indeed that discharge is violating those standards or not. And that's because the reality is is 10 that the stormwater event is a very dynamic event in which you will see concentrations of some of these constituents being highly variable. And so to try to apply these standards to a stormwater discharge is an extremely difficult process to do as opposed to trying to apply these to your standard steady states industrial discharge. 16

And what we have tried to do in the permit is recognize the reality of that and build in what I will call an adaptive management process of building toward the types and numbers of stormwater best management practices that would bring these stormwater discharges into a level of assurance that we could be confident that these standards are not being violated.

Q. Your reference to compliance schedule and an 25 adaptive management approach suggests to me that you're

anticipating future compliance based on the permit management approach. Doesn't that indicate that you don't believe there is present compliance today?

A. No, I don't believe that, because what we're presented with right now in our standards and with the technical limits that we're presented with, when it comes to regulating stormwater, are pretty monumental. Because what we've been presented with to regulate stormwater discharges are a set of regulations that are 10 best suited to regulating a typical steady state type of industrial or municipal wastewater discharge.

You don't have that with stormwater. It's a 13 whole different animal. And so, you know, we're out there trying as best we can given the limitations of 15 where the regulations are at right now, where the 16 science is at right now, to ensure that these current 17 stormwater discharges and future stormwater discharges 18 will not adversely impact the water quality of the 19 receiving waters, in this case adversely impact the 20 receiving waters of Miller, Walker and Des Moines Creeks.

Q. Isn't it the permittee's obligation to comply 23 with the permit requirements and the water quality 24 standards regardless of the subjective difficulty of 25 doing so?

A. It's the permittee's obligation to comply with the permit, correct. And you're correct that it's the permittee's obligation to not violate our state water quality standards.

Q. And isn't it Ecology's obligation to ensure that the permittee satisfies both --

A. Correct.

Q. -- the permit and the water quality standards?

A. I believe we're fulfilling both of those obligations the way that we presently have the permit

Q. Well, let's look at the relationship between the permit and the water quality standards, focusing first on the water quality criteria that you identified. And before we proceed, I'd like to mention that if at any time you'd like to take a break, we can easily do that.

(Recess taken.)

Q. (BY MR. POULIN) It's 10:12. Let's continue. Before we jump back in, let me ask that we try to avoid situations when we're both speaking at the same time so that the reporter can get an accurate record, and it's 24 also important that you allow me to finish a question so that you know where I'm going with it. Also, I'll

try not to cut you off.

Am I correct to understand your testimony as asserting that the Port's compliance with its NPDES permit assures Ecology that discharges at Sea-Tac International Airport comply with water quality standards?

A. What it assures Ecology is that they are on a compliance schedule by complying with the permit to achieve compliance with these standards. And this is in particular for the stormwater discharges from the facility.

Q. I think the question fairly calls for a yes or no answer. Do you feel unable to answer yes or no?

A. Well, you say it calls for a simple yes or no answer, and I don't believe I can give you a simple yes or no answer.

Q. Let's look at the Port's current NPDES 17 permit. This is Exhibit 3. Would you agree that 18 19 this --

(Discussion off the record.)

Q. (BY MR. POULIN) Is it your understanding that the NPDES permit for Sea-Tac International Airpo includes a compliance schedule for stormwater discharges?

A. Correct. That is my understanding.

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Q. And what's your understanding of how that compliance schedule works?

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- A. My understanding of how the compliance schedule works is -- and without having the permit in front of me, my recollection is that there's a section for developing stormwater limits, stormwater discharge limits in the current permit. So that says to me that since we're developing stormwater limits, that that's a compliance schedule.
 - O. I'm sorry, I missed the end of your answer.
- A. That says to me that we're developing --12 since we're developing final stormwater limits, that says to me that that is a compliance schedule, a compliance track, if you will, for developing final stormwater effluent limits.
 - Q. Is it your understanding that the permit does not presently include effluent limits for stormwater discharges?
 - A. That's my understanding, yes. Well, let me correct that. Could I have a copy of the permit?
 - Q. Certainly. Here's a copy of Exhibit 3. Please take a moment to review it and let me know if you agree this is the current enforced permit.
- A. (Witness reviewing document). Having had a chance to look at the permit fresh here, you'll notice 25

that with respect to stormwater, that there are no final effluent limitations listed for stormwater. And 3 instead what you have are monitoring requirements for stormwater under Special Condition S2 of the permit.

- Q. What's your understanding of what an effluent limitation is?
- A. An effluent limitation is a regulatory requirement usually in a permit that is a set limit that the permittee is held to. For example, you'll 10 note that they have a set of effluent limitations for 11 the industrial wastewater system for oil and grease, 12 and they have both an average monthly limitation of 8milligrams per liter and a maximum daily limitation of 15 milligrams per liter.
- Q. And are you referring to Permit Condition 15 S1.A on Page 8? 16
 - A. Yes, I am.
 - Q. So that's a numeric cap on the amount or volume of discharge that can be included --
- A. On the monitoring that they do, the 20 21 monitoring that they do on their industrial wastewater 22 discharge, on their final treated industrial wastewater 23 discharge cannot, on an average monthly basis, that 24 concentration could not exceed for oil and grease 8milligrams per liter. And they could never have one

day that exceeded 15 milligrams per liter. If they were, they would be out of compliance with the permit.

- O. Are there both -- is it your understanding that there are both numeric effluent limitations and narrative effluent limitations?
- A. You can have narrative effluent limitations, ves, in a permit.
 - 0. Does --
 - A. I don't see any right off the bat here.
- Q. Does this permit include either numeric or 10 narrative effluent limitations for stormwater 11 discharges at present? 12
 - A. No.
 - Q. Why doesn't the permit identify the water quality criteria as effluent limitations?
 - A. Why would it?
 - Q. If the permit is intended to assure compliance with water quality criteria, shouldn't those criteria be identified as the not to exceed limits --
 - A. But as I stated before --MR. YOUNG: You need to wait until he finishes his question.
 - Q. (BY MR. POULIN) In fact, I was finished.
 - A. As I stated before, the way that our standards are right now, okay, and the way we are

technically limited right now, it is exceedingly difficult, if not impossible, to try to apply those standards to a stormwater discharge.

That is why this permit was designed, to require the Port to do the type of monitoring and to provide us with the type of data where down the line once the science around stormwater improved, once our knowledge around how contaminants are conveyed in stormwater, once our knowledge around what the actual impacts of stormwater are on a receiving water, we could look to the day of establishing water quality-based limits for stormwater discharges.

Where we were at when this permit was developed, and I will say where we are at even now, it is an extremely difficult prospect to develop water quality-based stormwater limits.

- Q. Haven't those water quality-based limits already been established in the water quality criteria?
- A. Not for stormwater discharge, no, they have not.
- Q. Can you show me anything in WAC 173-201A that says the Washington state water quality criteria, water quality standards, do not apply to stormwater?
- A. I'm saying that the methodology for developing those -- and you would not find the

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- methodology here, you wouldn't find them in the standards, okay? These are either strictly narrative or numeric standards.
 - Q. The standards exist, don't they?
- A. Yeah.

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- Q. My question is, are those standards imposed 6 under this permit? Is the legal obligation to satisfy those standards imposed on the permittee by this document, Exhibit 3?
 - A. They're imposed in that we are -- we put into the permit a mechanism to develop water quality-based limits, and that's what's under Condition S2.
- 13 Q. And that's something that will happen in the 14 future?
 - A. Correct.
- 16 Q. It's not happening today under this permit?
- 17 A. If you're asking are there water quality-18 based limits for stormwater in the permit right now, 19 no, there are not.
- Q. For the purpose of convenience, I'd like to 20 focus on four different water quality standards that apply to stormwater. The first is the standard for turbidity. Do you see the stormwater -- sorry.
- Do you see the water quality standard for 25 turbidity in WAC 173-201A-030?
 - A. Yes.
 - Q. Where do you see that standard?
 - A. It's under 030. It's I guess Subsection (b) (vi), Turbidity should not exceed 5 NTU over background.
 - Q. Would you agree that that section is properly designated as Section 030 (1)(c)(vi) for Class AA, extraordinary water quality criteria?
 - A. Wouldn't that be (1)(b)(vi)? Oh, I'm sorry.
 - Q. (1)(a) is general characteristics, (1)(b) is characteristic uses, and (1)(c) is water quality criteria? I believe you'll see there's an arrow.
 - A. Oh, I see, okay.
- Q. So would you agree that (1)(c)(vi) is the 14 right section? 15
 - A. Correct.
- 17 Q. And that section applies to discharges at Sea-Tac Airport?
- 19 A. That section applies to -- yes, it would apply to discharges from any facility.
- Q. Now, this states, Turbidity shall not exceed 21 22 5 NTU over background when the background turbidity is 23 50 NTU or less. And paraphrasing, when background
- 24 turbidity is more than 50 NTU, then turbidity shall not
- 25 have more than a 10 percent increase.

- Is that the way you understand it?
- A. That's correct.
- Q. Does your description of how difficult water quality standards are to apply applied in the turbic. standard here?
 - A. No, it doesn't apply to the turbidity standards. What I was referring to is the difficulty in applying the standards under 040.
 - Q. Okay. We'll get to those in a moment.
 - A. Okay.
 - Q. Does the Port's current NPDES permit require the Port to satisfy the turbidity standard here in 173-201A-030(1)(c)(vi)?
- A. I would say it does, because under Condition S13, the Port is required for their construction activities, which is where you would anticipate seeing problems with turbidity, the Port's required for these construction activities to come up with Stormwater Pollution Prevention Plans and employ all the necessary BMPs, and that would include sediment erosion controls that would bring them into compliance with the standard.
- Q. Is the standard identified as an effluent limitation?
 - A. We did not put the standard in as an effluent

limitation, no.

- Q. And why not?
- A. I don't see it included as -- I do not know. I did not write the permit.
- Q. Would you agree that monitoring and testing to determine compliance with the turbidity standard is a technically simple matter?
- A. Are you asking is it simple to do a turbidity test?
 - O. Yes.
- A. Yeah, in my opinion it is a simple thing to do a turbidity analysis test.
- Q. Would you agree that the requirements of Condition S13 for construction activities do not apply generally to non-construction-related stormwater discharges under this permit?
- A. Yeah, S13 applies to construction-related activities.
 - O. But not non-construction stormwater?
- A. S13 is particular to construction-related activities, so -- correct, S13 does not apply to the non-construction stormwater.
- Q. Let's look at those requirements in WAC 173-201A-040, and let's focus today on the water quality criteria for copper, lead and zinc. And we can

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look at those individually.

Now, you've described difficulties relating to these water quality criteria. Could you please explain what difficulties you are referring to?

- A. Certainly. The difficulty in using these criteria the way they're set up in our standards right now -- and again -- did you want to start off with copper?
 - O. Yes.

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- A. Just to hold copper up as an example, if you'll see there that copper has a couple of footnotes attached to it. If you'll look under the Freshwater 13 Acute criteria, for example, you'll see that copper --14 the acute criteria is a one-hour average concentration not to be exceeded more than once every three years on 16 the average. Also it has a footnote D for the chronic criteria, and that's a four-day average concentration not to be exceeded more than once every three years on the average.
- Q. Now, with respect to copper, how does the 20 21 Department of Ecology --
 - A. I wasn't finished.
- 23 Q. Oh, I'm sorry.
 - A. So when you look at those footnotes, you
- 25 know, what that is telling you, or at least what it

tells me is that you're dealing with a wastewater stream that is coming from a source or sources that have what I would describe as steady state or predictable concentrations, in this case steady state or predictable concentrations of copper.

And you would build your treatment system accordingly to attempt to meet these particular -- or attempt to treat that wastewater discharge in such a way that statistically you could count on not exceeding either the acute or chronic criteria that's described here and then also footnoted in C and D here.

And so when you try to apply this same thing to a stormwater discharge, it's not that easy -- in fact, you really can't apply it to stormwater, because what you see in a typical stormwater event are 16 concentrations for copper in this case fluctuating all over the place. And typically what you might see is perhaps in the first 15 minutes of the storm event you may indeed see a higher concentration than the copper acute or chronic concentrations. But then you may see it actually tail off later on in a storm event to virtually non-detect.

So, you know, what this tells me at least is that we have to approach stormwater in a very different way, especially when it comes to try to apply these

standards, you have to approach it in a very different way than the way that we've traditionally approached wastewater discharges from municipal facilities or industrial process wastewater discharges.

O. Well, there's a lot to discuss in that statement. I'd like to address many of those components individually.

Is it your assertion that there's an exception for stormwater so that stormwater discharges are not subject to the obligation of meeting these numeric effluent limitations?

- A. No, that's not my assertion.
- Q. Do you agree that all discharges in the state are subject to the obligation to assure that their discharges do not cause levels of toxic substances in the receiving waters to rise above the levels identified here in the water quality criteria?
- A. You know, there's a lot of dischargers in the 18 state. You discharge from in front of your home every 19 day, the stormwater that comes off from your residence, okay? So my particular take on this is that it's 21 Ecology's obligation to, you know, reach for what makes 22
- the most sense in applying these standards to 23
 - stormwater. And in the case of Sea-Tac Airport, I
 - believe our permit that was originally issued back in

38 '98 is a very good first step in doing that. 1

- Q. How does Ecology know whether the Port's discharges cause exceedances of these water quality criteria in the receiving waters?
- A. We don't know that. That's what we're working on.
 - O. You don't know?
 - A. No. That's what we're working on.
- O. The Port's discharges could be causing violations of these criteria and Ecology --
 - A. Or they could not.
 - O. -- wouldn't know?
 - A. Or they could not.
 - O. But they could be?
- A. Could be or they could not. We don't know.
- That's what this permit is attempting to do. O. Hasn't Ecology certified that it has
- assurance that the water quality criteria are being met?
 - A. Could you say that again, please?
- Q. Hasn't the Department of Ecology certified that the water quality standards are being met at Sea-Tac International Airport?
- A. What we have certified in the 401 water 25 quality certification is that we have reasonable

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- 1 assurance that all our state water quality laws and regulations are being met, okay? I do not believe that we have certified that we know with absolute certainty that stormwater discharges are or are not, for that matter, exceeding these standards. But what we have done is say that we have reasonable assurance in finding that out, and in finding that out if it is indeed happening, correcting it.
- Q. What steps has the Department taken to 10 determine whether the water quality in the receiving waters meets these criteria in WAC 173-201A-040 for copper, lead and zinc?

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- A. Well, one of the steps is the NPDES permit, 14 is putting this facility and all its stormwater 15 discharges on that path to greater knowledge. And the 16 other is -- I believe it's in the most recent water 17 quality certification is a requirement to do a water 18 effects ratio study or something similar to a water 19 effects ratio study at the Port of Seattle.
- O. Well, we'll focus on that a bit later, but for now let's continue looking at the steps taken in the permit.

You focused initially in reviewing the water 24 quality criteria for copper on the requirement of a 25 one-hour average concentration and a four-day average

1 concentration. What kind of sample do you need to determine whether that one-hour average in the first instance is met?

- A. I've got to tell you right now, I don't know. I don't know what that would take. I know what it would take at a facility where you have a steady state 7 discharge, but I don't know what it would take for a 8 stormwater discharge. And that's one of the things 9 we're working on.
- Q. Isn't it true that many different kinds of 11 industrial facilities have discharges that are not steady state?
 - A. If they're stormwater discharges, yes, I would say that it is true, if it's an industrial facility with stormwater.
 - Q. Isn't it also true of industrial discharges?
 - A. No, because if it's a process wastewater discharge, they have control over that process and, therefore, I would consider that a fairly steady state predictable type of discharge.
- Q. What about a facility that rinses down the 22 shop floor once a day with a result that all the 23 resulting pollutants are discharged in a single flush?
 - A. They still know how much water they're applying and when it's coming, so I would consider that

a steady state discharge.

- Q. Even though it fluctuates wildly over the course of a day?
- A. There's still far more predictable variables in that than there are in a storm event.
- O. What kind of sample does the water quality criteria apply to? Does it apply to a direct sample of the discharge or does it apply to a sample of the stream?
- A. It applies to where the criteria is met or has to be met, and so I would say that if it's criteria that's being applied end of pipe then that would be the area where the sample would be taken. If it's criteria that are being applied at the edge of a mixing zone, then that's where the sample would be taken and where the criteria would need to be met.
- 17 Q. Where is the freshwater criteria for copper 18 applied?
- A. As I just stated, it depends on if it's an 19 end of pipe water quality criteria sample. In that case you would be looking at where the discharge meets the receiving water. And if there's a described and permitted dilution zone, then you're looking at the end of the dilution zone.
 - Q. What kind of discharge is the stormwater

under the NPDES permit?

