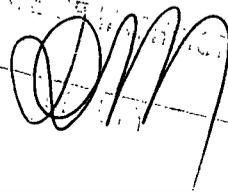


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**COURT OF APPEALS, DIVISION II OF THE STATE OF
WASHINGTON**

PUGET SOUNDKEEPER ALLIANCE; RE SOURCES FOR
SUSTAINABLE COMMUNITIES; and FRIENDS OF THE EARTH,
Petitioners,
v.

STATE OF WASHINGTON, POLLUTION CONTROL HEARINGS
BOARD, and DEPARTMENT OF ECOLOGY,
Respondents.

**OPENING BRIEF FOR PUGET SOUNDKEEPER ALLIANCE,
RE SOURCES FOR SUSTAINABLE COMMUNITIES, and
FRIENDS OF THE EARTH**

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TABLE OF CONTENTS

	Page
I. INTRODUCTION.....	1
II. ASSIGNMENTS OF ERROR.....	4
A. Assignments of Error.....	4
B. Issues Pertaining to Assignments of Error.....	4
III. STATEMENT OF THE CASE.....	5
A. Statutory and Regulatory Background.....	5
1. <u>Clean Water Act.....</u>	<u>5</u>
2. <u>Washington’s Water Quality Standards for Toxic Pollutants.....</u>	<u>7</u>
B. BP Cherry Point National Pollutant Discharge Elimination System (“NPDES”) Permit.....	12
C. The Pollution Control Hearings Board Order.....	15
D. Soundkeeper’s Petition for Judicial Review.....	17
IV. ARGUMENT.....	18
A. Standard of Review.....	18
B. BP’s NPDES Permit Fails to Prohibit Toxic Discharges.....	20
C. The Board Erred in Upholding an NPDES Permit Term that Allows Violations of the Water Quality Standard for Acute Toxicity.....	28
1. <u>Ecology’s WET regulations, and applicable state and federal law and guidance, foreclose the Board’s decision.....</u>	<u>30</u>

2.	<u>The Board erroneously deferred to Ecology on a factually unsupported and unlawful determination.....</u>	34
	a. The record does not support the Board’s conclusion that two or more failed WET tests are needed to violate the water quality standard for acute WET.....	35
	b. The Board’s decision to defer to Ecology conflicts with the agency’s regulations and state law.....	37
3.	<u>The Board’s order allows Ecology to exceed the agency’s statutory authority when re-issuing BP’s Permit.....</u>	39
V.	CONCLUSION	40
VI.	APPENDIX A-I	

APPENDICES

- A WAC 173-205-070
- B Washington State Dept. of Ecology, Response to Public Comments, NPDES Permit No. WA0022900, Feb. 9, 2012, AR 000267, 000294 (Ex. 8, Soundkeeper's Motion for Summary Judgment) (excerpts)
- C United State Environmental Protection Agency, National Whole Effluent Toxicity (WET) Implementation Guidance Under the NPDES Program, Draft, Dec. 28, 2004, p. xii; AR 000344, 000351 (Ex. 1, Soundkeeper's Motion for Summary Judgment) (excerpts)
- D United State Environmental Protection Agency, Whole Effluent Toxicity (WET) Control Policy, July 1994, pp. 4-11; AR 000405, 000409-416 (Ex. 2, Soundkeeper's Motion for Summary Judgment) (excerpts)
- E Washington State Dept. of Ecology, Water Quality Program Permit Writer's Manual, Dec. 2011, p. VI-61 – VI- 65, VI-69; AR 000431, 000445-000448, 000452 (Ex. 3, Soundkeeper's Motion for Summary Judgment) (excerpts)
- F Transcript of Deposition of Randall Marshall, *Puget Soundkeeper Alliance et al., v. State of Washington, et al.*, July 27, 2012, pp. 1-2, 7-12, 23-29, 189-190, 195-200, 203-208, 210, 212; AR 000471-000482, 000500-000501, 000506-000511, 000514-000515, 000517-000519, 000521, 000523 (Ex. 4 to Soundkeeper's Motion for Summary Judgment) (excerpts)
- G Fact Sheet for NPDES Permit WA0022900, Feb. 14, 2012; AR 000527, 000534, 000537, 000544-000545, 000568 (Ex. 5 to Soundkeeper's Motion for Summary Judgment) (excerpts)
- H NPDES Permit WA0022900, February 14, 2012, pp. 1, 27-30; AR 000658, 000684-000687 (Ex. 7 to Soundkeeper's Motion for Summary Judgment) (excerpts)
- I Pollution Control Hearings Board, PCHB No. 12-027c, *Puget Soundkeeper Alliance et al., v. State of Washington, et al.*, Order on Motions for Summary Judgment on Legal Issues 12, 14, and 15, July 26, 2013, pp. 1-4, 10-19; AR 001092-001095, 001101-001110 (excerpts)

TABLE OF AUTHORITIES

<i>Cases</i>	Pages
<i>Ackels v. U.S. Env'tl. Prot. Agency</i> , 7 F.3d 862 (9 th Cir. 1993).....	6, 26
<i>American Mining Congress v. U.S. Env'tl. Prot. Agency</i> , 965 F.2d 759 (9 th Cir. 1992).....	5-6
<i>Ass'n to Protect Hammersley, Eld, and Totten Inlets v. Taylor Res., Inc.</i> 299 F.3d 1007 (9 th Cir. 2002).....	5
<i>Bowers v. Pollution Control Hearings Bd.</i> , 103 Wn.App. 587, 13 P.3d 1076 (2000).....	18
<i>Burton v. Lehman</i> , 153 Wn.2d 416, 103 P.3d 1230 (2005).	19
<i>Clay v. Portik</i> , 84 Wash.App. 553, 929 P.2d 1132 (1997).....	18
<i>Defenders of Wildlife v. Browner</i> , 191 F.3d 1159, 1163 (9 th Cir. 1999).....	6, 26, 39
<i>Dot Foods v. Dep't of Revenue</i> , 166 Wn.2d 912, 215 P.3d 185 (2009).....	19, 24, 31, 38
<i>Gwaltney of Smithfield, Ltd. v. Chesapeake Bay Found., Inc.</i> , 484 U.S. 49 (1987).....	28-29
<i>Heckler v. Chaney</i> , 470 U.S. 821 (1985).....	33
<i>Oklahoma v. EPA</i> , 908 F.2d 595 (10 th Cir. 1990).....	26
<i>Port of Seattle v. Pollution Control Hearings Bd.</i> , 151 Wn.2d 568, 90.P.3d 659 (2004).....	18,19,20,27,36-37,39
<i>PUD No. 1 of Jefferson County v. Wash. Dep't of Ecology</i> 511 U.S. 700 (1994).....	6, 27
<i>Sierra Club v. Union Oil Co.</i> , 853 F.2d 667 (9 th Cir. 1988).....	29

<i>Silverstreak, Inc. v. Dep't of Labor & Indus.</i> , 159 Wash.2d 868, 154 P.3d 891 (2007).....	19, 38
<i>State v. J.P.</i> , 149 Wn.2d 444, 69 P.3d 318 (2003).....	19
<i>Upper Blackstone Water Pollution Abatement Dist. v. U.S. EPA</i> , 690 F.3d 9, 28 (1st Cir. 2012).....	6

Statutes

40 C.F.R. § 122.44.....	4, 7, 9, 10, 22, 39
33 U.S.C	
§ 1251.....	5, 7, 40
§ 1311.....	4, 5, 6-7, 22, 27, 39
§ 1313.....	6
§ 1342.....	5
§1362.....	5
RCW 34.05.....	18
05.558.....	19
05.570.....	18, 27, 30, 34, 35, 37
RCW 90.48.260.....	5
RCW 90.48.520.....	4, 8, 9, 22, 23, 28, 31, 40

Regulations

WAC 173-201A	
201A-240.....	4, 8, 9, 10, 22, 26, 31, 38, 40
201A-510.....	7, 28, 40
WAC 173-205.....	4, 9, 11, 14-15, 24, 38
205-010.....	9
205-040.....	10
205-050.....	10
205-070.....	10-11, 12, 20-21, 24, 30-31, 32, 37, 39
205-090.....	25, 32
205-100.....	25
WAC 173-220-130.....	4, 7

I. INTRODUCTION

This appeal presents an important question of first impression regarding protection of Washington's water quality from the adverse effects of toxic industrial pollution discharges —whether the Washington Department of Ecology (“Ecology”) may issue a National Pollutant Discharge Elimination System (“NPDES”) permit that authorizes a discharge of wastewater effluent that fails a whole effluent toxicity (“WET”) test and is thereby deemed “toxic” under Ecology’s regulations. This question is answered by the unambiguous language of the Clean Water Act (“CWA”), Washington statute, and Washington’s water quality standards, which all forbid toxic discharges. Specifically, the CWA and state law prohibit Ecology from issuing an NPDES permit that allows a discharge of wastewater effluent to violate the narrative water quality standard for acute toxicity. Under Ecology’s regulations, wastewater effluent violates this standard when it fails the regulatorily-defined acute WET compliance test. Thus, an NPDES permit that allows a discharge to fail the acute WET test thereby authorizes the discharge to violate the narrative water quality standard for acute toxicity.

Puget Soundkeeper Alliance, Re Sources for Sustainable Communities, and Friends of the Earth (hereinafter “Soundkeeper”) appealed the NPDES Permit issued by Ecology for water pollution from

Washington's largest oil refinery, the BP Cherry Point Refinery ("BP"), which allows BP's discharges to periodically fail the acute WET test and thereby violate the bedrock narrative water quality standard intended to prevent the poisoning of aquatic animals. When reviewing the NPDES permit, the Pollution Control Hearings Board (the "Board") correctly recognized that the law prohibits Ecology from issuing an NPDES permit that authorizes "ongoing" violations of an acute WET test.¹ However, the Board arbitrarily and erroneously concluded that a single failure of the acute WET test does not violate the narrative water quality standard for toxics, and therefore need not be prohibited in an NPDES permit.²

The Board's decision creates an exemption from the clear legal prohibition on toxic discharges where none exists in statute or regulation. In doing so, the Board deferred to Ecology's argument that a single failure of an acute WET test is inconclusive and therefore not indicative of a violation of the narrative water quality standard prohibiting toxic

¹ The relevant portions of the Board's Order are attached as Appendix I. Page references to the Order and other documents in the Appendices are to the Administrative Record page numbers included at the bottom of each document, which are labeled "AR" throughout this brief.

² The Board's order held Condition S7 of BP's NPDES permit was unlawful to the extent it authorized ongoing exceedances of the acute WET test. App. I, AR 001109. Soundkeeper assigns error to the other portion of the Board's order that allows Condition S7 to authorize single failures of the acute WET test. *See* App. I, AR 001108.

discharges. Ecology's argument contradicts the agency's own regulations, which define a failure of the acute WET test as a violation of the narrative water quality standard prohibiting acutely toxic discharges and leave no room for Ecology to write a pollution permit effectively authorizing discharges failing this compliance test. Thus, the Board's decision to defer to Ecology was arbitrary and contrary to the law.

The Board's error has serious consequences for the many other NPDES permits issued across the state that also include WET limits because it effectively amnesties permittees for violations of the most fundamental state and federal water quality law. The acute WET test, which defines compliance with the acute toxicity water quality standard, measures the aggregate toxic effect of an effluent sample on living aquatic organisms. In other words, effluent that fails an acute WET test was so toxic that aquatic organisms died when exposed to the effluent for a short period of time. Accordingly, a reversal of the Board's decision is necessary to uphold crucial protections of the CWA and state law and prevent allowances for pollution demonstrably poisonous to aquatic life.

II. ASSIGNMENTS OF ERROR

A. Assignments of Error.

1. The Board erred in finding lawful an NPDES permit condition that provides a single failure of an acute WET test is not a violation of Washington's water quality standard for acute toxicity nor a violation of the NPDES permit.

2. The Board erred in granting deference to Ecology's argument that a single failure of the acute WET test does not constitute a violation of the water quality standard for acute toxicity.

B. Issues Pertaining to Assignments of Error.

Is an NPDES Permit condition that does not prohibit a single violation of the acute WET test consistent with the statutory and regulatory prohibitions on toxic discharges, RCW 90.48.520 and WAC 173-201A-240(1), state and federal CWA requirements that NPDES permits include effluent limitations adequate to ensure compliance with water quality standards, 33 U.S.C. § 1311(b)(1)(C), 40 C.F.R. § 122.44(d), and WAC 173-220-130(1)(b)(i), and related implementing laws and regulations, including WAC Ch. 173-205?

III. STATEMENT OF THE CASE

A. Statutory and Regulatory Background.

1. The Clean Water Act

Congress enacted the CWA “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251(a). To this end, section 301(a) of the CWA prohibits the discharge of any pollutant to the waters of the United States except as otherwise in compliance with specified sections of the CWA. 33 U.S.C. §§ 1311(a) and 1362(7). Section 402 establishes the NPDES program, under which permits are issued authorizing and regulating discharges. *See* 33 U.S.C. § 1342. NPDES permits are issued by the United States Environmental Protection Agency (“EPA”) or by state agencies that have been delegated NPDES permitting authority. *See* 33 U.S.C. § 1342(b). “In Washington State, [Ecology] is authorized by the EPA to administer the [CWA’s] NPDES program.” *Ass’n to Protect Hammersley, Eld, and Totten Inlets v. Taylor Res., Inc.*, 299 F.3d 1007, 1009-10 (9th Cir. 2002); RCW 90.48.260.

NPDES permits generally include two types of limits, called “effluent limitations,” on the quantities of pollutants that may be discharged to waterbodies: (1) technology-based limits and (2) water quality-based limits. *See Am. Mining Cong. v. U. S. Env’tl. Prot. Agency*,

965 F.2d 759, 762 n.3 (9th Cir. 1992). Water quality-based limits are derived from water quality standards adopted by individual states that include numeric and narrative criteria for pollutant parameters and describe the characteristics required of navigable waters within a state's jurisdiction. *See* 33 U.S.C. § 1313(a). Water quality standards form the bedrock of the CWA because they ensure that water quality and designated uses of waters are protected regardless of technological or economic limitations. *See PUD No. 1 of Jefferson County v. Wash. Dep't of Ecology*, 511 U.S. 700, 704 (1994) ("state water quality standards provide a supplementary basis . . . so that numerous point sources, despite individual compliance with effluent limitations, may be further regulated to prevent water quality from falling below acceptable levels") (internal quotations omitted); *see also Ackels v. U.S. Env'tl. Prot. Agency*, 7 F.3d 862, 865-66 (9th Cir. 1993) ("economic and technological restraints are not a valid consideration" in establishing permit conditions necessary to comply with water quality standards).

NPDES permits must include effluent limitations adequate to ensure compliance with water quality standards in the receiving water. *Defenders of Wildlife v. Browner*, 191 F.3d 1159, 1163 (9th Cir. 1999); *Upper Blackstone Water Pollution Abatement Dist. v. U.S. Env'tl. Prot. Agency*, 690 F.3d 9, 28 (1st Cir. 2012); 33 U.S.C. § 1311(b)(1)(C) (a

permittee “shall . . . achieve[] . . . any more stringent limitation, including those necessary to meet water quality standards”); 40 C.F.R. § 122.44(d). Accordingly, Ecology may not issue an NPDES permit that allows violations of water quality standards. 40 C.F.R. § 122.4(d); WAC 173-220-130(1)(b)(i). Washington’s water quality standards mandate that NPDES permits “must be conditioned so the discharges authorized will meet the water quality standards. No waste discharge permit can be issued that causes or contributes to a violation of water quality criteria” WAC 173-201A-510(1).

2. Washington’s Water Quality Standards for Toxic Pollutants.

The CWA established a national policy “that the discharge of toxic pollutants in toxic amounts be prohibited.” 33 U.S.C. § 1251(a)(3).

Consistent with this policy, Washington’s water quality standards include a blanket prohibition on discharges causing toxicity:

- (1) ***Toxic substances shall not be introduced above natural background levels in waters of the state which have the potential either singularly or cumulatively to adversely affect characteristic water uses, cause acute or chronic toxicity to the most sensitive biota dependent upon those waters, or adversely affect public health, as determined by the department.***
- (2) ***The department shall employ or require chemical testing, acute and chronic toxicity testing, and biological assessments, as appropriate, to evaluate compliance with subsection (1) of this section and to***

ensure that aquatic communities and the existing and designated uses of waters are being fully protected.

WAC 173-201A-240 (emphasis added). This water quality standard also reflects a **prohibition** in Washington statute:

In order to improve water quality by controlling toxicants in wastewater, the department of ecology shall in issuing and renewing state and federal wastewater discharge permits review the applicant's operations and incorporate permit conditions which require all known, available, and reasonable methods to control toxicants in the applicant's wastewater. Such conditions may include, but are not limited to: (1) Limits on the discharge of specific chemicals, and (2) limits on the overall toxicity of the effluent. The toxicity of the effluent shall be determined by techniques such as chronic or acute bioassays. Such conditions shall be required regardless of the quality of receiving water and regardless of the minimum water quality standards. *In no event shall the discharge of toxicants be allowed that would violate any water quality standard, including toxicant standards, sediment criteria, and dilution zone criteria.*

RCW 90.48.520 (emphasis added).

To determine whether discharges authorized by an NPDES permit comply with the narrative water quality standard for toxicity, NPDES permits must require WET testing. WAC 173-201A-240(2). EPA's draft National WET implementation guidance summarizes concisely why WET testing is used in NPDES permits:

Whole effluent toxicity is the aggregate toxic effect of an aqueous sample (e.g., a reference toxicant, an effluent, or a receiving water) measured directly by an aquatic toxicity test. Aquatic toxicity tests are laboratory experiments that

measure biological effects (e.g., growth, survival, and reproduction) of a test sample (effluents or receiving waters) on aquatic organisms. In aquatic toxicity tests, organisms of a particular species and age are held in test chambers and exposed to different concentrations of an aqueous sample. Observations are then made at predetermined exposure periods. At the end of the test, the responses of test organisms are used to estimate the effects of the test sample, either in absolute terms or relative terms (i.e., the effects of an effluent in receiving waters).

Whole effluent toxicity test results are an integral tool in the assessment of water quality. For the protection of aquatic life, EPA's integrated strategy includes the use of three control approaches: the chemical-specific control approach, the WET control approach, and the biological criteria/bioassessment approach. The two primary advantages of using WET controls over individual, chemical-specific controls are (1) WET tests evaluate the integrated effects of all chemical(s) in the aqueous sample; and (2) while EPA has established aquatic life criteria for a relatively small number (126) of chemical-specific pollutants, WET tests can measure toxicity caused by other compounds for which EPA does not have chemical-specific numeric criteria for the protection of aquatic life or approved parameter-specific analytical test methods.

App. C, Ex. 1, AR 000351.³

In 1993, Ecology adopted WAC 173-205 to establish procedures for NPDES WET conditions consistent with Washington's prohibition on the discharge of toxic pollutants, RCW 90.48.520, the water quality standard for specified toxic substances, WAC 173-201A-240, and 40 C.F.R. § 122.44. WAC 173-205-010. The WAC 173-205 process

³ References to Exhibits throughout this brief are to Exhibits attached to Soundkeeper's Motion for Summary Judgment. See AR 000324-000755.

comports with EPA guidance and federal regulations in comprising (1) WET monitoring to ascertain whether a discharge presents the reasonable potential to cause toxicity in receiving waters (“characterization,” both acute and chronic), (2) establishment of WET water quality-based effluent limitations and compliance monitoring permit conditions where reasonable potential exists, and (3) additional monitoring and toxicity evaluation measures to be taken in response to noncompliance with WET limitations. WAC 173-205-040 through -100; 40 C.F.R. § 122.44(d)(1)(iv); AR 000409-000416; *see also*, AR 000445-00448.

WET effluent characterization determines whether wastewater effluent has the reasonable potential to cause toxicity. WAC 173-205-050(2); App. F, Ex. 4, AR 000478-000482. An NPDES permit for wastewater effluent presenting a reasonable potential for acute toxicity requires periodic acute WET testing and an acute WET effluent limitation. WAC 173-201A-240(2). Ecology’s regulation explains that the outcome of an acute WET test is the means by which compliance with the narrative water quality standard for acute toxicity is determined: when “the most recent acute toxicity test has shown no statistically significant difference in response between the acute critical effluent concentration and a control,” the discharge is “in compliance with the water quality standard for acute toxicity.” WAC 173-205-070(1). But when a “statistically

significant difference” is found, “the effluent has failed the test for compliance with the whole effluent acute toxicity limit.” WAC 173-205-070(1)(c). This compliance test for acute toxicity is “a maximum daily discharge permit limitation.” WAC 173-205-070(1)(d). The purpose of the WET testing provision is to “protect aquatic life through the implementation of all known, available, and reasonable methods of prevention, control and treatment of toxicants and through the attainment of state water quality standards.” WAC 173-205-010.

