

Department of Ecology Triennial Review
Public Meeting

DEPARTMENT OF ECOLOGY TRIENNIAL REVIEW OF
WASHINGTON'S SURFACE WATER QUALITY STANDARDS

VERBATIM TRANSCRIPTION OF PUBLIC MEETING HELD BEFORE
JOCELYN WINZ, HEARING OFFICER,
IN LACEY, WASHINGTON

NOVEMBER 4, 2010

COPY

Taken Before:

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10 SCOTT TOBIASON

11 DON RUSSELL

12 DAVID PEELER

13 LLEWELLYN MATTHEWS

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1 HEARING OFFICER: So let the record show that
2 it is 3:09 on Thursday, November 4, 2010, and this
3 hearing is being held in Lacey, Washington, at the
4 Lacey Community Center.

5 Notice of this hearing was electronically
6 distributed to about 1,200 interested parties and
7 delivered through the postal system to about 250
8 people. Many of you may have received the notice in
9 one of those two forms. Additionally, a press release
10 was issued on October 10, 2010.

11 Okay. So remember, one at a time, come up.
12 Questions are for the record. Limit questions to about
13 five minutes. Try to keep the extra background noise
14 to a limit so that Janette can get a clear record, and
15 that the recorder can get that record.

16 And then we're going to begin, Dave. It's all
17 you.

18 DAVID DeFOREST: Well, my name is David DeForest.
19 I work at Windward Environmental Science and
20 Engineering Consultants in Seattle. We're at 200 West
21 Mercer Street.

22 Thanks for the opportunity to provide comments
23 here today. My comments that I'll be providing are
24 being presented on behalf of the Copper Development
25 Association, the CDA, and the International Copper

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1 Association. CDA and ICA are interested in seeing
2 copper criteria updates in the state of Washington,
3 specifically the freshwater criteria for protection of
4 aquatic life.

5 Washington's current copper criteria are 25 years
6 old. It's being based on EPA's 1985 copper criteria
7 guidance. Since 1985, EPA has twice provided updated
8 national recommended copper criteria for protection of
9 freshwater aquatic life. And these are the -- these
10 were the 1995 and, most recently, the 2007 updates.

11 The 1985 and 1995 national copper criteria are
12 both hardness based, which are models or equations that
13 account for a single variable, which is water hardness.
14 EPA has always intended criteria to be updated as new
15 test data become available and has specific guidance
16 for developing updated criteria. These criteria
17 updating can be performed by the EPA or the states, and
18 the triennial review process is the means for adoption.

19 Copper toxicity has continued to be extensively
20 researched since the 1985 and 1995 updates. It's
21 become extensively well understood that multiple water
22 quality factors in addition to --

23 (Interruption by the court
24 reporter.)

25 DAVID DeFOREST: It is well understood that

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1 multiple water quality factors in addition to hardness
2 influence copper toxicity, such as dissolved organic
3 carbon from DOC and pH.

4 DOC is naturally present in surface waters and is
5 a measure of dissolved organic matter. When organic
6 matter such leaves decompose they release DOC. DOC is
7 well known to reduce the toxicity of many metals like
8 copper.

9 For example, in waters low in DOC, hardness-based
10 copper criteria may be underprotective of aquatic life,
11 while hardness-based copper criteria for waters with
12 common DOC concentrations may be overprotective of
13 aquatic life.

14 Recognizing the importance of DOC and other
15 factors on copper toxicity, the EPA in 2007 recommended
16 national copper criteria based on the Biotic Ligand
17 Model, or the BLM, which is used to derive more
18 accurate copper criteria than either the 1985 or 1995
19 hardness-based approach.

20 The copper BLM is free and publically available.
21 It requires little training to use. There are ten BLM
22 input parameters, including DOC, pH, hardness ions, and
23 several other ions, and it typically costs less than
24 \$150 per sample for the analysis. Several states have
25 adopted the copper BLM state water quality standard as

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1 a result of recent triennial reviews, including South
2 Carolina, Maryland, New Mexico, New Hampshire, New
3 Jersey, and Texas.