- A. We don't have -- as I stated before, we don't have effluent limits for stormwater discharges. We're developing effluent limits for stormwater discharges.
- Q. What does it mean to say that there are no effluent limits applicable to non-construction stormwater in the permit?
- A. It means what's stated under S2.B, is that they are on a monitoring schedule.
- Q. Is it possible for the Port of Seattle to violate this permit in any way with a non-construction stormwater discharge?
- A. Oh, certainly. I mean, they could violate it with a discharge from their industrial wastewater system because there are limits for the water that they collect and treat in their industrial wastewater system so that they could violate those limits, be out of compliance with the permit.
- 19 Q. That would be a violation applicable to the industrial wastewater system?
 - A. Correct.
 - Q. How about for non-construction stormwater?
- A. For non-construction stormwater, well, they could violate the conditions of the permit by -- they could violate this particular condition of the permit 25

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and not do the required monitoring and reporting on the stormwater discharges. And, you know, that goes for all the parameters that are listed there under S2.

- O. Putting monitoring and reporting requirements aside, let's consider a hypothetical for turbidity.
 - A. Okay.

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O. If the Port had a non-construction stormwater discharge that raised the background turbidity by a factor of 3, tripled the background turbidity in the receiving water, would that violate this permit?

MR. YOUNG: I object to the extent it calls for a legal conclusion.

- Q. (BY MR. POULIN) Let me qualify the hypothetical. If we assume a background NTU of 10 and the Port's non-construction stormwater discharge caused the turbidity in that receiving water to increase to 60, would that be a violation of this permit?
- A. As I stated before, there's no effluent standards for turbidity for non-construction stormwater 20 in the permit, okay? Department of Ecology is still obligated, though, to ensure that our water quality standards are being met exclusive of any permit. And so if we had information of that, we would investigate 24 it and proceed with, you know, following our investigation. We may well proceed with an enforcement

Q. Are you familiar with the provision of the Clean Water Act that states that compliance with the terms of a NPDES permit is considered compliance with 4 the Act?

A. I'm not really familiar with that section. No, I'm not well-versed in that.

- Q. Have you heard reference to a provision that's called permit shield?
- A. You know, I just don't get in to that. I'm not a lawyer.
 - Q. Fair enough.
 - A. I'm trying to get water clean.
- Q. You previously mentioned a compliance schedule. Is there a compliance schedule in the permit?
- A. Yeah, I would interpret what's under the monitoring requirements, if you look at some of the language under the monitoring requirements, and in particular if you look at S2.C.b.
 - Q. Would that be S2.C.2.b?
 - A. Yeah, I'm sorry.
- Q. On Page 17?

A. That's an example of, you know, what I would consider a type of compliance schedule, that's entitled Compliance Evaluation, of how we'll be using that data

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action on that.

- Q. And what provision of this permit authorizes Ecology to do that in the absence of an effluent limit?
- A. There's no provision in the permit, but we do have the provision in our water quality standards. Again, it goes back to that there are not expressed effluent limits for non-construction-related stormwater discharges. But that doesn't tie Ecology's hands from taking the necessary corrective action to correct that hypothetical should it arise.
- Q. But it does mean that the permit itself does 12 not require the permittee to avoid the exceedance we described in the hypothetical?
 - A. Well, if you'll look -- there's a Condition G6, Compliance with Other Laws and Statutes. "Nothing in the permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations."
 - Q. In your review, do those applicable federal, state and local statutes, ordinances or regulations include the water quality criteria in 173-201A?
 - A. Yes.
- 23 Q. Does that answer apply equally to stormwater discharges?
 - A. Yes.

that they generate. 1

- Q. And this states that, "Monitoring will be reviewed for compliance with WAC 173-201A. The department will exercise its enforcement discretion in the event of non-compliance with these standards."
 - A. Correct.
- Q. Now, isn't it true that that provision, S2.C.2.b, applies only to construction stormwater?
- A. Yeah, I'm looking at that right now, and that's right, that applies to construction stormwater.
- Q. That's a provision, S2.C.2.b is a provision that was just recently added by the major modification, isn't that right?
 - A. Was it? I don't know.

MR. REAVIS: Can I ask a question here? You said Page 17 a minute ago. Are you reading from which exhibit now?

MR. POULIN: This is Page 17 of Exhibit 3.

MR. REAVIS: That's the major modification, not the original permit; is that right?

MR. POULIN: This is the current modified permit which includes the original permit.

Q. (BY MR. POULIN) If it's of help, I'll direct your attention to Page 16, Provision S2.C.2, creates the monitoring schedule for construction stormwater

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- discharges to Walker Creek and tributaries and Gilliam Creek and tributaries. So seeing that, would you
 - A. Yeah, I would agree that this was part of the recent modification.
- Q. So not only does the compliance evaluation provision that you've cited, S2.C.2.b, not only does that not apply to non-construction stormwater, it only applies to construction stormwater that occurs in 10 Walker Creek and tributaries and Gilliam Creek and 11 tributaries but not construction stormwater discharges to Miller or Des Moines Creeks; would you agree?
 - A. Correct, yes.

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O. Now, before we move on, I want to get back to your discussion of -- if I can paraphrase and hopefully accurately characterize your statement -- the stormwater quality criteria in Section 040 may not be 18 so appropriate for stormwater because of its 19 fluctuating nature.

Isn't it true that these state water quality 21 criteria are designed to protect water quality in the 22 receiving waters and to prevent degradation of characteristic uses?

- A. Of beneficial uses? 24
- O. Beneficial uses. 25

A. Yes.

- Q. And isn't that objective, independent of the specific nature of any discharge, the goal is to make sure in order to prevent harm to aquatic life and environmental values, the goal is to make sure that the water quality does not exceed these standards?
 - A. Yes.
- Q. So shouldn't that concern override the difficulty of fitting a square peg of stormwater discharges into the round hole of compliance with water quality standards?
- A. I don't think we're in disagreement. 13 I agree. And that's what we're trying to do here. We are trying to fit the square peg of stormwater into --15 or to do the type of analysis that's required to 16 determine if stormwater discharges from the Port of Seattle are or are not violating these standards. And 18 there's a lot of gaps in our knowledge right now. And we're using our NPDES permit to fill in those gaps.
- O. Let's look at another aspect of copper 21 standard. Isn't it true that the Department of Ecology 22 needs hardness data -- scratch that question and let me rephrase.

Does the Department of Ecology need hardness data to determine whether the water quality criteria for copper is being met?

- A. Yes. We need the hardness data from the receiving water.
 - Q. And could you explain why that is?
- A. Without getting too overly technical, you'll note that for copper, like a lot of the metals for freshwater and acute criteria, you're referred to footnote -- at least for the acute criteria, you're referred to footnote O. And you see that there's an equation there in which the hardness value of the receiving water is required for you to figure out the exact numeric acute concentration.
- O. So the actual numeric criteria varies with the hardness of the receiving water?
- A. That's correct. The correlation is that as hardness in the water column in the receiving water increases, so too does the acute concentration increase.
- Q. Does the NPDES permit require the Port to sample and report hardness in the receiving water?
- A. In reviewing this right now, I do not see where hardness of the receiving water under this Condition S2.B for non-construction stormwater, I don't see where that's required.
 - Q. S2.B, that's on Page 14?

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- A. That's correct.
- Q. And that identifies a schedule according to which the permittee shall monitor stormwater discharges at four specified outfalls?
 - A. Correct.
- O. And then the listed parameters called TPH, TSS, turbidity, also total recoverable lead, total recoverable copper, total recoverable zinc?
 - A. Yes.
- Q. But you don't see anything here that requires 10 11 sampling for hardness?
 - A. No.
 - Q. Doesn't that make it impossible for Ecology to determine whether the discharges satisfy water quality criteria?
 - A. It makes that type of analysis more difficult with the absence of that information, and that is why in the water quality certification we put the requirement in for a study similar to a water effects ratio analysis in which you would be taking and doing a study of the receiving water hardness.

(Reporter read back as requested.)

- Q. (BY MR. POULIN) It's not merely more difficult, it's impossible, isn't it?
 - A. No, I wouldn't say it's impossible.

DIANE MILLS, CCR, RMR, CRR (206) 622-6875 * dmills@yomreporting.com

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- Q. How can you determine compliance with water quality standards without hardness data?
- A. Because we have other sources for hardness data other than what the Port would be collecting for hardness data.
 - O. What are those sources?

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A. There is, from other stream studies done in King County, you know, studies of hardness values for similar types of streams, similar streams to Miller and Des Moines and Walker Creeks, depending on the season that the samples were taken.

But I don't think I'm disagreeing with you 13 that that is a value or a monitoring requirement that 14 should be in this permit to make Ecology's job easier in evaluating how these non-construction stormwater 16 discharges meet or don't meet our state water quality standards.

MR. POULIN: That's fine, we can break. It's 11:21. Let's go off record.

(Recess taken.)

Q. (BY MR. POULIN) Let's go back on record, it's 11:29.

23 I believe you stated that you did not write 24 the permit?

A. No, I did not.

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- Q. Do you know who did?
- A. Lisa Austin.
- 3 O. And that was back in 1997 or '98; is that right?
 - A. Yeah. She would have been writing it through
 - Q. She was an employee under your supervision at the time?
 - A. Yes.
 - Q. Who is going to be writing the new permit that presumably will be issued to replace this permit this year?
 - A. His name is Ed Abbasi.
- Q. And he is the current facility manager and 14 permit manager for Sea-Tac International Airport? 15
 - A. Yes.
- Q. Do you know whether the new permit will include a requirement to monitor hardness? 18
- A. I don't know what it will include right now. 19 I haven't seen a draft or anything of that nature. I'm fairly certain that we will be addressing hardness in any metals monitoring work that we do.
 - Q. Let's go back to the water quality criteria in 173-201A-040. We've just looked at hardness. We previously focused briefly on footnote C and its

reference to a one-hour average concentration as well as footnote D and its reference to a four-day average concentration.

Do you know whether the permit requires sampling sufficient to generate one-hour average concentration?

A. The type of sampling that is required for metals is composite sampling. And the difficulty comes in that, again, how in a storm event do you take discreet aliquots, samples, that are giving you an accurate representation of what indeed the one-hour average concentration is during that period of a storm or any number of storms?

Now, what they are sampling here or what they're required to do in their sampling is at least eight times a year do this type of composite sampling. And I do not know if -- because I have not recently reviewed their stormwater sampling reports, I do not know if you could rely on the data in those reports to answer the question of whether you're exceeding the one-hour average, and for that matter even more, whether you're -- for chronic criteria whether you're exceeding the four-day average.

Q. Aren't there standards governing how to sample a creek to generate a one-hour average?

A. Are there standards? 1

O. Uh-huh.

A. On it?

O. Yeah.

A. There are guidelines from EPA on how you conduct stormwater sampling. Those guidelines are by a number of experts in the field considered to be very inadequate, especially when it comes to answering the questions as to whether or not you're exceeding the one-hour or four-day average concentration, and inadequate and out of date, very dated guidelines. Those are the only standards or quidelines that I'm currently aware of that are out there right now.

There's a lot of work being done by -- well, for example, the National Urban Stormwater Study of where they're trying to develop the science further so that we can get at some of these very thorny issues relative to stormwater. And sampling stormwater events is what I would characterize as very much a work in progress and in its infancy and definitely at the beginning here.

And we're hoping through this permit to advance that science and knowledge even more, through this permit and also through the water effects ratio study that we're requiring as part of the water quality

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- Q. Well, independent of stormwater, doesn't the state have some agreed-upon protocols for determining what the one-hour average concentration of pollutants in a creek or other surface water body is?
- A. Yes. We have what's called reasonable potential determination procedures. And again, though, those reasonable potential procedures are only for what 9 I called before steady state industrial process 10 wastewater discharges or municipal wastewater 11 discharges. We have not yet come up with a method for applying a reasonable potential determination to 13 stormwater.
- Q. Well, these criteria in the WACs, they were 14 created by the Department of Ecology, weren't they? 15
- A. Yes, as we're obligated to do under the Clean 16 Water Act. 17
- O. And doesn't 173-201A-040 sub 2 say the 19 Department shall employ or require chemical testing, acute and chronic toxicity testing, and biological assessments, as appropriate, to determine compliance?
 - A. Sure does, yes. It says that.
- Q. Are you telling me the Department doesn't 23
- know how to do that? 24
- A. No, I'm not telling you that. What I am 25

1 telling you is that the science for doing the

appropriate level of testing is in development right 3 now. But I believe that we're employing all -- or

4 requiring of the Port all necessary chemical, acute,

5 chronic toxicity testing in this permit and in the water quality certification to work on this evaluation

of their non-construction stormwater.

Q. Let's shift gears briefly here. Let's turn to Page 52 of the permit, Section G11, General Condition G11.

You can take your time to read this, but it 12 states, "If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard of prohibition) is established under Section 307(a) of the Clean Water Act 16 for a toxic pollutant and that standard or prohibition is more stringent than any limitation upon such 18 pollutant in the permit, the Department shall institute 19 proceedings to modify or revoke and reissue the permit 20 to conform to the new toxic effluent standard or 21 prohibition."

- A. Uh-huh.
- Q. Isn't WAC 173-201A, and in particular 040, 24 just such a toxic effluent standard of prohibition 25 established under Section 307(a) of the Clean Water

- Act?
- A. No. And I'm not an attorney, but I believe 307(a) are the effluent standards on toxics establishe under effluent guidelines that are established by EPA
- O. And isn't 173-201A-040 addressed to toxic substances as required to implement that EPA directive at the state level?
- A. I can't speak to -- I'd have to research what 307(a) is, but I think you may be -- I don't think what is being referred to here, which I think are in fact standards developed under effluent quidelines from EPA, and that's what Section 307(a) of the Clean Water Act is referring to, I don't think to say that those are comparable to our water quality standards are the same. What drives our water quality standards is actually a different section of the Clean Water Act.
 - Q. Do you know which section that is?
 - A. No, I don't.
- Q. But you would agree that this particular component, 173-201A-040, is the section of Washington's water quality standards that addresses toxic pollutants as designated by EPA?
 - A. No, I don't agree.
- 24 Q. You don't agree?
- 25 A. No, I don't agree. I don't agree that this
 - Section G11 is referring to water quality standards that the state's developed. These are standards that we have set for toxics in Washington state waters. And without the Clean Water Act available to me, I believe 307(a) actually refers to effluent standards that are
- set under EPA's -- that EPA would set under effluent quidelines.
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- Q. Can you tell me what a composite sample is, turning back to the sampling requirements in the permit on Page 14? 11
 - A. (Witness reviewing document). I believe composite -- and I don't see the associated fact sheet here -- but it used to have a list of definitions on the fact sheet.
- O. I have the fact sheet available here. This 15 is a new exhibit.

(Deposition Exhibit No. 136 was marked for identification.)

- Q. (BY MR. POULIN) Please take a look at new 19 Exhibit 136 and see if this appears to be the fact 21 sheet.
- A. Okay. In Exhibit 136, if you look on Page 22 47, there's a definition there of what we mean by composite sample.
 - Q. And it says it's "A mixture of grab samples

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collected at the same sampling point at different times, formed either by continuous sampling or by mixing discreet samples. May be a 'time-composite' (collected at constant time intervals) or 'flowproportional' collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time

Do you know whether this kind of composite sample could be used to give you a one-hour average concentration?

A. I don't know.

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interval between the aliquots."

- O. Do you know if it could be used to give you a four-day average concentration?
- A. That would assume that you had a storm event that lasted over four days.
- Q. Who knows that kind of thing within the water quality program?
- A. I don't know who would know within the water quality program. I know people who are working on this 22 within the water quality program to -- again, try to 23 advance a science here. The question comes in is, 24 especially in composite sampling on storm events, 25 whether you're answering the question better using

that right now.

- O. Is it possible that there is no answer?
- A. It's possible, but I think that we can't simply stand still and do nothing because it's not possible right now to get this answer. But I think it's very possible with further study, further knowledge, to advance this whole issue and thereby -you know, I'm optimistic that by working on these 9 things, you know, we will have an answer.
 - Q. Ecology could require the Port to collect a grab sample instead of a composite sample, couldn't it?
 - A. Yes, they could, but grab sample doesn't tell you anything. It doesn't tell you as much as a composite sample does.
 - O. Wouldn't a series of grab samples give you the ability to determine four-hour or several one-hour averages?
 - A. Now you're talking composites. A series of grab samples combined is a composite sample.
 - Q. I'm not suggesting that they be combined but that they be evaluated independently. Four grab samples taken over the course of an hour, for example, wouldn't that give you a one-hour average?
 - A. Then if you're taking the average of their concentrations, you've just composited the sample.

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time-composite or flow-proportional.

I do know that there is debate among the sampling experts, the stormwater experts in the field, that you most likely get a more accurate characterization of just what the concentrations are in a storm event if you were to use flow-proportional, that that better gauges what the impact is. But then that leads to a difficulty as to, you know, what is really the associated time to your flow-proportional sample and then whether that time then correlates with something that you would see in the receiving water, and again, the receiving water being where we're trying to measure whether these impacts are occurring or not, whether you can get all of those things to line up.