In deposition, Randall Marshall, Ecology’s WET coordinator who drafted the WET regulations and trains Ecology permit writers to draft WET NPDES permit conditions, confirmed that the WET testing provisions are the means by which Ecology implements the prohibition on toxic discharges in NPDES permits. App. F, Ex. 4, AR 000474-000476, 000500-000501, and 000506-000507 (Marshall Deposition Transcript,⁴ pp. 7:20-9:23, 189:8-190:24, 195:5-196:8). Marshall expressly confirmed that a violation of a WET limit indicates a violation of the prohibition. *Id.*

⁴ Citations to the deposition transcript of Randall Marshall throughout this brief include a parenthetical with the page and line numbers after the AR citation.

B. BP Cherry Point National Pollutant Discharge Elimination System (“NPDES”) Permit

On February 14, 2012, Ecology issued NPDES Permit No. WA0022900 (“the Permit”), to authorize wastewater and stormwater discharges from BP West Coast Products’ Cherry Point Refinery, which is located in Whatcom County and discharges to the Strait of Georgia in a part of the Cherry Point Aquatic Reserve. App. G, Ex.5, AR 000527, 000534, 000544-000545. In normal conditions, the refinery discharges up to 6.4 million gallons per day of treated wastewater, ballast water, and stormwater into the Strait of Georgia. App. G, Ex. 5, AR 000537.

Over the years, acute WET testing results for the BP Cherry Point Refinery’s effluent found acute toxicity in 17 of 55 tests, which indicates reasonable potential for the discharge to “cause receiving water toxicity.” App. G, Ex. 5, AR 00568. The parties do not dispute that BP’s effluent discharges may cause toxicity in receiving waters. CP 43.

Due to the reasonable potential for toxicity caused by BP’s pollution, condition S7.A of the Permit establishes an effluent limitation for acute toxicity based on WET testing. App. H, Ex. 7, AR 000684. Mirroring the language of WAC 173-205-070(1), condition S7.A states “[t]he effluent limit for acute toxicity” is “[n]o acute toxicity detected in a test concentration representing the acute critical effluent concentration

(ACEC).” *Id.* Condition S7.B provides that compliance with the acute toxicity limit is measured through the acute WET test. *Id.* Condition S7.B further explains that:

Compliance with the effluent limit for acute toxicity means the results of the testing specified in subsection C show no statistically significant difference in survival between the control and the ACEC.

If the test results show a statistically significant difference in survival between the control and the ACEC, the test does not comply with the effluent limit for acute toxicity. The Permittee must then immediately conduct the additional testing described in subsection D. **The Permittee will comply with the requirements of this section by meeting the requirements of subsection D.**

Id. (underline in original, emphasis added). Condition S7.D explains the retesting required if the WET test fails to comply by showing a statistically significant difference in response between the ACEC and the control. App. H, Ex.7, AR 000685-AR 000686. If retests also show a “violation,” BP must submit a “Toxicity Identification/Reduction Evaluation” (“TI/RE”) plan as described by the regulation. App. H, Ex.7, AR 000686.

Under condition S7.B, if BP fails the compliance test for the acute WET (*i.e.*, a statistically significant difference in survival between the control and the ACEC is found), BP is *not* in violation of condition S7 of the Permit (which includes the acute WET limit) so long as BP conducts the re-testing required by condition S7.D and, if necessary, the TI/RE. *See*

App. B, Ex. 8, AR 000294. Randall Marshall confirmed as much through the following deposition testimony:

Q. So a permittee can violate the effluent limitation by doing WET tests that fail to meet this standard and can continue to violate that effluent limitation and it's not a permit violation as long as they're doing what is in 7.D, right?

A. Yes

App. F., Ex. 4, AR 000507 (Marshall Transcript, p. 196:10-23). The re-testing requirements of condition S7.D and the TI/RE do not ensure nor require actual compliance with the acute toxicity standard (*i.e.*, passage of the acute WET compliance test). *See* App. B., Ex., AR 000294 (“If it is not clear what is causing the toxicity, then it can’t be fixed.”); *and see* App. H, Ex. 7, AR 000685-000686. This is the way that Ecology has incorporated WET testing and effluent limitations into NPDES permits “for umpteen years and dozens and dozens of permits,” but this method has not been challenged until now. App. F, Ex. 4, AR 000517-000518, 000521 (Marshall Transcript, pp. 206:4 – 207:23, 210:5 – 210:9).

Marshall testified that Ecology’s WET regulations, Ch. 173-205 WAC, do not contemplate nor intend NPDES permits to incorporate this “compliance with the process is compliance with the permit” scheme. App. F, Ex. 4, AR 000519, 000523 (Marshall Transcript, pp. 208:1 – 208:14, 212:22 – 212:25). Rather, Marshall gave two reasons for his

design and Ecology's use of this scheme following adoption of WAC Ch. 173-205: first, because it is hard for polluters to eliminate toxicity when it is found, and second, to encourage dischargers to refrain from challenging permits and WET test results. App. F, Ex. 4, AR 000509-11 (Marshall Transcript, pp. 198:2 – 200:15).

C. The Pollution Control Hearings Board Order

Soundkeeper appealed Ecology's issuance of the Permit to the Board and raised Legal Issue 15, which questioned whether condition S7 of the Permit is unlawful because it does not make the failure of the acute WET test a permit violation and therefore transgresses the prohibition on violations of water quality standards for acute toxicity.⁵ App. I, AR 001101, 001105. Both Soundkeeper and BP moved for summary judgment on the legality of condition S7. AR 000324-000755, 000929-001018. On July 26, 2013, the Board issued its Order on Motions for Summary Judgment on Legal Issue 14 and 15 (the "Order"), granting summary judgment to Soundkeeper on Legal Issue No. 15 and remanding

⁵ BP also appealed the Permit and the appeals were consolidated into a single matter, which included a number of legal issues that are not implicated in this appeal. BP raised Legal Issue No. 14, which also involved the validity of condition S7.B. App. I, AR 001104.

the Permit to Ecology for modification of condition S7.⁶ App. I, AR 001109-001110.

The Order concluded that “compliance with the WET limit is necessary to comply with water quality standards,” and found that “[s]tate and federal water quality laws leave no room but to conclude that an ongoing excursion of the WET limit of the Permit is a violation of the water quality standards, and consequently, a violation of the Permit.” App. I, AR 001107, 001109. The Board agreed with Soundkeeper that “the law is clear” and unambiguous regarding the meaning of ongoing WET test failures—they violate the acute toxicity water quality standard and can not be authorized by an NPDES permit. App. I, AR 001108, 001109. The Board determined that the Permit was “ambiguous as to whether such *ongoing* exceedances of the WET limit are a violation of water quality standards and of the Permit itself” and therefore remanded the Permit to Ecology “to clarify that ongoing exceedances of the WET limit are violations of the Permit”. App. I, AR 001109

While the Board determined that “ongoing exceedances” must be considered violations of the Permit, the Board did not consider an initial failure of the WET test to be an “ongoing” exceedance of the toxicity water quality standard. App. I, AR 001108. The Board found that:

⁶ The Board’s order also addressed Legal Issue 12, which is not relevant to this current action.

Ecology exercised its technical expertise to evaluate at what point a non-compliant WET test indicates a violation of water quality standards, concluding that an initial WET test violation may be transient, not continuing, or simply inconclusive. This judgment reflects the science-based expertise of agency staff on a complex scientific or technical issue, and is consistent with the EPA guidance set forth above. The Board gives deference to Ecology's determination that a single WET limit exceedance does not indicate a pattern of toxicity, but is instead the trigger for a further process aimed at determining if, in fact, there is a violation of the toxicity standard of the Permit. The requirement for subsequent testing to determine whether or not there is a continued presence of toxicity, and allowance for the permittee to be in compliance with the Permit requirements while making this determination, is a valid exercise of Ecology's permitting discretion. The term that states a permittee is in compliance with the Permit while it responds to a single, and non-determinative WET test, is a valid approach and term in the Permit.

Id.

D. Soundkeeper's Petition for Judicial Review

On September 20, 2013, Soundkeeper filed a Petition for Review of the Board's Order in Thurston County Superior Court. CP 4-38. On November 6, 2013, the Board granted the Certificate of Appealability. CP 42. This Court granted direct review on February 27, 2014.

IV. ARGUMENT

A. Standard of Review

The Washington Administrative Procedure Act (“APA”), RCW Chapter 34.05, governs review of the Board’s order. *Port of Seattle v. Pollution Control Hearings Bd.*, 151 Wn.2d 568, 587, 90 P.3d 659 (2004). This Court may overturn the Board’s order based on any of the nine grounds enumerated in the APA. RCW 34.05.570(3). Relevant here, this Court may grant relief from the Order if it determines: 1) the Order is outside statutory authority or jurisdiction conferred by law upon the agency; 2) the agency has erroneously interpreted or applied the law; 3) the Order is not supported by substantial evidence; 4) the Order is inconsistent with a rule of the agency; or 5) the Order is arbitrary or capricious. *Id.* at (b), (d), (e), (h), and (i).

When reviewing a motion for summary judgment, the Court applies the CR 56 summary judgment standards and engages in the same inquiry as the Board. *Bowers v. Pollution Control Hearings Bd.*, 103 Wn. App. 587, 623, 13 P.3d 1076 (2000). The Court reviews questions of law de novo and applies the error of law standard to review of an agency’s legal determination, which allows substitution of the Court’s judgment for that of the agency. *Port of Seattle*, 151 Wn.2d at 587, 90 P.3d 659; *Clay v. Portik*, 84 Wn. App. 553, 557, 929 P.2d 1132 (1997). However, review of

the Board's order is confined to the agency record unless otherwise provided within the APA. RCW 34.05.558.

When interpreting a statute, the Court's fundamental objective is discerning and implementing the legislature's intent. *State v. J.P.*, 149 Wn.2d 444, 450, 69 P.3d 318 (2003). This Court should not afford deference to an agency's interpretation of a statutory provision that is unambiguous. *Dot Foods, Inc. v. Dep't of Revenue*, 166 Wn.2d 912, 921, 215 P.3d 185 (2009). Only where a statutory provision is ambiguous and within an agency's area of expertise may the Court defer to an agency's interpretation of the statutory provision. *Id.* A statute is ambiguous if it is "susceptible to two or more reasonable interpretations." *Burton v. Lehman*, 153 Wn.2d 416, 423, 103 P.3d 1230 (2005).

"[D]eference to an agency's interpretation of its own regulations is also appropriate." *Port of Seattle*, 151 Wn.2d at 593, 90 P.3d 659.

However, the Court should not give deference to an agency's interpretation that "conflicts with legislative intent or is in excess of the agency's authority." *Silverstreak, Inc. v. Dep't of Labor & Indus.*, 159 Wn.2d 868, 884, 154 P.3d 891 (2007).

The Washington Supreme Court has "defined arbitrary or capricious agency action as action that is willful and unreasoning and

taken without regard to the attending facts or circumstances." *Port of Seattle*, 151 Wn.2d at 589, 90 P.3d 659 (internal quotations omitted).

B. BP's NPDES Permit Fails to Prohibit Toxic Discharges.⁷

Condition S7.B of the Permit is unlawful because it provides that BP is in compliance with the Permit even when BP violates the acute WET limit, so long as certain follow-up retesting and investigation requirements are met.⁸ AR 000684-000685. The Permit subjects BP to no possible enforcement consequence for violating the acute WET limit because the Permit does not prohibit a violation of the acute WET test. *Id.* By authorizing, rather than prohibiting, failed acute WET tests, condition S7 allows BP to violate the acute WET limit and thereby transgress the water quality standard for acute toxicity. WAC 173-205-070(1)(c) (defining a failed WET test as a violation of the acute WET limit and thereby the water quality standard for acute toxicity). As a result, BP is never actually required to comply with the acute WET limit and water

⁷ Soundkeeper is not asking this Court to re-visit the portion of the Board's ruling that invalidated and remanded condition S7 of the Permit to the extent that it authorizes ongoing exceedances of the acute WET limit. App. I, AR 001109. Nevertheless, Soundkeeper is providing a full argument regarding why condition S7 is unlawful as written to assist the Court in understanding why the Board erred in only *partially invalidating* condition S7.

⁸ The parties and the Board agree that condition S7 does not make a failed WET test a violation of the Permit, although BP raised Legal Issue 14 to have the Board confirm this interpretation of the Permit. App. I, AR 001103-001104.

quality criterion, resulting in a Permit that fails to ensure protection for the receiving water quality, designated uses, and aquatic life.

Condition S7 of the Permit is unlawful because Ecology is prohibited from issuing an NPDES permit that allows BP to violate the acute WET limit under *any circumstances*, as Ecology's regulations specifically define a violation of the acute WET limit as a violation of the water quality standard for acute toxicity. WAC 173-205-070(1) ("A discharge is in compliance with the narrative water quality standard for acute toxicity when the most recent acute toxicity test has shown no statistically significant difference in response between the acute critical effluent concentration and a control.") (emphasis added); *cf.* WAC 173-205-070(1)(c) (when a "statistically significant difference" is found in response to an acute WET test, "the effluent has failed the test for compliance with the whole effluent acute toxicity limit"); App. F, Ex. 4, AR 000501 (Marshall Transcript, p. 190:5 – 190:24) (confirming that the acute WET test is the method for assessing compliance with the water quality standard for acute toxicity). These regulations unambiguously provide that the only manner for a permittee to be in compliance with the water quality standard for acute toxicity is to pass an acute WET test, and each failure of an acute WET test is a violation of the acute water quality standard for acute toxicity. WAC 173-205-070(1). By allowing BP to

remain in compliance with the Permit when it violates the acute WET limit, Ecology authorizes BP's violation of the water quality standard for acute toxicity.

Ecology's issuance of condition S7 defies the federal and state mandate that an NPDES permit prohibit *any discharge* that violates water quality standards. 33 U.S.C. § 1311(b)(1)(C) (commanding that permit limits "necessary to meet water quality standards" be achieved); 40 C.F.R. § 122.44(d) (same); RCW 90.48.520 ("*In no event shall* the discharge of toxicants be allowed that would violate any water quality standard, including toxicant standards") (emphasis added). Washington's water quality standards strictly forbid a discharge of wastewater effluent that causes acute toxicity in state waters. WAC 173-201A-240(1) ("[t]oxic substances *shall not be introduced* . . . which have the potential . . . to . . . cause acute . . . toxicity to the most sensitive biota dependent upon those waters") (emphasis added). WAC 173-201A-240 and RCW 90.48.520 contain an absolute prohibition on discharges causing toxicity and do not allow NPDES permits to authorize such discharges even when a permittee performs follow-up testing, evaluates the causes for toxicity, and investigates means for reducing it. These unambiguous federal and state prohibitions do not exempt violations of water quality

standards where re-testing and investigation of violative discharges occurs.

In contrast, condition S7 allows BP to discharge of wastewater effluent in violation of the water quality standard for acute toxicity *throughout the life of the Permit* because the permit ensures only that retesting, investigation, and planning follow a failed WET test, or even repeated WET failures. App. H, Ex. 7, AR 000684-000685. A toxic discharge may continue indefinitely under the Permit because performance of the follow-up procedure is all that determines permit compliance. *Id.*; App. B, Ex. 8, AR 000294 (Ecology confirming in response to comments on BP's Permit that BP does not violate the Permit by failing the acute WET test and that BP can only be in violation of the Permit when it fails to complete the follow-up requirements). Nothing in condition S7 or the Permit ensures that BP *ever* passes an acute WET compliance test, or even that it actually implement the TI/RE plan. App. H, Ex. 7, AR 000684; App. F, Ex. 4, AR 000508, 000517 (Marshall Transcript, pp. 197:14 – 197:22; 206:4 – 206:24). This permit provision clearly violates the state law mandate that NPDES permits “[i]n no event” allow discharges to violate water quality standards for toxicity. RCW 90.48.520 (emphasis added). Ecology's reasoning and expertise cannot trump nor explain away

this unambiguous statutory provision. *See Dot Foods*, 166 Wn.2d at 921, 215 P.3d 185.

In crafting condition S7, Ecology cast aside its own precise regulatory requirements that address acute WET limits for NPDES permits. *See generally* WAC 173-205. Nothing in Ecology’s regulations allows a permittee to forever escape compliance with the acute WET limit by following a process that never actually requires compliance with the acute WET limit. *Id.* Rather, the law defines the acute WET test as “a maximum daily discharge *permit limitation*.” WAC 173-205-070(1)(d) (emphasis added). Compliance with a maximum permit limitation must be mandatory and enforceable to prevent it from being a meaningless standard better titled as a “goal.”

Ecology’s regulations do not contemplate that retesting and the T1/RE follow-up process are the manner in which a permittee complies with the acute WET limit—rather, this process is the means by which a permittee *returns to compliance* with a WET “maximum daily discharge permit limitation.” App. F, Ex. 4, AR 000514-000515 (Marshall Transcript, pp. 203:11 – 204:14). Ecology’s NPDES permit writer’s manual explains “[c]ompliance with the permit limit is restored with the first additional sample that passes the compliance test.” App. E, Ex. 3, AR 000452 (emphasis added); App. F., Ex. 4, AR 000475 (Marshall

Transcript, p. 8:15-8:17). Further, WAC 173-205-090(2) states “[a]ny permittee failing the compliance test for a whole effluent toxicity limit shall take all reasonable actions *to achieve compliance* including conducting a toxicity identification reduction evaluation as defined in WAC 173-205-100.” (emphasis added). In sum, Ecology’s regulations and guidance explain that the retesting and TI/RE process are the response to a violation of the WET “maximum daily discharge permit limitation” and that a permittee who fails an acute WET test is out of compliance with a permit limitation until it passes a subsequent acute WET test. Yet condition S7 of the Permit establishes just the opposite—that a permittee remains in compliance with the permit when it violates the acute WET limit, provided it merely conducts the retesting and TI/RE process.

In crafting condition S7’s allowance for acute WET violations where retesting and TI/RE follow-up occurs, Ecology ignored its own clear regulatory requirements for impermissible political reasons and matters of convenience. Remarkably, Ecology’s WET coordinator explained that Ecology included the language in condition S7 allowing violations of the acute WET limit because it is hard for dischargers to eliminate toxicity when it is found, and to encourage dischargers to refrain from challenging permits and WET test results. App. F, Ex. 4, AR 000509-000511 (Marshall Transcript, pp. 198:2 – 200:15). Ecology’s

decision to do so contravened the Ninth Circuit's command that NPDES Permits must impose effluent limitations sufficient to fulfill a permitting authority's "specific obligation to require that level of effluent control which is needed to implement existing water quality standards *without regard to the limits of practicability.*" *Defenders of Wildlife*, 191 F.3d at 1163 (emphasis added) (quoting *Oklahoma v. EPA*, 908 F.2d 595, 613 (10th Cir. 1990)). By allowing political and administrative reasons to dilute an NPDES permit provision from the protective water quality-based limits, Ecology's permit fails to comply with the unambiguous mandate under the CWA. *Ackels*, 7 F.3d at 865-6 ("economic and technological restraints *are not a valid consideration*" when crafting permit limitations that are necessary to comply with state water quality standards) (emphasis added). Ecology's decision to make condition S7 easier for industry and Ecology comes at a serious cost to the water quality, designated uses, and aquatic life, all of which are threatened by toxic discharges.

Ecology's rationale is egregious in this context because it allows violations of the particularly vital water quality standard for acute toxicity. *See* WAC 173-201A-240 (2) (requiring WET testing to ensure that aquatic communities and the existing and designated uses of the waters are being fully protected). The acute WET limit is a catch-all standard designed to protect sensitive aquatic biota from toxic effects that are not identified nor

prevented by existing scientific and technical protocol. App. C, Ex. 1, AR 000351. Congress designed water quality standards as the bedrock of the CWA to protect water quality in this precise situation—to fill gaps that technology-based standards cannot reach to ensure that water quality and designated uses are protected regardless of technological or economic limitations. *See PUD No. 1 of Jefferson County*, 511 U.S. at 704. Accordingly, the CWA demands NPDES permits include effluent limitations adequate to ensure that discharges authorized under the permits do not cause or contribute to violations of water quality standards. 33 U.S.C. § 1311(b)(1)(C). Thus, by allowing political considerations to trump water quality-based limits, Ecology offends the crucial CWA backstop that prevents the introduction of toxic substances that cause acute toxicity in Washington's waters. Further, Ecology's willful decision to cast aside its own regulations when crafting this Permit was arbitrary, unlawful, and beyond the agency's authority and therefore must be overturned. *See RCW 34.05.570(3)(b), (h), and (i); and see Port of Seattle*, 151 Wn.2d at 589, 90 P.3d 659.

C. The Board Erred in Upholding an NPDES Permit Term that Allows Violations of the Water Quality Standard for Acute Toxicity.

When considering the legality of condition S7, the Board correctly held the CWA and state law prohibit Ecology from issuing an NPDES permit that authorizes violations of the water quality standard for acute toxicity. App. I, AR 001109. Specifically, the Board agreed with Soundkeeper that:

the law is clear and unambiguous on the meaning of ongoing violations of a WET limit. . . leav[ing] no room but to conclude that an ongoing excursion of the WET limit of the Permit is a violation of the water quality standards, and consequently, a violation of the Permit. A condition that allows continued excursions above the Permit limit, while imposing only a process to get back to the limit at some future time, falls short of the requirement to condition an NPDES permit 'so the discharges authorized will met water quality standards.'