4 In the Pacific Northwest, concerns have been
5 raised that copper may be impacting the olfactory
6 system or the sense of smell of salmon in very low
7 copper concentrations. However, recent evaluations
8 have demonstrated that the 2007 BLM-based copper
9 criteria are more consistently protective of olfactory
10 impairment in juvenile salmon than are either the 1985
11 or 1995 hardness-based copper criteria.

12 In Washington, there is well over 1,000 National
13 Pollution Discharge Elimination System (NPDES)
14 permittees subject to compliance based on the current
15 Washington criteria, which again for copper is the 1985
16 EPA national criteria. The NPDES permits are the
17 principle regulatory vehicles for Clean Water Act
18 implementation to protect and restore water quality.
19 NPDES permits rely on state water quality standards
20 criteria for setting appropriate compliance levels.

21 Water quality criteria drive current compliance
22 decisions and can lead to significant capital
23 expenditures. Water quality criteria also drive the
24 303(d) and TMDL process for identifying and cleaning up
25 impaired water bodies. Using outdated criteria for

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1 NPDES, 303(d), and TMDL purposes could lead to waste of
2 resources or false positives. Using outdated criteria
3 may also result in underprotecting aquatic life, or
4 false negatives. Therefore, Washington should consider
5 adopting the most current EPA criteria for protection
6 of freshwater aquatic life, which for copper are the
7 2007 BLM-based criteria.

8 In the process of considering BLM-based copper
9 criteria, implementation issues have been raised in
10 other states. These can include the availability of
11 sufficient data to run the model, or recent consensus
12 on how best to summarize the chemical data for a
13 particular water body or river segment. However, most
14 of these issues are common to water quality criteria in
15 general and can be addressed outside of the triennial
16 review in various guidance documents.

17 Furthermore, statistical methods and systems may
18 allow one to simplify data collection needs to focus
19 only on those chemical parameters that influence
20 criteria calculations for copper the most, such as DOC
21 and pH.

22 And then finally I just want to note that CDA and
23 ICA will also be providing written comments, and I'll
24 summarize these points in further detail. And thank
25 you for the opportunity to speak, and for your

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1 consideration of our request to incorporate BLM into
2 the Washington State standards.

3 HEARING OFFICER: Great. Thanks, Dave.
4 Okay. Thank you so much.

5 Tape recorder is still rolling. We're in good
6 shape. We're going to go ahead, and Scott you can come
7 on up.

8 SCOTT TOBIASON: Hello. My name is Scott
9 Tobiason. I work for Windward Environmental Science
10 and Engineering Consultants in Seattle, 200 West Mercer
11 Street, also. First, thanks for the opportunity to
12 present comments here today to help shape the triennial
13 review.

14 The comments I'd like to provide are being
15 presented on behalf of the International Zinc
16 Association. These comments are about zinc criteria.
17 IZA is interested in seeing zinc criteria updates in
18 the state of Washington, specifically freshwater
19 criteria for protection of aquatic life. Washington's
20 current zinc criteria are now 23 years old, being based
21 on EPA's 1987 zinc criteria.

22 Since 1987, EPA has provided one update to the
23 zinc criteria, which was in 1995. The 1987 and 1995
24 national zinc criteria are both hardness based, and
25 these are models or equations that account for a single

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1 -- single variable, which is water hardness.

2 The EPA has always wanted criteria to be updated
3 as the toxicity data become available and has specific
4 guidance for developing and updating these criteria.
5 These criteria updates can be performed by the EPA or
6 by the states, and the triennial review process is the
7 means for adoption.

8 Zinc toxicity has continued to be extensively
9 researched since the 1997 and the 1995 updates.
10 Freshwater zinc criteria were recently adopted by the
11 state of New Mexico. The 2010 New Mexico zinc criteria
12 are based on a nationwide update, the same toxicity
13 data sets, which contains toxicity data for
14 approximately twice as many species as the data set
15 used in the 1987 and the 1995 EPA criteria.