Again, this points to just how difficult and complex true characterization of the impact of the stormwater discharge, characterization of those stormwater events can be on the receiving water.

- Q. Is it possible that no one in Ecology knows 20 the answer to my question whether the composite sample can be used to determine one-hour average or four-day average for purposes of compliance with water quality criteria for metals?
- A. I think it's possible, yeah. I think it's 25 possible that you're -- that there's no one who knows

- Q. Well, isn't that what the water quality standard calls for, a one-hour average concentration?
 - A. Correct.
- Q. So does that suggest to you, then, that a composite may be adequate if it's a composite of a one-hour time period?
 - A. It's a composite -- no, no.
- O. Okay, let's look at a different issue. The monitoring requirements for non-construction stormwater require the permittee, that is the Port, to monitor for total recoverable copper, lead and zinc.

What does that mean, total recoverable?

A. Total recoverable is a measure of all the metals that -- whether a dissolved or particulate, all the metals -- or the -- let me back up.

Total recoverable is a measure of the entire concentration of a metal regardless of the species of that metal, whether it be dissolved or associated with a particulate.

- O. Do you see that in the water quality criteria Section 173-201A-040 that in the first column, both copper, lead and zinc and other relevant metals are followed by the footnote DD?
 - A. Yes, I do.
 - Q. Let's look at footnote DD. And for your

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convenience, I have a new exhibit which you will see is simply an enlarged photocopy of footnote DD.

(Deposition Exhibit No. 137 was marked for identification.)

- Q. (BY MR. POULIN) Could you please read the first sentence of footnote DD aloud.
 - A. First sentence?
- O. Yes.

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- 9 A. "These ambient criteria in the table are for the dissolved fraction."
- 11 Q. And did you just explain that the total 12 recoverable is a whole that includes subparts?
 - A. It includes the dissolved fraction.
- 14 Q. So the dissolved fraction is just part of the
- 17 Q. Have you reviewed this footnote before?
- 18 A. Yes, I've had occasion to review this 19 footnote before.
- 21 of the footnote. Those sentences state, "The metals
- 22 criteria may not be used to calculate total recoverable
- 23 effluent limits unless the seasonal partitioning of the
- 24 dissolved to total metals in the ambient water are
- 25 known. When this information is absent, these metals
- criteria shall be applied as total recoverable values, determined by back-calculation, using the conversion
- 3 factors incorporated in the criterion equations."
- 4 **A.** Yes.
- Q. What does that language mean to you, or what do you understand it to mean?
 - A. I understand it to mean what it says.
- Q. Does Ecology know the seasonal partitioning of the dissolved to total metals in Miller and
- 10 Des Moines Creek?

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- 11 A. No, we do not.
 - Q. Do you understand the phrase, this
- 3 information in the fourth sentence of footnote DD to
- 14 refer to the seasonal partitioning of the dissolved to
- 15 total metals in the ambient water?
- 16 A. Could you repeat that, please?
- 17 Q. Do you understand the phrase, this
- 18 information in the fourth sentence of footnote DD to
- 19 refer to the seasonal partitioning of the dissolved to
- 20 total metals in the ambient water?
- 21 **A.** Yes, I do.
- 22 Q. Would you agree that then in the meaning of
- 23 footnote DD, that information is absent because Ecology
- 24 doesn't know it?
- 25 **A.** Yes.

- Q. Would you agree then that the metals criteria, since Ecology doesn't know the seasonal partitioning, shall be applied as total recoverable values instead of being applied as the dissolved fraction?
- A. Well, there's more to that sentence there.
 "Determined by back-calculation, using the conversion factors incorporated in the criterion equations."
- Q. Okay. So are the criterion equations the items we see in footnote O and, for example, P, and for lead, Q and R, and for zinc, AA and BB? Are those the criterion equations?
- A. Yes, those are examples of criterion equations.
- Q. And do you understand the reference to backcalculation to mean using this equation --
 - A. Yes
 - Q. -- to identify the numeric criteria?
 - A. Yes.
- Q. And do you understand this fourth sentence to mean that because the Department does not know seasonal partitioning of the dissolved metals, it should use the
- 23 total recoverable metal value rather than the dissolved
- 24 fraction?
- 25 **A.** Yes.
 - Q. So would you agree, then, that at least insofar as our focus on footnote DD, the sampling requirement in the permit for total recoverable copper, lead and zinc, is sufficient to generate information that we can use to determine the water quality criteria with that back-calculation process?
 - A. That's if you're developing an effluent limit.
 - Q. Or if you're determining compliance with the standard?
- 11 **A.** Or if you're determining compliance with the 12 standard, yes.
 - Q. Because DD explains how to use the equation to determine what the numeric criteria is?
 - A. Yes.
- Q. So in summary, would you agree that footnote
 DD can be understood to mean that you do not have to
- 18 know the dissolved fraction of the specific metal to
- determine the applicable water quality criteria when the seasonal partitioning of the dissolved to total
- 21 metals in the ambient water is not known?
- 22 A. That's what we're left with, yes.
- 23 Could I add something, please?
 - Q. Sure.
- 25 A. If you'll read the entire paragraph there,

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- going on from the fourth sentence, "Metals criteria may be adjusted on a site-specific basis when data are made available to the Department clearly demonstrating the effective use of the water effects ratio approach established by USEPA, as generally guided by the procedures in USEPA Water Quality Standards Handbook, 6 December 1983, as supplemented." And that has been supplemented and replaced since 1983.
 - O. Have data been made available to the Department in the sense of that sentence? Has the water effects ratio approach established by USEPA and as supplemented since 1983, has that taken place?
 - A. We have put requirements in the permit, in the NPDES permit, and also in the water quality certification to develop that information.
 - O. We'll focus more on the 401 later, but where is that relevant section or provision of the NPDES permit?
 - A. Well, in my opinion, we are filling in that data gap with the monitoring requirements under S2.B in part. It's not perfect, but I think it gets us part of the wav there.
 - Q. Didn't you agree that S2.B doesn't even require hardness sampling?
 - A. Sure, I agreed with you on that, but that

Do you understand that language to require sampling of the receiving water?

- A. Yes.
- Q. Why is that?
- A. Because they are taking the -- well, let me back up on that. It's sampling of their acute toxicity effects from the stormwater at the end of pipe, so it would be just before it enters the receiving water.
 - O. It's characterization of the effluent, not of the receiving water, isn't that right?
- A. That's correct. But what this effluent characterization helps us to answer is whether or not 12 13 we'll see any acute toxicity effects in the receiving 14 water. If we're not seeing any acute toxicity in the stormwater, in the stormwater effluent, then we would 15 not anticipate seeing any acute toxicity impacts in the 16 17 receiving water.
 - Q. But it doesn't necessarily tell you whether water quality standards are being met in the receiving water, does it?
 - A. Well, it tells us that one of the standards is being met, and that's a narrative standard for acute toxicity.
 - Q. But it doesn't tell you whether the numeric criteria for the metals are being met?

doesn't say it's not telling us anything else.

- Q. If Ecology wants to determine whether these water quality criteria are being met in the receiving water, shouldn't the permittee be required to sample the receiving water in addition to the discharge?
 - A. Correct.

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- Q. Does this permit require the Port to sample the receiving water?
- A. This condition in the permit does not require
- Q. Is there some other provision in the permit that requires sampling of the receiving water for this purpose?
- A. That requires a receiving water study? 15 Yeah, we have other provisions in here, in particular, the acute toxicity conditions under S10, acute toxicity for stormwater. And some of the information generated 17 18 there helps tell us what's happening in the receiving water, especially as it relates to acute toxicity effects from stormwater discharges.
- Q. That Provision S10 on Page 34 identifies two 22 acute toxicity tests listed below and says at the 23 outset that effluent characterization for acute 24 toxicity shall be conducted twice at each of the 25 following outfalls, and then identifies four outfalls.

A. No, it doesn't give us that type of definition.

3 O. There's a reference here at the bottom of Page 35 to Department of Ecology publication WO-R-90-80, Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria. And it says that all samples and test solutions for toxicity testing shall have water quality measurements as specified in that publication.

Do you know whether that publication requires sampling of hardness or receiving water characteristics?

- A. I believe it requires sampling of the hardness of the whole effluent.
- O. And in your understanding of Section 040 --MR. YOUNG: Is it time to take a lunch break? MR. POULIN: Oh, sure, we can break now, if you'd like.

(Discussion off the record.) MR. POULIN: It's 12:15. Let's break. (Deposition recessed at 12:15, to be reconvened at 1:00.)

DIANE MILLS, CCR, RMR, CRR

(206) 622-6875 * dmills@yomreporting.com

AFTERNOON SESSION 1 1:00 P.M. --000--3

CONTINUING EXAMINATION

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BY MR. POULIN:

- Q. It's 1:06. Let's recap one or two matters. Before we get in to that, have you ever done a site visit at the Seattle-Tacoma International Airport?
 - A. Yes.
- Q. How many times have you done site visits? 11
- A. I'd have to say over the years, six to eight 12 13 times.
- O. Six to eight times? 14
- 15 A. Uh-huh.
- Q. Let's say in the past two years, how many 16 site visits? 17
- A. In the past two years, I believe it's been 18 three times. 19
 - O. What were the circumstances of those visits?
 - A. I believe the circumstance of one of the
- 22 visits was to show our deputy director the types of sediment erosion control facilities that the Port of
- 24 Seattle had in place for some of their construction
- 25 activities.

The other was to follow up on a complaint that we had received about one of the construction 3 activities. I think the other was to follow up on a 4 concern that a citizen had. Brett Fish was the citizen 5 who had a concern about what he was observing as 6 presporum mortalities in Miller Creek. And so while I was visiting with him, I also did a drive-by inspection of some of the construction activities at the Port of Seattle.

- Q. Where were those construction activities or which construction sites did you visit? 11
- A. The construction sites that we visited for --13 the most recent visit with our deputy director were in and around the developing embankment area and also in and around the interchange construction on State Route 509.
- O. Has the Port ever placed any restrictions on 18 your access to any part of the airport grounds or 19 facility?
 - A. The only restrictions we have is because of the security nature that the Port has, but we've never been denied access to areas that we wanted to have access to.
 - Q. What were those security conditions that you recall?

- A. We have to check in with Port personnel and be accompanied onto the secure areas of the facility.
- Q. So did they identify -- verify your identification, make sure you were Kevin Fitzpatrick? Is that one of the things?
 - A. Yes.
- Q. And did you have an escort from the Port throughout your visit?
- A. Yeah. There's certain areas of the Port where escort's required, certain parts of the facility 10 where an escort's required. 11
- O. And how did it work -- how did you move about 12 the facility physically? Did you use your own vehicles 13 or did the Port provide a vehicle?
- A. It's been different on different occasions. 15 At times we have followed in our own vehicle.
 - O. Followed the Port?
- A. Yeah. And at other times we've gone in a 18 Port vehicle for convenience. 19
- Q. What was the group size that you had? Well, 20 I guess you said you had six to eight different visits.
- 22 What was the largest entourage or group you ever did a site visit with? 23
- A. Are you referring to the number from 24 Department of Ecology? 25
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- Q. The total number of people present.
- A. Both Port personnel and Ecology personnel?
- - A. And I should say, and Port consultants?
- A. The largest number I can recall is all total, I think there were about ten of us.
- Q. And excluding Port and its personnel and consultants, what was the largest group of non-Port people that you did a site visit with?
 - A. What do you mean by non-Port people?
- Q. Everyone other than Port staff employees or 12 13 consultants.
 - A. Are you referring to the largest number of Ecology personnel?
 - Q. Well, you could tell me the largest number of Ecology personnel. I would also be interested to hear Ecology plus. If you had other people with you that were not Ecology people, I'd like to get their numbers.
 - A. Well, I quess exclusive of Ecology
- personnel -- I'm sorry, if you're talking about the largest group of Ecology personnel, I think including
- myself that would number about four.
- Q. And if you expanded that to include people that were not Ecology?

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- Q. Did you ever do a site visit with King County personnel?
- A. Well, I'm including in that group King County personnel because the King County person who was along with us -- I should say one of the King County persons was not under contract to Ecology, so I guess that would be one King County person.

When I was talking about Ecology personnel before, and here I'm referring specifically to Kelly Whiting because Kelly was under contract to Department of Ecology, I considered him Ecology personnel even though he works for King County.

- Q. So on the site visit when Kelly Whiting accompanied you, there were no more than four non-Port people, as you recall?
 - A. As I recall.
- Q. Did the Port ever place any restrictions on 21 where you could go?
- 23 A. No.

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- Q. Did they require any background checks? 24
- A. They required that we submit our ID and then, 25

you know, when we -- especially when we were in secure areas of the airport, we had to have the necessary badges to show that we were being accompanied by Port

- personnel into those areas.
- Q. Did the Port require the Department to identify in advance where it would be going?
 - A. No.
- Q. And did it require Ecology to identify in advance who would be among the Ecology group?
- A. No, I don't recall doing that in advance, you know. They may have asked what number of people are coming from Ecology so that they could make vehicle arrangements, but I don't recall where we had to identify them by name who was coming.
- Q. Who is the deputy director that you mentioned?
 - A. Linda Hoffman.
 - Q. And what's she a deputy director of?
- A. She's deputy director of the Department of 19
 - Q. How many deputy directors does Ecology have?
 - A. One.
- 23 O. Just one?
- 24 A. Yeah.
 - Q. So she's an assistant to Director

Fitzsimmons?

- A. Yes.
- Q. And what prompted her visit?
- A. She was on a visit of a number of different sites in the Northwest region, and she expressed an interest in, since she was brand new to the agency, of -- and we thought it would be of interest to her since she was brand new to the agency, to see the Port of Seattle Sea-Tac Airport facility.

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- O. Has Director Fitzsimmons done a site visit?
- A. I don't know.
- Q. To your knowledge, when did stormwater discharges become subject to the Clean Water Act?
- A. That's funny, because we just talked about 14 15 that at lunchtime. Stormwater discharges --16 MR. YOUNG: Move to strike the privilege that 17 you just referred to.
 - Q. (BY MR. POULIN) Without divulging any privileged attorney-client information, do you remember when Ecology started to focus on stormwater, if that would be helpful?
- A. Stormwater became an increasing concern --22 23 and this is from my perspective now. Stormwater from industrial facilities became an increasing concern I believe starting with the shipyards, and that would be

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back in the mid to late '80s.

Q. Would you agree that Sea-Tac International Airport is considered an industrial facility?

A. Yes. That's why we put it under permit. In fact, I was the person at Ecology who first raised

the concerns about whether we were adequately

addressing stormwater runoff at Sea-Tac Airport. And 8 that goes back to '91/92.

- O. So ten years ago you raised that issue?
- A. Yes.
- Q. When did stormwater discharges become subject 11 12 to the requirement of complying with water quality 13 standards?
- 14 A. When did stormwater discharges? I'm not sure 15 I understand your question.
- 16 Q. Well, you would agree at one point stormwater 17 discharges were not regulated under the Clean Water 18 Act; is that right?
- A. I believe it was always the intent to somehow regulate the impacts of stormwater, you know, in the 20 Clean Water Act. I mean, the goal of the Clean Water Act is to protect and restore the beneficial uses of our nation's waters, the fishable/swimmable. And I believe what was included in that is even to look at

the impacts that come from stormwater, whether it be 25

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municipal stormwater sources or industrial stormwater sources.

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And so towards that end, EPA developed their stormwater regulations which I believe were first promulgated back in -- I don't recall exactly, I believe in the early '90s. And so following in that, we wanted to ensure that we were in step with those 8 regulations, especially with regard to industrial stormwater discharges. But I would say that Ecology as 10 an agency may have even been ahead of EPA in that we were looking at stormwater concerns at shipyards dating back to the mid '80s.

- Q. Do shipyards have particular issues with metals in their stormwater discharges?
- A. Yes, they do, because of the nature of their 15 16 industrial processes and because much of their work on vessels, whether in dry-docks or out in their yards, 17 are exposed to weather. And because of one particular type of industrial operation that they use which is blasting with -- sandblasting, aggregate blasting operations, and if they use a particular type of 22 blasting agent that has high copper concentrations in 23 it. So you put all those together and you get into some really serious stormwater runoff concerns and source control concerns.

(Recess taken.)

Q. (BY MR. POULIN) Back on at 1:28. As something of a layman or at least a newcomer, it seems amazing to me that 15 years after these shipyard issues first arose and ten years after you say the stormwater concerns at Sea-Tac were first raised, Ecology still isn't requiring something as basic as hardness sampling in the NPDES permit.

How can that be?