App. I, AR001108-09 (emphasis added) (citing WAC 173-201A-510; RCW 90.48.520). Quite inexplicably, the Board pronounced a new standard for impermissible violations of the acute WET limit—"ongoing violations"—which appears nowhere in relevant provisions of Ecology's regulations, the CWA, and state law, nor in the NPDES permit or other guidance from Ecology.⁹ Based upon this reasoning, the Board correctly

⁹ Soundkeeper notes that the term "ongoing violations" has a precise legal meaning under the CWA regarding citizen suits—federal courts have jurisdiction over citizen suits alleging violations of an NPDES permit or other statutory provision where the violations are "ongoing." See *Gwaltney of Smithfield, Ltd. v. Chesapeake Bay Found., Inc.*, 484 U.S. 49, 56-63 (1987) (Plaintiffs must allege

held that Ecology must clarify condition S7 to prohibit “ongoing exceedances” of the WET limit as violations of the Permit. App. I, AR001109.

Disregarding the “clear and unambiguous” prohibition against authorizing violations of water quality standards, the Board arbitrarily and erroneously found that the Permit need not prohibit the failure of a single WET test. App. I, AR 001108. The Board cloaked its inexplicable decision behind a wall of deference to a purported “determination” made by Ecology that a single failed WET test does not violate the water quality standard for acute toxicity. *Id.* In doing so, the Board crafted an exception that was not previously present in Washington’s water quality standards for a discharge that results in a single violation of the acute WET limit, which the Board described as “transient” toxicity, or toxicity that does not result in a “pattern of toxicity.” *Id.*

The Board’s decision is wrong for two major reasons. First, the decision relies on an erroneous interpretation of the meaning of a failed WET test that conflicts with Ecology’s WET regulations and applicable

“ongoing,” continuous, or intermittent violations, as opposed to “wholly past” violations for a federal court to have jurisdiction over a Clean Water Act citizen suit.); and see *Sierra Club v. Union Oil Co.*, 853 F.2d 667, 671 (9th Cir. 1988) (A “citizen plaintiff may prove ongoing violations either (1) by proving violations that continue on or after the date the complaint is filed, or (2) by adducing evidence from which a reasonable trier of fact could find a continuing likelihood of a recurrence in intermittent or sporadic violations.”) (internal quotations omitted)

state law. Second, the Board afforded deference to Ecology for a determination that is not supported by the record and is contrary to Ecology's WET regulations and applicable state law, which unambiguously states that a single failed WET test equals a violation of water quality standard for acute toxicity and must be prohibited in an NPDES permit. As a result, the Board's order allows Ecology to re-issue an NPDES permit provision that exceeds the agency's authority under the CWA and state law, and must therefore be reversed. *See* RCW 34.05.570(3)(b).

1. Ecology's WET regulations, and applicable state and federal law and guidance, foreclose the Board's decision.

The Board's Order is unlawful because it depends on the false conclusion that a single WET test is non-determinative of toxicity, and a serious misunderstanding of the meaning of a failed WET test. App. I, AR001108. Ecology's regulations are clear—by definition, a single violation of a WET test is a violation of the water quality standard, regardless of whether the toxicity does not continue, or is transient, or does not give rise to a pattern of toxicity. WAC 173-205-070(1)(c). The regulation's specification that the WET test is a "*maximum daily* permit limit," and not a weekly, or monthly average limit, undercuts the Board's reasoning that a WET test must be failed twice, over the course of two

different tests that may occur days or weeks apart using different effluent samples, to violate the WET limit and thereby water quality standards. WAC 173-205-070(1)(d) (emphasis added). Accordingly, Ecology and this Board have no room to exempt a single failure of an acute WET test from the firm statutory and regulatory prohibitions on toxic discharges. RCW 90.48.520; WAC 173-201A-240(1). Further, Ecology's regulations comport with the RCW 90.48.520 "in-no-event" prohibition on toxicity no matter its duration or pattern. Unless and until the law is changed, Ecology cannot ignore and re-write its own regulations in individual NPDES permits to determine at what point a violation of water quality standards occurs. Moreover, the Board lacks the authority to re-write the regulation itself by inserting the qualifier "ongoing" to ascertain violations of the water quality standard for acute toxicity from WET test results. *See Dot Foods*, 166 Wn.2d at 921, 215 P.3d 184 (Court should not defer agency's position where statutory provision at issue is unambiguous).

In calling for a "pattern of toxicity" before finding a violation of the daily maximum WET limit, the Board's decision assumes, without factual support, that a single test is always non-determinative. App. I, AR 001108 (finding by the Board that a permit term "that states a permittee is in compliance with the Permit while it responds to a single, and *non-determinative* WET test, is a valid approach and term in the Permit.")

(emphasis added). The Board's ruling on this point conflates transient toxicity with an anomalous, or non-determinative result. The Board needed not craft an exemption for anomalous toxicity because Ecology has already addressed non-determinative, or anomalous toxicity in BP's permit—condition S7.D, which provides the agency with discretion to distinguish and discount WET tests that are, in Ecology's expert opinion, truly *anomalous* for whatever reason, as contemplated by the regulation. App. H, Ex. 7, AR 000685-00686; WAC 173-205-090(1)(d) – (f). Anomalous results are inconclusive and do not constitute WET limit violations. App. H, Ex. 7, AR 000685-00686 (non-anomalous test results replace anomalous test results). Where Ecology determines that a failed WET test is not anomalous, but rather valid evidence of acute toxicity, the failed acute WET test means the effluent violated the acute WET limit and the corresponding water quality standard. WAC 173-205-070(1)(c). However, the Board's decision would require a second failed WET test before accepting that the permittee violated the *daily maximum* toxicity limit, which is flatly contradicted by Ecology's own regulation that unambiguously does not require a second failed (non-anomalous) WET test. WAC 173-205-070(1).

The Board also erroneously interpreted statements from Ecology and EPA regarding the enforceability of the permit. First, the Board noted

Ecology's position that a single exceedance of a WET limit is not subject to *enforcement* because it is difficult to assess whether the toxicity problem is transient, continuing, or conclusive. App. I, AR 001104

Similarly, the Board relied on EPA guidance for the proposition that the first violation of a WET test should not be formal enforcement action. App. I, AR 001107-08. Ecology's and EPA's opinions about when enforcement is warranted are irrelevant to whether a single failed WET test is a violation of the water quality standard for acute toxicity; Ecology and EPA may have discretion to determine whether *to enforce a violation of the law*, but this issue is distinct from the legal question of whether a violation of the law that *could give rise to enforcement* has occurred. *See Heckler v. Chaney*, 470 U.S. 821, 831 (1985) (enforcement discretion arises where agency determines what, if any, action to take in response to a violation of the law). Moreover, the Board cited agency explanations that a permittee *can come back into* compliance after failing a WET test—this indicates that a permittee is out of compliance with the permit after failing a WET test. App. I, AR 001106-07 (EPA guidance characterizes “noncompliance with a WET limit as a violation of NPDES permits”). EPA's statements reinforce the conclusion that a single exceedance must be a violation of the permit because if it was not, enforcement would not

be even an option. Accordingly, the Board erred in determining its decision was consistent with EPA guidance. App. I, AR 001108.

Because the Board's decision is based upon a false factual premise and an erroneous legal interpretation, and conflicts with Ecology's own regulations, state law, and EPA guidance, this Court should reverse the Board's decision on condition S7. See RCW 34.05.570(3)(d), (e), and (h).

2. The Board erroneously deferred to Ecology on a factually unsupported and unlawful determination.

The Board's Order also errs because it improperly affords deference to Ecology's "determination" that a single failure of a WET test does not mean that there is a violation of the narrative water quality standard for acute toxicity. App. I, AR 001108. Specifically, the Board's Order defers to Ecology's purported technical determination that a pattern of toxicity, evinced by two or more successive failed WET tests, is required to conclude that water quality standards have been violated. *Id.* Deference to Ecology's determination is not warranted for two reasons. First, the Board's decision is not based upon substantial evidence as the record provides no support for Ecology's purported determination. Second, the determination to which the Board purportedly deferred conflicts with Ecology's own regulations and state and federal statutory provisions on point.

- a. **The record does not support the Board's conclusion that two or more failed WET tests are needed to violate the water quality standard for acute WET.**

The Board's deference to Ecology on the point at which a failed WET test violates the water quality standard for acute toxicity is unlawful because it is not supported by substantial evidence. *See* RCW 34.05.570(3)(e). Remarkably, the record does not show that Ecology believes one WET test failure can never be conclusive, or that two failed tests are sufficiently conclusive evidence. Rather, Ecology explained in its briefing that it did not suggest "a single WET limit exceedance is without consequences and should be ignored or discounted" but rather noted that EPA's guidance indicated "[a]ny violation of a [WET] limit is of concern to the regulatory agency and should receive an immediate professional review." AR 000763-00764. In other words, the Board is deferring to a position that Ecology has not actually taken.

The Board's decision on this point is also contradicted by Ecology's WET testing coordinator and expert, who confirmed that "the WET testing determines whether or not there is compliance with [the WET] limit." App. F, Ex. 4, AR 000479 (Marshall Transcript, p. 12:9-16). Ecology's expert testified further that "[q]uite often, when you have a WET limit and a violation of that limit, you don't know what the toxicant

is”—whether or not the source of toxicity is known does not make the test result that found the permittee’s discharge to be toxic (and thereby violative of the water quality standard for toxicity) somehow non-determinative. App. F, Ex. 4, AR 000509 (Marshall Transcript at 198:2-10). Indeed, refinery effluent that failed an acute WET test was so toxic during the test that it actually killed organisms exposed to it—even the Board recognized that transient toxicity is something with a cause that requires preventative measures to “avoid future excursions of the WET limit.” App. I, AR 001103. Moreover, Ecology has already applied its technical expertise in crafting the WET regulations, which define a WET limit violation as one non-anomalous failed test; Ecology’s interpretation of the CWA and NPDES requirements as set forth in its unambiguous WET regulations should be afforded deference, not the agency’s litigation position defending an impermissibly diluted NPDES permit condition. *See Port of Seattle*, 151 Wn.2d at 593, 90 P.3d 659.

There is simply no legal or scientific basis for the Board’s decision that it takes at least two failed WET tests to violate the WET limitation mandated by law. As a result, the Board’s decision appears to be an attempt to split the baby for the sake of practicality and to empower Ecology to shield polluters such as BP from the demands of appropriately stringent water quality standards. This arbitrary and unsupported decision

should therefore be overturned. *See Port of Seattle*, 151 Wn.2d at 589, 90 P.3d 659; *and see* RCW 34.05.570(3)(e) and (i).

b. The Board's decision to defer to Ecology conflicts with the agency's regulations and state law.

Ecology's own WET regulations foreclose a determination that a single WET test is not indicative of a violation of the water quality standard for acute toxicity. WAC 173-205-070(1) specifically defines a failed WET test as a violation of the acute WET limit, which measures compliance with the water quality standard for acute toxicity, and a compliant WET test result equaling compliance with the water quality standard for acute toxicity. WAC 173-205-070(1)(c) (when a "statistically significant difference" results from an acute WET test, "the effluent has failed the test for compliance with the whole effluent acute toxicity limit."). Ecology's regulations are clear and unambiguous—a "pattern of toxicity" or two or more failed WET tests are not required to violate the water quality standard for acute toxicity. *Id.* Thus, Ecology's regulations foreclose the agency's purported determination that two or more failed WET tests are necessary to violate the water quality standard. Further, Ecology's determination conflicts with the clear state prohibition against NPDES permit provisions allowing violations of water quality standards. RCW 90.48.520 ("*In no event shall the discharge of toxicants be allowed*

that would violate any water quality standard . . . “) (emphasis added); *and see* WAC 173-201A-240 (“Toxic substances *shall not be introduced* . . . which . . . cause acute . . . toxicity . . .”) (emphasis added). Deference in this situation is inappropriate, as an agency’s interpretation may not be afforded deference where it conflicts with clear legal provisions and is in excess of the agency’s statutory authority. *Silverstreak*, 159 Wn.2d at 884, 154 P.3d 891. Thus, the Court should reverse the Board’s decision to defer to Ecology on this issue. *See Dot Foods*, 166 Wn.2d at 921, 215 P.3d 185.

The Board’s decision ignores that Ecology has already relied upon its technical expertise and discretion to determine at what point a failed WET test violates the water quality standard for acute toxicity—Ecology did so through the formal rulemaking process under the APA for the WET regulations, WAC Ch. 173-205. Ecology may not casually re-write its regulations through individual NPDES permits and attempt to cloak these impermissible actions behind a wall of deference simply because the regulations involve technical or otherwise challenging issues. Affording deference in this situation would endorse Ecology’s actions and leave the agency free to ignore regulations that implicate a scientific or technical issue whenever it is inconvenient to the agency or polluters. Ecology’s NPDES permit regulations generally involve technical and scientific

issues regarding water quality, so the Board's version of deference would result in a loss of value and certainty in many of the agency's formal regulations. Washington jurisprudence that allows deference to an agency's scientific and technical issues cannot be used in this manner. *See Port of Seattle*, 151 Wash.2d at 593, 90 P.3d 659.

3. The Board's order allows Ecology to exceed the agency's statutory authority when re-issuing BP's Permit.

The Board's decision allows Ecology to re-issue an NPDES Permit that authorizes failures of the acute WET test. App. I, AR 001108. A Permit term that does not prohibit a discharge that fails any WET compliance test effectively authorizes BP to violate the water quality standard for acute toxicity. WAC 173-205-070(1)(c). Thus, the Board's decision allows Ecology to issue an NPDES permit that authorizes BP to violate the water quality standard for acute toxicity. Ecology does not have the statutory authority to do so, as both the CWA and state law prohibit Ecology from issuing an NPDES permit that authorizes violations of the water quality standard for acute toxicity. 33 U.S.C. § 1311(b)(1)(C); 40 C.F.R. § 122.44(d); *Defenders of Wildlife*, 191 F.3d at 1163; WAC 173-201A-510(1); and RCW 90.48.520. Accordingly, the Board's decision must be overturned because it allows Ecology to issue a Permit that is beyond its statutory authority. *See* RCW 34.05.570(3)(b).

V. CONCLUSION

Soundkeeper respectfully requests that the Court reverse and remand the part of the Board's order that allows Ecology to issue an NPDES permit that authorizes single failures of the acute WET test. Soundkeeper further requests that the Court provide instructions for the Board to remand condition S7 of the BP Cherry Point NPDES permit to Ecology for revision consistent with the prohibition on violations of water quality standards and toxic discharges under 33 U.S.C. § 1251(a)(3); RCW 90.48.520; WAC 173-201A-240(1).

RESPECTFULLY SUBMITTED this 23rd day of May, 2014.

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DECLARATION OF SERVICE

I, Jessie Sherwood, declare under penalty of perjury under the laws of the State of Washington that on this date I caused the Petitioners' Opening Brief to be served via electronic service on the following persons on May 23, 2014:

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APPENDIX A

WAC 173-205-070

Monitoring for compliance with whole effluent toxicity limits.

(1) A discharge is in compliance with the narrative water quality standard for acute toxicity when the most recent acute toxicity test has shown no statistically significant difference in response between the acute critical effluent concentration and a control.

(a) Acute toxicity testing shall be performed using one hundred percent effluent, the acute critical effluent concentration, and a control.

(b) The acute critical effluent concentrations in a whole effluent toxicity test shall be compared to the control using the method in Appendix H of EPA/600/4-89/001 or an equivalent method approved by the department.

(c) If a statistically significant difference in response is determined between the control and the acute critical effluent concentration in an acute toxicity test, then the effluent has failed the test for compliance with the whole effluent acute toxicity limit and the permittee shall immediately begin the process described in WAC 173-205-090.

(d) The compliance test for acute toxicity shall be considered to be a maximum daily discharge permit limitation.

APPENDIX B

**WASHINGTON STATE DEPARTMENT OF ECOLOGY
RESPONSE TO PUBLIC COMMENTS**

**BP Cherry Point Refinery
1560A Marble Valley Road
Blaine, Washington 99101**

**NPDES Permit No. WA0022900
February 9, 2012**

Ecology published notice of an opportunity to comment on the renewal of NPDES Permit No. WA 002290-0 in the Ferndale Record on April 13, 2011 and the Bellingham Herald on April 14, 2011. The proposed permit will allow the BP Cherry Point Refinery (BP) to discharge treated process wastewater and stormwater to the Strait of Georgia and Terrell Creek. In the notice, Ecology invited public review of the proposed order and provided a 60-day public comment period. The deadline for submittal of written comments was June 13, 2011. A public meeting and hearing was held for this action on June 2, 2011. Seven people provided comments at the hearing. Ecology received written comments from seven entities and individuals.

Comments were received from:

Kathy Berg
Lionel Klifoff, Washington State Department of Natural Resources
Lee First
Lynne Pendleton
Doug Ericksen, Washington State Senate
Sam Crawford, Whatcom County Council
Wendy Steffensen, RE Sources
Rachel Vasak, Nooksack Salmon Enhancement Association
Elizabeth Daly, BP Cherry Point Refinery
San Juan County Council
Frank Holmes, Western States Petroleum Association
BP Cherry Point Refinery
Katelyn Kinn, Puget Soundkeeper Alliance
RE Sources/Sierra Club/Friends of the Earth/Fred Felleman

We included all of the comments received in this document. We summarized the comments, where appropriate, to save time and space. The original comments comprise part of the legal record for this permit. The record is available for public review at Ecology's Industrial Section office in Lacey, WA. Anyone interested in reading the full text of the comments or in obtaining a copy of a particular comment should call or e-mail Liem Nguyen in Lacey at (360) 407-6955 or liem.nguyen@ecy.wa.gov.

water quality standards and a maximum daily discharge limitation per WAC 173-205-070(1)(d)?

If the reference is mistaken and should be instead to S7.D., PSA's concern remains. The S7.D. requirement for conducting more tests, and if failures continue, to submit a toxicity identification/reduction evaluation plan cannot magically make the discharge non-toxic and compliant with the maximum daily discharge limitation.

Ecology corrected several errors in the references to other subsections in S7.B. With these changes, the wording states that the Permittee will be considered in compliance with the requirements of the acute whole effluent toxicity by meeting the requirements of S7.D.

A Permittee is out of compliance only if toxicity persists and they do not complete the follow up requirements such as conducting additional testing and preparing a TIRE plan. If it is not clear what is causing the toxicity, then it can't be fixed. A toxicity identification/reduction evaluation plan requires the Permittee to investigate the cause of the toxicity and then to control or eliminate the toxicity through efforts such as changes in plant operation, replacement of a toxic material, or improvement in best management practices.

82. The fact sheet states that Ecology may require additional chronic toxicity characterization if BP makes process or material changes. The draft permit should specify the additional chronic toxicity testing and limitations that will apply.

The fact sheet was in error. Ecology will require additional chronic toxicity characterization if BP makes changes to processes, materials, or treatment that could result in an increase to effluent toxicity (WAC 173-305-060). Ecology will review the proposed changes and tailor the toxicity characterization requirements accordingly. The results of the effluent characterization will be evaluated to determine if a reasonable potential for chronic toxicity exists and a WET limit is required.

83. On page 38 of the fact sheet, Ecology essentially admits that BP's discharges have the reasonable potential to impair the Cherry Point herring's beneficial use of the receiving waters. The draft permit should include an actual enforceable herring toxicity testing effluent limitation instead of the mere monitoring and response requirement found in Condition S9. This requirement is yet rendered vague and further inappropriate by S9.B.4. and 5. which merely recite Ecology's ability to order BP to take additional

APPENDIX C



**National
Whole Effluent Toxicity (WET)
Implementation Guidance
Under the NPDES Program**

DRAFT

November 2004

(Released on December 28, 2004)

NPDES program. The methods were subsequently challenged, and under a settlement agreement, EPA conducted a round-robin study, which evaluated 12 of those test methods (USEPA 2001b,c) EPA also prepared a WET test method variability guidance document (*Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the National Pollutant Discharge Elimination System*, USEPA 2000b) and a WET test methods guidance document (USEPA 2000c). In November 2002, EPA promulgated the revised WET test methods (USEPA 2002 a,b,c) [see 67 FR 69951-69972, November 19, 2002].

Why WET Testing

Whole effluent toxicity is the aggregate toxic effect of an aqueous sample (e.g., a reference toxicant, an effluent, or a receiving water) measured directly by an aquatic toxicity test. Aquatic toxicity tests are laboratory experiments that measure biological effects (e.g., growth, survival, and reproduction) of a test sample (effluents or receiving waters) on aquatic organisms. In aquatic toxicity tests, organisms of a particular species and age are held in test chambers and exposed to different concentrations of an aqueous sample. Observations are then made at predetermined exposure periods. At the end of the test, the responses of test organisms are used to estimate the effects of the test sample, either in absolute terms or relative terms (i.e., the effects of an effluent in receiving waters).