16 It is well understood that the multiple water
17 quality factors in addition to hardness influence zinc
18 toxicity, such as dissolved organic carbon, or known as
19 DOC, and pH. DOC is naturally present in surface
20 waters and is a measure of organic matter. When
21 organic matter such as leaves decompose, they release
22 DOC, which can often be seen as a tea color in extreme
23 cases. DOC is well known to reduce the toxicity of
24 many metals like zinc.

25 For example, in waters low in DOC, hardness-based

1 zinc criteria may be underprotective of aquatic life.
2 In contrast, common DOC concentrations render zinc less
3 toxic so that hardness-based zinc criteria may be
4 overprotective of aquatic life.

5 A tool called the Biotic Ligand Model, known as
6 the BLM, has been developed to predict the toxicity of
7 several metals, including zinc, in water with varying
8 DOC, hardness, and pH and other parameters.

9 As noted in the earlier comments on copper, the
10 EPA in 2007 recommended -- recommended national copper
11 criteria based on the BLM. So there is a precedent for
12 the BLM for copper criteria.

13 Draft zinc BLM-based criteria were submitted to
14 the EPA in 2006. The BLM-based criteria were derived
15 following the same approach used for deriving the
16 BLM-based copper criteria. However, the EPA has yet to
17 release the BLM-based zinc criteria for public comment.

18 The zinc BLM, similar to the copper BLM, requires
19 the same ten BLM input parameters, including DOC, pH,
20 hardness ions, and several other ions. These input
21 parameters typically cost less than \$150 per sample for
22 analysis.

23 In Washington, there are well over 1,000
24 permittees covered by National Pollution Discharge
25 Elimination System, or NPDES, permits, and these are

1 subject to compliance levels based on the current
2 Washington water quality criteria, which for zinc are
3 the 1987 EPA national criteria.

4 NPDES permits are the principle regulatory vehicle
5 for Clean Water Act implementation to protect and
6 restore water quality. NPDES permits rely on state
7 water quality standards and criteria for setting
8 appropriate compliance levels. Water quality criteria
9 drive permit compliance decisions and can lead to
10 significant capital expenditures.

11 Water quality criteria also drive the state's
12 process for identifying and cleaning up impaired water
13 bodies under 303(d) and the TMDL process. Using
14 outdated criteria for NPDES, 303(d), and TMDL purposes
15 could lead to wasted resources, i.e., false positives.
16 Using outdated criteria may also result in
17 underprotection of aquatic life, which would be false
18 negatives.

19 Therefore, Washington State should consider
20 adopting more current and more accurate zinc criteria
21 for the protection of freshwater aquatic life. These
22 zinc criteria could be the updated hardness-based zinc
23 criteria, similar to the criteria recently approved in
24 New Mexico, or the BLM-based zinc criteria.

25 Alternatively, another option would be to update the

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1 hardness-based zinc criteria and consider adoption of
2 BLM-based zinc criteria as a site-specific option.

3 Similar to the earlier comments today on the
4 copper Biotic Ligand Model, the zinc Biotic Ligand
5 Model implementation issues are common to water quality
6 criteria in general and can be addressed outside the
7 triennial review in various guidance documents.

8 I would like to note also that the International
9 Zinc Association will also be providing written
10 comments that summarize these points in more detail.

11 And I'd like to thank you for the opportunity to
12 speak and for your consideration of our request for
13 updated zinc criteria into Washington State water
14 quality standards.

15 HEARING OFFICER: Thanks, Scott.

16 So next up, we have Don. And again, if I can get
17 you to state your name and address for the record. And
18 feel free to adjust the mic if you need to.

19 DON RUSSELL: My name is Don Russell, and I'm
20 a citizen, and I've been involved with water quality
21 issues for quite a number of years now, but as a
22 citizen and as a volunteer. I'd like to share with you
23 some of my impressions.