- A. Well, it doesn't strike me as amazing at all. 11 And I don't see how the fact that EPA first promulgated 12 its first regulations on stormwater, what relationship 13 that has to do with whether or not we're putting 14 hardness monitoring requirements in the Sea-Tac permit. 15 I'm sorry, I just don't see the relation.
 - Q. Well, didn't you agree earlier that the Department of Ecology has the obligation to ensure compliance with water quality standards?
 - A. Yes.
- Q. And didn't you agree that with respect to the 21 metals that we've looked at today, you can't determine 22 whether a discharge of the receiving water is meeting 23 water quality standards without hardness data?
- A. Yes, I will agree with that, but I also 25 stated that this is all part of an effort to increase

our knowledge on the character of the stormwater discharges from the Port of Seattle and what the impacts of those stormwater discharges are to the surrounding receiving waters, and with that increased knowledge, how best then to regulate those stormwater discharges given that, you know, what we require right now is currently the best available science that we have, the types of best management practices that they should be putting into effect for treating those stormwater discharges. 10

But again, I don't see the relationship between the fact that, you know, we started working on stormwater discharges at shipyards back in the mid '80s, that we then were presented with a whole set of new regulations from Environmental Protection Agency on stormwater and how to manage stormwater.

If you'll look at those regulations, those regulations don't speak at all to regulating stormwater discharges with NPDES permits outside of issuing general NPDES permits for industrial stormwater discharges. And I think we've gone quite a bit further than that by having an individual permit on Sea-Tac Airport for their industrial stormwater discharges.

So I actually think we've done a commendable, if not excellent job in controlling those discharges

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and working for further controls on those discharges from Sea-Tac Airport.

- Q. Isn't it true that there are two kinds of effluent limitations, generally speaking; there's technology-based effluent limitations and surface water quality-based effluent limitations?
 - A. Yes.
- Q. If you look at Exhibit 136 which is the fact sheet for the Port's permit, you'll see a discussion of both kinds of effluent limitations; technology-based effluent limitations beginning on Page 20, and water quality-based effluent limitations beginning on Page 22.

Isn't it true that the water quality criteria and specifically the numeric limits on metals concentrations identified in WAC 173-201A-040 constitute surface water quality-based effluent 17 limitations?

- A. They go to how you develop those surface water quality-based effluent limitations. They're not -- they are not the surface water quality effluent limitations. You use those standards to develop water quality-based effluent limitations.
 - O. And isn't it true that the effluent limitations that are developed in that process must be

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designed to ensure that the surface water criteria in WAC 173-201A-040 are not exceeded?

- A. If you develop effluent limitations, that's the purpose of developing those effluent limitations. Water quality-based effluent limitations are derived to ensure that those standards are not violated.
- Q. You've already agreed that the Port's NPDES permit does not include any effluent limitations on non-construction stormwater, isn't that right?
 - A. That's correct.

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- O. And you've also stated that Ecology does not 12 know whether the receiving waters for the Port's non-construction stormwater discharges meet the state water quality criteria or not?
- A. We don't know if they're meeting them or if 16 they're not meeting them, correct, but we're working to find out.
- Q. And you, I believe, agreed that you can't 19 know without hardness criteria -- sorry, without 20 hardness data from the receiving waters?
- A. I'm saying that it is more difficult without 22 current hardness data on those receiving waters to 23 determine whether a stormwater discharge is impacting 24 the receiving water in such a way that it's exceeding 25 the criteria. But that is one of the reasons why, to
- 1 fill in that data gap, we put into the water quality certification the requirements for a water effect ratio study.
 - Q. Why doesn't Ecology simply require hardness sampling in the permit?
 - A. Because when we issued the permit it wasn't in there, so we're correcting that now by putting it in the water quality certification.
 - Q. Ecology can modify the permit any time it wants to, can't it?
 - A. That's true.
 - Q. And Ecology has an obligation to do so if necessary to protect water quality, does it not?
 - A. And there's a number of avenues available to Ecology to get that data, and the avenue that we chose to take to get that data is through the water quality certification requirement for a water effects ratio
- Q. Isn't the avenue that Ecology chose to wait 19 until the next permit cycle?
- A. No. I just told you that we have the 22 requirement for a water effects ratio study in the 23 water quality certification which would get us this hardness data.
 - O. What is the purpose of the water effects

ratio study?

A. The purpose -- if you'll turn to Exhibit 137. part of the purpose of this study is to calculate seasonal partitioning of dissolved to total metals in the ambient waters. That would be one of the purposes of that study.

The other purpose of the study, and what I should say, this study includes a water effects ratio study, but it also is intended to evaluate or to help us fill in data gaps that we have as to what the water quality impacts of non-construction-related stormwater discharges are to the surrounding receiving waters of Miller, Walker and Des Moines Creeks.

- Q. Isn't it true that the purpose of the WERS study is to change the site-specific water quality criteria applicable to metals in the receiving waters at Sea-Tac International Airport?
- A. No, I wouldn't characterize it that way. I would say that the purpose of any water effects ratio 19 study is to determine how to apply our acute and chronic criteria, especially for metals, at the site.
 - Q. I deposed a water quality specialist from King County yesterday, and she told me that King County simply requires permittees to sample the dissolved fraction of metals. Why doesn't Ecology do that?

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A. I don't know.

- Q. Isn't it true that Ecology does not want to know whether the Port's discharges comply with water quality standards?
 - A. No. That is categorically no.
- Q. Wouldn't it be easy to find out simply by sampling dissolved fractions of metals and hardness in the receiving water?
- A. And that's what the water effects ratio study requires them to do.
- Q. You don't need a water effects ratio to get that information, do you?
- A. You need it in its totality to answer a lot of other questions.
- Q. But not these questions? For over ten years Ecology has avoided requiring the Port to sample hardness in the receiving waters --

MR. YOUNG: Object. Argumentative.

- O. (BY MR. POULIN) -- isn't that true?
- A. I'm sorry, what's your -- the point you're 20 trying to make is really lost on me. 21
 - Q. If Ecology really wanted to know if water quality standards in the receiving waters at Sea-Tac International Airport were being exceeded, wouldn't it be much easier to require the Port to measure the

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dissolved fraction of metals and hardness in the

study that's not needed?

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A. Well, I don't agree with your characterization of this at all. Ecology does want to know and has made honest and forthright inquiry of what the actual impacts of stormwater is from the Port of Seattle facility. And I take great offense that you're implying that somehow Ecology wants to keep itself in the dark. That is 180 out from the way I know Ecology goes about its business.

receiving water instead of embarking on a complex WERS

MR. POULIN: I'd like to introduce a new exhibit.

> (Deposition Exhibit No. 138 was marked for identification.)

Q. (BY MR. POULIN) Exhibit 138 is a copy of a 17 certified letter that the Citizens Against Sea-Tac Expansion organization sent to the Port of Seattle and 19 Director Fitzsimmons of Washington Department of 20 Ecology as well as relevant personnel in the regional

21 and national offices of EPA stating their notice of 22 intent to file suit for violations of toxic water

23 quality criteria for copper, lead and zinc, dated

24 September 7, 2000. And the exhibit also includes a

25 cover letter to Raymond Hellwig, director of Ecology's

Northwest regional office, and Tom Luster, then in the permit coordination unit of Ecology.

Have you seen any part of this exhibit 3 before?

A. I think I have, yes.

Q. Could you please describe the circumstances in which you saw this exhibit?

A. I believe I saw a carbon copy of the notice of intent to file suit under the Clean Water Act, carbon copy of the notice that was given to Port of Seattle.

Q. I believe you testified earlier that at the 12 time, you were the unit supervisor of industrial permit unit in the Northwest regional office; is that right?

A. At the time of this letter?

O. Yes.

A. Of this notice of intent to file suit? 17

O. Yes.

A. Yes, in September of 2000 I was a supervisor 20 in the industrial permit unit.

Q. And were you also the facility manager at 21 Sea-Tac at the time, Sea-Tac International Airport?

A. I believe I was filling in as the facility manager then too. 24

O. As described in the cover letter, the notice

letter, Exhibit 138 identifies 75 distinct violations of water quality standards documented in the Port's 1999 Annual Stormwater Monitoring Report alone, and that's based on sampled and reported metals concentrations with contemporaneous hardness information.

MR. REAVIS: I guess the document speaks for itself. I'm not sure there was a question in there anyway.

MR. POULIN: There hasn't been yet.

Q. (BY MR. POULIN) Can you tell me what action you took when provided a copy of this letter during your tenure as the facility manager of Sea-Tac?

A. I'm not sure that this letter -- this was a notice of intent to sue that was filed against the Port of Seattle, and I fail to see how that -- because this is a third party -- or notice of intent of a third party to take a Clean Water Act citizen suit against the Port of Seattle, I'm unclear as to how that is supposed to compel me to take some action on that. In fact, you know, we are instructed not to interfere with third party lawsuit actions.

Q. Did the Department -- did you consider taking any enforcement action against the Port using your authority under state and federal law?

A. Consider when? Because I mean, we've considered and taken enforcement action against the Port of Seattle on a number of occasions.

Q. I'm referring to enforcement action addressing the violations identified or alleged in this letter.

A. Yes, we did look at the information provided in this letter. I think it also prompted me to go back and review the permit and their annual water quality monitoring reports and also to review actions that the Port of Seattle had taken in working on the data that they were developing in the stormwater monitoring reports and to determine if some type of compliance or enforcement action is warranted. I think I did consider that at the time.

Q. And what was the result of that review?

A. As I recall, my thought processes at the time were that the type of source control efforts that the Port was going through and the types of actions that they were taking to track down sources of these metals in their stormwater, and in particular sources of zinc, and then the control measures that they were putting

22 place to control those sources of zinc into their 23

stormwater discharges I felt was the type of

responsible -- or the type of response that we were 25

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1 looking for from the Port. That is, that as their 2 monitoring data would show a problem in a particular 3 stormwater drainage, they then put investigation into 4 effect at the Port to determine where these sources 5 were at and then take measures to, where possible, control those sources.

And the particular instance I remember is that they were using their stormwater monitoring results to track down, and track down rather 10 effectively, I believe, a zinc -- a roof on a building 11 on the north end of the airport. And then they 12 moved -- and this is my evaluation -- I thought they 13 moved rather expeditiously to control that source.

- Q. What have they done to control that source of zinc from rooftops?
- A. My recollection is that they are going to put some inert coating on that roof so that you don't have 17 18 the metals/zinc runoff into that. I'm not the permit manager right now so I don't know if that's actually 20 been put into effect.
- Q. Well, you just described the Port's actions 22 as rather expeditious. Do you know whether it's taken
 - A. Expeditious in terms of tracking down the source.
 - Q. But not expeditious in terms of implementing a fix?
 - A. I don't know if they've implemented the recommended source control measures to finally eliminate it as a source.
 - Q. You don't know the schedule they've proposed to retrofit the roof or the coating?
 - A. I don't know.

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- O. What actions have they taken to address the copper?
- A. Well, some of the actions that they've proposed to address the copper, where they've been able to find a source problem with the copper, and if it's a 14 source that can't be easily ameliorated like they could 15 with the zinc roof, then their proposal is to route those type of drainages into their wastewater industrial treatment system.

In the case where they can't effect adequate 19 source control, they propose in their stormwater 20 management plan to upgrade treatment, stormwater treatment being used for those areas.

- O. Isn't it true that one source of copper in 23 stormwater runoff at Sea-Tac is the runways?
- A. That's a source area. But where that copper 25 is originating from, it could be a number of different

sources of where it's originating from. It could be from aircraft tires, it could be -- copper is such a ubiquitous metal that sometimes its anybody's guess as to where it could be coming from. It could be actual air deposition.

- Q. Isn't it known that the non-construction stormwater runoff from the runways includes elevated levels of copper?
- A. Yeah, they have levels of copper that are 9 10 similar to what you find in other urban stormwater sources. And if you look at the data from other urban 11 12 stormwater sources, the levels of copper is actually lower from the runway runoff than it would be for 13 runoff from a city street. 14
- Q. Isn't it true that the levels of copper in 15 the runway area of runoff at Sea-Tac are higher than the levels of copper in other stormwater runoff areas 17 at Sea-Tac that don't include runway runoff? 18
- A. I don't know. I'd have to go back and look 19 at the data. 20
- O. What's the source of lead in the stormwater 21 runoff at Sea-Tac? 22
- A. I don't know. In all earnest, I'd be curious 23 if you knew what the source of lead is.
 - Q. Well, if I understood the sense of your

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1 previous response, you seemed satisfied with the source control efforts that the Port has suggested to address these metal concentrations. And if you don't know where the lead comes from, I'm wondering how you could be satisfied with their proposal to address the

A. Well, is lead a problem?

problem.

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- Q. Well, this Exhibit 138 identifies 21 violations of Washington's acute and chronic water quality criteria for lead on Page 3 of the notice of intent to sue. And that's from three different storm drains at Sea-Tac Airport.
- A. (Witness reviewing document). Well, my recollection at the time is what I was really focusing in on were the continual problems we were seeing with copper and zinc, and I have not thought as hard on lead.

And I think one of the things that may be slightly flawed in this analysis that was done, what's being reported back here is the total recoverable lead discharge. And I don't believe that that -- and I 22 could be wrong, but I don't believe that that takes into account the translator for lead which would tell you what the actual dissolved portion of that total recoverable lead value is.

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- Q. Isn't that another footnote DD issue?
- A. Yeah, footnote DD gets in to that.
- O. That's Exhibit 137?
 - A. Uh-huh.

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- Q. Didn't you agree earlier that the total recoverable value is acceptable and useful under the criteria when seasonal partitioning data is not known?
- A. Yeah, but again, it goes with the whole sentence there that you're determining that value through using conversion factors incorporated in the criterion equations. So for lead, there's a -- when you have the total recoverable value of lead measured, you're then putting a translator to that, and then 14 that's what you compare to the actual criterion. Just looking at this again after a couple of years, it looks like that might not have been done here.
- Q. Are you retracting your previous agreement 17 that footnote DD allows you to use total recoverable 18 metals in the conversion factor?
- MR. YOUNG: I object. It mischaracterizes 20
- the previous testimony.
- 22 A. No.
- MR. YOUNG: Go ahead. 23
- A. No, that's not what I'm saying. What I'm 24 saying is if you again read that whole sentence, "When
 - this information is absent, these metals criteria shall
- be applied as total recoverable values, determined by
- back-calculation, using the conversion factors
- 4 incorporated in the criterion equations." And one of
- 5 the conversion factors that enters into this, and it
- appears that it was not applied to this column on total
- recoverable lead, the column marked Total Recoverable
- Lead Discharge, is that it doesn't appear to me as
- though that conversion factor was applied to those
- total recoverable lead values.
- Q. Why do you say that? 11
 - A. Because it appears that --
- Q. And let me clarify. You're referring to the 13 far right-hand or sixth column of information on Page 3 15
 - of the notice of intent to sue in Exhibit 138?
 - A. Yes.

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- Q. Why do you assert that the conversion factor 17 was not correctly applied in generating those values? 18
- A. Because I'm just going on the information 19
- presented, and the column is headed TR, which I assume
- 21 is for total recoverable, lead discharge. And there's 22 footnotes on there of 1 and 4, 1 being from 1999 Annual
- 23 Stormwater Monitoring Report, Appendix B and Appendix
- 24 D; and then footnote 4, values stated in micrograms per
- 25 liter.

- And it doesn't say that that -- it's not expressed in there that then those values were further
- back-calculated using the conversion factor from our standards. It appears to me as if this column was
- generated just using the raw data that was reported out of the Annual Stormwater Monitoring Report which were
 - simply the total recoverable values.
- O. Isn't it true that the conversion factor identified in footnotes Q and R in WAC 173-201A-040 is a factor that's applied to adjust the applicable
- numeric criteria, not the sample value? 11
 - A. You put the translator in front of that total recoverable value -- okay. I don't want to get into it. Do we have to get into a technical discussion? MR. YOUNG: You have to answer his question.
 - A. I'm sorry, I'm --
 - Q. (BY MR. POULIN) Yeah. In other words, you don't use the sample data in determining what the criteria is under footnote Q or R, do you?
 - A. Okay, you're right, I'm wrong.
- Q. So that basis you identified for discrediting 21 the apparent lead violations reported here is mistaken?
 - A. I'm mistaken.
- 24 Q. Did you take this issue up with the Port?
 - A. What issue?
 - O. The issue of the alleged ongoing and continuing violations of water quality standards for copper, lead and zinc as identified in this notice of intent to sue. Did you ever say, Hey, we've got a problem, we've got to get to the bottom of this?
 - A. Yes, on a number of occasions. And again, at the time that I was the facility manager for the Port or acting as the facility manager of the Port, I was aware of what was coming through on their Annual Stormwater Monitoring Reports, and I was satisfied with the steps that the Port was taking to address and solve those problems for these -- especially for two particular metals, for copper and zinc, in those discharges.
 - O. I'm confused. You said you didn't know what the source of the copper was.
 - A. No, I don't think I said I didn't know what the source of the copper was. I suspected that one of the sources of copper was probably in the --
 - O. Aircraft tires?
 - A. Aircraft tire.
 - Q. Well, let's look briefly at the permit fact sheet, Exhibit 136, on Page 27.
- 24 A. What was the page again?
 - Q. Page 26, I meant to say. But before we focus

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- on that, this fact sheet is as old as the permit itself, isn't that right? In other words, the fact sheet came out in 1998?
 - A. Correct, along with the permit.
- Q. And in the discussion of the Stormwater Receiving Environment Monitoring Report, the fact sheet discusses the June 1997 report --
 - A. That was required by the previous permit.
- Q. Yes, and states right up front in the second sentence, "The study found that concentrations of total recoverable copper in ambient waters both upstream and downstream of the stormwater discharges generally exceeded the water quality criteria."
 - A. Uh-huh.

