BEFORE THE POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

PORT OF SEATTLE, Appellant, v. STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY, Respondent. AIRPORT COMMUNITIES COALITION, CITIZENS AGAINST SEATAC EXPANSION, and PUGET SOUNDKEEPER ALLIANCE Appellants, v. STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY and PORT OF SEATTLE, Respondents.	PCHB Nos. 03-140, 03-141, 03-142 CONSOLIDATED PUGET SOUNDKEEPER ALLIANCE'S PRE-HEARING BRIEF

I. INTRODUCTION

Appellant Puget Soundkeeper Alliance ("PSA") respectfully submits the following Pre-Hearing Brief.

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PSA will play a limited role in the hearing on the merits. The issues that PSA brings forward in this appeal are based generally on undisputed facts and stipulated exhibits. Based on these undisputed facts, the law supports reversal of the Port's 2003 NPDES permit for Sea-Tac.

In the 10 year since the 1994 NPDES permit was issued, Ecology has not required, and the Port has not implemented AKART at Sea-Tac. Moreover, despite knowing that the Port discharges significant amounts of BOD_5 and toxic pollutants from its deicing and anti-icing activities, and that those discharges likely violate water quality standards, Ecology has not established enforceable effluent limitations for pollutants such as BOD_5. Nor has Ecology required acute or chronic toxicity testing of IWTP discharges. Instead, Ecology has willfully and knowingly allowed the Port to continue its significant and unchecked discharges into Puget Sound.

In 1998 Ecology determined that the "clock" on the State's 10 year limitation for compliance schedules began running on June 30, 1994. Consequently, Ecology determined and publicly stated that Sea-Tac must comply with the Clean Water Act and Washington's water quality standards by June 30, 2004. The October 2003 NPDES permit, however, impermissibly extends the State's 10 year limitation to 13 years. Because the 2003 NPDES permit is inconsistent with both Washington law and the Clean Water Act, the permit is invalid.

II. RELEVANT AND MATERIAL FACTS

This case concerns NPDES Permit No. WA-002465-1 issued to the Port of Seattle on September 4, 2003 for discharges from the Port's Sea-Tac airport. ("2003 NPDES permit").

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Ex.1. [1] Sea-Tac airport occupies more than 2,500 acres of land within the city of SeaTac. Fact Sheet for NPDES Permit WA-002465-1, p. 8 (hereinafter, "Fact Sheet"). Ex. 4.

The 2003 NPDES permit addresses discharges of industrial wastewater, uncontaminated construction dewatering water, stormwater associated with industrial activity from airport operations and construction stormwater. *Id.*

A. Discharges from The IWS/IWTP to Puget Sound

The Sea-Tac Industrial Wastewater System ("IWS") collects industrial wastewater which is primarily from rainfall that falls on the terminal, air cargo, deicing areas, hangers and maintenance areas. Ex. 4. The IWS conveyance system collects and transports Sea-Tac's wastewater to the Sea-Tac Industrial Waste Treatment Plant ("IWTP"). *Id*. at 10.

The IWTP was originally designed and built in 1963-64 for the purpose of capturing and treating fuel spills. *Id.* at 11. The IWTP now consists of three lagoons and a Dissolved Air Flotation plant. The three lagoons have a combined capacity of approximately 81 million gallons. *Id*. "Treatment" at the IWTP consists primarily of adding coagulation chemicals to influent in order to flocculate suspended solids and oils and then running the wastewater through the DAF plant for removal of the suspended solids and oils. *Id*. at 12. The wastewater leaves the IWTP through an 18-inch trunk line, which eventually joins the Midway Sewer District's 30-inch effluent trunk line and discharges through a diffuser into Puget Sound (Outfall 001). The discharge occurs approximately 1,400 feet from shore in 178 feet of water. *Id*. at 13.

One of appellants' primary concerns in this appeal is the Port's use and discharge of aircraft deicing and anti-icing fluids and their subsequent discharge into the Puget Sound and

[1] Citations in this Pre-Hearing Brief are to the parties' consolidated master exhibit list. All exhibits cited in this brief are stipulated to as admissible.

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other area surface waters. Aircraft deicing and anti-icing fluids are used in significant volumes – over 100,000 gallons per year – at Sea-Tac. *Id*. at 21.[2] The Port and its tenants use both ethylene glycol-based ADAFs and propylene glycol-based ADAFs for aircraft deicing and anti-icing. *Id.* "Deicing fluids are highly biodegradable and when released to into surface water will exert BOD_5." *Id*. at 22.[3] The primary source of BOD_5 in the industrial wastewater from Sea-Tac is aircraft deicing/anti-icing fluids (glycols).