24 HEARING OFFICER: If I can have you read your
25 address into the record.

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1 DON RUSSELL: Oh, yes. 7746 Walnut Street
2 Southwest. That's Lakewood, Washington.

3 HEARING OFFICER: Thank you.

4 DON RUSSELL: I live on American Lake, and
5 I've examined that lake as a volunteer water quality
6 monitor for eleven years now. I've lived on the lake
7 for 70 years. I'm 80. And I have a strong
8 recollection of what used to be and what is now.

9 And it's been very disappointing to see the
10 adverse deterioration in water quality, not only in
11 American Lake, but Lake Steilacoom, Gravelly Lake, Lake
12 Louise, Clover Creek, Chambers Creek, Sequelitchew
13 Creek, and I've seen them all.

14 One of the things that I would like to state is
15 that the Department of Ecology has a water quality
16 index in which its evaluated the quality of water in
17 the state waters. And it's interesting to note that 40
18 percent of the water in the state of Washington is
19 judged as good quality. 60 percent is judged as fair
20 or poor.

21 Now, the problem is that the water quality
22 standards assume that the water quality that needs to
23 be protected and preserved is the dominant condition of
24 the state. That's not true. The dominant condition in
25 the state is 60 percent of the water bodies are

1 impaired to a certain degree. And my concern is that
2 the water quality standards as written actually
3 discourage the restoration of impaired water bodies.

4 I'll give you an example. American Lake had a
5 toxic algae bloom in 1989 and 1990. It was the first
6 in Western Washington, and a great deal of study was
7 done to find out the cause. And the cause, of course,
8 was determined to be phosphorus pollution of the lake.
9 It was unusual in that the bloom was in the winter, not
10 the summer. The explanation was that the lake, as it
11 turned over in the fall, released a lot of the
12 phosphorus throughout the water column, and that the
13 toxic blue-green algae blossomed as a result of that
14 release of phosphorus that had come from bottom
15 sediments internal loading.

16 In 2006 I worked with the Legislature to try to
17 get the legislation to treat toxic algae blooms. The
18 outcome of that was the passage of a bill that
19 established the Freshwater Algae Control Program. Now,
20 one of the things that I had hoped would come of that
21 legislation was that we would begin to prevent and
22 control toxic algae blooms in our lakes.

23 That's not what's happened. What happened is that
24 money has been spent setting up monitoring systems and
25 making it available for health departments to advise

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1 consumers, users, fishermen, swimmers, that using these
2 lakes could be hazardous to their health.

3 I have not seen a concerted effort yet to really
4 mount an aggressive program to address non-point
5 pollution from the standpoint of phosphorus external
6 and internal loading. I don't think the current water
7 standard, surface water standards help us in this
8 regard. Because in order to inactivate phosphorus, you
9 have to add chemicals to the lake. Those chemicals
10 include aluminum sulfate, sodium aluminate, calcium
11 hydroxide or calcium oxide or calcium carbonate. There
12 are other inactivators such as iron, and also certain
13 proprietary compounds that are produced in Australia.

14 But the water quality standards are tied to the
15 pollution control acts. And the Department of
16 Ecology's position is that if you add anything to the
17 water that alters its chemistry, it's prohibited. You
18 gotta do it under a NP -- NPDES permit.

19 We have polluted lakes. We need to do something
20 to inactivate phosphorus. The only way you can
21 inactivate phosphorus once it's in the groundwater or
22 in the surface water in any of these lakes is to treat
23 it at its point of entry or to batch treat the lake.
24 And the only way to do that is with aluminum salts, iron
25 salts, or calcium salts. Yet these standards which are

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1 supposed to preserve, protect, and restore water bodies
2 prohibit effective restoration activity.