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- Q. Boom, right there. So the water quality 16 criteria for copper is not being met in the receiving water, and Ecology acknowledges that four years ago based on information it had five years ago.
 - A. Uh-huh, yes.
- Q. And you've just stated that you believe one 20 21 of the sources of copper is aircraft tires that work their way into the stormwater; is that right?
 - A. Right, as they take off and touch down on the runway.
 - Q. And the Port has proposed to build another

related stormwater discharges. 2

- O. And this iterative process involves permits that last for five years. How many permit cycles do you anticipate it will take to impose effluent limits that are sufficient to achieve compliance with water quality standards?
- A. Well, I believe our standards actually allow us to put a facility on a 12-year compliance schedule. I'm hoping that we're able to do it in less time than that.
 - Q. And that's 12 years starting when?
- A. That would be 12 years starting when we put on what we know to be final stormwater effluent limits.
- Q. So it could be as much as 12 years from a date that hasn't even happened yet?
 - A. That's my understanding, yes.
- Q. What's your understanding of the limit on how much time Ecology has to impose effluent limits?
 - A. For stormwater?
- O. Yes.
- A. The only thing that we're required to do for stormwater right now, at least from EPA, the only thing we're required to do for stormwater right now is to put BMPs on those. So we're I think considerably ahead of the game here in that for at least moving towards

runway which will have more aircraft landing and depositing aircraft tire rubber on new impervious surface and resulting in additional copper-tainted stormwater runoff.

A. But the Port has also proposed to continue to put in all necessary treatment BMPs since it's highly unlikely that they can adequately control that source, that particular source, that is, aircraft tires. But that they would in their stormwater management plan for 10 the facility move to put in the necessary treatment 11 BMPs to control for that copper runoff, to treat for that copper runoff.

Not only is it in their stormwater management plan, but that is the intent behind our permit as well, is I'll go back to a statement I made earlier, is that 16 with stormwater treatment controls, the permit drives adaptive management on stormwater treatment.

- Q. And you think the permit is effective in doing so without any other effluent limits on non-construction stormwater?
- A. The idea of the permit is it's an iterative 22 process, and I didn't say that it's effective in doing 23 it without effluent limits for stormwater. This permit 24 and then subsequent permits will build towards setting stormwater effluent limits for their non-construction-

putting water quality-based limits, through the information that we're gathering, we're at least moving towards putting water quality-based limits into effect for this facility.

- Q. Let me see if I understand you. Despite known exceedances of state water quality criteria for copper that are identified in the fact sheet, your understanding is that Ecology is under no obligation to impose any effluent limits on copper stormwater runoff and that requiring BMPs is good enough?
- A. No, I'm saying that EPA says it's good enough to require BMPs. Ecology is actually moving ahead to say, we think it takes more than BMPs to truly address the impacts, the water quality impacts of stormwater discharges. That's why we're trying to logically and intelligently move ahead to put stormwater effluent limits, stormwater water quality-based effluent limits into effect for this facility as well as a number of other industrial facilities where stormwater's a problem.
- Q. What happened to Ecology's obligation to set permit limitations and conditions as necessary to avoid violations of water quality standards now, not 12 years from now or 12 years from some future date?
 - A. Well, we're fulfilling that obligation by

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putting in the type of requirements that moves us towards that level of compliance. One cannot simply turn a switch or say, okay, here are the effluent limits, make it happen, and just by doing that have it be so. I mean, that is not dealing in reality.

The reality is is that you have a facility that discharges large amounts of stormwater, large amounts of stormwater that are receiving some treatment, but we're finding that in some cases it's 10 not receiving all the necessary treatment. And so what we have to do, if we're going to do anything at all and not simply fold our tents up and go away, is build a system that further expands our knowledge of what is the characteristics and what are the impacts of these stormwater discharges, and then further, how we can put the sort of source control changes into effect, how we can maximize all our treatment BMPs at this facility, 17 and then to see if we even need to go further in 18 developing some innovative best management practices 19 treatment BMPs to really solve the water quality problem that we're confronted with. MR. POULIN: I'd like to introduce a new

And the trend that I've seen, and I'm going to put the caveat on this that this is not any formal type of analysis that I've done but this is a very thumbnail type of trend analysis, that the trend tha. have seen is that from the Port's Annual Stormwater Monitoring Reports is that over the years, the trend that I'm seeing is an improvement in the water quality of their stormwater discharges. And again, I want that understood that there's a fair number of qualifiers on 10 that.

- Q. You've just said that the monitoring you require the Port to do tells you something, but it doesn't tell you the information necessary to determine compliance, isn't that true?
 - A. Compliance with what?
- Q. With the state water quality standards for dissolved metals.
- A. It helps us look at part of that picture. And I will grant you that by not having the hardness data on the receiving water submitted along with the stormwater sampling that they're doing, that it leaves that picture incomplete. But nevertheless, it does tell us something as to what the characteristics of that stormwater are and through the reporting that they do in their Annual Stormwater Monitoring Reports, we

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it's 2:35.

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Mr. Fitzpatrick, you've testified that you were satisfied that the source control efforts and other actions that the Port has taken -- well, you're satisfied with their approach.

exhibit, but before we do that, let's take a break.

O. (BY MR. POULIN) Let's go back on the record,

(Recess taken.)

I'd like to ask, if you don't know whether the Port's discharges or the conditions in the receiving waters comply with water quality standards and you're not presently requiring the sampling and monitoring necessary to determine such compliance, how can you know whether things are getting better or will get better?

- A. I think part of your question, which was a 14 multi-part question, you said that we don't require monitoring to determine if things are getting better, 16 and I would disagree with that. We do require monitoring.
- Q. My question is intended to refer to the kinds 19 of monitoring we discussed earlier, monitoring of 20 hardness, monitoring of instream quality.
- A. Well, the types of monitoring we do require 22 does tell us something about the characteristics of 23 their stormwater discharges, and we can tell from that 24 monitoring whether that water quality is getting better 25 or if it's getting worse.

1 can tell if things are getting better or things are getting worse. Now, there's a lot more that we need to learn.

- O. Before we look at one of those Annual Stormwater Monitoring Reports, let's look at the permit requirement that requires the Port to generate an Annual Stormwater Monitoring Report. It appears to me that that's addressed in Permit condition S2.E. Please tell me if you agree. That would be Page 17 of 52 in Exhibit 3.
 - A. Yes, I'd agree.
- O. Let me ask your understanding as the former permit manager and current section head for water quality, under the first sentence of Permit Condition S2.E, is the Port supposed to report a summary of the results of both construction and non-construction stormwater?
- A. (Witness reading document). Are you talking 18 19 in the Annual Stormwater Monitoring Summary Report? 20
 - O. Yes.
 - A. What they're supposed to report there is monitoring that was done under S2.B which is -- S2.P monitoring requirements for non-construction stormwater, or S3.E -- and it needs to include I believe S3.E.

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O. And isn't it true that Permit Condition S3.E requires the recording of results for each measurement or sample taken, a requirement that embraces both construction and non-construction stormwater?

- A. Well, S3.E applies to all samples taken by the Port, yeah.
- Q. So then shouldn't their Annual Stormwater Monitoring Summary include a summary of all stormwater samples taken, not just the non-construction?
- A. I would take it that they, at least in that summary, be providing everything that's included there under S3.E.
- O. Would you agree that that includes construction stormwater samples?
- A. Yeah, I'd agree. Yes, I'd agree.
- Q. So the annual summary report generated to satisfy Permit Condition S2.E should include all stormwater sampling whether construction or non-construction? 19
- A. Now that I read this over again, I would have to -- (Witness reading document.) Yeah, because it
- says "stormwater monitoring conducted pursuant to 23 Special Condition S2.B or S3.E," and S3.E does apply to
- 24 all measurements taken. So I would think that would
- 25 include stormwater monitoring done at construction
- 1 sites as well.

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- Q. Now, what happens to these reports when 3 they're submitted? First off, who are they submitted
- A. They're submitted to the permit manager for review, and I believe they also copy -- these Annual Stormwater Monitoring Reports, they put a copy of those 8 into the Burien Public Library for ease of public access.
 - Q. Is this the kind of report that Ecology has to approve or sign off on?
- A. No, there's no approval required on this 13 report.

(Deposition Exhibit No. 139 was marked for identification.)

Q. (BY MR. POULIN) Exhibit 139 is a copy of the 17 Annual Stormwater Monitoring Report for Seattle-Tacoma 18 International Airport for the period July 1, 1998 19 through June 30, 1999, has a date of September 1999 on

Have you previously reviewed this 1999 Annual 21 Stormwater Monitoring Report?

- A. I believe I reviewed it soon after I came in. That would be over, what is it now, two years ago. 24
 - Q. Am I correct to read Page 6 of the permit as

indicating that this report would have been submitted on October 1, 1999?

- A. Yeah, it has to be submitted by October 1st. That's probably why it's dated September '99. 4
- Q. That was right about the time when you took over as the permit manager?
 - A. Just right about then, yeah.
- 8 Q. At the outset, would you agree that this Annual Stormwater Summary Report only summarizes non-construction stormwater sampling? 10
 - A. No, I don't think I'd agree with that, because they have another section in here, 4.7, Other Results, which includes WET samples, non-representative composites, field quality control samples, and then also there's a section on outfall constructions.

So without having opportunity to review this again in detail, you know, I wouldn't know whether I could agree or disagree with you as to whether or not there's results from construction activity included in

- Q. Looking briefly at Pages 29, 30, 31, do you see any indication that these other results include sampling of construction discharges?
- A. (Witness reviewing document). Well, just with my quick review of those pages that you point out

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to me, I don't see under that Section 4.7, which is entitled Other Results, anything referring to samples from construction-related stormwater.

- Q. Let's turn to Page 29 where there's a discussion of WET testing, whole effluent toxicity.
- Q. It says in the second paragraph there under 4.7.1 that "WET testing bioassays used the two required aquatic test species: Daphnia pulex" -- well, paraphrasing, a waterflea, and the fathead minnow.

Who or what requires the use of those two species, do you know?

- A. I think you'd have to turn back to the NPDES permit and the whole effluent toxicity testing, S10.
 - Q. Yes.
 - A. And it says there --
- Q. I see here, Page 35 apparently answers the 17 questions on provision -- seems to kind of revert from 19 S10 to S9.
- A. That's a typo in there. 20
 - Q. Appears to be a pagination error --
- 22 A. Yeah.
 - O. -- of some sort.
- A. Yeah, it's a heading error. It should 25 actually read S10, Acute Toxicity - Stormwater

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- (Continued). But you look under there, it says, "Acute toxicity tests shall be conducted with the following species and protocols," so.
 - Q. The reason I ask, in yesterday's deposition, the King County water quality specialist stated that she thought it somewhat curious that the fathead minnow was used rather than a salmonid. Do you know why that fathead minnow was selected?
 - A. I don't, I don't.
 - Q. Now, in this report, back to Page 29 in the 1999 report, it states, "Results from outfall SDN1 exhibited toxicity that appears to be attributable to metals leaching from uncoated galvanized metal rooftops. The Port is currently verifying the source of toxicity so that this problem can be rectified in a timely manner."

Now, isn't it true that SDN1 is a code that designates a known outfall with a known drainage basin?

- A. Yes. I believe it refers to stormwater 19 outfall, north stormwater -- or drainage basin on the 20 north part of the airport.
- Q. And this report is over two years old, isn't that right?
- 24 A. Yes.

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Q. Let's introduce or take a look at a 25

1 previously introduced exhibit that's Exhibit No. 6.

I haven't given you a copy yet. If you look to Page 37 -- back that up. If you look to the bottom of Page

36 in this 2001 Annual Stormwater Monitoring Report

from Sea-Tac, the discussion two years later states

- that, "Zinc associated with runoff from galvanized" --A. I'm sorry. I'm just trying to establish the
- times here. Okay, go ahead.
- Q. Yeah, the Exhibit 139 is the 1999 report and 10 Exhibit 6 is the similar report two years later,
- September 2001, which states on Page 36, "Zinc associated with runoff from galvanized roofing
- materials appears to affect only outfall SDN1. Unlike
- SDE4, where several metal-roofed cargo buildings make
- up a few percent of the total impervious area in the
- 16 subbasin, three similar cargo buildings comprise nearly 30 percent of the total impervious area drained by SDN1
- 17 (at the sampling station)." And skipping a sentence
- then states, "Source-tracing indicated that the SDN1
- toxicity was attributable to zinc."
 - So it sounds like the source of that zinc problem has been identified as of last September or as of the date of the year 2000 reports identified there, would you agree?
- A. Correct.

- MR. REAVIS: Did that last question say "as of the year 2000"?
- A. Actually, this is more of the year 2001, wouldn't it be?
- Q. (BY MR. POULIN) Well, my reference is to the two reports mentioned in the parenthetical POS 2000b and Tobiason and Logan 2000.

Do you know if either of those reports was previously submitted to the Department?

- A. I don't know. The references -- I don't know because it's unclear to me what these references are. If I had a better idea of what the references are, I might be able to tell you.
- Q. Now, the discussion in the next three paragraphs refers in a couple of places to the apparently high costs of reroofing or painting, paraphrasing.
- A. Could I have it established, this is the first time I've seen this report. This report was submitted to Ecology in September 2001. At that time I was no longer the facility manager for the Port of Seattle, so you're catching me at a cold start here.
- Q. The question I wanted to ask is, given the discussion here of the cost effectiveness of various options, I wanted to have you explain your

understanding of the extent to which cost is a factor when Ecology decides what proposals are acceptable to address known pollution problems.

- A. Well, our standard under RCW 9048 is all known available and reasonable treatment. And "reasonable" does consider cost, it does factor in.
- Q. And could you please explain to me how that AKART, that so-called AKART of standard applies, how it's used?
- A. Well, this would be something that is done by the facility manager, that the facility manager would do what we call an AKART analysis. And they would look at the available -- you know, the literature that's available out there to see what type of remedies have been brought to bear in the past for these types of pollution control issues.

And, for example, if they were to find through a review of the literature that reroofing or recoating the rooftop is a generally accepted practice, they would most likely require the Port to put that remedy in place, unless the Port could demonstrate that their alternative here of putting a treatment media place effects the same level of control.

Q. Let's look at this 1999 annual reports discussion of the metals in stormwater. If you look at

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- the discussion beginning on Page 22, first paragraph states that, "All data reported below are for total recoverable metals." And the first sentence of the second paragraph explains that "The Washington water quality standards for copper, lead and zinc are based on the dissolved fraction of the metal."
 - A. Yes.

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- Q. Now, isn't it true that the same laboratories that evaluate samples to determine total recoverable metals could determine the dissolved fraction?
 - A. Yes. In most cases, yes.
- Q. And all that would require would be a change 12 in their instructions to do so? 13
 - A. Well, it would require a change in the way the sampling is done.
 - O. How so?
- A. Because in testing for dissolved metals, you 18 have to filter the sample to do a test for dissolved metals. You're filtering through only the dissolved species of the metal.
- Q. Would that involve a change in the way the sample is taken or a change in the way the sample is 23 processed?
 - A. It's a change in the way the sample's taken.
- 25 At least that's my understanding. The sampling

procedure for dissolved metals is different from the sampling procedures for total recoverable.

- Q. If I remember correctly, you were uncertain earlier as to where the permit dictates the required procedures for sampling; is that right? Or do you know where they are specified?
- A. I think they're specified in the monitoring portion of the permit. In S2, there's Sampling and Analytical Procedures.
 - Q. That's on Page 18?
- A. Page 18, right. If you look at the second paragraph there, "Sampling and analytical methods used to meet the water and wastewater monitoring 14 requirements specified in this permit shall conform to the latest revision of the Guidelines Establishing Test 16 Procedures for the Analysis of Pollutants contained in
- the 40 CFR Part 136." Q. Do you know whether -- to finish that 19 sentence, it says, "or to the latest version of 20 Standard Methods for Examination of Water and
- 21 Wastewater, " skipping a bit, "unless otherwise 22 specified in this permit or approved in writing by the
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Do you know which procedures are approved at 25 present?