In addition to oxygen-demanding glycols, aircraft deicing and anti-icing fluids also contain additives which may cause adverse aquatic toxic effects, including surfactants, corrosion inhibitors, flame retardants, pH buffers, and colorants or dyes. *See generally,* EPA's "Preliminary Data Summary, Airport Deicing Operations"), Ex. 65, at 9-1, 9-9. "The additives contribute significantly to the overall toxicity of ADFs." *Id.* Despite knowledge that these toxic pollutants exist,[4] Ecology has never required the Port to conduct testing for toxicity with effluent from the IWTP.[5] **Despite never testing its IWTP effluent, the Port is "virtually certain" that if tested today, it would fail acute and chronic whole effluent toxicity testing**.[6]

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[2] Deicing fluids are used for the removal of ice from the surface of an aircraft, the airfield or the runway. Anti-icing fluids are used to prevent ice accumulation on the surface of the aircraft, airfield or runway. Once a plane has been de-iced or coated with anti-icing fluid it must take off within a specific amount of time of the chemicals must be reapplied. Fact Sheet at 21.

[3] The Fact Sheet continues: "Measuring the BOD of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is used by bacteria as food. BOD is used to estimate the potential reduction of dissolved oxygen in receiving water after an effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment." *Id*. at 22.

[4] Based on stormwater sampling events between 1999 and 2003, the Port reports that the IWTP effluent contains toxic pollutants including: 1,1-dichlorethane, 2,4-dimethylphenol, 2,4-dinitrotoluene, acenaphthene, anthracene, antimony, barium, benzene, chlorobenzene, chloroform, coppery lead, naphthalene, phenol, selenium, toluene, xylene and zinc. *See* Port's Response to CASE and ACC's Interrogatory No. 11. Ex. 66.

[5] *See* Port's Response to CASE and ACC's Interrogatory No. 6. Ex. 66.

[6] In its 2003 comments on Ecology's draft 2003 NPDES Permit, the Port objected to having to conduct acute or chronic WET testing prior to construction of its proposed AKART pipeline transferring high BOD waste to King

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The Sea-Tac IWTP does not effectively treat glycols or the BOD_5 they exert.[7] As a result, the industrial wastewater discharged from the IWTP into Puget Sound can have extremely high BOD_5 levels. In January 2002, the Port reported discharges with an average BOD_5 concentration of 2100 mg/l and a maximum concentration of 13,000 mg/l. Ex. 54. In December 2003, the Port reported the maximum sampled BOD_5 concentration in industrial wastewater discharged from the IWTP into Puget Sound was 2988 mg/l. In January 2004, the IWTP discharged industrial wastewater containing 3970 mg/l BOD_5 into Puget Sound. *Id*.

The Port's own analysis shows that a BOD_5 concentration approaching 1,000 mg./l will drop Dissolved Oxygen levels below Washington's Water Quality Standards. Ex. 57 at 3-3. Consequently the Port's BOD_5 discharges at least the winters of 2002 and 2003/2004 likely violated water quality standards.

The Port's 1994 NPDES permit did not contain effluent limits for the IWTP's discharges of BOD_5 to Puget Sound.[8] Nor did the Port's 1994 NPDES permit require compliance with water quality standards for dissolved oxygen. Ex. 3.

County's Renton Facility. According to the Port: "Because of the high BOD content in the pre-AKART pipeline effluent, we are virtually certain that the IWTP effluent, if tested today, would fail the acute and chronic WET tests laid out in Conditions S3 and S4 with out the addition of the proposed language. … Under the current permit, acute and chronic WET testing were delayed because WET testing of the effluent is useless until the pipeline is constructed. It will not tell us anything that we don't already know. Nothing can be done that will reduce the toxicity of the wastewater, other than construction of the pipeline." *See* Ex. 15.

[7] In a letter dated January 5, 1994, Ecology's Water Quality Permit Manager for Sea-Tac Airport stated, "The current IWS, which discharges into Puget Sound, is unable to treat glycols. While there may be some degradation prior to discharge, the Department considers the glycols that are discharged from the IWS to be untreated." *See,* Ex. 91. (Letter from D. North to B. Stuhring, dated January 5, 1994).