3 So I would urge you to take a good look at what
4 you've got in the standard -- water quality standards
5 and realize that the current definition of "pollution
6 is" -- and I'll read it to you. Pollution means "such
7 contamination or other alteration of a physical,
8 chemical or biological properties of any waters of the
9 state, including change in temperature, taste, color,
10 turbidity or odor of the waters, or such discharge of
11 any liquid, gasses, solid radioactive or other
12 elements, other substances in the water of this state"
13 - and this is the important part - "as will or is
14 likely to create a nuisance or render such waters
15 harmful, detrimental, or injurious to public health,
16 safety, welfare, or domestic, commercial, industrial,
17 agriculture, recreational or other legitimate
18 beneficial uses or to livestock, wild animals, birds,
19 fish or other aquatic life."

20 Toxic algae blooms have rendered most -- many of
21 the state waters as unfit for wildlife, humans,
22 irrigation, and everything else. Something must be
23 done to either eliminate phosphorus introduction into
24 the surface waters or into groundwaters or be treated
25 at the point of entry into these water bodies. And

1 this definition has been interpreted by the Department
2 of Ecology to preclude the addition of these chemicals
3 that will inactivate phosphorus, insomuch as they are
4 considered most by the definition that I just read to
5 you. I think that's wrong. I think that needs to be
6 corrected.

7 So in summary, I would say this. To carry out the
8 Legislature's mandate of preserving, protecting, and
9 restoring state waters, the current emphasis of the
10 surface water quality standards on preserving and
11 protecting the 40 percent of the state's waters that
12 are classified as good from pollution should be
13 counterbalanced by equal emphasis on restoring 60
14 percent of the water bodies in the state of Washington
15 that are considered fair or poor.

16 In this regard there needs to be an understanding
17 that impaired lakes are already polluted and to secure
18 high quality they require restoration by the
19 application of chemicals and techniques that inactivate
20 the polluting nutrients that result in their
21 impairment.

22 HEARING OFFICER: Thank you. Thank you, Don.
23 I appreciate that.

24 Okay. So next up we have Dave Peeler. Again I'll
25 remind you to say your name and address into the

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1 record. And after that, we'll have Llewellyn.

2 DAVID PEELER: Thank you. My name is David
3 Peeler. I'm the director of programs at People for
4 Puget Sound. Our address is 120 East Union Avenue,
5 Suite 204, Olympia 98501. And my comments are somewhat
6 repetitive in some -- in some regards and somewhat
7 different.

8 Susan described earlier the use of water quality
9 standards --

10 (Interruption by the court
11 reporter.)

12 DAVID PEELER: You have a tape recorder.

13 Susan describe earlier the use of water quality
14 standards in sort of a circular diagram that I've seen
15 around for quite a few years now. And as was pointed
16 out by two other speakers, it really left out two
17 significant areas; one, of course, is NPDES permits has
18 been pointed out, and the other one is around toxics
19 cleanups where the water quality standards are used as
20 ARARs. And I already forget what that stands for. But
21 it means they take those into account as well in
22 sediment -- sediment management standards. So they can
23 be directly used in those other kinds of
24 decision-making as well as TMDLs and water quality
25 assessments, as Susan described. So that means that

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1 they get used, as has been pointed out, really very
2 commonly on a daily basis for all kind of management
3 decisions, meaning they should be as up to date and
4 accurate as -- as we can make them.

5 Two areas that we believe should be updated and
6 revised in the next triennial review include mixing
7 zones analysis, which I don't think have been described
8 today. For mixing zones, in our view, should not be
9 allowed for persistent toxic blooms that are not going
10 to degrade or dissipate in the environment. For
11 example, certain types of metals or persistent toxic
12 chemicals or radioactive substances might be of the
13 kind that should not be allowed to have mixing zones.

14 The other one I will mention is toxics criteria,
15 primarily toxics criteria for human health. Our state
16 never did adopt our own criteria for the protection of
17 human health, I think as Susan pointed out earlier. We
18 are covered by a federal rule that was adopted in 1995,
19 The National Toxics Rule. That rule has never been
20 updated either. That rule covers about 100 plus or
21 minus toxic substances and at one time covered, I
22 believe it was 17 states, and then now we're down to a
23 handful of states, including the state of Washington;
24 i.e., the other states have since that time adopted
25 their own human health criteria.