- A. I'm not sure I understand your question.
- Q. Well, this Section S2.G that you've identified seems to suggest that there are several sources of standards that could be used. I'm wondering if you know which one is used. Is it the CFR guidelines, is it the APHA guidelines, is it something 7
- A. I don't know and I wouldn't want to guess. I'd have to go back and ask the current facility manager to research that. In most cases, though, people are following the sampling and analytical methods prescribed in standard methods. 12
 - O. We talked about whole effluent toxicity testing. Is that something that the Port is required to do on an annual basis under this permit?
- A. Well, there's both acute and chronic whole 16 effluent toxicity testing that they do both on their 17 industrial wastewater discharge and on their stormwater discharges. And if you're -- is your question 19 referring to stormwater? 20
 - Q. Yes, with reference to stormwater.
- 21 A. With reference to stormwater, in this permit 22 they were required to do the effluent characterization 23 for acute toxicity. And I believe for this permit that effluent characterization was required once based on

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- two acute toxicity tests. And it was toxicity tests done on composite stormwater samples from outfalls 002, 005, 006, and 011.
- Q. Now, I note those four outfalls do not include -- do not appear to include SDN1, the outfall with the zinc problem; is that right?
- A. I wouldn't know whether subbasin SDN1 is tributary to those outfalls.
- Q. If you'll look to page -- for example, if you'll look to Page 119 of Exhibit 139, it's a spreadsheet very near to the end of the exhibit, you will see that in the last full column to the right of this spreadsheet, which is identified as SDE4 Source Tracing in Multiple Upstream Manholes, the Port is actually reporting here hardness data.
 - A. Yes.
- O. And if you turn to the page back to SDE4 --I'm sorry, if you turn the page back to the previous page, 118, you'll see that there towards the center there's some hardness information reported in the column to the left of PH.
 - A. Yes.
- O. Turning to, for example, Pages 113, 115, 114 23 24 as you like, you will see these spreadsheets, which towards the right report sampling results for copper,

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leads and zinc do not include hardness, in contrast 2 with that first page we looked at, 119, which includes 3 hardness data but no results for copper, lead and zinc. 4 In that respect 119 is the same as 118.

I'd like to know if you're aware that following Citizens Against Sea-Tac Expansion's use of the 1999 Annual Stormwater Monitoring Report, Exhibit 139, to correlate copper, lead and zinc data with the hardness reported in the annual report, the Port of 10 Seattle stopped including hardness data in its annual 11 report?

A. I'm not aware of that.

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- O. In your understanding of the permit 14 requirements that obligate the Port to generate an 15 annual report summarizing the results of its stormwater 16 sampling including, as stated in Permit Condition S3.E, 17 the results of all analyses, are you aware of any 18 authority that would allow the Port to withhold hardness data from the annual report?
- A. They could not withhold hardness data from 21 that. If they were doing the sampling, if they were 22 taking the samples for hardness, it's my understanding 23 that they would have to include it as part of their annual report.
 - Q. So if we assume that the Port is complying

with its obligations, does its failure to report any hardness data suggest that it has stopped monitoring or sampling hardness data?

- A. If they're complying with their obligations, 5 if they're meeting the obligations of their NPDES permit, I would draw the conclusion that they have stopped taking hardness samples and running analysis for hardness.
 - Q. And would you agree that they're able to do so without violating the permit because the permit does not require them to sample or report hardness?
 - A. The permit does not require them to sample or report hardness.

MR. POULIN: It's 3:32. I'd like to take a brief break, if we could.

(Recess taken.)

O. (BY MR. POULIN) It's 3:37.

Before we move on from the Annual Stormwater Monitoring Report, the Port's discussion of metals 20 focuses heavily on comparisons of the water quality in 21 the Port's discharges from Sea-Tac Airport with other 22 places rather than comparing its own water quality with 23 state water quality standards.

Is that approach acceptable to the Department?

- A. What pages are you referring to?
- Q. Well, as an example, I would refer you to Page 14 of the 1999 report that's Exhibit 139.
 - **A.** Page 14?
 - Q. Yes.
- water quality of their stormwater runoff to that from other stormwater studies I think is a comparison that they are welcome to make. I mean, it's advancing information, advancing knowledge of what you see in 10 other stormwater sources, other stormwater sources from 11 12 City of Bellevue in this case, from studies done by Metro in the Seattle area, and then also what's come

A. Well, to make the comparison between the

Q. Well, perhaps these questions should be directed to the Port and perhaps they will be, but looking at Table 4, that table doesn't even include Sea-Tac's discharges, does it?

out of national studies like under the column of NURP.

- A. No.
- Q. Doesn't this compare everybody but Sea-Tac?
- A. That's correct. I'm taking it for what they're calling it, stormwater quality comparators.
- And I take it as it was authored is, here's some 23
- information for Ecology to consider on what other
 - stormwater studies have shown. I guess what I'm saying
- is I'm taking it at its face value. I'm not trying to read anything into it, any intent into it.
 - Q. What do you make of this footnote (f) on Table 4?
 - A. What page again, please?
 - O. This is Page 14, Table 4. In discussing the Washington state standard and the far right-hand column, the table actually generates a state standard for copper, lead and zinc but attaches a footnote (f) which says, "Total recoverable metals. Washington state acute standards expressed as total recoverable, calculated at 28 micrograms per liter of hardness using Ecology's 'TSDCALC6.XLW' spreadsheet."
 - A. Uh-huh.
 - Q. Does Ecology have a program that identifies the applicable water quality standard at different hardness values?
 - 18 A. Yes. And I believe at the time that they did this report in 1999, the version of that program was a TSDCALC6.XLW spreadsheet.
 - Q. Now, it just strikes me as odd when the Port has a demonstrated ability to create a nice summary table including easy-to-compare information and juxtaposes that with the Washington state standard, they omit the relevant information from Sea-Tac from

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1 that table, and any effort to derive that information
   from this report requires a great deal of scratching
   and digging through the text of the discussion in all
   manner of different parts of the report.
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MR. YOUNG: I object to the form of the question. It's not even a question.

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- Q. (BY MR. POULIN) That's not very helpful, is it?
 - A. I don't know what I'm being asked, Rich.
- Q. Well, you stated earlier that you're satisfied that what the Port's doing is making things 12 better. And looking at these reports, I have to ask, 13 how can you possibly know? How can you easily compare what's being packaged in this format with the previous year's report?
- A. Well, again, I'll go back to what I 17 previously said. As you go year to year and look at 18 the actual quality of the stormwater effluent, it's my 19 evaluation, and again with the qualifier that I haven't 20 done a formal analysis on this, but my thumbnail sketch 21 evaluation is that there is a trend of improving 22 stormwater quality at the outfalls that they're 23 monitoring.

And I'll go further and say that I believe a reason for that improvement are the source control

312 samples in the past six years, the median copper value for all outfalls sampled is," paraphrasing, blah, 3 blah, blah. Now, they're taking a composite of samples

from over six years, but more than that, they're conglomerating all outfalls sampled, some of which may not have any copper at all. Where's the discussion 7 that focuses on the places where copper is actually a 9 problem?

- A. I don't know where that is in this particular 10 report. As I told you before, I have not had 11 opportunity to review the 2001 report. Is that the one 12 that you're quoting from? Which report are we on? 13
- O. That most recent quote was indeed from the 14 15 2001 report.
 - A. Exhibit 6, okay.
- Q. The next thing they say there, and this very 17 closely tracks the discussion in the 1999 annual report 18 on Page 23 --19
- A. Are we on Page 23 of the 2001 report? 20
 - Q. Let's look at Page 23 of the 1999 report.
 - A. Okay.
- O. There they discuss 225 samples in the past 23 five years, but in the next sentence in both, they discuss airfield and landside outfall data in this case

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efforts going on by Port of Seattle staff at the airport. And I believe they've done a very credible job at when they found that they were having fecal coliform problems in one particular subdrainage, of tracking down the source of that fecal coliform to a 6 Dumpster that was being improperly managed, and putting controls on that.

Another instance I recall is they've found -and this refers to fecal coliform again -- where waste 10 from the aircraft, where that was being managed or 11 disposed of didn't have tight enough stormwater 12 controls on that, they got on top of that.

In the case of deicing controls, they've in 14 my opinion successfully tracked down where the real problem subdrainages are for aircraft deicing runoff. 16 And they're taking steps, in some cases I believe they've already completed, in one particular case of 18 rerouting those problem drainages into the industrial wastewater system.

So I quess perhaps I choose to look on these 21 reports as the glass being half full rather than half empty.

Q. We've talked considerably about copper today, 24 but looking at the discussion of copper here, the first 25 thing they say on Page 33 of Exhibit 6 is, "Overall, in

are similar. 1

> Well, perhaps we should move on. We haven't talked about fecal coliform. Isn't it true that fecal coliform has been a problem area for some of the Port's discharges?

- A. Yes. On occasion, yes.
- Q. And isn't it true that some of the Port's discharges have violated the water quality criteria for fecal coliform?
 - A. Yes.
- Q. Isn't it also true that the receiving waters, one of the receiving waters is on the 303D list --
 - A. Yes.
 - Q. -- for fecal coliform?
- A. Yes. I believe that's Des Moines Creek.
- Q. Does Ecology have any evidence that the BMPs the Port has proposed to address stormwater runoff are effective to reduce concentrations of dissolved metals?
- A. There is some evidence to support that for some of the treatment BMPs that the Port has proposed, for example, compost media filters and other types of filter media treatment BMPs, that there is treatment for -- that they can successfully treat and remove dissolved metals.
 - Q. Do you know what the relative degree of that

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success is, what portion of dissolved metals you might expect to be removed?

- A. I can't recall what the specifics of performance of these treatments are other than that in the suite of different treatment BMPs that the Port is considering or has into effect, that they do have -some of those treatment BMPs do have the capability of treating for dissolved metals, and further, that they also have the ability to treat for particulates, metals 10 in the particulate form.
- O. During your term as the acting permit or facility manager for the NPDES permit at Sea-Tac 12 13 International Airport, did you take any enforcement 14 actions against the Port of Seattle?
- 15 A. I don't know if it was during my term as the facility manager or whether I was the -- in my capacity 16 17 as a unit supervisor, but I do recall a couple of 18 occasions when we took enforcement actions against the 19 Port of Seattle; one for their construction operations 20 at the north employees parking lot, and the other for 21 their operation of a cement batch plant.
- Q. Have you ever imposed a fine on the Port?
- 23 A. Yes.

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- Q. For violations? 24
- A. On two occasions that I can recall. 25

Q. Do you recall the violation and/or the amount?

- A. I think for the violation at the cement batch plant, I believe that was a 6- or \$8,000 fine, and I 5 think for the north employees parking lot violations, that was somewhere between 16- and \$20,000. I'm sorry, I'd have to go back and actually review the enforcement fines.
- Q. Your mention of concrete reminds me that the 10 King County water quality specialist noted that King 11 County has recently become aware of pH problems that 12 can result from improper curing of stormwater vaults. 13 Are you aware of that issue?
 - A. Yes. Actually, we're working along with King County on that problem. It was one of our water quality inspectors who first brought that to a number of people's attention, Ron Devitt, D-e-v-i-t-t.
- Q. The comprehensive stormwater management plan 19 associated with the third runway and master plan update 20 projects proposes the construction of a number of new stormwater detention vaults; is that right? 21
- 22 A. Uh-huh.
 - Q. Will they be concrete vaults?
 - A. Some I believe will be concrete. I believe the wet vault facilities proposed will be concrete

vaults.

- Q. How long does concrete have to cure before the pH issue is no longer a problem?
- A. I do not know. That's something that's -- as your source from King County tells you, it's something they've recently become aware of. Like a lot of stuff in stormwater, there's always some new problem popping up.
- 9 Q. Does Ecology know institutionally or is it an 10 unresolved issue?
- 11 A. I don't know, when you say does Ecology know 12 institutionally.
 - Q. When you say you don't know, do you mean you personally don't know, or are there other people in Ecology that probably do, or do you think no one knows?
 - A. What I'm aware of is that our stormwater inspector, Ron Devitt, through the course of his duties became aware of this as recently as -- I'm talking about in March of 2001. And he is working very diligently, as a number of people in Ecology do, to raise attention on this matter, that this is a water quality concern.

But again, this points out that everyone is in the learning process on stormwater. Anyone that says that they know everything there is to know about

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stormwater is dead wrong or a fool.

- Q. I want to briefly address the recent permit modification relating to construction-related stormwater discharges in the Walker Creek and Gilliam Creek basins. I believe you agreed earlier that the provisions of --
 - A. Can I take a quick head break? MR. POULIN: Sure, yes. (Recess taken.)

MR. POULIN: Perhaps we should discuss timing. I'm happy to continue today as late as you all would like. I'm fairly convinced that unless you're interested in going quite late, I'm not going to make it through all the subject matter that I have. But again, I'm happy to press on.

MR. YOUNG: I'm inclined to say that at 5 the deposition as far as we're concerned is concluded. And if you want to add more time, you'll have to ask the Board for more time.

MR. POULIN: Well, I believe under the civil rules, the deposition is open-ended until its purposes have been satisfied. And your obligation will be t move for protective order if you believe that sometimes about the conduct of the deposition has been unacceptable or in conflict with the rules.

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MR. YOUNG: Well, first of all, you all said you needed one day, which is what you will have at 5:00. Second of all, we have a tremendous number of depositions that need to be conducted in this case before the discovery cutoff in two weeks, and so I don't believe that it makes sense to have him come back for another day.

I also would note that your clients, the ACC, have taken a position that it's unreasonable for their experts to come back for two days, so I think that it's unreasonable for your experts to come for two days, 12 it's unreasonable for our experts to come in two days, particularly when you indicated you would only need one 14 day in the first place. So I'm willing to go till 5 or 15 5:30 or even 6:00, but we're not coming back for a 16 second day.

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MR. POULIN: Well, I am not personally aware of the discussions in which you say ACC indicated that 19 it only needed one day. I'd be surprised if they closed the door on going longer. It certainly is not what happened with the Kenny deposition or the Kelly Whiting deposition, both of which have been continued.

MR. YOUNG: Kelly Whiting is coming back solely for the purpose of questioning with regards to

his review of the December 2001 stream flow plan,

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otherwise that deposition is concluded.

We can conclude Kelly Whiting in one day, we can conclude Ray Hellwig in one day, we can certainly conclude Kevin Fitzpatrick in one day. The Ann Kenny deposition was carried over for another day because Ann Kenny is the author of the 401.

MR. REAVIS: Let me say that no one really agreed to that continuance. It was not finished. Mr. Stock said he would like to do another day, but 10 there was no agreement among counsel to that effect, 11 that that was acceptable.

MR. YOUNG: We're not coming back for another day, it's as simple of that.

MR. POULIN: Is either of you aware of any agreement that depositions would not take more than one day?

MR. YOUNG: You all said you needed one day. I mean, that's what you said at the beginning, and so we gave you a day.

MR. POULIN: My quess would be that that was an estimate of how much time the deposition would likely take in a context where the question was, should we schedule this for a half a day or do you think it's going to take longer.

MR. YOUNG: Well, it was identified that this

was the time that you needed, so this is what we scheduled.

3 MR. POULIN: Well, I quess we'll have to go back to the deposition notice and see what it says. I would note that with respect to Kelly Whiting, of course he's not represented by the Attorney General's office, and I would note that he has yet to be cross-8 examined by either the Port or by Citizens Against Sea-Tac Expansion. So I don't believe that his deposition has been concluded or will be limited to the 10 11 issues that you've described.

MR. YOUNG: Oh, yes, it's quite clear, it's on the record. You can review the record.

MR. POULIN: Oh, I understand you stated that; I was in the room.

MR. YOUNG: And Rachel agreed to that. She subsequently, in fact, wrote me a letter saying that yes, that's what we agreed to, and she had a couple additional subjects she wanted to talk about which we can discuss. But that is what the agreement was. Now, all of this is just wasting time.

MR. POULIN: Sure. Let's not waste additional time.

24 O. (BY MR. POULIN) When we spoke previously earlier today, I believe you agreed that the

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conditions, Permit Condition S2.C.2.a, was added to the permit with a recent major modification and does not apply to any construction-related stormwater discharges except for those in the Miller and Gilliam Creek 4 5 drainages; is that right?

- A. Correct, other than those, in reading S2.2, Monitoring Schedule for Construction Stormwater Discharges to Walker Creek and tributaries and Gilliam Creek and tributaries. So S2.A (sic), it would follow applies to those watersheds.
- O. So in order to find out the monitoring requirements applicable to all of the other previously authorized construction-related stormwater discharges, we would look to S2.C.1; is that correct?
 - A. (Witness reading document). Yes.
- Q. Would you agree that the requirements of S2.C.1 apply only to those construction projects required to have a Stormwater Pollution Prevention Plan under Special Condition S13 of the permit?
 - A. (Witness reading document). Yes.
- Q. Turning to Condition S13 on Page 39 of the permit, could you please explain your understanding of this phrase, "five or more acres of total land area (or other minimum land area to be determined by federal regulation)"?