Whole effluent toxicity test results are an integral tool in the assessment of water quality. For the protection of aquatic life, EPA's integrated strategy includes the use of three control approaches: the chemical-specific control approach, the WET control approach, and the biological criteria/bioassessment approach. The two primary advantages of using WET controls over individual, chemical-specific controls are (1) WET tests evaluate the integrated effects of all chemical(s) in the aqueous sample; and (2) while EPA has established aquatic life criteria for a relatively small number (126) of chemical-specific pollutants, WET tests can measure toxicity caused by other compounds for which EPA does not have chemical-specific numeric criteria for the protection of aquatic life or approved parameter-specific analytical test methods. Another advantage to using WET testing is that it enables prediction and avoidance of a toxic impact before the detrimental impact might occur (i.e., after the aquatic population in the receiving water has experienced prolonged exposure to such toxicity). Reliance solely on chemical-specific numeric criteria or bioassessments could result in a considerably less effective toxics control program. These toxicity tests therefore should be fully implemented in a NPDES authority's water quality control program. EPA policy and guidance recommend that States and Tribes use chemical-specific, toxicity, and biological measurements and criteria to monitor and protect designated uses. In 1991, EPA established its policy on independent application [Transmittal memorandum of Final Policy on Biological Assessment and Criteria from Tudor Davies to Regions, June 19, 1991(USEPA 1991c)]. EPA's independent application policy addresses how assessments based on these three kinds of criteria are to be used to make water quality management decisions related to protection of aquatic life and aquatic life uses. This National WET Implementation Guidance presents EPA's approaches to addressing some issues concerning WET implementation through the three overall goals outlined after this section.

Effect of This Guidance

EPA Headquarters expects permits issued by EPA Regions to be consistent with this guidance. EPA strongly encourages States¹ authorized to administer the NPDES program to implement the recommendations in this guidance so that national consistency in implementing the WET program can be

¹ State means any of the 50 States, the District of Columbia, Guam, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Commonwealth of the Northern Mariana Islands, the Trust Territory of the Pacific Islands, or an Indian Tribe as defined in 40 CFR 122 which meets the requirements of § 123.3.

APPENDIX D

United States
Environmental Protection
Agency

Office of Water
(4203)

EPA 833-B-94-002
July 1994



WHOLE EFFLUENT TOXICITY (WET) CONTROL POLICY

POLICY FOR THE DEVELOPMENT OF EFFLUENT LIMITATIONS IN
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMITS
TO CONTROL WHOLE EFFLUENT TOXICITY FOR THE PROTECTION
OF AQUATIC LIFE

000405



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EXPLANATION OF STATEMENTS OF POLICY¹

1. Basis for WET Controls

The permitting authority should evaluate WET water quality criteria attainment for acute WET at the edge of the acute mixing zone and for chronic WET at the edge of the chronic mixing zone except where the State has different requirements for evaluating WET criteria. The permitting authority will develop WET effluent limitations based upon the more stringent of the acute or chronic criterion applied at the edge of the respective mixing zone, or, alternatively, on both.

This policy statement describes the procedure permitting authorities should use to evaluate WET water quality criteria attainment and to develop effluent limitations to control WET. In the absence of more specific State requirements, EPA believes this approach most appropriately assures compliance with State water quality standards.⁴ The permitting authority must evaluate WET water quality criteria attainment according to the applicable State water quality standard(s). Permitting authorities should assess WET concentrations as diluted in the receiving water at the edge of the acute and chronic mixing zones

²To aid the reader in using this policy, Appendix Two contains some background materials on WET testing, the State water quality standards process and WET, and federal statutory and regulatory requirements for development of water quality-based permit limitations for WET.

⁴State water quality standards or implementation procedures may (1) specify whether and how it is appropriate to account for dilution in establishing WET controls; (2) require the applicable criteria to apply at the outfall point of discharge or may contain a specific policy approved by EPA allowing or prohibiting mixing zones; as well as (3) specify exposure factors for WET which are relevant to the application of this policy statement, such as critical flow requirements for the receiving water, appropriate modeling techniques for determining the fate of the pollutant or pollutant parameter in stream, or required techniques for evaluating the mixing of the pollutant or pollutant parameter in the stream.

⁵NPDES permitting authorities traditionally measure compliance with effluent limitations at the outfall point of discharge. By issuing this policy statement, EPA does not intend to disturb this well-established permitting practice. Permitting authorities are familiar with procedures for determining the concentration of toxicity in-stream and establishing end-of-pipe effluent limitations on the basis of the information.

and apply the more stringent of the acute criterion at the edge of the acute mixing zone or the chronic criterion at the edge of the chronic mixing zone in developing WET effluent limitations. If there is uncertainty as to which of the two criterion so applied is more stringent for the discharge, however, the permitting authority will apply both.

The statement reflects the specific requirement of 40 C.F.R. § 122.44(d)(1)(ii) that "where appropriate, [the permitting authority will consider] the dilution of the effluent in the receiving water" in determining whether a discharge causes, has the reasonable potential to cause, or contributes to exceedance of WET water quality criteria. This statement should assist permitting authorities in establishing WET controls which meet the requirements of sections 301(b)(1)(C) and 402 of the Clean Water Act (CWA) and 40 C.F.R. § 122.44(d)(1).

40 C.F.R. § 122.44(d)(1)(iv) and (v) require the permitting authority to impose effluent limitations to control WET where it determines that a discharge causes, has the reasonable potential to cause, or contributes to exceedance of WET water quality criteria. 40 C.F.R. § 122.44(d)(1)(vii) also requires permitting authorities to establish effluent limitations on point sources which are consistent with the requirements of applicable State water quality standards. This is a basic premise of this policy statement. Where the applicable State water quality standard or implementation procedure requires a different basis for establishing WET controls, the permitting authority must follow applicable State requirements.⁶

The second component of the policy statement also reflects the principle of section 301(b)(1)(C) of the CWA that effluent limitations must assure compliance with all State water quality standards. Here, the permitting authority will establish WET controls for the particular discharge based upon the more stringent of the acute or chronic criterion (or both) applied at the edge of their respective mixing zones in order to achieve both criteria.

Consistent with this policy statement, the permitting authority will establish two independent zones for controlling

⁶For example, some State water quality standards or implementation procedures do not allow mixing zones at all or restrict mixing zone use for certain dischargers. Where this is the case, the permitting authority will not use the procedure provided in policy statement one concerning the application of mixing zones. The permitting authority must still ensure that the permit includes WET limitations as necessary to achieve the applicable State requirements.

acute and chronic WET.⁷ The first zone, the acute mixing zone, immediately surrounds the discharge outfall. The acute mixing zone is normally sized to prevent lethality (sometimes also described as "acute effects") to passing organisms. The permit must include effluent limitations as necessary to meet numeric or narrative water quality criteria for acute toxicity at the edge of the acute mixing zone. The second zone, the chronic mixing zone, is typically a larger zone which surrounds the acute mixing zone. The chronic mixing zone is normally sized to protect the ecology of the water body as a whole from all point-source related stresses including WET. The permit must include effluent limitations as necessary to meet numeric or narrative water quality criteria for chronic toxicity at the edge of the chronic mixing zone.⁴

Once it is determined what the appropriate mixing zones are, the permitting authority will take several additional steps consistent with this policy statement. The permitting authority will (1) evaluate the receiving water concentration of acute WET at the edge of the acute mixing zone and of chronic WET at the edge of the chronic mixing zone for the particular discharge, (2) determine which of the acute criterion or the chronic criterion applied at the edge of the appropriate mixing zone is the more stringent of the two for the particular discharge, and (3) establish effluent limitations to assure attainment of the more stringent criterion (or both where it is unclear which is more stringent). The Technical Support Document for Water Quality-based Toxics Control, as revised in March 1991 (EPA/505/2-90-001) (the TSD) at 3.3 and 5.4, illustrates how to apply this procedure

⁷This policy does not address what is acute or chronic WET. 40 C.F.R. § 122.2 defines "whole effluent toxicity." Appendix Two, which provides an overview of the water quality standards process and WET, describes traditional acute and chronic toxicity tests and EPA's recommended magnitudes for acute and chronic WET. States may interpret narrative water quality criteria for toxicity in State implementation procedures. In the absence of such implementation procedures, EPA's recommended magnitudes for WET are .3 acute toxic unit and 1.0 chronic toxic unit at the edge of the appropriate mixing zone. Technical Support Document for Water Quality-based Toxics Control, as revised in March 1991 (EPA/505/2-90-001), at 2.3.3 and 2.3.4 (the TSD).

⁴The implementation of this policy requires permitting authorities to establish mixing zones unless State standards or implementation procedures direct otherwise; however, the specific size of a particular mixing zone depends on a variety of factors which can also be specified in the State water quality standard or implementation procedure. See generally the Water Quality Standards Handbook at 2-7 (1983); the TSD at 2.2.2, for discussions of this issue.

to evaluate a particular discharge for reasonable potential and to develop effluent limitations.

2. Evaluation of Dischargers for Reasonable Potential

At a minimum, the permitting authority should review all major dischargers for reasonable potential to cause or contribute to exceedance of WET water quality criteria.

40 C.F.R. §§ 122.44(d)(1)(iv) and (v) require permitting authorities to impose effluent limitations to control WET whenever a discharge causes, has the reasonable potential to cause, or contributes to an instream excursion of applicable water quality criteria.⁹ This policy statement identifies which dischargers the permitting authority should, as a first priority, assess for reasonable potential.¹⁰

The group of dischargers which the permitting authority should evaluate first for reasonable potential are "major" facilities. EPA defines a major POTW as a POTW having a design flow of one million gallons per day or greater, a service population of 10,000 or greater, or a significant impact on water quality. EPA identifies a major industrial discharger on the basis of a combination of factors, including size, toxic pollutant potential, and stream flow volume.¹¹ EPA believes that these facilities (either POTWs or industrial facilities) have the greatest opportunity for impacting surface water quality and therefore should be evaluated for "reasonable potential" to exceed an applicable State water quality standard.

Permitting authorities should continue to evaluate other dischargers of concern for reasonable potential to exceed WET water quality criteria. Factors which permitting authorities may consider in deciding whether a particular discharge is "of

⁹Throughout this policy, any reference to "reasonable potential" includes both reasonable potential to cause and reasonable potential to contribute to an excursion of numeric water quality criteria for WET or narrative water quality criteria.

¹⁰This policy statement continues to reflect EPA's position on this matter articulated in the January 25, 1989, memorandum of Rebecca W. Hanmer, Acting Assistant Administrator for Water, to Regional Administrators entitled "Whole Effluent Toxicity Basic Permitting Principles and Enforcement Strategy."

¹¹See the June 27, 1990, memorandum "New NPDES Non-Municipal Permit Rating System" from James R. Elder, Director of the Office of Water Enforcement and Permits, to Regional Water Management Division Directors, which is Appendix Three to today's policy.

concern" obviously would include those factors which are described in Chapter 3 of the TSD as factors for assessing reasonable potential (including WET data, chemical-specific data, instream survey data, industry or publicly owned treatment work type, compliance history, receiving water type, designated/existing uses, and dilution calculations). Under § 122.44(d)(1)(iv) and (v), permitting authorities must impose effluent limitations to control WET where reasonable potential is established. In addition, the permitting authority should consider WET controls, where appropriate, in issuing general permits.

3. Evaluating Reasonable Potential

The permitting authority will consider available WET testing data and other information in evaluating whether a discharger has reasonable potential to cause or contribute to exceedance of WET water quality criteria.

This policy statement describes what information is considered in evaluating whether a specific discharger has the reasonable potential to cause or contribute to excursion of WET water quality criteria. The permitting authority first determines whether valid WET testing data is available that is relevant to the particular discharge.¹² Whole effluent toxicity data may be available from previous monitoring. Additionally, under 40 C.F.R. § 122.21(j), certain POTWs are required to submit WET testing as part of the permit application. The permitting authority may also decide to require the permittee to generate WET data prior to permit issuance or as a condition of the permit. See policy statement five below. If valid WET testing data is available that is relevant to the particular discharge, the permitting authority uses this data to determine if the discharge exhibits reasonable potential under §§ 122.44(d)(1)(iv) or (v).¹³ Where such WET data exist and demonstrate reasonable potential, the permitting authority does not need to gather or

¹²The permitting authority determines whether available WET testing is valid and addresses concerns relative to toxicity for the particular discharge. For example, where a facility discharges to a low flow stream, submission of acute WET testing data showing no toxicity is insufficient (absent conversion of the acute results to chronic results using an acute-to-chronic ratio, as explained in the TSD) to assess reasonable potential for chronic toxicity.

¹³If additional factors also demonstrate reasonable potential (see main text discussion below), the permitting authority should also discuss these factors in the fact sheet or statement of basis accompanying the permit.

generate other information to verify or support the WET results. EPA believes it is appropriate to assess reasonable potential on the basis of WET testing. Whole effluent toxicity testing is comparable in precision to chemical analytical measurements in wide use. See discussions of these questions in 55 Fed. Reg. 30082, 30112-30115 (July 24, 1990); 54 Fed. Reg. 23868, 23874 (June 2, 1989); the TSD at 1.3 and 3.3.

The permitting authority should also consider whether other factors establish reasonable potential for the discharge. The TSD at 3.2 offers a discussion of factors other than facility-specific WET monitoring data which a permitting authority may consider in making a reasonable potential determination for a particular discharge. These factors include 1) industry type (primary, secondary, raw materials used, products produced, best management practices, control equipment, treatment efficiencies, etc.), 2) publicly owned treatment work type (pretreatment, industrial loadings, number of taps, unit processes, treatment efficiencies, chlorination/ammonia problems, etc.), 3) compliance history, 4) existing chemical data from discharge monitoring reports and applications, 5) available instream survey data, 6) receiving water type and designated/existing uses, 7) available dilution, etc. For each individual permit, the permitting authority must include a clear explanation in the statement of basis or fact sheet accompanying the permit of the specific factors considered in evaluating reasonable potential for the particular discharge.

EPA believes this approach to assessing reasonable potential implements the requirements of sections 301(b)(1)(C) and 402 of the CWA and 40 C.F.R. § 122.44(d)(1). 40 C.F.R. § 122.44(d)(1)(ii), (iv), and (v) require the permitting authority to use valid procedures which account for at least the following four factors in establishing whether a discharge causes, has the reasonable potential to cause, or contributes to an exceedance of WET water quality criteria: (1) existing controls on point and nonpoint sources of pollution, (2) the variability of the pollutant or pollutant parameter in the effluent, (3) the sensitivity of the test species when evaluating WET, and (4) the dilution of the effluent in the receiving water where appropriate. 40 C.F.R. § 122.44(d)(1)(v) also explicitly provides that the permitting authority must establish an effluent limitation to control WET where it determines, using "toxicity testing data, or other information," that the discharge causes, has the reasonable potential to cause, or contributes to an exceedance of a narrative water quality criterion.

4. Consequences of Establishing Reasonable Potential

Upon finding reasonable potential to cause or contribute to exceedance of WET water quality criteria,

the permitting authority will impose effluent limitations to control WET.

This policy statement reiterates the requirements of sections 301(b)(1)(C) and 402 of the CWA as well as 40 C.F.R. §§ 122.44(d)(1)(iv) and (v). 40 C.F.R. §§ 122.44(d)(1)(iv) and (v) require the permitting authority to establish effluent limitations in a permit to control WET where it determines that a discharge has the reasonable potential to cause or contribute to an instream excursion above a numeric criterion for WET or a narrative criterion.¹⁴

The permitting authority can either modify the permit or reissue the permit upon expiration, as appropriate, to incorporate effluent limitations to control WET. In no instance will the permitting authority reissue the permit without including appropriate effluent limitations to control WET. In appropriate cases, the permitting authority may also require the discharger to conduct a toxicity identification evaluation/toxicity reduction evaluation to identify and eliminate the cause of the toxicity as part of a compliance schedule to comply with effluent limitations to control WET.

5. Whole Effluent Toxicity Monitoring

Where appropriate, the permitting authority should impose WET monitoring conditions upon dischargers that do not have effluent limitations to control WET.

Where appropriate, the permitting authority should impose WET monitoring conditions upon those dischargers for which it did not determine reasonable potential and did not impose effluent limitations to control WET. Where the permitting authority concludes that a continued monitoring requirement is warranted based upon the particular circumstances of the discharger, the permitting authority should require WET monitoring for a reasonable period of time and evaluate the monitoring results at the conclusion of this period.¹⁵

¹⁴Paragraph (v) provides that where the permitting authority determines that a discharge causes, has the reasonable potential to cause, or contributes to an instream excursion above a narrative water quality criterion, the permit must contain (1) a WET effluent limitation or (2) a pollutant-specific limitation, where the permitting authority demonstrates that a pollutant-specific limitation is sufficient to attain and maintain applicable numeric and narrative water quality standards.

¹⁵40 C.F.R. § 122.21(j) requires many new and existing POTWs to collect WET data for submission to the permitting authority at time of application or reapplication for an NPDES permit. Where

EPA and authorized NPDES States have broad authority under the CWA to require continued monitoring to assure attainment of water quality criteria. Under sections 308 and 402 of the CWA, EPA or a State with an authorized NPDES program can require NPDES permittees to provide WET testing data to assure State water quality standards will be attained and maintained. The permitting authority can impose a requirement on the discharger to collect monitoring data through conditions in the NPDES permit or through CWA section 308 letters. Under sections 301(b)(1)(C) and 402 of the CWA as well as 40 C.F.R. §§ 122.44(d)(1)(iv) and (v), EPA or a State with an authorized NPDES program must impose effluent limitations to control WET where continued monitoring results in a determination of reasonable potential to exceed WET water quality criteria.

6. Compliance Schedules in NPDES Permits

Where allowed under State and federal law, NPDES permits may contain schedules for compliance with WET effluent limitations.

This policy statement reflects the principles for allowing compliance schedules in NPDES permits which were articulated in In re Star-Kist Caribe, Inc., NPDES Appeal No. 88-5 (May 26, 1992) (order denying modification request).¹⁶ Section 301(b)(1)(C) of the CWA establishes a deadline of no later than July 1, 1977, for compliance with effluent limitations developed to meet State water quality standards. In light of this CWA provision, EPA has determined that all permits must reflect this deadline, unless the following requirements are met.¹⁷ NPDES permits may contain schedules of compliance beyond July 1, 1977, to meet water quality-based effluent limitations if two requirements are met. The two requirements are: 1) the permit

appropriate, the permitting authority may, in its discretion, require more frequent WET monitoring of POTWs or industrial dischargers. For example, it may be appropriate to impose a continued WET monitoring obligation upon a major industrial discharger for which WET testing data is not available. Similarly, it may be appropriate to impose a monitoring obligation upon a discharger for which available WET data is limited or for which later information raises the possibility of reasonable potential.

¹⁶40 C.F.R. § 122.2 defines a "schedule of compliance" as a "schedule of remedial measures included in a 'permit', including an enforceable sequence of interim requirements . . . leading to compliance with the CWA and regulations."

¹⁷This entire discussion does not apply to permit limitations which are governed by section 304(1) of the CWA.

APPENDIX E



Water Quality Program Permit Writer's Manual

Revised December 2011
Publication no. 92-109

000431

toxicity limits in accordance with RCW 90.48.520, 40 CFR 122.44(d), and 40 CFR 122.44(e) for inclusion into NPDES permits. The rule implements the requirement for all known, available, and reasonable methods of prevention, control, and treatment of toxicants and assures the attainment of state water quality standards.

This guidance explains WET requirements and helps readers locate WET rule sections pertinent to each issue. It will be helpful to refer to the text of the WET rule while using this Section of the *Permit Writer's Manual*. The WET rule contains the authoritative language on the WET requirements and should be consulted directly in order to make correct decisions. This guidance directs the reader to the section of the WET rule applicable to each subject discussed below.

WET testing is used in NPDES permits for the following purposes:

◆ *To serve as a broad spectrum indicator of increases in effluent toxicity.* Analyzing effluents regularly for every possible toxic chemical would be expensive. WET tests provide an assessment of the overall toxicity of every toxicant and toxicant combination.

◆ *To assess and limit WET to levels allowable under the state Water Quality Standards.* The state's water quality standards prohibit ambient toxicity (WAC 173-201A-040(1), WAC 173-201A-030). The water quality standards also establish the point of compliance; there is no ambient toxicity allowed past the edge of an approved mixing zone (WAC 173-201A-100). The main purpose of Chapter 173-205 WAC is to characterize effluents for WET in order to establish whether a reasonable potential exists to violate this prohibition against ambient toxicity. If a reasonable potential exists, a permit limit is required on WET (WAC 173-205-050(2)(a)). The WET rule also describes how to monitor for WET limits based on the prohibition against ambient toxicity outside of approved mixing zones (WAC 173-205-070(1) and (2)).

◆ *To assess and limit WET on a technology basis.* Technology-based limits on acute WET may be placed into permits on a case-by-case basis (WAC 173-205-130). WAC 173-

205-130 does not provide for technology-based WET limits for categories of dischargers or for chronic WET.

The regulatory process for WET in NPDES permits is shown in Figure VI-8 and Figure VI-9. Figure VI-10 illustrates the compliance process for WET. The steps in the process in Figure VI-8 are described below.