[8] The 1994 NPDES permit established interim effluent limitations only for pH, Oil and Grease and TSS. The 1994 NPDES permit did not establish interim or final effluent limitations for BOD_5, ammonia, Polynuclear aromatic hydrocarbons (PAHs), Benzene, toluene, ethylbenzene, xylenes (BTEX), phenolics or priority pollutant metals. Instead effluent limitations for these polluntants were left "To Be Determined." According to the 1994 NPDES permit:

> The effluent limitations shall be set <u>at the most stringent of the following three values</u>:
>
> 1. Limitations based on the determination of All Known, Available, and Reasonable Methods of Treatment (AKART).
> 2. Limitations based on compliance with the Water Quality Standards (Chapter 173-201A WAC).

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The Port's 1994 permit did not required acute or chronic toxicity testing. Nor did the 1994 permit establish effluent limitation for toxic discharges. Finally, the1994 permit did not require compliance with water quality standards for toxic discharges. *Id*.

Rather than establish effluent limitations for BOD_5 and other pollutants, the 1994 permit established a "compliance schedule" requiring the Port to submit an engineering report consistent with all the requirements of WAC 173-240, "describing plant modifications and/or additional wastewater treatment necessary for the Department to determine AKART" for the airport's industrial wastewater. *See,* Cond. S5.A, 1994 NPDES Permit at 25. The engineering report was required to include a schedule for project design, construction and startup of a new IWTP. The schedule was supposed to become an enforceable part of the 1994 NPDES Permit. *Id*.

Under the 1994 NPDES permit, effluent limits for BOD_5were to be determined after approval of the engineering report. Similarly, the 1994 NPDES permit required the Port to begin Whole Effluent Toxicity Testing once the new IWTP (approved as part of the engineering report) was completed. *See Id.,* Cond. S5.D., *Id*. at 26.

During the 5 year term of the 1994 NPDES permit, Ecology never established BOD_5 effluent limits and never required compliance with water quality standards for dissolved oxygen. Nor was the Port required to conduct chronic or acute toxicity testing of its discharges. The Port was also not required to monitor for or demonstrate compliance with water quality standards for toxic discharges.

> 3. Limitations based on compliance with the Sediment Quality Standards established in the Sediment Management Standards (Chapter 173-204 WAC).

1994 NPDES Permit, Ex. 3, at 14.

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On February 20, 1998, Ecology issued a new NPDES permit to the Port for Sea-Tac discharges ("1998 NPDES permit).[9] The 1998 permit once again did not establish interim or final effluent limitations for BOD_5 in the Port's industrial wastewater. The 1998 permit again left these effluent limitations "To Be Determined." *See* Cond. S1, 1998 NPDES permit at 8-12. The 1998 permit also delayed any requirement for acute or chronic toxicity testing of the Port's effluent until "sixty (60) days after the startup date of the new IWS Waste Treatment System required in Special Condition S4." Conds. S8 and S9, 1998 NPDES permit at 25-35.

Once again, in order to establish AKART, **and subsequent effluent limitations**, Ecology established another "compliance schedule" within the 1998 NPDES permit. Cond. S4, 1998 NPDES permit at 21. This time Ecology required the Port to submit an Addendum to its earlier AKART engineering report. The 1998 NPDES permit established a compliance "deadline" of June 30, 2004, for the Port to "take all available and reasonable means to implement the AKART determination in the shortest practicable time, but no later than June 30, 1994. *Id*.

In response to its draft 1998 NPDES permit, Ecology received a significant number of public comments opposing the lack of enforceable effluent limitations and the extension of the 1994 AKART deadline. Ecology responded to these comments by stating:

> WAC 173-201A-160(4) allows the Department to establish compliance schedules for existing discharges to include a schedule for achieving compliance with the water quality criteria. Schedules of compliance are allowed for construction of necessary treatment capability and are developed to ensure final compliance with all water quality based effluent limits in the shortest practicable time. **Schedules of compliance may in no case exceed ten years, and shall generally not exceed the term of any permit.** Decisions on schedules of compliance are made on a case-by-case basis by the Department
>
> **The compliance schedule for the IWS discharge was established in the previous permit, which was issued on June 30, 1994.**

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[9] *See* Mann dec., Ex. 8 (relevant excerpts from the 1998 NPDES permit).