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A. Certainly. The five or more acres is the current threshold for the required general stormwater permit for construction activity. Any construction project which disturbs five or more acres is required to have coverage under that general permit if they don't have coverage under an individual permit.

And then five or more acres of total land area or other minimum land area, that is to make sure -- that was put in there to provide language to keep 10 current with any newly promulgated federal regulation which might decrease that five or more acre threshold.

- Q. Is it your understanding that, then, five 13 acres is the applicable minimum at present?
 - A. For the required --
 - Q. For this permit.

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- A. It's the applicable -- for the requirement for the Stormwater Pollution Prevention Plan for 17 construction activities, that's the threshold. Any 19 construction project at the Port of Seattle that will disturb five or more acres would then trigger this requirement S13.
- O. And what about construction projects 22 disturbing less than five acres? 23
- A. If it's a project that disturbs less than 24 25 five acres, it wouldn't trigger this requirement.
 - Q. And so because of the related nature of the provisions, not only would there be no Stormwater Pollution Prevention Plan under S13 but, likewise, no monitoring at all under S2.C.1; is that right?
- A. Correct, unless the construction project -- I 6 wouldn't want to say no monitoring at all because the construction project might indeed lead into stormwater 8 drainages that are monitored under other sections of the permit.
 - O. Isn't it true that the permit does not require monitoring of discharges from construction projects that result in disturbance of less than five acres?
 - A. If a construction project is less than five acres, it would not -- this Condition S13 would not kick in, correct.
- Q. Is it your understanding -- I don't mean to 18 be obtuse; I perhaps should explain. My reading of the 19 federal regulation is that the five acre minimum should 20 not apply at Sea-Tac because the construction is all related to the activities at an industrial site which is subject to the permit.

And I wanted to find out -- I don't have the citation of the specific federal regulation with that provision buried in its terms, but I wanted to know if Ecology is aware of that and interprets it to reduce this minimum below five acres.

A. Well, our interpretation, the reason why we created the S13 condition was to make sure that this individual permit was in compliance with the stormwater regulations, EPA's stormwater regulations. EPA's stormwater regulations require a construction activity permit which follows that they have to have sediment erosion control plans for projects that disturb five acres or more.

We cover the Port's industrial activities under other portions of this permit, and so if there's construction activity occurring of five acres or less in an area where the Port's conducting construction activity, that activity is being monitored -- or, I'm sorry, that portion of the facility is being regulated under the industrial activities section of this permit.

That is why we call out certain outfalls for monitoring, because those are outfalls that are characteristics of portions of the facility where we have industrial activities taking place at the airport. And by "industrial activities" I mean subbasin areas of the airport where there's fueling of aircraft taking place or deicing of aircraft taking place or where those aircraft may be -- the deicing aircraft may be

1 taking off.

- Q. Do you know if Ecology intends to apply the requirements of new Condition S2.C.2 to all construction stormwater discharges in the new permit instead of just the Walker and Gilliam Creek basin projects?
- A. Are you referring on the reissuance of the permit?
 - Q. Yes.

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- A. That is something that we have discussed and are considering for the reissuance of the permit, yes.
- Q. Do I recall your stating earlier that Ed 12 Abbasi will be reviewing the Port's application for the 14 renewal program?
 - A. Yes.
 - Q. Will you be involved in that review process?
 - A. No. Ed's the facility manager; I'm trusting on his professional capabilities as an environmental engineer and professional engineer to do that. That's his baby.
 - Q. Ann Kenny testified in her deposition that the 401 certification can be changed and could be modified by future changes in the Port's NPDES permit Do you agree with that view?
- A. Ann is the expert on the 401 water quality 25

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certification, and so if she stated that, I would have to defer to her expertise on that.

- Q. Have you reviewed the water quality components in the low flow plan submitted by the Port in support of the 401 certification request?
- A. I think I may have glanced at them, but that's not a part of the water quality certification that I was really reviewing.

MR. POULIN: I'd like to introduce a new exhibit.

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(Deposition Exhibit No. 140 was marked for identification.)

O. (BY MR. POULIN) I'd like to explain, this is a portion of the most recent version of the Low Streamflow Analysis and Summer Low Flow Impact Offset Facility Proposal submitted by the Port in December of 2001. In compiling this exhibit, I included the title page, the table of contents, and two sections of Volume 1, the water quality design aspect of the mitigation proposal that's captured in Section 3.4, and also the monitoring plan that's described in Section 5.

Would you agree that the Summer Low Flow Impact Offset Facility Proposal is to capture rainwater or stormwater during the rainy season, store it, and subsequently release it when needed for mitigation 25

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purposes during the summer dry season?

- A. I understand that that's a proposal to mitigate for the base flow impacts from the project,
- Q. So do you understand that this proposal will result in direct discharges to the creeks? MR. REAVIS: Objection; vague.
- Q. (BY MR. POULIN) I'd like to clarify. Do you understand that this proposal will result in direct discharges of stored stormwater to the creeks?
- A. I don't know the details of how they will deliver up that stored water. There's been, as far as I know, a number of proposals of how that water would 14 be delivered back into the stream, and that's as far as my knowledge goes. I mean, one of the proposals I heard that was put forth was actually to reinfiltrate some of that water and allow it to enter back into the stream through groundwater base flow.
 - Q. Do you personally not have any role in the review of this proposal?
 - A. I do not have any role in the review of that proposal, no.
 - Q. Do you know who does?
- A. The two people that I'm aware of who are 25 involved in review of the proposal, we've contracted

Kelly Whiting, Department of Ecology has contracted Kelly Whiting to review and comment on the proposal. And I believe John Drabek also was -- I quess to best describe it is assisting Ann in understanding the comments and concerns coming back from Kelly Whiting on the proposal.

Q. Just as background on my further questioning, I'd like you to understand that this proposal states that, "Ecology has defined standards for water quality related to stormwater release, including periods of low flow. Ecology has jurisdiction to monitor and enforce these standards through their National Pollution Discharge Elimination System (NPDES) Permit. These standards include" -- ellipses, dot, dot, dot, I'm adding -- "dissolved metals." 15

It states further down that "the water quality standards discussed in this report are those listed for Class AA water bodies, which are the most stringent standards. Water quality standards for metals are based on toxicity" -- again ellipses -- "and are listed in WAC 173-201A-040 (Toxic Substances)," the section we've been discussing for much of the day.

It next states, "Ecology has started the process to potentially revise state water quality standards."

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Are you aware of that effort?

- A. Certainly that's part of the state's triennial review process. I read that statement as reflecting that the state's triennial review process is underway of our state water quality standards.
- Q. You'll see on Page 3-8 a discussion of metals of concern including copper, lead and zinc. The Port explains that, "Washington State water quality standards for these metals are based on the dissolved fraction, are dependent on the hardness of the water, and, as with all water quality standards, are applicable to the receiving waters."
 - A. Yes.
- Q. I'd like you to join me in reviewing the proposed monitoring plan for this facility to see if the Port intends to do the kind of monitoring that's necessary to determine whether their discharges can be expected to result in violations of state water quality criteria in the receiving waters.

If you turn to Page 5-3, this proposal states under the heading 5.1.3.6, Metals, "Samples will be analyzed for copper, lead and zinc. The samples will be obtained from discharge points in receiving waters (approximately 100 feet downstream from where discharges enter the streams). The metals sampling and

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1 analysis will occur upon opening of Flow Impact Offset
  Facility outlets and a minimum of monthly throughout
   operation of the facility."
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It doesn't appear that the Port intends to sample for hardness, does it?

MR. YOUNG: I object. Lack of foundation. This is only a portion of this document. This witness has not seen this document before, I don't believe,

MR. POULIN: A simple concise objection will be sufficient.

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MR. YOUNG: I'm making my objection.

MR. POULIN: You're making a speech.

MR. YOUNG: And he has not -- it's only a partial exhibit. He's never seen it before and he's testified that he's not going to review it.

O. (BY MR. POULIN) Please answer the question.

A. I can't answer the question because I don't believe all the information on how they're doing sampling has been presented to me. Again, I have not seen this document before, and in the line of my duties, I will not be reviewing this document.

Q. Would you agree that there's no indication in 24 the language we just looked at to suggest that the Port 25 intends to monitor for hardness in the receiving waters Q. Could I ask where you're reading that?

A. At the top of 5.1.3, Operational Monitoring. Now, what I would hope would be pointed out to them by whoever is providing comment back to them, and this is submitted to Ecology in December of 2001, my hope is that they would point out to them the need to do hardness sampling.

Q. Should that be a requirement?

A. This document's currently under review by Ecology.

Q. Shouldn't that be a requirement imposed by Ecology rather than a suggestion?

A. In order -- this has to be approved by Ecology, and certainly it would be a requirement for approvals of such a plan, of such a monitoring plan.

This document to my understanding as to the way that we approve monitoring plans, we only approve those monitoring plans if they're monitoring for all necessary parameters, and one of those necessary parameters, as you've pointed out, is hardness. And that appears to me as if that has been overlooked here. But again, this is a document that my understanding of it, gosh, we just got this -- we're currently reviewing this right now. Q. None of the other monitoring plans that

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or in discharges from their proposed facility? MR. YOUNG: I object. The document speaks for itself.

A. Without seeing the entire document, I don't know what type of receiving water monitoring they'll be doing. If somewhere in this document there's receiving water monitoring going on as part of the low flow analysis, I'm assuming that any type of receiving water monitoring that they would be doing would include 10 analysis for hardness.

O. (BY MR. POULIN) I'll direct your attention 12 to Page 5-2 and Paragraph 5.1.3 where the proposal states that, "The monitoring proposal for the Flow Impact Offset Facility includes the following monitoring components: Water levels within the 16 stormwater vaults, flow, turbidity, DO, temperature, and metals."

A. Right. And I would point to before that, "The Port is proposing to monitor the operation of Flow 20 Impact Offset Facility to provide assurance that the facility is achieving its performance goals and not 22 causing any water quality violations in the receiving 23 waters. This will be accomplished by periodic 24 monitoring of both the discharge and receiving waters 25 during the annual operation" --

Ecology has approved have required monitoring for hardness, have they?

A. What other monitoring plans Ecology's approved? I don't understand.

Q. For instance, stormwater monitoring plans, SWPPPs submitted to Ecology pursuant to the NPDES permit.

A. If you're talking about the stormwater monitoring plans for construction activity, our main concern on construction activity is turbidity, and what we're looking for there is where they're going to be monitoring their facilities for those construction projects for turbidity.

Q. Let's shift gears.

How did it come to be that the King County Surface Water Design Manual basic menu became the standard for the Comprehensive Stormwater Management Plan for the Port's proposal?

> MR. YOUNG: I object. Lack of foundation. THE WITNESS: What am I supposed to do? MR. YOUNG: You can go ahead and answer, I'm

21 sorry. If you can answer, go ahead and answer. If yo understand his question, you can answer it. 23

Q. (BY MR. POULIN) Would you agree that the Port has invested considerable effort to demonstrate

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that its proposal complies with the requirements of the
King County Stormwater Design Manual?
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- A. Correct. And one of the reasons for that is the Port's stated intention for its stormwater management plan is that it would meet necessary requirements of the King County Design Manual as well as the -- what was at the time Department of Ecology's stormwater manual, I believe, which is the stormwater manual for Puget Sound.
 - O. And do you know why that is?
- A. Why what is?

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- Q. I thought you said that that was the Port's 13 stated objective or intention. Do you know why they sought to meet those standards?
- A. I would have to assume that the Port was intending to demonstrate that they're meeting not only state standards but applicable local standards, local 18 standards that the surrounding communities to the Port 19 are subject to.
- O. Aren't the most relevant standards for 21 Section 401 certification purposes the state water quality standards?
- A. There's the state water quality standards, 24 but you also have the design requirements that are -were in the Puget Sound Stormwater Manual and in King

MR. YOUNG: At 6:00.

MR. POULIN: You previously said 5.

2 3 MR. YOUNG: Well, I said I was willing to go to 5:30 or even 6, and I'm willing to do that. But at

that point we're done. MR. POULIN: Well, you're welcome to leave, 6 7 but I reserve the right to indicate that I haven't finished my questioning. And I'm happy to go until 6.

(Discussion off the record.)

(Recess taken.)

Q. (BY MR. POULIN) Let's go back on. It's 11 12 4:59.

13 Kevin, did I understand you to state that you were not involved in reviewing the water quality implications of this Low Streamflow Analysis and Summer Low Flow Impact Offset Facility Proposal?

- A. Correct.
- Q. Could you refresh my memory as to who you said was in charge of reviewing the water quality impacts of this low flow plan and facility?
- A. I believe that this is being reviewed by John 21 Drabek and it may also be under review by Ed Abbasi.
 - Q. And how will their --
 - A. Let me also state that because this is an analysis on this low flow impact offset facility

County's Stormwater Design Manual.

- Q. Compliance with those manuals does not assure compliance with state water quality standards, does it?
- A. Compliance with those manuals -- well, I don't believe that King County makes the -- or Department of Ecology, for that matter, has ever made the type of categorical statement that you comply with these manuals and you're entirely in compliance with the state water quality standards. I don't think they would make that type of leap, nor could they make that 10 type of leap.
 - Q. So you'd agree that they're independent standards?
- A. Well, it's apples and oranges, isn't it? I 14 15
 - Q. That's the question.
 - A. Well --

MR. POULIN: Could we go off record for a bit (Recess taken.)

MR. POULIN: Back on the record at 4:54. I guess we'll reserve any further discussion of the time limits applicable to these depositions, and I'll

continue questioning. MR. YOUNG: Yeah, but at 6:00 we're leaving. 24 25

MR. POULIN: At 6:00?

required by the water quality certification, I believe that Ann Kenny would be in that review loop as well.

- Q. Can you please turn to Exhibit 1 which I handed out earlier, and tell me, if you can, where the provision pertaining to this report and Ecology's review and approval authority is?
 - A. (Witness reviewing document). MR. REAVIS: Page 22.
 - A. Thank you.
 - O. (BY MR. POULIN) Yeah, to save time, I just came across that as well.
 - A. I believe this comes out of right there in Paragraph 1. "In order to ensure clarity, within 45 days of receipt of this Order the Port shall submit a revised plan integrating the Low Streamflow Analysis and Summer Low Flow Impact." And I believe that's what this is.
 - Q. And doesn't this Section I.1 of the water quality certification on Page 22 state that Ecology has already -- and that's my term -- Ecology has reviewed and approved the December 2000 version of that report, the Low Streamflow Analysis?
- A. Well, it says it's reviewed and approved the 24 December 2000 Low Streamflow Analysis, and then there was also a Summer Low Flow Impact Offset Facility

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Proposal dated July 23, 2001.

Q. Now, do you see --

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- A. So I understand both of those documents have been reviewed and approved.
- Q. Do you see any provision of this Section 1 that requires subsequent review and approval of this December 2000 plan?

MR. REAVIS: 2001?

- 9 Q. (BY MR. POULIN) Thank you. December 2001 10 plan?
- A. Well, I'd have to go through -- this is a 11 lengthy condition here of what this revised plan must 13 have.
- 14 Q. Right. Well, I understood you to state earlier that this -- that whatever this plan that I 16 have partially excerpted in Exhibit 140 does or states is subject to further review and approval, and so I 18 thought you might know where that requirement of further review and approval is. And, frankly, I'm not seeing it here.
- 21 A. Well, what's here is everything that this revised document must have in it, including monitoring and reporting requirements, what a minimum -- addresses the following elements. And if you'll look in there under (e) (v), and again, this is what this recently

submitted plan must include, it must include "Contingency if water quality in vaults does not meet

water quality criteria."

So what that says to me is that they'd have to have a means in the plan to determine if that collected and stored stormwater is indeed meeting water quality criteria. And it would follow that what they would have to do is monitor instream receiving water hardness.

Q. Well, you'd think so.

Did I understand you to state you have not reviewed the previously submitted Low Flow Analysis or 13 Low Flow Impact Offset Facility Proposal?

- Q. You weren't in on that loop?
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- 17 Q. Did anyone report to you about their review
 - of the water quality aspects of those plans?
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- Q. So it may be that John Drabek or Ed Abbasi or 21 Kelly Whiting has looked into it but they didn't --
- A. They wouldn't report to me, they would have 23 reported to Ann. Ann relied upon them to do the 24 reviews of these plans since Ann was the project person for the water quality certification.

- Q. Did you review the water quality implications of the MSE wall as part of the 401 certification?
- A. I guess reviewed as part of -- as it was addressed in their stormwater management plan.
 - Q. To what extent was it addressed in that plan?
- A. What I recall is given the proposed structure and slope of the wall, the types of stormwater facilities that would have to be constructed in order to accommodate the design of the wall.
- Q. Do you know what the date of that monitoring plan was?
- A. I didn't say it was a monitoring -- it was a stormwater management plan.
- Q. Management plan, I'm sorry. Thank you. Do you know the date of that plan that you reviewed?
- A. That review, along with a number of other people in the water quality section -- well, when I say "number of other people," I had part in that review along with John Drabek and also Kelly Whiting was our main review authority, if you will, on the stormwater management plan. But I recall reviewing aspects of that plan, their most recent plan that was submitted I think just prior to issuance of the 401 certification.
- Q. So to paraphrase, then, the management plan that you reviewed was issued in August or September of

2001; is that right?