1. The process begins with NPDES permit application. The application can be for a new NPDES permit or for renewal of an existing permit. If a previous permit required an effluent characterization, the permittee will either be at STEP 5 and STEP 6 will determine the new permit requirements or the permittee will be at STEP 7 and STEP 8 will determine the new permit requirements.

2. Section 173-205-040 of the WET rule contains a list of circumstances under which a discharge is required to be characterized for WET. These circumstances define discharges with a risk for aquatic toxicity. The permits for a discharge which fits any of these circumstances will contain a requirement for WET characterization. Unless section 173-205-060 applies, effluent characterization will only happen once in the lifetime of a discharge. Permits for discharges which do not fit any of the circumstances will not require WET testing. If circumstances change so that a facility no longer has a risk for aquatic toxicity pursuant to WAC 173-205-040(1), a permit writer may make a determination in accordance with WAC 173-205-040(2)(h) to stop WET testing.

3. An effluent characterization usually occurs during the first year of the permit term. Effluent characterization establishes the baseline toxicity level and determines the need for WET limits. Every sample during effluent characterization will be tested with all of the WET tests listed in the permit (multiple species testing).

4. The permit will require that the permittee determines, at the end of effluent characterization, whether the WET performance standards have been met for acute and chronic toxicity. The performance standard for acute toxicity is a median of at least 80% survival in 100% effluent with no single test showing less than 65% survival in 100% effluent. The performance standard for chronic toxicity is no toxicity in a concentration of effluent representing the edge of the acute mixing zone. Permittees meeting performance standards will get no WET limits or compliance monitoring and go straight to STEP 7 on the diagram.

5. Those permittees not meeting a performance standard during effluent characterization will receive WET limits. The permit will require monitoring to determine compliance with the WET limit. Failing to comply with a WET limit will trigger additional WET testing and possibly other enforcement actions as described in subsection 5.6 and Figure VI-10 below.

6. The WET rule does not intend that WET limits are permanent. If a permittee with a WET limit meets the performance standard during compliance monitoring for a permit term, then the WET limit will not be placed into subsequent permits. By controlling toxicity well enough to meet the performance standard, the permittee has allowed the limit and routine monitoring to be removed from the permit. The permittee's cost and liability are lower.

7. Permittees who have attained the performance standards can remain indefinitely without WET limits or compliance monitoring. The only requirement will be WET test results submitted with each permit application or rapid screening testing during the permit term. The results of the WET tests done for permit application or routine rapid screening testing will be used to determine if another effluent characterization is needed. (In addition, there is a requirement in 40 CFR 122.21(j) that POTWs with design influent flows greater than or equal to 1 mgd and POTWs required to develop pretreatment programs must submit WET test results with each permit application in Part E of the 2A permit application form.)

8. If **changes** have occurred that **might increase toxicity**, then the next permit will require a new effluent characterization in accordance with WAC 173-205-060 and start the process over again at STEP 3. WET limits could result from a new effluent characterization or the permittee could go directly back to STEP 7 with no WET limits. If **changes** have occurred that **decrease the chance for effluent toxicity**, then the permit application should be reviewed as in STEP 2 to see if any of the risk criteria in WAC 173-205-040 still apply. If none of the risk criteria apply, WET testing requirements can be removed from the next permit. If any of the risk criteria still apply, the permit should keep the requirement to submit a set of WET test results with the next permit application as in STEP 7 even though there is a reduced risk.

Figure VI-8. The WET implementation process.

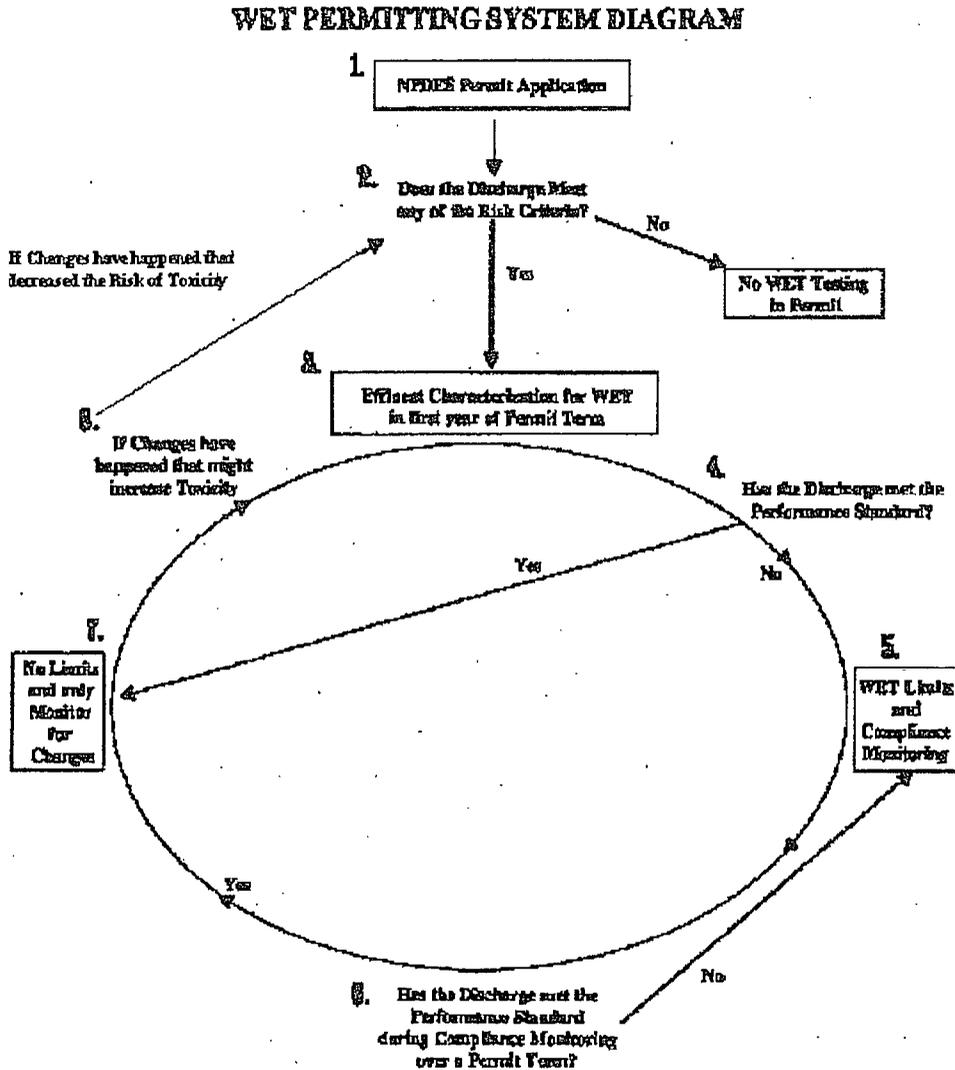
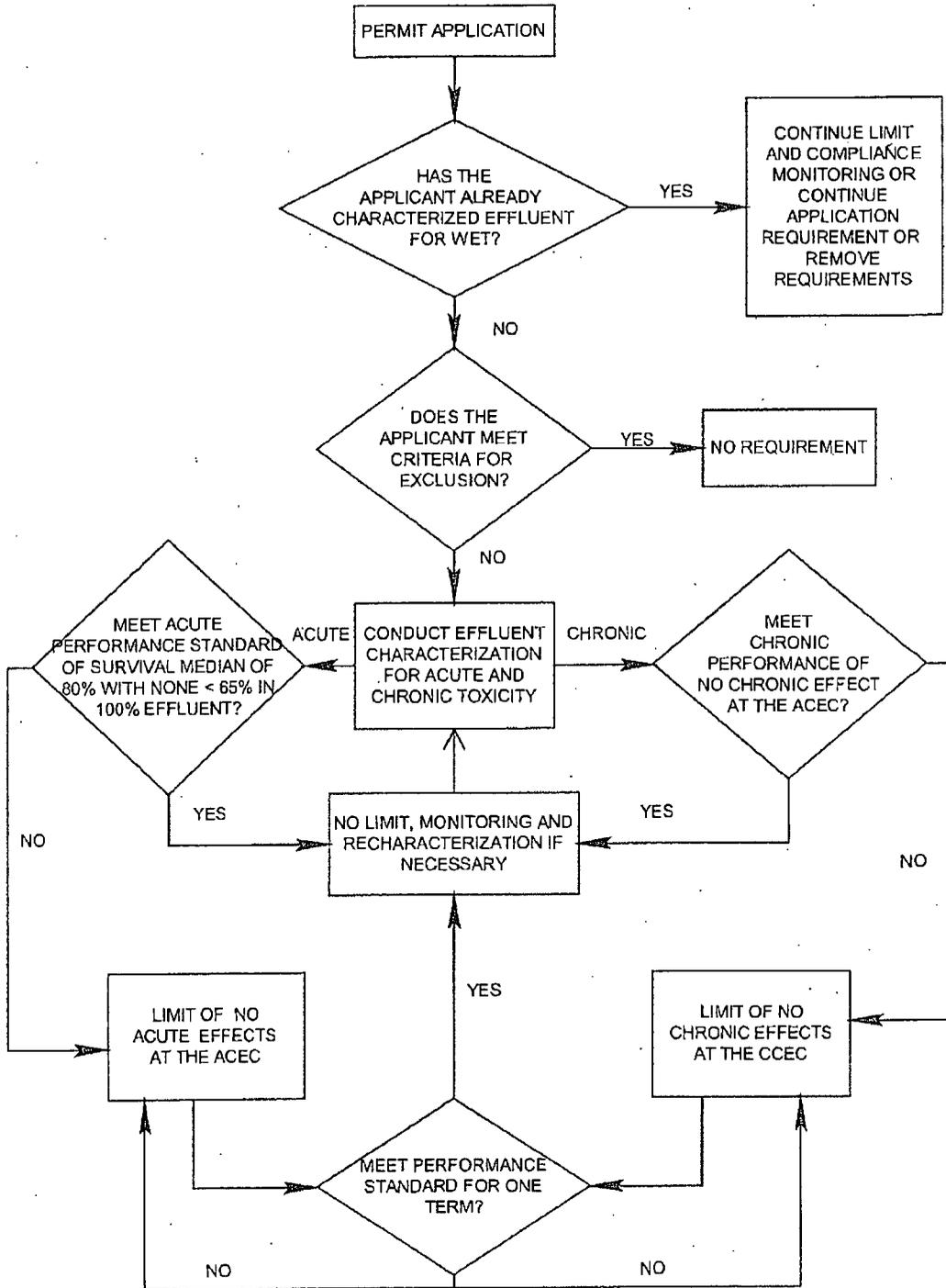


Figure VI-9. WET requirements for permits



low and the lab is not careful in conducting the WET test. Chapter 173-205 WAC handles false negatives through the establishment of power standards. Several parts of the WET rule require that toxicity tests meet the power standards (WAC 173-205-050(1)(f)(ii), WAC 173-205-050(2)(a)(iii)(A), WAC 173-205-070(4), and WAC 173-205-120(2)(c)). The acute statistical power standard and the chronic statistical power standard are defined in WAC 173-205-020. The acute statistical power standard says that acute toxicity tests must be able to detect a minimum of a 30% difference in survival between the ACEC and a control as statistically significant. The chronic statistical power standard says that chronic toxicity tests must be able to detect a minimum of a 40% difference in response between the ACEC or CCEC and a control as statistically significant. If a WET test does not meet the appropriate statistical power standard, then the permittee will be required to immediately resample the effluent and repeat the toxicity test with the number of replicates increased in order to meet the statistical power standard.

5.6 Noncompliance, Transient Toxicity Reports, and TI/RE Plans

ADDITIONAL TESTING AND TRANSIENT TOXICITY REPORTS. (Figure VI-10). When a permittee fails a routine compliance test for a WET limit, then additional testing is immediately required to assess and confirm the continuing presence of toxicity (WAC 173-205-090(1)). WET testing of 4 additional weekly samples are required following noncompliance with an acute WET limit and 3 additional monthly samples following noncompliance with a chronic WET limit (WAC 173-205-090(1)). If only the routine compliance test is failed, then the permittee is required to prepare a transient toxicity report on the possible causes and prevention of the toxicity. Compliance with the permit limit is restored with the first additional sample that passes the compliance test. Compliance with all WET testing provisions of the permit is accomplished by passing all of the additional testing following a routine compliance test failure and submitting an acceptable transient toxicity report. The contents of a transient toxicity report are described in WAC 173-205-100(1).

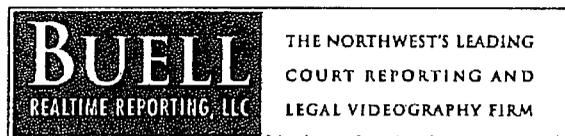
TI/RE PLANS. If any toxicity test fails the compliance test during the additional monitoring, then the permittee must submit a TI/RE plan to Ecology within sixty days of the last additional sample (WAC 173-205-100(2)). The TI/RE plan will be based on procedures in the latest versions of the EPA guidance documents for conducting toxicity reduction evaluations or toxicity identification evaluations (WAC 173-205-100(2)(b)). However, the TI/RE plan need not include any procedure from the EPA manuals that is not necessary to the goal of controlling the discharge of WET by the permittee (WAC 173-205-100(2)(b)(i)). Ecology may approve any modifications or additions to the EPA procedures that will improve the ability to identify or reduce toxicity (WAC 173-205-100(2)(b)(ii)). The permittee is required to implement the TI/RE plan immediately upon notification by Ecology of plan approval (WAC 173-205-100(3)). Model permit language specifies an administrative order as the means to notify a permittee to implement a TI/RE. The Program Development Services Section will assist in reviewing TI/RE plans and in writing administrative orders to implement TI/RE plans.

APPENDIX F

Deposition of Randall Marshall

**Puget Soundkeeper Alliance, et al. v. State of
Washington, et al.**

July 27, 2012



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POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

PUGET SOUNDKEEPER ALLIANCE,)
 RESOURCES FOR SUSTAINABLE)
 COMMUNITIES, FRIENDS OF)
 THE EARTH; and BP WEST)
 COAST PRODUCTS, LLC,)
)
 Appellants,) PCHB No. 12-027c
)
 vs.)
)
 STATE OF WASHINGTON,)
 DEPARTMENT OF ECOLOGY; and)
 BP CHERRY POINT REFINERY,)
)
 Respondents.)

DEPOSITION UPON ORAL EXAMINATION
OF
RANDALL MARSHALL

Taken at 2425 Bristol Court SW
Olympia, Washington

DATE TAKEN: JULY 27, 2012

REPORTED BY: JOLENE C. HANCA, RPR, CCR #2741

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ALSO PRESENT: Liz Daly
Bill Stubblefield

1 A. Yes.

2 Q. Okay, good. So, Randy, can you tell me what
3 your educational background is, please?

4 A. I have a Bachelor of Science degree from Wright
5 State University in environmental health.

6 Q. Okay. And after graduating from Wright State
7 University, where was your first job?

8 A. My first job, my first permanent job, was with
9 the Meigs County Health Department.

10 Q. What did you do there?

11 A. I was the chief sanitarian. I conducted all of
12 the Health Department's environmental health business,
13 sewage, water, restaurants, dog bites, all of it.

14 Q. When did you begin your employment at the
15 Department of Ecology?

16 A. In 1989.

17 Q. And what was your first job there?

18 A. The same job I've got now, as the whole
19 effluent toxicity coordinator.

20 Q. Would you please describe your role as the
21 whole effluent toxicity, or WET, can we just use the
22 acronym WET, coordinator?

23 A. I wrote Chapter 173-205 WAC, describing the
24 process for the use of whole effluent toxicity testing
25 and the results in NPDES permits.

1 I have set up permit language to implement
2 that. I have a database of whole effluent toxicity test
3 results and put every test report through quality
4 assurance examination to make sure the test was conducted
5 properly, statistics were run correctly and the results
6 make sense.

7 There was a provision in the chapter to just
8 define anomalous tests, which have a concentration
9 response relationship that doesn't -- that isn't
10 meaningful.

11 Basically, as the concentration of the toxin
12 increases, the effect should also increase, and sometimes
13 it doesn't, and that means something else was at play
14 besides toxicity.

15 Q. Did you write the chapter in the Permit
16 Writer's Guide, or Manual, on WET testing?

17 A. Yes, I did.

18 Q. And did you write the Canary Book?

19 A. I wrote the Canary Book, yes.

20 Q. And would you describe for us what the Canary
21 Book is?

22 A. The Canary Book is actually Ecology Publication
23 WQ-R-95-80 officially. Canary Book is its nickname. I
24 put a yellow cover on it. It is laboratory guidance and
25 whole effluent toxicity test review criteria.

1 Q. So you indicated that you wrote the WET test
2 rules. That is Chapter 173-205?

3 A. Yes.

4 Q. And is it your understanding that that
5 establishes the procedure for deriving whole effluent
6 toxicity tests and limits for inclusion in NPDES permits?

7 A. Yes.

8 Q. You also answer permit writers' questions about
9 how to write WET test provisions in permits?

10 A. Yes, I do.

11 Q. And do you train permit writers to follow the
12 Canary Book and the WAC rules for whole effluent toxicity
13 testing?

14 A. Yes, I do.

15 Q. And do you train permit writers to strictly
16 follow the Permit Writer's Manual and the WAC rules when
17 implementing WET tests?

18 A. The Permit Writer's Manual is only
19 recommendations. The term "strictly" doesn't apply.

20 Q. What about the WACs? Do you train permit
21 writers to follow the WACs, the 173 Chapter 205, when
22 inserting WET tests into NPDES permits?

23 A. Yes, I do.

24 (Exhibit No. 9 marked.)

25 BY MS. GINSBERG:

1 Q. I'm handing you what is being marked as
2 Exhibit 9. I'm going to ask you to take a look at this
3 and tell me whether this is the Canary Book that we were
4 just referring to.

5 A. This is the Canary Book.

6 Q. And this is the Canary Book that you
7 essentially wrote to provide guidance to Ecology staff
8 permit writers when deriving WET tests for NPDES permits
9 and other purposes, right?

10 A. Yes.

11 (Exhibit No. 10 marked.)

12 BY MS. GINSBERG:

13 Q. I'm handing you what is being marked as
14 Exhibit 10, and that is an excerpt of the Water Quality
15 Program Permit Writer's Manual, revised as of
16 December 2011, and has a section that I copied here for
17 our use on whole effluent toxicity.

18 Is this the chapter that you described that you
19 basically wrote for inclusion in the Permit Writer's
20 Manual?

21 A. No, it is not. At least what I'm holding here
22 is a list of analytical methods.

23 MS. GINSBERG: Let me mark this as Exhibit 11.
24 That was an incomplete copy.

25 (Exhibit No. 11 marked.)

1 BY MS. GINSBERG:

2 Q. Is this a chapter that you wrote for inclusion
3 in the Permit Writer's Manual on whole effluent toxicity?

4 A. Yes, it is.

5 Q. And this is the guidance that you have written
6 to provide assistance to Ecology staff permit writers
7 when establishing WET tests in NPDES permits, correct?

8 A. Correct.

9 Q. What is the purpose of a WET test?

10 A. The purpose of a WET test is to determine if an
11 effluent -- the "E" is effluent, so we're sampling
12 wastewater discharges -- seeing if the sample is toxic,
13 and hopefully this is looking for unknown toxicants. If
14 we already know that there's copper there, we have water
15 quality criteria, for example, to apply.

16 The WET test is intended not to just simply
17 label samples as toxic or not, but to find the toxicity
18 when it is unknown and provide a method for discovering
19 what may have caused that toxicity.

20 Q. Put another way, would you agree that the
21 purpose of a WET test is to see if there is a reasonable
22 potential to exceed a narrative or numeric water quality
23 criteria?

24 A. That also is a purpose, yes.

25 Q. And is that basically called effluent

1 characterization?

2 A. That's called effluent characterization in WAC
3 173-205.

4 Q. And if there is a reasonable potential to
5 exceed a water quality criterion, the purpose of the WET
6 testing rule is to establish a WET testing limit,
7 correct?

8 A. Yes.

9 Q. And would you agree that compliance monitoring
10 is basically putting in a provision in the permit for a
11 permittee to monitor their effluent to ensure that they
12 are complying with the whole effluent toxicity limit and
13 therefore not violating a water quality criteria?

14 A. Yes. When there is a WET limit, the WET
15 testing determines whether or not there is compliance
16 with that limit.

17 Q. And tell me what a performance standard is.

18 A. A performance standard is in Chapter 173-205
19 the reasonable potential determiner. Reasonable, if you
20 have a reasonable potential to exceed the narrative
21 criterion, then you get a WET limit, and the performance
22 standards are the test we use to determine whether there
23 is or is not a reasonable potential.

24 Q. So, for example, does a common performance
25 standard require a permittee to compare the response of a

1 A. It's not clear-cut. It is a judgment call.
2 You could squeeze together an effluent characterization,
3 if you considered the herring spawning season and how
4 often you were going to test. We could do something like
5 that.