1 Although scientific information has been greatly
2 expanded, of course, since 1991, and EPA has revised
3 its recommended toxics criteria, it has not revised the
4 National Toxics Rule itself. So even though EPA itself
5 over the last 19 years has revised and has gathered
6 more scientific data, it has recommended changes for
7 all states to revise their human health criteria, it
8 has not done so nationally for those few states like
9 ours that are still covered by the NTR.

10 Studies in our own state and region have
11 demonstrated, for example, that the fish consumption
12 rate is underprotective; that is, fish consumption rate
13 is six and a half grams per day -- that's in the NTR --
14 is underprotective of not only tribal fishermen but
15 other sustenance fishermen and fish consumers in our
16 state.

17 And actually, the average fish consumer consumes
18 more than that amount. Even EPA has a higher fish
19 consumption rate now recommended. I think Susan said
20 it was about 18 and a half. So about three times
21 higher than the National Toxics Rule.

22 And as has been pointed out, Oregon is poised to
23 adopt a fish consumption rate that is approximately 30
24 times higher than the National Toxics Rule. So it's
25 clear that our -- our particular standard is quite a

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1 bit out of date and needs to be modified. And the
2 reason that we worry about this is, as I said earlier,
3 that the standards are literally not measured for so
4 many different actions, from measuring the health of
5 our water bodies to -- to issuing indigenous permits to
6 CMDLs between our standards. I mean, it's across the
7 board. It's the foundation that needs to be -- needs
8 to be updated.

9 I will also mention briefly toxics for aquatic
10 life, as has been pointed out by other speakers, were
11 updated in 1997. And again, more recent science,
12 really across the board, has -- has shown that some of
13 those are underprotected or overprotected, depending on
14 the scientific data has -- has, you know, progressed
15 since that time in 1997.

16 Additionally, we know that in our state, at least
17 where we have endangered species, some of our federal
18 agencies, notably NOAA Fisheries and also U.S. Fish and
19 Wildlife Service, have themselves performed studies in
20 our state on our salmon that show that some salmon are
21 affected in ways that preclude or add to their
22 mortality, either as juveniles or in spawning stages,
23 by toxics at much more lower levels than are in our --
24 in our criteria.

25 And in talking with staff, I know there remain

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1 some difficulties in trying to incorporate that. But I
2 think this is an opportunity for us to work in
3 partnership with those federal agencies to figure out
4 how to take advantage of that more recent data on our
5 endangered species and bring that into our standards.
6 Thank you. And I will provide written comments at a
7 later time.

8 HEARING OFFICER: Thanks, David. So
9 Llewellyn is already here. Again, state your name and
10 address for the record.

11 Does that mic work for you? It's really awkward.
12 If you want to hold it, you can.

13 LLEWELLYN MATTHEWS: My name is Llewellyn
14 Matthews. I'm the executive director of Northwest Pulp
15 and Paper Association. Northwest Pulp and Paper
16 Association represents pulp and paper manufacturers in
17 three states: Washington, Oregon, and Idaho.

18 HEARING OFFICER: Could you state your
19 address, please?

20 LLEWELLYN MATTHEWS: Our address for Pulp and
21 Paper is 7900 Southeast 28th Street, Mercer Island,
22 Washington 98040.

23 I wanted to comment on the Oregon process and some
24 issues that would need to be considered in looking at
25 revising the fish consumption rate in -- as one

1 component of the equation that drives water quality
2 decisions.

3 So first, a couple of seconds here, update on the
4 Oregon process. In 2008, the Oregon Environmental
5 Quality Commission directed the Department of
6 Environmental Quality to start a rulemaking process
7 based on several factors. Factor number one was to use
8 that fish consumption rate of 175 grams a day. And
9 they attached several caveats to that, and I'll mention
10 two of them. One was that the package had to include
11 effective implementation measures. That was point
12 number one.