- A. I'd have to look back at the records as to when their final stormwater management plan was submitted, but that sounds about right. I think it may have been July of 2001.
- Q. But you're sure it was before the issuance of the certification, the 401 certification?
 - A. I believe it was.
- Q. Have you reviewed a Hart Crowser report relating to the design of the MSE wall that was submitted to Ecology in November?
 - A. No.
- Q. Are you aware that that report proposes significant changes to the design of the MSE wall?
 - A. I'm not aware of the report so I don't know.
- Q. You haven't heard any mention of the substance of that report or any design change?
 - A. No.
- Q. So you haven't reviewed any water quality implications that might result from such a change?
- A. No, but -- no.
- 22 Q. Is it true that the Port has proposed an 23 expansion of its industrial wastewater system?
 - A. Yes.
 - Q. Is it true that that expansion project is not

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- considered part of the master plan update project?
- A. Yes. The expansion and improvements of their industrial wastewater system were driven primarily by the NPDES permit.
- O. Is it true that not all of the metalsgenerating surfaces at Sea-Tac International Airport are being routed to the IWS for treatment?
- A. That's correct, that they do have some metalgenerating surfaces, some roofs and downspouts that are not going into the industrial wastewater system.
- O. And isn't it also true that a part of the 12 stormwater runoff from the runways themselves is not routed to the IWS system for treatment?
- A. Yeah, there's large portions of the runways 15 that go into the stormwater system and not into the 16 industrial wastewater system.
- Q. And the Port is not proposing to route 18 stormwater runoff resulting from the third runway to the IWS, is it?
- A. No, I don't believe that that's -- I believe there's a contingency that if they find -- well, I won't speculate on that. But, yes, I believe most of 23 the stormwater runoff from the third runway go into a 24 stormwater system and not into the industrial 25 wastewater system.
 - Q. Let's turn to your work on the clean fill
 - A. Okav.

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- Q. Who selected the final clean fill criteria incorporated in the final 401 certification, by which I mean the amended --
 - A. The acceptable fill criteria?

criteria aspect of the 401 certification.

- Q. Yes, thank you. I am referring to the September 21st water quality certification.
 - A. Section E?
 - O. Yes, Section E, beginning on Page 14.
- A. The conditions under Section E, those final draft conditions were proposed by myself, and this was after working in some consultation with Chung Yee in our cleanup program.
- Q. Are you referring to the values in the second column of the table on Page 17, the --
- A. Actually, I'm referring to all the conditions.
- Q. All the conditions, okay. Including the fill 21 criteria specified in that table?
- A. Including what's entitled the fill criteria limitations for hazardous substances. 23
 - O. How did Chung Yee come to be involved in the project? Could you please tell us who he is?

A. Yes. Chung Yee was actually -- for a short time he was a facility manager, I believe, for a period of about six months of the Sea-Tac Airport permit.

And Chung Yee's background both in water quality and in

5 the toxics cleanup program made him a good resource to tap into as we started to think about acceptable fill 6

criteria for the 401 water quality certification. So he did some initial work on these acceptable fill

criteria while he was the facility manager for Sea-Tac 10 Airport. This would be in about August/September 2000.

11 And then he switched positions within 12 Department of Ecology to take a toxics cleanup program 13 position down in our headquarters office in Lacey. 14 And when our water quality certification -- as we 15 appeared to be moving toward drafting up a water quality certification, we called upon the toxics 16 cleanup program to see if he could involve himself, you 17 know, lend his technical expertise to the 401 water 18 19 quality certification team.

And so I guess to characterize Chung Yee, he was sort of our consultant from the toxics cleanup program developing these criteria. And then I worked along with him.

24 Q. Why didn't the toxic cleanup program itself 25 develop these fill criteria?

- A. Well, I don't know what you mean by that. Chung Yee works for the toxics cleanup program. He's an environmental engineer and a professional engineer in the toxics cleanup program. And they made his services available to us in helping to develop these acceptable fill criteria.
 - Q. Did you also rely on the expertise of Pete Kmet in developing these criteria?
 - A. Yes. I believe Pete Kmet was -- we sought review and advice from Pete Kmet on those, as I recall.
 - Q. Isn't Pete Kmet Ecology's resident expert on hazardous substances?
 - MR. REAVIS: Objection; lack of foundation.
 - A. We have a number of experts on hazardous substances in the toxics cleanup program. I would say he's one of those, yes.
 - Q. (BY MR. POULIN) Would you agree that he has considerably more expertise than Chung Yee?
 - A. I don't have a way of agreeing or disagreeing with that.
- Q. Were any of Pete Kmet's recommendations concerning fill criteria adopted in the final 401
- A. We heard loud and clear from Pete Kmet and agreed with him that there should be no fill material

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coming from a contaminated site or even fill material that's been remediated from a contaminated site. And so we put that as a condition in here on Prohibited Fill Sources, on E(d), I think it is, Prohibited Fill Sources.
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"The following fill sources are prohibited
for use on Port 404 projects: Fill which consists in
whole or in part of soils or materials that are
determined to be contaminated following a Phase I or
Phase II site assessment." And even further, "Fill
which consists in whole or in part of soils or
materials that were previously determined to be
contaminated by a Phase I or Phase II site assessment
and have been treated in some manner so to be
considered remediated soils or fill material."

- Q. Did Mr. Kmet submit any written comments to you or to Chung Yee concerning the proposed fill criteria?
- 19 **A.** I believe that there were -- there was an 20 e-mail transmission, one or two of those.
 - Q. And do you recall whether Mr. Kmet suggested a minimum sampling frequency for fill?
- A. I don't recall -- I'm sorry, I don't recall a minimum sampling.
 - MR. POULIN: I'd like to help refresh your

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memory with an exhibit.
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(Discussion off the record.)

3 (Recess taken.)

Q. (BY MR. POULIN) Back on the record.

I'd like to have you review this previously introduced Exhibit 15. Would you agree that this exhibit appears to be Ann Kenny's copy of an e-mail that Peter Kmet sent to you?

- A. Well, what I see what was sent to me is a word document that says, "Here are my comments. Make sure you open the attachment." Then, but what follows is a copy of an e-mail sent from me to Pete. Is this the opened attachment then?
- Q. My understanding is that the referenced attachment is the second, third and fourth pages of the exhibit.
 - A. Okay.
 - Q. Do you recognize these as the comments that Pete Kmet sent to your attention?
 - A. You mean the underlined material?
 - Q. Well, I mean the entirety of Pages 2, 3 and 4, unnumbered Pages 2, 3 and 4 of this exhibit.

MR. REAVIS: I think it starts with Page 3, actually, because isn't Page 2 the second page of the e-mail?

MR. POULIN: It's entirely possible that --MR. REAVIS: Because my Page 2 has a number on it that says 2. That's the second page of the e-mail.

MR. POULIN: I was concerned that you might be missing the conclusion of the e-mail. And if we could very briefly revise the exhibit, I'd like to get a quick copy of this. And we'll go off record for just a moment and I'll do that. Thanks, Mr. Reavis.

(Discussion off the record.)

O. (BY MR. POULIN) Back on the record.

Thanks to Mr. Reavis, a copy of the original exhibit, we can now see that this should be a six-page exhibit, and we in fact were missing the second and third pages.

Now that you see those pages which should be inserted in Exhibit 15 after the first page, does that look more familiar to you?

- A. Yes, it does.
- Q. Now, on the unnumbered fifth page of this exhibit which has a couple of two-column tables towards the bottom, would you agree that Mr. Kmet -- do you recall now in reviewing this that Mr. Kmet recommended a higher minimum number of samples than were proposed in the fill criteria that he reviewed?

A. Yes.

- Q. Would you agree that Mr. Kmet recommended a higher minimum number of samples than were adopted in the final 401 criteria?
 - A. Yes.
 - Q. What was your basis for rejecting his recommendation?
 - A. I didn't reject his recommendation. I took the recommendation that came to me from Chung Yee, and the recommendation that came to me from Chung Yee is what appears in the water quality certification as the minimum number of samples.
 - Q. Why did you select as the fill criteria the minimum number of samples provided to you by Chung Yee instead of those forwarded to you by Peter Kmet?

A. Because Chung Yee was the one who was working

- on the final set of conditions that were established in the water quality certification. This recommendation from Pete I believe came in September, came by us September 11, 2000, and then the final draft of these recommendations went through or came to me from Chung Yee, gosh, I believe in July of 2001.
- Q. Did you have any basis to believe that Chung Yee's work product was superior to Peter Kmet's?
- A. What I was relying upon was Chung Yee's

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- expertise, and as the person, the staff person from the toxics cleanup program who was selected to assist us in this process. And so what I was relying on is that he 4 had reviewed Pete Kmet's recommendation and that he considered that recommendation and decided to go with what he originally had.
 - O. So is it your testimony, then, that you did not select the final criteria; rather, Chung Yee did?
 - A. It's my testimony that I relied on the final set of draft conditions that Chung Yee came up with, but I did select his final draft recommendations.
 - Q. Do you know whether Chung Yee had any basis to reject Pete Kmet's recommendations?
 - A. I do not know.

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- Q. So do you know whether Chung Yee's recommendations are superior to those of Mr. Kmet?
 - A. I don't know. Again, what I was relying upon is what Chung Yee provided us in June/July of 2001.
- Q. Independent of Chung Yee's recommendation, what basis do you have for concluding that the fill criteria he recommended to you is adequate to protect water quality?
- A. If your question is -- when you say the fill criteria recommended, are you referring to the minimum number of samples that he recommended?

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- Q. Yes. Yes, I am.
- A. Okay, that's very different from the acceptable fill criteria. This is for characterization of the fill.

And my sense of it is that in light of the 6 fact that we were requiring the Port not to use any fill sources that were contaminated or even fill sources that had in part or whole even remediated soils 9 from contaminated sources, my sense of it is that this 10 testing of this uncontaminated soils would give us a 11 sort of -- a confirmation that indeed we were dealing with uncontaminated sources.

- Q. Isn't it true that Mr. Kmet commented that 14 the sampling frequency proposed by Chung Yee is, quote, insufficient to determine compliance with the 16 monitoring standards, and further, that the sampling schedule is not likely to find contamination?
 - A. I don't see where it says "not likely to find contamination."
- O. You'll find in the underlined text in the third full paragraph on that unnumbered fifth page of 22 Exhibit 15 the full sentence being, "Also, your sampling schedule is not likely to find contamination."
 - A. Okay. I'm now aware of that.
 - O. So notwithstanding his advice, you thought

that Chung Yee's recommendations were sufficient?

- A. Yes.
- Q. Did you ever respond to Mr. Kmet's comments?
- A. No. I held on to these comments because I 4 knew that we were going to be revisiting this issue eventually when we got around to issuing the 401 certification. And I made sure to forward these comments on to Chung Yee.
 - O. Let's look at the fill criteria themselves, and by that I mean the numeric criteria identified in the second column of the table on Page 17 of the water quality certification, Exhibit 1.

MR. REAVIS: Let me just say, I've got just a few more minutes here and then I have to head out, I've got another commitment. So I don't think that we're going to agree on whether or not that's in compliance with the completion of this deposition, but I suggest we take that up later. And I don't know how much time you think it's going to take to go through this subject area, but my guess is it's going to take awhile. So my suggestion would be to go ahead and stop here.

MR. POULIN: Well, are you available until 6? 22 23 MR. REAVIS: Yeah. If you think you can get 24 through this, I can wait until 6.

MR. POULIN: Well, I don't think I can get

through it, but in the off chance that we don't have a chance to reconvene this deposition, I'd like to use the time available.

MR. REAVIS: Okay, certainly.

- Q. (BY MR. POULIN) Did you select these fill criteria?
- A. What I chose to do is include these criteria among the conditions for acceptable fill in the water quality certification, and that's because these were presented to me by Chung Yee as acceptable criteria.
 - Q. Do you have any independent basis for --
- A. But there's more to -- I mean, you're talking about an entire -- not just this table. I mean, these are all part and parcel of that entire fill criteria condition. I mean, the fill criteria is not just this table alone. You know, it also includes special criteria that come into effect when -- well, you'll notice there's a footnote 3 there of -- you know, a different set of criteria that come in to play for metals like chromium when the fill is placed within six feet of the ground surface.
 - O. Sure. But let's look at another exhibit. (Deposition Exhibit No. 141 was marked for identification.)
 - Q. (BY MR. POULIN) To my surprise, the Board's

Page 165 to Page 168

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Order Granting Motion to Stay the Effectiveness of 401 2 Certification has not previously been used as an 3 exhibit. I'd like you to turn to Page 16 of the Board's Order Granting the Motion to Stay.

You'll see that the second column of the -let me back up. You'll see that the first two columns apart from the heading correspond to the information presented in Page 17, the table in Page 17 of the 401 certification, listing the substance or contaminant in the first column and the fill criteria from the 401 certification in the second column.

First off, let me ask, do you have any reason to disagree with any of the information here in the third and fourth columns of the table in the Order?

- A. Far be it from me to ever disagree with a 16 Board decision, but I believe that those are accurate representations in those third and fourth columns there for those contaminants of what Puget Sound background is, where it's known, and then the practical quantification limits for detection of those contaminants.
- Q. Would you agree that in several instances the 22 fill criteria selected in the 401 certification is substantially higher than the Puget Sound background and the practical quantification limits?

MR. REAVIS: Let me just object to this question because it's a compound question and covers a number of different constituents and issues. That's my objection.

Q. (BY MR. POULIN) Fair enough. Let's look at arsenic where the 401 fill criteria is 20, Puget Sound background is 7, and the practical quantification limit is 1.5, presumably milligrams per kilogram.

Doesn't this indicate that the 401 9 certification accepts fill that is more than double the 10 11 background of arsenic?

- A. Of what the Puget Sound background is?
- Q. Yes.
- 14 A. Yes.

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- Q. And so with lead where the quantification 15 16 limit is just .5 and the background is 24, the lead value is nearly ten times that, 220, or in some cases 18 250?
- 19 A. Yes.
- Q. Now, in light of this, I'd like to ask why 20 you believe that the levels selected in the 401 certification are sufficiently protective of water 23 quality.
- A. Well, I believe they're sufficiently 24 protective of water quality because this fill material

will not be in contact with an active groundwater component and, therefore, you know, I believe -- and this is relying somewhat on Chung Yee's expertise, the because of that, that fill material which was even a. these levels for chromium or nickel or lead, because you'll notice that for certain metals we match the Puget Sound background, in particular for copper. But that given the characteristics of those particular metals, that as long as they are not in contact with an active groundwater component, as they would not be in the proposed fill profile for the third runway, that that would be sufficiently protective of state ground waters and surface waters.

Q. Well, I'd like to ask, if I might use a colloquialism, where does the buck stop? You state that you relied on Chung Yee, I believe Ann Kenny would state that she relied on you, and probably Mr. White would state that he relied on Ann Kenny.

19 Who has the responsibility for selecting standards that are known to be sufficiently protective? 20

- A. I told you I selected these.
- Q. You selected these based on --
 - A. Chung Yee's expertise.
- Q. For which you have no independent basis to confirm or deny or reject?

A. I don't understand his question.

- Q. You don't know -- you don't have any reason to know whether Chung Yee's recommendation is valid or invalid, adequate or inadequate?
- A. I rely on the fact that of his years of experience in the toxics cleanup program, his education and background as an environmental engineer and as a professional engineer, and his expertise in how contaminants may or may not become mobile from the soils in a fill profile.

And if you want to know where the buck stopped on selecting these criterias, I told you, it stopped with me. And the reason I accepted these is because of the expertise, experience and background that Chung Yee had, and that also that he took Pete Kmet's comments into consideration as well. But why he made the recommendation that he made to me in the end is something that you'll have to ask him.

MR. POULIN: In respect of your request to stop at 6:00, I'll note that it's 5:59 and a half. I would like to continue the deposition and would request that Ecology provide me with a future date " Mr. Fitzpatrick will be available for future questioning.

THE WITNESS: If that's to be done over the

record. It's 6:00.

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Port.

AIRPORT COMMUNITIES COALITION VS. STATE OF WASHINGTON, et al.

BEFORE THE POLLUTION CONTROL HEARINGS BOARD DEPOSITION OF: KEVIN FITZPATRICK; 1/16/2002

I, KEVIN FITZPATRICK, have read the within transcript taken JANUARY 16, 2002, and the same is true and accurate except for any changes and/or corrections, if any, as follows:

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KEVIN FITZPATRICK

Signed at on the day of AR 028505

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