6 It's just we decided, a judgment call, you
7 can't do the same degree of characterization you can with
8 the EPA tests. The EPA tests, you can do them all, like
9 I said, all year. You can do it as frequently as you
10 need to.

11 In the case of herring, no. You can't -- you
12 could still do it. I mean we could have called it
13 effluent characterization from the perspective of whether
14 or not you could get herring and do a couple of tests,
15 one at the beginning of the spawning season, one at the
16 end, and then call it an effluent characterization, but
17 we decided not to.

18 It was a judgment call. It's not -- it's not
19 like you can't. It's just not going to get you as much
20 as you would with an EPA test.

21 Q. Okay. If I understand what effluent
22 characterization is, you are basically determining
23 whether an effluent has reasonable potential to violate a
24 narrative or a numeric water quality standard, right;
25 that's what an effluent characterization is?

1 A. Yes. Under the WAC, it establishes two things:
2 One is whether the effluent meets the performance
3 standard or not, and the performance standard determines
4 whether there is reasonable potential to succeed.

5 Q. And in the case of the herring chronic larval
6 seven-day growth and survival test, what is the
7 performance standard?

8 A. It's no significant toxicity at the ACEC.

9 Q. At the ACEC, okay. And to perform an effluent
10 characterization with the herring growth and survival
11 test that you derived in the permit, what would you need
12 that you didn't -- we don't have in S9.B.3? And if you
13 need to look at the condition of the permit, let me know,
14 to answer this question.

15 A. I would like to see the permit.

16 Q. This is a copy of the final permit which was
17 introduced as a previous exhibit. I don't know which
18 one, but I will ask you to turn to condition S9.B.

19 A. Okay.

20 Q. So in here, you know, you have stated that this
21 chronic seven-day growth and survival test is not being
22 used for effluent characterization.

23 What would it need that it doesn't have to make
24 an effluent characterization in your judgment?

25 A. Well, you know, the WAC 173-205 says at a

1 permit for effluent characterization or compliance
2 monitoring, we also would have to go and do that. We
3 would have to formally approve in accordance with those
4 criteria in WAC 173-205-050. We would have to do that,
5 and we -- we're getting close to the point where, you
6 know, we could make an effort to do that, but we don't
7 want to, so.

8 But that's neither here nor there. We haven't.
9 Therefore, for this permit we're looking at this moment,
10 the herring tests are out of reach in accordance with the
11 State's regulation on whole effluent toxicity for use in
12 effluent characterization or compliance monitoring.

13 Q. But am I right in understanding that the
14 requirement in S9.B.3 is a functional equivalent of
15 effluent characterization? BP is being required to do
16 essentially effluent characterization, notwithstanding
17 the fact that you weren't able to validate this herring
18 test in strict accordance with WAC 173-205-050, I think
19 it's (1)(d)?

20 A. Well, no, it's not. It doesn't even look like
21 effluent characterization. Effluent characterization
22 determines a reasonable potential. This does not.

23 Effluent characterization is used as a step in
24 the process towards setting limits. This does not.
25 Effluent characterization establishes a baseline based

1 Q. -- violates what is called a WET, whole
2 effluent toxicity, limit --

3 A. Right.

4 Q. -- in the NPDES permit?

5 A. (No audible response.)

6 Q. Okay.

7 (Exhibit No. 25 marked.)

8 BY MR. SMITH:

9 Q. The court reporter has handed you what has been
10 marked as Exhibit 25, which is an excerpt from the
11 surface water quality standards, WAC 173-201A. The
12 highlighting, of course, is mine, and if you could take
13 the time to read to yourself Sections 240 (1) and (2) and
14 let me know when you are done.

15 A. I'm done.

16 Q. So what is the relationship between
17 173-201A-240 (1) and (2) and WAC 173-205?

18 A. Well, the relationship is that the -- we have a
19 narrative standard for toxicity, and that's --

20 Q. That's this, that's 240 (1) and (2)?

21 A. That's this. And it is translated into
22 effluent monitoring, that the concentration of effluent
23 at the edge of the mixing zone or at the edge of the
24 acute mixing zone, as the case may be, must not be toxic.
25 You know, it can be toxic at higher concentrations, but

1 it can't be toxic at that concentration.

2 So that's the way we determine that, and toxic
3 is defined in terms of a comparison with a control
4 response.

5 Q. So the WET testing requirements and the WET
6 effluent limitations that are implemented in NPDES
7 permits are for the purpose, as described in 240
8 subparagraph (2), to evaluate compliance with
9 subsection (1) and to ensure that aquatic communities and
10 the existing and designated uses of water are being fully
11 protected; is that right?

12 A. Yes.

13 Q. And section (1) says, "Toxic substances shall
14 not be introduced above natural background levels in
15 waters of the state which have the potential either
16 singularly or cumulatively to adversely affect
17 characteristic water uses, cause acute or chronic
18 toxicity to the most sensitive biota dependent upon those
19 waters," and then it goes on, right?

20 A. Yes.

21 Q. So the purpose of WET effluent limitations is
22 to prohibit discharges that violate this 240 subparagraph
23 (1), narrative limit, right?

24 A. Yes.

25 Q. Next, I'd like you to look at --

1 A. Starting on page 27?

2 Q. Yes.

3 A. I must have it. Where is the permit? I think
4 that's the draft. Page 27, okay.

5 Q. So 7.A states in bold that "The effluent
6 limitation for acute toxicity is no acute toxicity
7 detected in a test concentration representing the acute
8 critical effluent concentration," right?

9 A. Yes.

10 Q. And under WAC 173-205-070(1)(d), that
11 compliance test is that that effluent limitation is
12 considered a maximum daily discharge permit limitation,
13 right?

14 A. Yes.

15 Q. And a violation of that maximum daily discharge
16 permit limitation indicates that the permittee has
17 violated WAC 173-201A-240 subparagraph (1)?

18 MS. GINSBERG: Object to form. Calls for a
19 legal conclusion.

20 MS. BARNEY: Join.

21 THE WITNESS: That's our way of measuring for
22 compliance with that standard.

23 BY MR. SMITH:

24 Q. Okay. And 240 subparagraph (1) is a
25 prohibition, is it not; it's a prohibition on the

1 introduction of toxic substances that meet these criteria
2 here?

3 MS. GINSBERG: Same objection. Calls for a
4 legal conclusion.

5 MS. BARNEY: Join.

6 THE WITNESS: Yes. Toxic substances shall not
7 be introduced above natural background levels, which have
8 the potential.

9 BY MR. SMITH:

10 Q. Okay. But under this condition S7 in this
11 permit, if the permittee violates the effluent limitation
12 for acute toxicity, pursuant to S7.B, the second
13 paragraph, where it says "The Permittee will comply with
14 the requirements of this section by meeting the
15 requirements of subsection D," as long as the permittee
16 does what 7.D says, there is no permit violation, right?

17 A. That is the intention of that language.

18 Q. So a permittee can violate the effluent
19 limitation by doing WET tests that fails to meet this
20 standard and can continue to violate that effluent
21 limitation and it's not a permit violation as long as
22 they're doing what is in 7.D, right?

23 A. Yes.

24 MS. GINSBERG: Same objection.

25 THE WITNESS: To the satisfaction of the

1 Department, but we do have -- based upon that phrase, "to
2 the satisfaction of the Department," we have the ability
3 to -- I don't know actually off the top of my head if
4 that phrase was omitted from the BP permit or not.

5 They have revised that language, but my
6 original version of it, the last phrase was "to the
7 satisfaction of the Department." So it's up to us to
8 judge whether or not they're actually accomplishing what
9 they should be accomplishing under subsection D.

10 BY MR. SMITH:

11 Q. Well, I don't see that language in here.

12 A. It may not be. All of a sudden it occurred to
13 me.

14 Q. So am I reading this right, that the permittee
15 could continue to fail the acute WET compliance testing
16 and be violating the effluent limitation for acute
17 toxicity and it's not a permit violation as long as
18 they're doing the TI/RE and whatever else 7.D requires?

19 MS. GINSBERG: Object to form. Calls for a
20 legal conclusion.

21 THE WITNESS: Yes, that actually is what it
22 says.

23 BY MR. SMITH:

24 Q. So how does that ensure compliance with
25 173-201A-240?

1 MS. GINSBERG: Same objection.

2 THE WITNESS: Well, my answer for that is the
3 reason for going down that road to begin with. I was the
4 innovator of this kind of permit language, and it was
5 only for whole effluent toxicity for this reason.

6 Quite often, when you have a WET limit and a
7 violation of that limit, you don't know what the toxicant
8 is. So there's nothing the permittee can do at that
9 point. You need to do the work. This gave them the
10 elbow room to do the work.

11 Also, as you've heard here in this room, there
12 is an industry in the nation on complaining about whole
13 effluent toxicity tests. There is nothing easier to do.
14 This removes the temptation to challenge the test or the
15 test result and move to the next step in the process.

16 So our intention was to provide the necessary
17 process to solve the problem and provide an incentive not
18 to deviate from that. As soon as the permittee stops and
19 says, Well, I don't think ceriodaphnia really represents
20 anything meaningful, they're, Okay, sue them. They're
21 outside the process.

22 So that was the reason for the language. It's
23 often been painted as being a little weak, but in the
24 case of this -- now I know it's been applied in other
25 circumstances where it is truly a circular process and

1 can go on forever, but in this case there was a
2 necessity.

3 You need to do the TIE, you need to find out
4 what is causing the toxicity, and it's -- you know, the
5 permittee needs to be given a fair chance to do that, and
6 then by wording the language this way, where they're in
7 compliance until they step outside the process, it
8 provides an additional incentive as well.

9 So that was the thinking behind that language.
10 Whether or not it accomplishes it well enough, I mean
11 there again there would be a legal conclusion as to how
12 legal this is as far as the water quality standards, and
13 that's beyond me to make. You know, this could become an
14 issue.

15 BY MR. SMITH:

16 Q. It is an issue in this case, and the two
17 reasons that you have given for structuring this permit
18 provision like it is, in other words, where violating the
19 effluent limitation for acute toxicity is not a
20 standalone permit violation as long as the follow-up is
21 performed, you said that that's for two reasons; one, is
22 that it's hard to comply; if someone violates the acute
23 toxicity, they don't know why they did it and it's hard
24 to comply? Is that a fair restatement?

25 A. Yes.

1 MS. GINSBERG: Objection; mischaracterizes
2 testimony.

3 BY MR. SMITH:

4 Q. The second reason is that by writing it this
5 way, you get less pushback from permittees; is that
6 right?

7 MS. GINSBERG: Objection. Object to the form,
8 mischaracterizes his prior testimony.

9 THE WITNESS: In a way it turns it around. It
10 is a fair statement, but it is better, I think, to say
11 that it encourages the permittee to follow the process.

12 BY MR. SMITH:

13 Q. Rather than challenging the permit?

14 A. Rather than challenging the permit or the
15 individual test result.

16 Q. How is -- so this permit includes other maximum
17 daily discharge permit limitations; besides this effluent
18 limitation for acute toxicity, it includes in condition
19 S1 a bunch of kind of more standard numeric, straight
20 numeric effluent limitations that are also maximum daily
21 discharge permit limitations, right?

22 A. Yes.

23 Q. And so a permittee might violate one of those
24 and not know how to fix it, right?

25 A. That is possible, but it is not as likely. The

1 unless anyone wants it. Does anyone care if it's an
2 exhibit?

3 MS. BARNEY: . It was introduced last time.

4 BY MR. SMITH:

5 Q. So in here, I already pointed to the language
6 in 173-205-070(1)(d) that says, "The compliance test for
7 acute toxicity shall be considered to be a maximum daily
8 discharge permit limitation," and that's -- that language
9 is this S7.A, right; that's what this is talking about?

10 A. Yes.

11 Q. And I also see in here 173-205-090, which is
12 called "Response to noncompliance with whole effluent
13 toxicity limits," and that describes in section
14 subparagraph (2) of that, it says, "Any permittee failing
15 the compliance test for a whole effluent toxicity limit
16 shall take all reasonable actions to achieve compliance
17 including conducting a toxicity identification/reduction
18 evaluation as defined in WAC 173-205-100."

19 So doesn't this regulation that you wrote say
20 that when a permittee violates a compliance test for
21 acute toxicity, which is a maximum daily discharge permit
22 regulation, the way that they restore compliance with
23 that effluent limitation is by doing the TI/RE?

24 MS. GINSBERG: Object to the extent you are
25 asking him to give you a legal conclusion.

1 MS. BARNEY: Join.

2 THE WITNESS: In a general way, the TI/RE could
3 accomplish -- could be a number of different actions, and
4 yes.

5 So to that extent, the TI/RE defined broadly
6 is -- you know, and it may be nothing more than changing
7 a material or adjusting treatment or it may involve a
8 TIE. It is a very, very broad term.

9 That said, yes, that's generally the mechanism
10 described for finding and fixing toxicity.

11 BY MR. SMITH:

12 Q. For restoring compliance with maximum daily
13 effluent limitation, right?

14 A. Yes.

15 Q. So this regulation, 173-205A, was effective in
16 1993, right?

17 A. Yeah, I do believe so.

18 Q. And so you must have been involved in writing
19 it for a couple of years before that date, right?

20 A. Well, actually, it was a -- it was a fairly
21 quick process. A couple years, one to two years.

22 Q. When did you come up with the idea to use the
23 structure that we've been talking about in NPDES permits
24 to implement this? And by that I mean the structure
25 where the permittee continues, stays, maintains

1 the environment and the permittees, in the same way. You
2 would have -- everything would be there in one tight,
3 definable package.

4 Q. Except that by doing it that way, NPDES permits
5 authorized discharges of wastewater that fails the
6 toxicity tests, so long as the process is being followed,
7 no matter whether it violates the narrative water quality
8 standard; isn't that right?

9 MS. GINSBERG: Object to form. Argumentative,
10 calls for a legal conclusion.

11 THE WITNESS: It is difficult. All I have to
12 do is -- you know, I believe, as everyone does, that my
13 ideas are brilliant, and this is my idea, it was
14 brilliant.

15 But that said, what we have has never been
16 tested. What we need to have is an effluent that is
17 stubbornly toxic and it goes on and on and on and they
18 can't come to an answer and they continue to violate the
19 limit.

20 Whole effluent toxicity is extremely rare. I
21 mean it's once or twice a decade, where I actually get
22 involved in sitting down with someone and working out a
23 TI/RE plan.

24 The fact of the matter is, so much of what
25 looks like good language in the WET rule, and it seems to

1 be highly regarded in most sectors, what looks like it
2 makes sense has not really been tested. It just reads
3 well. We needed more effluent toxicity in order to run
4 this through the ringer and see to what extent it really
5 performs.

6 Effluent toxicity is, the current levels of
7 treatment are such that with the -- the only two
8 exceptions are ammonia with POTWs and, of course, pulp
9 mill effluent matched with the right toxicity test, and
10 then you have ongoing constant toxicity.

11 The pulp mills have closed, and the POTWs'
12 dilution takes care of the ammonia and they never have
13 toxicity at the ACEC, so we're not faced with this.

14 So to answer your question, I don't know. It's
15 never been challenged. Whether or not people's minds,
16 including my own, would be changed if there was a
17 discharger who was not meeting the limit on a repeated
18 basis and the TI/RE process was going nowhere, I do not
19 know how that would be viewed, certainly in a court of
20 law, but even within the Department of Ecology I don't
21 know to what extent we would adapt to that, but it hasn't
22 happened. I mean it's kind of good news, that effluent
23 toxicity as determined using the standard EPA WET test is
24 rare.

25 BY MR. SMITH:

1 Q. So this regulation, 173-205, doesn't
2 contemplate the scheme you created a couple years after
3 its adoption for incorporating WET tests and this
4 protection from permit violation, despite violation of an
5 effluent limitation, by doing follow-up monitoring and
6 planning, right?

7 MS. GINSBERG: Object to form. Confusing,
8 compound.

9 BY MR. SMITH:

10 Q. Do you understand my question?

11 A. Yes, I do. It's not -- no, you are correct.
12 There is nothing in Chapter 173-205 that specifies that
13 concept of compliance with the process is compliance with
14 the permit.

15 Q. Right. And in fact the regulation 173-205-070
16 specifically says that the compliance test for acute
17 toxicity shall be considered to be a maximum daily
18 discharge permit limitation, right?

19 A. Yes, it does, but I don't see that as
20 contradictory to the compliance with the permit -- with
21 the process is compliance with the permit process. I
22 don't think that necessarily contradicts it.

23 You need to have a permit -- they're called
24 permit limit violations in the permit language, you know.
25 So the permit seems to be saying the same thing, at least

1 Q. Isn't that in fact what the regulation
2 contemplates for acute toxicity, WET?

3 MS. GINSBERG: Object to form. Calls for a
4 legal conclusion.

5 THE WITNESS: Again, my previous answer, you
6 know, this is not -- this has gone into permit after
7 permit after permit, and I can say it's been in permits
8 for umpteen years and dozens and dozens of permits. It's
9 never really been challenged.

10 So to the extent it made sense to me, yes, I
11 have already said that. Whether or not I could offer a
12 legal conclusion on how well it meets the regulation,
13 even the one that I wrote, I am not sure. I don't think
14 the regulation I wrote prohibited it, or I wouldn't have
15 done it in the first place.

16 MR. SMITH: I have no further questions.

17 FURTHER EXAMINATION

18 BY MS. GINSBERG:

19 Q. I have a few follow-up.

20 You just answered a bunch of questions that Mr.
21 Smith asked you about what constitutes in your opinion a
22 permit violation and what doesn't, and I believe you
23 testified that there is nothing in WAC Chapter 173-205
24 that establishes what the permit says, which is
25 compliance with the process equals compliance with the

1 THE WITNESS: From a historical basis, yes, one
2 bill and the other, I made the regulation detailed as to
3 defining as many of the steps as possible. Both the
4 environmentalists and dischargers wanted me to do that.
5 Then everything else followed from that.

6 BY MS. GINSBERG:

7 Q. You designed the regulations to specifically
8 provide a process that a permittee would go through to
9 follow up on the toxicity hit that they got in 070 in WAC
10 173-205-100, right; that's what you did?

11 A. Yes.

12 Q. And you designed that with the specificity you
13 did in WAC 173-205-100 to establish the process they
14 would need to comply with to stay in compliance with the
15 permit, right?

16 MS. BARNEY: Objection to form.

17 MR. SMITH: Object to form.

18 THE WITNESS: Again, yes, that is the question
19 that I can't answer, and I have told that to Mr. Smith.
20 It seems to make sense, but only because it's never
21 challenged.

22 Whether or not -- you know, again, I did not
23 write and did not intend when I wrote Chapter 173-205
24 that compliance with the process be compliance with the
25 permit.

APPENDIX G

FACT SHEET FOR NPDES PERMIT WA0022900

BP CHERRY POINT REFINERY

February 14, 2012

PURPOSE of this Fact Sheet

This fact sheet explains and documents the decisions Ecology made in drafting the proposed National Pollutant Discharge Elimination System (NPDES) permit for BP Cherry Point Refinery.

The Environmental Protection Agency (EPA) developed the NPDES permitting program as a tool to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." EPA delegated to Ecology the power and duty to write, issue, and enforce NPDES permits within Washington State. Both state and federal laws require any industrial facility to obtain a permit before discharging treated process water to a water body.

An NPDES permit limits the types and amounts of pollutants the facility may discharge. Those limits are based either on (1) the pollution control or wastewater treatment technology available to the industry, or on (2) the receiving water's customary beneficial uses. This fact sheet complies with Section 173-220-060 of the Washington Administrative Code (WAC), which requires Ecology to prepare a draft permit *and accompanying fact sheet* for public evaluation before issuing an NPDES permit.

PUBLIC ROLE in the Permit

Ecology makes the draft permit and fact sheet available for public review and comment at least thirty (30) days before issuing the final permit to the facility operator (WAC 173-220-050). Copies of the fact sheet and draft permit for BP Cherry Point Refinery, NPDES permit **WA 0022900**, are available for public review and comment from April 13, 2011 until the close of business June 13, 2011. For more details on preparing and filing comments about these documents, please see **Appendix A - Public Involvement**.