13 And secondly, that it had to be based on good
14 science. And what the Environmental Quality Commission
15 did in that directive, which is available online, the
16 signed directive directly, was a very different way of
17 doing water quality standards. Normally the process is
18 you change the number and figure out later how you're
19 going to implement it.

20 Environmental Quality Commission recognized that
21 they were doing something extraordinary. They were
22 looking at the most stringent water quality standards
23 than any state has ever looked at statewide. And they
24 knew that there would be some issues with that, and
25 then they would need to measure sort of addressing

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1 these issues.

2 Rolling the clock three years forward, the Oregon
3 process currently has figured out the number part of it
4 fine, but they have no effective implementation
5 measures. And I'm going to emphasize no effective
6 implementation issues. They started out with a process
7 of looking at three dozen, and they whittled it all
8 down to that for certain types of issues a variance
9 might be allowed.

10 In the history of the state of Oregon, no variance
11 has ever been granted to an NPDES permit holder. So
12 right now we at least do not have a package in Oregon
13 that includes the most important point that their
14 commission directed them to do. So I think it's kind
15 of a mistake to look at that package and think it's
16 ready to go.

17 I think the -- the other important message that I
18 want to make here is that the process of revising the
19 fish consumption rate in water quality standards is one
20 that NWPPA supported in Oregon. We still support a lot
21 of it, along with the caveat that the Environmental
22 Quality Commission directed. We don't have that right
23 now.

24 So types of problems, I won't go into too many of
25 them. There's a group down there that's spent three

1 years looking at these. I'll mention just three
2 problems.

3 Problem number one: Natural earth metals such as
4 arsenic, other natural earth metals that are a product
5 of prior volcanic history. These have existed in our
6 waters prior to the time that the salmon came and prior
7 to the time that the people came to eat those salmon.
8 The Oregon water quality standard would be, for arsenic
9 at 2,000, more stringent than natural background levels
10 for arsenic. For groundwater, the number is even more
11 extreme because groundwater has more of that content
12 with the salt. So dealing with naturally occurring
13 earth metals, immediately the specter arose that every
14 NPDES permit holder in the state would be on the
15 waterline and 303(d) listed as exceeding the water
16 quality standards for natural earth metals have been
17 there for eons, and secondly that they would have to
18 remove that. We do not have a really very effective
19 solution for that.

20 Second type of problem, ubiquitous manmade
21 pollutants that are found everywhere. These
22 increasingly we are finding that these are due to
23 long-range transport. Issues around mercury in water
24 bodies are well known. We know what's going on in
25 Asia, and that we are affected by that in the Pacific.

1 We have a lot of mercury in our waters that shouldn't
2 be there, due to air pollution sources.

3 We're also finding because of EPA's recent
4 consideration of new test methods for PCBs, Method
5 1668(c) will detect PCBs in a far different way and far
6 lower level than in past. And what the studies are
7 showing is every water body is going to find them.

8 One of the noted scientists in Oregon, Bruce Hope
9 of the Department of Environmental Quality, did an
10 analysis of the Willamette River and said that
11 virtually all of the PCBs that are in the river can be
12 accounted for by long-range transport.

13 Now, if you have a -- what we will have, looking
14 at data and the Oregon water quality standards for
15 PCBs, every water body in the state will now be out of
16 compliance for the PCB standards, and primary tool for
17 adjusting that will be the NPDES permit holder, who may
18 be taking that water in as part of the background in
19 their intake water. Oregon has no proposal for how
20 they will deal with that. That's a problem.

21 Third problem: The types of technologies that the
22 EPA scientists and Oregon EQ have funded looked at a
23 variety of technologies to address these types of
24 problems, and they are very expensive, very unproven,
25 at very trace levels. Some of these technologies cost,

1 in the case of pulp and paper mills, cost more than the
2 mill. That's a problem.

3 So what I'm here to say is that this idea of
4 increasing the fish consumption rate is not a
5 plug-and-play idea. It's not a matter of simply taking
6 a number and plugging it into the water quality
7 standards. It has to come with a very thoughtful
8 package of how we are going to deal with problems that
9 we have not seen in the regulatory arena.