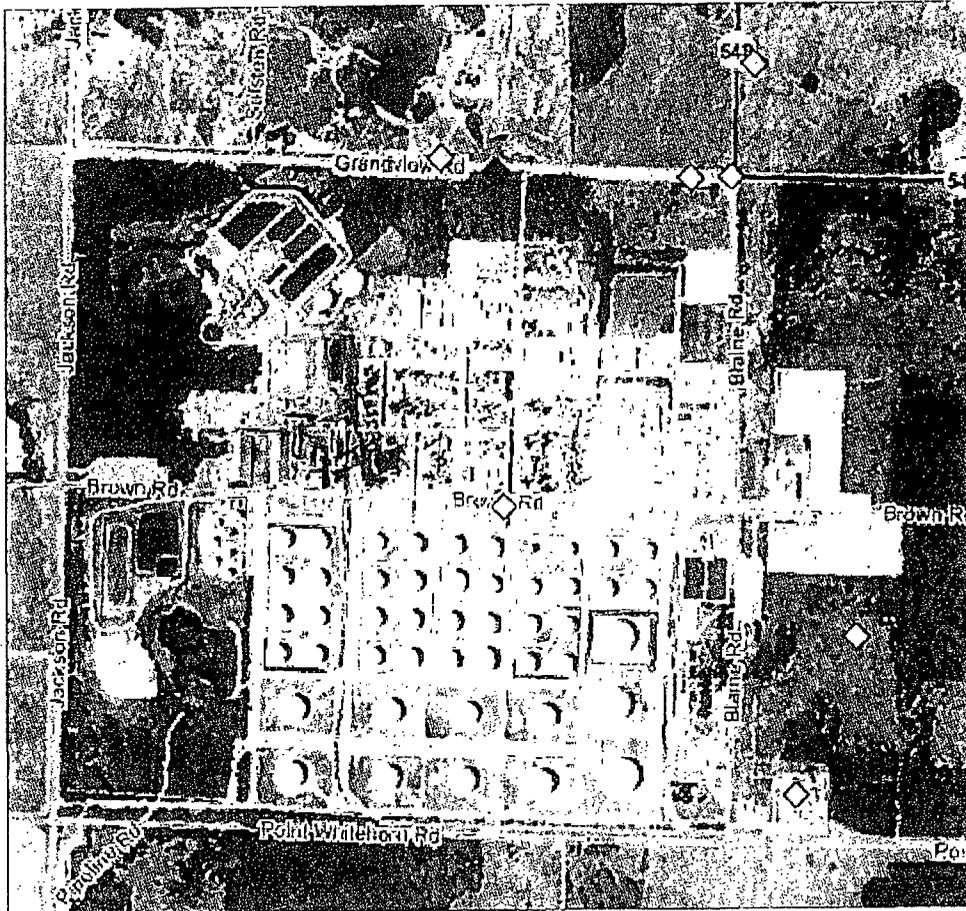
Before publishing the draft NPDES permit, BP Cherry Point Refinery reviewed it for factual accuracy. Ecology corrected any errors or omissions about the facility's location, product type or production rate, discharges or receiving water, or its history.

After the public comment period closes, Ecology will summarize substantive comments and our responses to them. Ecology will include our summary and responses to comments to this Fact Sheet as **Appendix O - Response to Comments**, and publish it when issuing the final NPDES permit. Ecology will not revise the rest of the fact sheet, but the full document will become part of the legal history contained in the facility's permit file.

Liem Nguyen prepared the permit and this fact sheet.

A. Facility Description

Figure 1. Facility Location Map



SITE DESCRIPTION AND HISTORY

The BP Cherry Point Refinery is located in a rural area of Whatcom County, approximately six miles northwest of Ferndale, Washington. The refinery encompasses an area of about 740 acres, bordered by Grandview Road to the north, Point Whitehorn Road on the south, and Jackson Road to the west. BP's property extends eastward to the railroad spur west of the Chemco facility. Prior to construction of the refinery in 1971, the site was used as agricultural land. The refinery employs approximately 800 people.

INDUSTRIAL PROCESS

In 1979, the refinery processed an average of 106,000 barrels (bbls) per day of crude oil. The refinery processed an average of 209,000 bbls per day of crude oil over a 24-month period from October 2008 to October 2010. The main source of crude oil has historically been from tankers delivering oil from Alaska's North Slope, however, crude oils from other sources are also processed.

SOLID WASTES

The BP refinery manages various solid wastes onsite including: garbage, recyclables, (paper, plastic, glass, metal, and wood) biosolids, clay tower media, non-hazardous vessel sludge, off-spec coke, non-hazardous excavated soil, concrete, and refractory.

DISCHARGE OUTFALLS

BP Cherry Point Refinery has one process wastewater outfall (001) and six industrial stormwater outfalls (002, 003, 004, 005, 006, and 007). The discharge from each outfall is described below.

Process Wastewater Outfall 001

The refinery treats process water, ballast water, and stormwater and discharges it via a 20-inch diameter multi-port submerged diffuser at **Outfall 001**. The diffuser is located under the south pier, 2200 feet offshore at a depth of 57 feet below mean lower low water.

The refinery pumps treated effluent into the Strait of Georgia on a continual basis. Since October 1999, the monthly average of effluent discharge generally ranged between 2.8 to 6.4 MGD. During heavy rainfall events the flow can reach levels as high as 10.5 MGD, as occurred in September of 2010.

Stormwater Outfalls 002-007

Outfall 002 drains approximately 108 acres of refinery property including construction equipment laydown yards, contractor areas, salvage yard, paint and sandblast area, and warehouse. The drainage area for Outfall 002 contains the largest percentage of areas of industrial activity (as compared to the other stormwater outfalls). Discharge from Outfall 002 flows north under Grandview Road and eventually to Terrell Creek.

Outfall 003 drains 37 acres of refinery property, primarily the area along the northern portion of the refinery. Outfall 003 could discharge wastewater in the unlikely event of an overflow of the Final Holding Pond or an alternative discharge of water held in the Storm Water Pond. Drainage from the outfall flows west along Grandview Road before flowing under Jackson Road and eventually to Terrell Creek. Only 4% of Outfall 003's drainage area is an area of industrial activity.

Outfall 004 drains 62 acres of refinery property, primarily the northwest portion of the property. It includes the butane sphere area, the contractor equipment storage area, and the calciner area. Drainage from the outfall flows north along Jackson Road before flowing west under Jackson Road, at its intersection with Grandview Road, and eventually to Terrell Creek. Only 17% of Outfall 004's drainage area is an area of industrial activity.

Outfall 005 drains 177 acres in the southwest corner of the refinery property, which includes an area below the pipelines running between the refinery and dock facilities along Jackson Road, as well as a tank dike area near the dock facilities. In addition, stormwater from the east and west of the refinery's property drains to Outfall 005. The discharge from Outfall 005 flows under Jackson Road to the northwest and eventually to Terrell Creek. Only 1% of Outfall 005's drainage area is an area of industrial activity.

Outfall 006 drains 7 acres of refinery property near the dock facilities. Stormwater discharging to Outfall 006 is normally captured in an on-shore sump and pumped back to the refinery's

Parameter	Concentration (mg/l)	Mass (lb/day)
Phenols (Total)	0.06	2.3
Parameter	Concentration (µg/l)	Mass (lb/day)
Arsenic (Total)	15	0.593
Copper (Total)	3.75	0.157
Chromium (Total)	4.5	0.174
Nickel (Total)	40.5	1.49
Selenium (Total)	66.5	2.7
Zinc (Total)	18	0.741
Cyanide (Total)	<5	Below Measurable Quantity

F. Description of the Receiving Water

BP discharges to the **Strait of Georgia**, which is designated as an extraordinary marine receiving water in the vicinity of Outfall 001. Characteristic uses include the following: fish migration, rearing, and spawning; clam, oyster, and mussel rearing, spawning, and harvesting; crustaceans and other shellfish (crabs, shrimp, scallops, etc.) rearing, spawning, and harvesting; wildlife habitat; primary contact recreation; sport fishing; commerce and navigation; boating; and aesthetic enjoyment. Water quality of this class shall markedly and uniformly exceed the requirements for all or substantially all uses.

Other nearby point-source outfalls include ConocoPhillips Refinery, Intalco Aluminum Smelter, and Birch Bay POTW. Significant nearby non-point sources of pollutants include stormwater runoff and groundwater seeps/discharges from contaminated sites, in particular the abandoned Treoil Industries site.

The closest Ecology long-term core monitoring station, GRG002, is located in the Strait of Georgia near Patos Island. It is far enough away from the Cherry Point industries to prevent their discharges from influencing readings taken there. There is also substantial data for this station. The station at Bellingham Bay, BLL009, is also very close but is influenced by activity in Bellingham and is not suitable for a background data station. The closest long-term rotating station is LOP001 in Lopez Sound.

The table below includes the ambient background for 90th percentile temperature calculated from January 1999 through June 2005 at Station GRG002 and the metal concentrations taken from the *Background Metals Concentrations in Selected Puget Sound Marine Receiving Waters* prepared by Eric Crecelius, Battelle Marine Sciences Laboratory, February 1998.

Table 5. Ambient Background Data

Parameter	Value Used
Temperature (90 th percentile)	11.8 °C
Ammonia	16 ug/L
Aluminum	45.2 ug/L
Cadmium	0.059 ug/L
Copper	0.673 ug/L
Lead	0.146 ug/L
Mercury	0.001 ug/L
Zinc	3.9 ug/L

G. Cherry Point Aquatic Reserve

BP discharges to the Strait of Georgia which is part of the Cherry Point Aquatic Reserve. In 2000, the Washington State Department of Natural Resources (DNR) designated the Cherry Point area as an environmental aquatic reserve. DNR developed the Cherry Point Aquatic Reserve Management Plan to guide future management decisions for the reserve. The plan includes actions related to: protection, enhancement and restoration, outreach and education, monitoring, data collection and research, and allowed and prohibited uses within the reserve.

A number of the management actions in the Cherry Point Aquatic Reserve Management Plan are addressed in the proposed permit, including conditions to ensure ongoing compliance with water quality standards, sediment monitoring, and herring toxicity testing.

H. SEPA Compliance

Regulation exempts reissuance or modification of any wastewater discharge permit from the SEPA process as long as the permit contains conditions that are no less stringent than state rules and regulations. The exemption applies only to existing discharges, not to new discharges.

III. PROPOSED PERMIT CONDITIONS

Federal and State regulations require that effluent limitations set forth in a NPDES permit must be either technology or water quality-based.

- Technology-based limits are based upon the treatment methods available to treat specific pollutants. Technology-based limits are set by the EPA and published as a regulation, or Ecology develops the limit on a case-by-case basis (40 CFR 125.3, and chapter 173-220 WAC).
- Water quality-based limits are calculated so that the effluent will comply with the Surface Water Quality Standards (chapter 173-201A WAC), Ground Water Standards (chapter 173-200 WAC), Sediment Quality Standards (chapter 173-204 WAC) or the National Toxics Rule (40 CFR 131.36).

F. Whole Effluent Toxicity

The water quality standards for surface waters forbid discharge of effluent that causes toxic effects in the receiving waters. Many toxic pollutants cannot be measured by commonly available detection methods. However, laboratory tests can measure toxicity directly, by exposing living organisms to the wastewater and measuring their responses. These tests measure the aggregate toxicity of the whole effluent, so this approach is called whole effluent toxicity (WET) testing. Some WET tests measure acute toxicity and other WET tests measure chronic toxicity.

- *Acute toxicity tests measure mortality as the significant response to the toxicity of the effluent.* Dischargers who monitor their wastewater with acute toxicity tests find early indications of any potential lethal effect of the effluent on organisms in the receiving water.
- *Chronic toxicity tests measure various sublethal toxic responses such as retarded growth or reduced reproduction.* Chronic toxicity tests often involve either a complete life cycle test on an organism with an extremely short life cycle, or a partial life cycle test during a critical stage of a test organism's life. Some chronic toxicity tests also measure organism survival.

Ecology-accredited WET testing laboratories use the proper WET testing protocols, fulfill the data requirements, and submit results in the correct reporting format. Accredited laboratory staff know about WET testing and how to calculate an NOEC, LC₅₀, EC₅₀, IC₂₅, etc. Ecology gives all accredited labs the most recent version of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* (<http://www.ecy.wa.gov/biblio/9580.html>), which is referenced in the permit. Ecology recommends that the Permittee sends a copy of the acute or chronic toxicity sections(s) of its NPDES permit to the laboratory.

Acute Toxicity

As required in the previous permit, the refinery conducted quarterly acute toxicity testing using *Pimephales promelas* and *Daphnia magna* on a rotating basis. The acute toxicity test was performed using 100% effluent, the acute critical effluent concentration (ACEC) 3.6%, and a control. The results of the acute toxicity test in **Appendix L** indicate that on 17 occasions (out of 55 tests) the refinery found acute toxicity at levels that, in accordance with WAC 173-205-050(2)(a), have a reasonable potential to cause receiving water toxicity. No acute toxicity tests conducted under the current permit exceeded the acute toxicity limit.

The proposed permit will impose an acute toxicity limit. The effluent limit for acute toxicity is: **No acute toxicity detected in a test sample representing the acute critical effluent concentration ACEC, 3.6% of the effluent, and the control.**

Compliance with an acute toxicity limit is measured by an acute toxicity test comparing test organism survival in the ACEC (using a sample of effluent diluted to equal the ACEC) to survival in nontoxic control water. BP is in compliance with the acute toxicity limit if there is no statistically significant difference in test organism survival between the ACEC sample and the control sample.

APPENDIX H

Issuance Date: February 14, 2012
Effective Date: March 1, 2012
Expiration Date: March 1, 2017

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT No. WA0022900

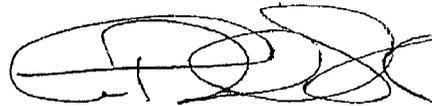
State of Washington
DEPARTMENT OF ECOLOGY
Olympia, Washington 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

BP Cherry Point Refinery
4519 Grandview Road
Blaine, Washington 98230

<u>Facility Location:</u> 4519 Grandview Road Blaine, Washington 98230	<u>Receiving Water:</u> Strait of Georgia		
		Latitude	Longitude
	Outfall 001	48.860833	122.757222
	Outfall 006	48.866111	122.752222
	<u>Receiving Water:</u> Terrell Creek		
		Latitude	Longitude
	Outfall 002	48.859167	122.731944
	Outfall 003	48.8925	122.743056
	Outfall 004	48.8925	122.747778
	Outfall 005	48.8825	122.747778
Outfall 007	48.891944	122.726389	
<u>Industry Type:</u>	Petroleum Refinery		

is authorized to discharge in accordance with the special and general conditions which follow.



Garin Schrieve, P.E.
Industrial Section Manager
Waste 2 Resources Program
Washington State Department of Ecology

4. The total volume of water it expects to discharge.
 5. The results of the chemical analysis of the water. The Permittee must analyze the water for all constituents normally monitored for the discharge. The analysis must also include hardness, any metals that are limited by water quality standards, and any other parameter deemed necessary by Ecology. All discharges must comply with the effluent limits as established in Condition S1. of this permit, water quality standards, and any other limits imposed by Ecology.
 6. The date of proposed discharge.
 7. The expected rate of discharge discharged, in gallons per minute. The Permittee must limit the discharge rate so it will not cause erosion of ditches or structural damage to culverts and their entrances or exits.
- B. The discharge cannot proceed until Ecology has reviewed the information provided and has authorized the discharge by email/letter to the Permittee or by an Administrative Order.

S7. ACUTE TOXICITY

A. Effluent Limit for Acute Toxicity

The effluent limit for acute toxicity is:

No acute toxicity detected in a test concentration representing the acute critical effluent concentration (ACEC).

The ACEC means the maximum concentration of effluent during critical conditions at the boundary of the acute mixing zone, defined in Section S1.G of this permit. The ACEC equals 3.6 % effluent.

B. Compliance With the Effluent Limit for Acute Toxicity

Compliance with the effluent limit for acute toxicity means the results of the testing specified in subsection C. show no statistically significant difference in survival between the control and the ACEC.

If the test results show a statistically significant difference in survival between the control and the ACEC, the test does not comply with the effluent limit for acute toxicity. The Permittee must then immediately conduct the additional testing described in subsection D. The Permittee will comply with the requirements of this section by meeting the requirements of subsection D.

The Permittee must determine the statistical significance by conducting a hypothesis test at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference

in survival between the control and the ACEC is less than 10%, the Permittee must conduct the hypothesis test at the 0.01 level of significance.

C. Compliance Testing for Acute Toxicity

The Permittee must:

1. Begin compliance testing by **May 1, 2012**. Perform the acute toxicity tests with 100% effluent, the ACEC, and a control, or with a full dilution series.
2. Submit a written report of all test results to Ecology within sixty (60) days after each sample date.

The Permittee must perform compliance tests **quarterly** using each of the species and protocols listed below on a rotating basis:

Acute Toxicity Tests	Species	Method
Topsmelt 96-hour static-renewal test	<i>Atherinops affinis</i>	EPA-821-R-02-012
Mysid 48-hour static test	<i>Americamysis bahia</i>	EPA-821-R-02-012

D. Response to Noncompliance with the Effluent Limit for Acute Toxicity

If a toxicity test conducted under subsection C. determines a statistically significant difference in response between the ACEC and the control, using the statistical test described in subsection B., the Permittee must begin additional testing within one week from the time of receiving the test results. The Permittee must:

1. Conduct one additional test each week for four consecutive weeks, using the same test and species as the failed compliance test.
2. Test at least five effluent concentrations and a control to determine appropriate point estimates. One of these effluent concentrations must equal the ACEC. The results of the test at the ACEC will determine compliance with the effluent limit for acute toxicity as described in Subsection B.
3. Return to the original monitoring frequency in Subsection C. after completion of the additional compliance monitoring.

Anomalous test results: If a toxicity test conducted under subsection C. indicates noncompliance with the acute toxicity limit and the Permittee believes that the test result is anomalous, the Permittee may notify Ecology that they believe the compliance test result is anomalous. The Permittee should conduct one additional test then wait for notification from Ecology before completing the

additional testing required above. The Permittee must submit the notification with the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous.

If Ecology determines that the test result was not anomalous, the Permittee must complete all of the additional monitoring required in this subsection. Or,

If the one additional test fails to comply with the effluent limit for acute toxicity, then the Permittee must complete all of the additional monitoring required in this subsection. Or,

If Ecology determines that the test result was anomalous, the one additional test result will replace the anomalous test result.

If all of the additional testing complies with the permit limit, the Permittee must submit a report to Ecology on possible causes and preventive measures for the transient toxicity event, which triggered the additional compliance monitoring. This report must be based upon a review of all pertinent and recent facility records, including:

1. Operating records
2. Monitoring results
3. Inspection records
4. Spill reports
5. Weather records
6. Production records
7. Raw material purchases
8. Pretreatment records, etc.

If the additional testing shows violation of the acute toxicity limit, the Permittee must submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to Ecology within 60 days after the sample date (WAC 173-205-100(2)).

E. Sampling and Reporting Requirements

1. The Permittee must submit all reports for toxicity testing in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. Reports must contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data in electronic format for entry into Ecology's database, then the Permittee must send the data to Ecology along with the test report, bench sheets, and reference toxicant results.
2. The Permittee must collect 24-hour composite effluent samples or grab samples for toxicity testing. The Permittee must cool the samples to 0 - 6 degrees Celsius during collection and send them to the lab immediately upon completion. The lab must begin the toxicity testing as soon as possible but no later than 36 hours after sampling was completed.

3. The laboratory must conduct water quality measurements on all samples and test solutions for toxicity testing, as specified in the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*.
4. All toxicity tests must meet quality assurance criteria and test conditions specified in the most recent versions of the EPA methods listed in subsection C. and Ecology of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If Ecology determines any test results to be invalid or anomalous, the Permittee must repeat the testing with freshly collected effluent.
5. The laboratory must use control water and dilution water meeting the requirements of the EPA methods listed in subsection C. or pristine natural water of sufficient quality for good control performance.
6. The Permittee must conduct whole effluent toxicity tests on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test during compliance testing in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the acute critical effluent concentration (ACEC). The ACEC equals 3.6 % effluent.
8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing must comply with the acute statistical power standard of 29% as defined in WAC 173-205-020. If the test does not meet the power standard, the Permittee must repeat the test on a fresh sample with an increased number of replicates to increase the power.
9. Reports of individual characterization or compliance test results must be submitted to Ecology within 60 days after completion of the test.

S8. CHRONIC TOXICITY

A. Testing When There Is No Permit Limit for Chronic Toxicity

The Permittee must:

1. Conduct chronic toxicity testing on final effluent **once** in the last summer and **once** in the last winter prior to submission of the permit renewal application.
2. Submit the results to Ecology with the permit renewal application.
3. Conduct chronic toxicity testing on a series of at least five concentrations of effluent and a control. This series of dilutions must include the acute critical effluent concentration (ACEC). The ACEC equals 3.6% effluent.

APPENDIX I

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**POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON**

PUGET SOUNDKEEPER ALLIANCE;
RESOURCES FOR SUSTAINABLE
COMMUNITIES; FRIENDS OF THE EARTH;
and BP WEST COAST PRODUCTS, LLC,

PCHB No. 12-027c

Appellants,

**ORDER ON MOTIONS FOR
SUMMARY JUDGMENT ON
LEGAL ISSUES 12, 14, AND 15**

v.

STATE OF WASHINGTON, DEPARTMENT
OF ECOLOGY; and BP CHERRY POINT
REFINERY,

Respondents.

INTRODUCTION AND BACKGROUND

The BP Cherry Point Refinery is located approximately six miles northwest of Ferndale, Washington. The refinery separates crude oil into various components for further processing and blending into a variety of petroleum products that include gasoline, jet fuel, diesel fuel, liquid petroleum gas, and residual fuel oil. The refinery also has a coke calciner operation, used in the aluminum smelting industry. The refinery processes use an average of 7 million gallons of potable water per day. The refinery operates a wastewater treatment plant to treat various wastewaters including ballast water from tankers, tank water draws, and stormwater that falls in the process areas of the site. The refinery has various outfalls for process wastewater and industrial stormwater. Treated wastewater, ballast water, and stormwater discharge to the Strait of Georgia on a continual basis from one of these outfalls. Barney Decl., Ex. A (Fact Sheet).

ORDER ON MOTIONS FOR SUMMARY
JUDGMENT ON LEGAL ISSUES 12, 14, & 15
PCHB No. 12-027c

1 The Washington State Department of Ecology (Ecology) issued National Pollutant
2 Discharge Elimination System (NPDES) Waste Discharge Permit No. WA0022900 (Permit) to
3 the BP Cherry Point Refinery (BP) to regulate the process wastewater discharges. The Permit
4 was issued on February 14, 2012, with a five-year effective period (expiration of March 1, 2017).
5 Appellants Puget Soundkeeper Alliance, Resources for Sustainable Communities, and Friends of
6 the Earth (Soundkeeper) filed an appeal (PCHB No. 12-027) with the Pollution Control Hearings
7 Board (Board), challenging terms of the Permit. BP West Coast Products, LLC (BP) filed a
8 separate appeal (PCHB No. 12-028) of the Permit. These two appeals were consolidated by a
9 separate order of the Board.

10 Soundkeeper, BP, and Ecology move for summary judgment on Legal Issues 14 and 15,
11 which are set forth in the Board's Pre-Hearing Order. On March 21, 2013, the Board heard oral
12 argument from the parties regarding these issues. Following the oral argument, BP filed an
13 additional motion for summary judgment on Legal Issue 12. Ecology and Soundkeeper
14 responded, requesting summary judgment be granted to Ecology on Legal Issue 12.

15 This Order on Motions for Summary Judgment of Issues 12, 14, and 15 (Order on
16 Motions) addresses all summary judgment motions currently pending before the Board. In
17 rendering this decision Board Members Kathleen D. Mix, Chair, and Tom McDonald reviewed
18 and considered the oral argument, pleadings, and record pertinent to these motions, including the
19 following:¹

20
21 ¹ Presiding Board Member William Lynch left the Board after submission of the motions to the Board and did not
participate in this decision. New Board Member Joan Marchioro recused herself from this case.

1. Soundkeeper's Motion for Summary Judgment on Legal Issues 14 and 15, with attached Exhibits 1 through 9;
2. BP West Coast Products, LLC's Cross Motion for Summary Judgment on Legal Issues 14 and 15;
3. Declaration of Beth S. Ginsberg in Support of BP West Coast Products, LLC's Cross Motion for Summary Judgment on Legal Issues 14 and 15, with attached Exhibits 1 through 8;
4. Department of Ecology's Cross Motion for Summary Judgment, and Response to Soundkeeper's Motion for Summary Judgment on Legal Issues 14 and 15;
5. Declaration of Phyllis J. Barney in Support of the Department of Ecology's Cross Motion for Summary Judgment, and Response to Conservationist Appellants' Motion for Summary Judgment on Legal Issues 14 and 15, with attached Exhibits A through M;
6. Soundkeeper's Reply and Response on Summary Judgment on Legal Issues 14 and 15, with attached Exhibit 10;
7. BP West Coast Products, LLC's Reply in Support of its Cross Motion for Summary Judgment on Legal Issues 14 and 15;
8. Second Declaration of Beth S. Ginsberg in Support of BP West Coast Products, LLC's Cross Motion for Summary Judgment on Legal Issues 14 and 15, with attached Exhibit A;
9. Department of Ecology's Reply in Support of its Cross Motion for Summary Judgment on Legal Issues 14 and 15;
10. Second Declaration of Phyllis J. Barney in Support of Department of Ecology's Cross Motion for Summary Judgment on Legal Issues 14 and 15, with attached Exhibits A and B;
11. BP West Coast Products, LLC's Motion for Summary Judgment on Legal Issue 12;
12. Declaration of Beth S. Ginsberg in Support of BP West Coast Products, LLC's Motion for Summary Judgment on Legal Issue 12, with attached Exhibit A;
13. Department of Ecology's Response to BP West Coast Products, LLC's Motion for Summary Judgment on Legal Issue 12;
14. Third Declaration of Phyllis J. Barney in Support of the Department of Ecology's Response to BP West Coast Products, LLC's Motion for Summary Judgment on Legal Issue 12, with attached Exhibits A and B;
15. Soundkeeper's Response to BP West Coast Products, LLC's Motion for Summary Judgment on Legal Issue 12; and
16. BP West Coast Products, LLC's Reply to Motion for Summary Judgment on Legal Issue 12.

1 The legal issues that are the subject of this Order are set forth in the Second Amended
2 Prehearing Order, and are restated in the body of the opinion for ease of reference. Having fully
3 considered the record in this case and being fully advised, the Board enters the following ruling:

4 ANALYSIS

5 1. Standard of Review

6 Summary judgment is a procedure available to avoid unnecessary trials on formal issues
7 that cannot be factually supported and could not lead to, or result in, a favorable outcome to the
8 opposing party. *Jacobsen v. State*, 89 Wn.2d 104, 569 Wn.2d 1152 (1977). The summary
9 judgment procedure is designed to eliminate trial if only questions of law remain for resolution.
10 Summary judgment is appropriate when the only controversy involves the meaning of statutes,
11 and neither party contests the facts relevant to a legal determination. *Rainier Nat'l Bank v.*
12 *Security State Bank*, 59 Wn. App. 161, 164, 796 P.2d 443 (1990), review denied, 117 Wn.2d
13 1004 (1991).

14 The parties have put no facts in dispute with respect to the various motions and cross
15 motions. The Board concludes that the issues presented by these motions can be resolved fully
16 on summary judgment.

17 2. Legal Issue 12

18 Issue 12 pertains to Condition S3.F(c) of the Permit and is stated in the Pre-Hearing
19 Order as follows:

20 Does the requirement in Condition S.3.F(c) to submit a new permit application
21 180 days prior to commencement of discharges resulting from various operating

1 or possibility) result in permit violations. This construction and harmonization of the various
2 regulatory terms is valid, and does not violate state or federal regulations.

3 The size of a facility, type of production and processes at the facility, and the related
4 effluent limitations were carefully considered and developed as the Permit was initially drafted,
5 and accordingly, it is also reasonable for Ecology to have adequate time to assess changes that
6 may result in a violation of the original permit. The Board concludes that Ecology has the
7 discretion to impose a 180-day notice requirement for the kind of changes that may cause an
8 exceedance of a permit limit, and that such a notice requirement is a valid permit term. Ecology
9 may also impose a more specific notice requirement for certain types of actions, as it has in
10 Condition S3.F(c), and the more specific term controls over the general terms which cover other
11 permitted actions, as set out in Permit Conditions G4 and G11.

12 3. Legal Issues 14 and 15

13 Issues 14 and 15 pertain to Condition S7.B of the Permit, which sets out the effluent
14 limits for acute toxicity, and the manner in which the permittee must comply with such effluent
15 limits. The issues from the Pre-Hearing Order are stated as follows:

16 **Issue 14:** Is Condition S7.B. (which suggests that BP may be in violation of
17 this provision if it measures a statistically significant difference in survival
18 between the control and the acute critical effluent concentration) invalid because
19 it conflicts with WAC 173-205 which establishes that a Permittee may maintain
20 compliance by following the confirmation testing and remedial response
21 requirements set forth therein?

Issue 15: Do the acute toxicity effluent limitations provisions of Condition S7.
satisfy applicable legal requirements, including WAC 173-205-070, WAC 173-
201A-240(1), WAC 173-201A-400(5), WAC 173-220-130, WAC 173-220-

1 150(1)(c), RCW 90.48.520, 33 U.S.C. § 1311, and 40 CFR § 122.44, or are they
2 otherwise invalid?

3 It is undisputed that effluent discharged from the BP facility is at risk for causing toxic
4 effects in the receiving waters. The refinery conducted quarterly acute toxicity testing under the
5 terms of the previous permit, and found acute toxicity at levels that have a reasonable potential to
6 cause receiving water toxicity. As a result, the Permit imposes an acute toxicity limit. Barney
7 Decl., Ex. A, p.37 (Fact Sheet). This standard is stated in the Permit as follows: "The effluent
8 limit for acute toxicity is: No acute toxicity detected in a test concentration representing the
9 acute critical effluent concentration (ACEC)." Condition S7.A.

10 Compliance with the effluent limit for acute toxicity is measured or implemented through
11 the whole effluent toxicity test (WET test), which screens effluents for toxic effects. Condition
12 S7.B. Chapter 173-205 WAC establishes procedures for deriving WET limits for inclusion in
13 NPDES permits. The overarching purpose of such procedures is to "protect aquatic life through
14 the implementation of all known, available, and reasonable methods of prevention, control and
15 treatment of toxicants and though the attainment of state water quality standards." WAC 173-
16 205-010. The goal is the eventual elimination of the discharge of toxics in toxic amounts. *Id.*

17 WET is the total toxicity of an effluent measured directly with a toxicity test. The WET
18 test is a direct measure of the adverse effect of a substance in a controlled test using living
19 organisms, and detects an exceedance of a toxicity limit. WET tests are performed using a
20 variety of fish and invertebrate species. Barney Decl. Exs. C-E. Under the regulatory scheme
21 and Permit term, a discharge is in compliance with the narrative water quality standard for acute

1 toxicity when the most recent acute toxicity test has shown no statistically significant difference
2 in response between the ACEC and a control. If there is a statistically significant difference in
3 the response, then the effluent has failed the test for compliance with the WET limit, and the
4 permittee is to immediately begin a process to come into compliance. WAC 173-205-070(1)(c)-
5 (d).

6 The Permit defines the process required to come into compliance with the WET limit
7 when a toxicity test reveals noncompliance with the effluent limit. BP must take a new sample
8 as soon as possible for retesting and begin additional monitoring weekly for four weeks, using
9 the same toxicity test as in the failed test. Condition S7.D; WAC 173-205-090(1). If the
10 detected toxicity is transient, BP must research potential causes of the toxicity and propose
11 preventive methods to avoid future excursions of the WET limit. If the toxicity is continuing, as
12 evidenced by further failed WET compliance tests, BP must submit a Toxicity Identification/
13 Reduction Evaluation (TI/RE) to Ecology identifying the possible source of the toxicity and
14 presenting a plan to reduce it. While the TI/RE must be submitted within 60 days after the
15 sample date which shows violations of the acute toxicity limit, the Permit contains no further
16 time frames for correction or implementation of the plan. *Id.* The terms of the Permit largely
17 restate the WET testing regulation contained at WAC ch. 173-205.

18 Ecology's position, as set forth in Condition S7 of the Permit, is that there is no permit
19 violation when the WET standard of the Permit is violated, as long as the permittee performs the
20 required follow-up testing, monitoring, and study required by the Permit. Ecology's position is
21 reflected in the language of Condition S7.B: "The Permittee will comply with the requirements

1 of this section by meeting the requirements of subsection D.” Subsection D of Condition S7 sets
2 out the necessary response to noncompliance with the effluent limit for acute toxicity (retesting,
3 eventual TI/RE if needed). According to the Permit term, the permittee must act on both the
4 initial WET limit exceedance (report on causes and preventive measures), or move forward with
5 a more extensive investigation and reduction plan (TI/RE). Ecology’s position that an
6 exceedance of a WET limit, by itself, is not subject to enforcement is based in part on the
7 difficulty of assessing whether the toxicity problem evidenced in an initial WET test is transient
8 or continuing, or conclusive as to the toxicant that may be a problem. See, Second Barney Decl.,
9 Ex. B (Marshall Deposition). If the toxicity problem is continuing, Ecology asserts it has
10 included an enforcement strategy in the Permit, by defining a process to investigate and
11 remediate the ongoing problem. Barney Decl., Ex. H.

12 BP raised Issue 14 because BP was concerned that, despite Ecology’s expressed intent,
13 the Permit could be interpreted to mean that the initial and ongoing failures of a WET test would
14 constitute a violation of the Permit. BP asks the Board to confirm an interpretation of the Permit
15 that an enforceable violation occurs only if a permittee fails to comply with the process set forth
16 in both the applicable regulations (ch. 173-205 WAC) and the Permit. BP argues the Permit
17 should be remanded to Ecology for revision of Condition S7 to clarify that exceedances of WET
18 limits, by themselves, do not constitute a permit violation. Ecology argues that Condition S7 is
19 clear, in that a single WET test failure does not constitute a permit violation, and asks that Issue
20 14 be dismissed.

1 Issue 15, raised by Soundkeeper, is an alternative statement of the same issue,
2 questioning whether the Permit is invalid for not making the failure of a WET test a permit
3 violation. Soundkeeper argues that both the Clean Water Act and state law demand strict
4 compliance with water quality standards, and that a failure to comply with WET limits
5 constitutes a violation of the Permit. Soundkeeper takes issue with Ecology's position,
6 characterizing it as "compliance with the process is compliance with the permit," and argues that
7 it is in contravention of the regulations that define how effluent discharges are in compliance
8 with the narrative water quality standards for acute toxicity. Ecology replies that the permittee is
9 compelled to investigate both an initial WET limit exceedance as well additional exceedances,
10 and that failure to do so is a permit violation.

11 Again, the Board must give due deference to the specialized knowledge and expertise of
12 Ecology. Where a statute is ambiguous, the Board will also give great weight to Ecology's
13 interpretation of the statute it administers. *Port of Seattle, supra*. Deference to an agency's
14 interpretation of its own regulations is also appropriate. *Id.* We turn to the applicable laws to
15 determine whether such deference is justified in this case and, if so, the scope of such deference.

16 NPDES permits must include such limitations as are necessary to ensure compliance with
17 applicable state water quality regulations. 33 U.S.C. § 1311(b)(1)(c). Federal regulations
18 implement this by requiring effluent limits for whole effluent toxicity where there is a reasonable
19 potential that a discharge might cause or contribute to an excursion over an applicable narrative
20 water quality criterion or a numeric WET limit. 40 CFR § 122.44(d).

1 Washington's water quality statutes speak directly to how toxicants must be controlled in
2 wastewater. RCW 90.48.520 states that "[i]n no event shall the discharge of toxicants be
3 allowed that would violate any water quality standard, including toxicant standards, sediment
4 criteria, and dilution zone criteria." Ecology regulations applicable to individual NPDES permits
5 also require Ecology to establish schedules and permit conditions "to achieve compliance with
6 applicable effluent standards and limitations, water quality standards, and other legally
7 applicable requirements." WAC 173-220-140(1). If a discharge is not in compliance with
8 specified effluent limitations, the permittee is required to take specific steps to achieve
9 compliance, in the shortest reasonable period of time. WAC 173-220-140(1)(a)-(b). The state's
10 water quality standards for surface waters, set out at WAC 173-201A-510, also mandate certain
11 terms in NPDES permits:

12 The primary means to be used for controlling municipal, commercial, and
13 industrial waste discharges shall be through the issuance of waste discharge
14 permits. . . . Waste discharge permits, *whether issued pursuant to the
15 National Pollutant Discharge Elimination System or otherwise, must be
conditioned so the discharges authorized will meet the water quality standards.
No waste discharge permit can be issued that causes or contributes to a
violation of water quality criteria, except as provided for in this chapter.*

16 WAC 173-201A-510(1) (emphasis added).

17 Both EPA and Ecology guidance and interpretive documents amplify and explain in
18 greater detail the purposes and application of WET testing and its relationship to legal
19 requirements, and are also relevant to our decision. Ecology's Permit Writer's Manual states that
20 WET testing is used in NPDES permits for three purposes; (1) to serve as a broad spectrum
21 indicator of increases in effluent toxicity; (2) *to assess and limit WET to levels allowable under*

1 *the state Water Quality Standards*; and (3) to assess and limit WET on a technology basis.
2 Barney Decl., Ex. C., p. 3 (emphasis added). The Manual also notes that “[C]ompliance with the
3 permit limit is restored with the first additional sample that passes the compliance test.” Barney
4 Decl., Ex. C. The WET Testing and Limits Chapter of the WAC states that “[A]ny permittee
5 failing the compliance test for a whole effluent toxicity limit shall take all reasonable actions to
6 achieve compliance including conducting a toxicity identification/reduction evaluation. . . .”
7 WAC 173-205-090(2). These interpretive documents lead to the conclusion that compliance
8 with the WET limit is necessary to comply with water quality standards.

9 EPA guidance also characterizes noncompliance with a WET limit as a violation of
10 NPDES permits, subjecting the permittee to enforcement action that favors escalating
11 enforcement. Barney Decl., Ex I, p.17 (Clarification Regarding Toxicity Reduction and
12 Identification Evaluations, March 27, 2001). EPA also set out several basic permitting principles
13 for WET tests in 1989, stating that WET limits must be included in permits where necessary to
14 ensure state water quality standards are met, that permits must avoid ambiguity and ensure
15 enforceability, and again characterizing an exceedance of a WET limit as a “violation” of a
16 permit. These permitting principles state that compliance dates must be specified, and the
17 permittee “must be compelled to come into compliance with the limit as soon as possible.”
18 Barney Decl., Ex. J, p. B-4-3. EPA recognized that the appropriate initial enforcement response
19 may be to require additional monitoring and “then rapidly escalate the response to the formal
20 enforcement if the noncompliance persists.” *Id.* at B-4-10. EPA has also clarified that the initial
21 response to a single exceedance of a WET limit, causing no known harm, should not be a formal

1 enforcement action. Barney Decl., Ex. L (National Policy Regarding Whole Effluent Toxicity
2 Enforcement, August, 1995). These Ecology and EPA interpretive and guidance documents
3 repeatedly frame the WET issue in terms of “compliance” and “noncompliance” with the WET
4 limit in order to meet water quality standards.

5 In this case, the WET limit of the Permit was included to address the risk that BP
6 wastewater effluent would cause toxicity in the receiving water. Ecology exercised its technical
7 expertise to evaluate at what point a non-compliant WET test indicates a violation of water
8 quality standards, concluding that an initial WET test violation may be transient, not continuing,
9 or simply inconclusive. This judgment reflects the science-based expertise of agency staff on a
10 complex scientific or technical issue, and is consistent with the EPA guidance set forth above.
11 The Board gives deference to Ecology’s determination that a single WET limit exceedance does
12 not indicate a pattern of toxicity, but is instead the trigger for a further process aimed at
13 determining if, in fact, there is a violation of the toxicity standard of the Permit. The requirement
14 for subsequent testing to determine whether or not there is a continued presence of toxicity, and
15 allowance for the permittee to be in compliance with the Permit requirements while making this
16 determination, is a valid exercise of Ecology’s permitting discretion. The term that states a
17 permittee is in compliance with the Permit while it responds to a single, and non-determinative
18 WET test, is a valid approach and term in the Permit.

19 However, once a subsequent or further test reveals ongoing noncompliance with the
20 Permit’s WET limit, we find the Permit becomes more ambiguous, while the law is clear.
21 Because the law is clear and unambiguous on the meaning of ongoing violations of a WET limit,

1 we need not give further deference to Ecology under the *Port of Seattle* decision. State and
2 federal water quality laws leave no room but to conclude that an ongoing excursion of the WET
3 limit of the Permit is a violation of the water quality standards, and consequently, a violation of
4 the Permit. A condition that allows continued excursions above the Permit limit, while imposing
5 only a process to get back to the limit at some future time, falls short of the requirement to
6 condition an NPDES permit “so the discharges authorized will meet the water quality standards.”
7 WAC 173-201A-510; RCW 90.48.520. While the Permit may set out a strategy intending to
8 bring the effluent discharge back into compliance with the WET standard, it cannot negate the
9 application of these laws nor the legal conclusion there is a violation of water quality standards
10 when the permittee repeatedly fails a WET test—a test which is designed to assess and limit
11 WET to levels allowable under the water quality standards. *See* Barney Decl., Ex. C. We
12 conclude that the Permit as written is, at minimum, ambiguous as to whether or not such ongoing
13 exceedances of the WET limit are a violation of water quality standards and of the Permit itself.
14 The Permit is also ambiguous as to Ecology’s authority to take necessary enforcement action
15 beyond the process described in the Permit with respect to noncompliance with the WET limit.
16 The Board remands the Permit to Ecology to clarify that ongoing exceedances of the WET limit
17 are violations of the Permit and are enforceable by Ecology.

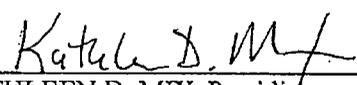
18 ORDER

19 Summary Judgment is GRANTED to Ecology on Legal Issue No. 12, and that issue is
20 dismissed from the case.

1 Summary Judgment is GRANTED to Soundkeeper on Legal Issue 15, and DENIED to
2 BP on Issue 14, which is dismissed from the case. The Permit is REMANDED to Ecology for
3 modification of Condition S7, consistent with this opinion.

4 SO ORDERED this 26th day of July, 2013.

6 **POLLUTION CONTROL HEARINGS BOARD**

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KATHLEEN D. MIX, Presiding

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TOM MCDONALD, Chair