10 There are some areas of the country that have
11 dealt with these very thorny issues. There's been some
12 very creative thinking coming out of areas such as San
13 Francisco, Great Lakes, Delaware TMDL. Florida has
14 worked on some idea called the restoration standards.
15 It's not for lack of effort in this country to think of
16 these ideas. But if Washington is going down this
17 route, they are going to have to look at that and more
18 in order to make such a thing work. They will also
19 need to include in this package action to implement
20 legislation that the Legislature adopted in 2008 having
21 to deal with a situation where a facility has installed
22 all of the best available technologies and still is not
23 getting out that last increment. So it's a big task.

24 There's some things that the Legislature has
25 directed that be part of it. But the main thing that I

1 want to conclude, it's not an undoable issue, but it is
2 not a plug-and-play idea. It's not a matter of taking
3 those numbers, taking the 125 with whatever number and
4 changing the water quality standard. It has to come
5 with a set of standards and implementation measures
6 that are going to look very different from what we now
7 have on the books; otherwise, it will not work.

8 We will have an inspector and people doing things
9 like going out of business because they can't remove
10 natural background metals, going out of business
11 because they can't -- their intake water has got
12 contaminants in it. We can't have those kinds of
13 results. Those are the types of things that the Oregon
14 Environmental Quality Commission, in its wisdom,
15 directed that there be measures to address.
16 Washington, if it goes this route, will have to do no
17 less. Thank you.

18 HEARING OFFICER: Thank you so much.

19 Did we inspire anyone else to come and testify?
20 No? Okay. All right.

21 I think I have a couple of things to remind
22 everybody of before everyone takes off. Let me find my
23 spot. So since no one else would like to testify, I'd
24 like to remind you that you can send in written
25 comments. They must be received no later than 5 p.m.

1 on December 17, 2010. You can send your comments to
2 Becca Conkin. She's with the Water Quality Program at
3 Washington State Department of Ecology, P.O. Box 47600.
4 That's Olympia, Washington 9850- -- does that end in
5 501 or 4 -- 98504. Yes. Or electronically you can
6 send them to swqs@ecy.wa.gov.

7 All testimony received at this hearing, as well as
8 the other hearings being held in Vancouver, Washington,
9 Mount Vernon, Washington, Yakima, Washington, and
10 Spokane, along with written comments received by 5 p.m.
11 on the 17th will all be part of the official hearings
12 record for this proposal.

13 In the spring of 2011, Ecology does anticipate
14 posting the transcript from this and the other hearings
15 on our website. If you want to be notified when this
16 happens, please take a moment to sign up with the
17 LISTSERV. There is a sign-up sheet at the table where
18 you signed in. If you do want a snail mail, a hard
19 copy of that response to comments and the testimony,
20 make sure you see Becca and give her an address or
21 check the card so that we know to send a hard copy of
22 that to you. If we can be of any further help, if you
23 have any other questions, while we're breaking down
24 staff will still be here.

25 I think on behalf of the Department of Ecology,

Department of Ecology Triennial Review
Public Meeting

1 thank you guys for coming. And let the record show
2 that it is 3:48 on Thursday, November 4, 2010, and this
3 hearing is adjourned. Thank you everyone.

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I, Janette Curley, a Certified Court Reporter in and for the State of Washington, residing at Kingston, authorized to administer oaths and affirmations pursuant to RCW 5.28.010, do hereby certify;

That the foregoing proceedings were taken stenographically before me and thereafter reduced to a typed format under my direction; that the transcript is a full, true and complete transcript of said proceedings;

That I am not a relative, employee, attorney or counsel of any party to this action, or relative or employee of any such attorney or counsel, and I am not financially interested in the said action or the outcome thereof;

That upon completion of signature, if required, the original transcript will be securely sealed and the same served upon the appropriate party.

IN WITNESS WHEREOF, I have hereunto set my hand this 23rd day of November, 2010.

Janette Curley
Janette Curley, CCR No. 2030