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> **Therefore, the compliance schedule may not go beyond June 30, 2004.** The complexity of the AKART determination and the capital improvements that will be necessary to implement the AKART determination make it necessary to go beyond the term of one permit. The final permit requires the Port to implement the AKART determination in the shortest practicable time, but no later than June 30, 2004.

See Ex. 8. (Responsiveness Summary for 1998 NPDES permit) (emphasis added).

The Port submitted its "Addendum to IWS Engineering Report" on April 1998. The Port's 1998 Addendum proposed sending all of the Sea-Tac IWTP wastes to King County's Renton sewage treatment plant for further treatment. This proposal would have eliminated the Port's direct discharge of industrial wastewaters to Puget Sound. Ecology's reviewing water quality engineer concurred and informed the Port:

> The recommended alternative presented in the IWS Engineering Report Addendum consists of enlarging Lagoon #3 to 47 MM gallons and rerouting the IWTP-treated effluent to the King County Department of Natural Resources Eastside Treatment Plant in Renton. The Department supports this option contingent upon the approval of King County. If King County will accept the IWS discharge, a permit will be required from the King County Industrial Waste Division (KCIWD).

Ex. 36. (Letter from L. Zinner to M. Feldman, dated June 9, 1998)

Another 5 years went by. During the 5 year term of the 1998 NPDES permit the Port did not implement its 1998 AKART determination. Ecology did not establish BOD_5 effluent limitations. Ecology did not require compliance with water quality standards for dissolved oxygen. The Port has still never conducted acute or chronic toxicity testing of its discharges. Ecology has not established effluent limitation for toxic discharges and has not required

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compliance with water quality standards for toxic discharges. These conditions remain today – over 10 years after issuance of the Port's 1994 NPDES permit.[10]

In December 2001, the Port submitted to Ecology a "Status Report" on AKART implementation. The Port's consultants reported:

> Section S4 of the Port's NPDES Permit … states that the Port "shall take all available and reasonable means to implement the AKART determination in the shortest practicable time, but no later than June 30, 2004." Because the proposed alignment of the AKART force main is along the utility corridor in the western portion of the proposed third runway embankment, the actual date for implementing the AKART recommendation is tied to the completion dates for the embankment and utilities associated with the new runway.
>
> Delays in obtaining the 401/404 permit and subsequent appeals have caused embankment construction to fall behind schedule. As a result, AKART implementation will be delayed beyond the 2004 deadline. Although the third runway schedule is subject to change and further delays, it is currently estimated that the AKART pipeline and pump station can be completed in 2006, at the earliest.

Ex. 17 (December 2001 Status Report) at 10.

Based on this schedule, the Port's consultant recommended to Ecology a delay in implementation of AKART:

> The current NPDES permit has given the Port until 30 June 2004 to fully implement its AKART solution. This deadline was based on the schedules proposed in the 1998 Addendum to the Engineering Report. However, delays in related Port projects, primarily third runway embankment, will affect the location, design, and construction of the AKART pipeline and pump station. Therefore, the NPDES permit will need to revise the AKART project completion date per the existing conditions and completion schedules of projects linked to the AKART pipeline.

Id. at 16.

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[10] Ecology's permit writer, Ed Abbasi confirmed during his deposition that there have been no effluent limits and no testing for toxicity during the almost 10 years since Ecology issued the 1994 report and that this status quo would remain for another three years.

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On September 4, 2003, Ecology issued the Port its present permit for industrial and stormwater discharges from Sea-Tac. *See* Ex. 1. While ostensibly rejecting the Port's request to link its AKART implementation deadline to third runway project completion,[11] the 2003 NPDES permit nonetheless established a new compliance schedule moving the deadline for AKART implementation to July 2007 – three years after the deadline established in the Port's 1998 NPDES permit and 13 years after the first compliance schedule established in the Port's 1994 Permit. *Id.* at 32.

While the 2003 NPDES Permit finally establishes a BOD_5 maximum daily effluent limitation,[12] the limitation is not applicable until "one year after successful implementation of AKART, i.e., July 2007." *Id.* at 11. Thus, the Port is operating without an enforceable BOD_5 effluent limit until at least July, 2007. Because there is no effluent limitation for BOD_5 the Port is not required to comply with water quality standards for dissolved oxygen.

Similarly, while the 2003 NPDES permit does finally establish a March 2005 deadline for the Port to conduct acute and chronic toxicity testing of its effluent, Ecology required the Port only to conduct its toxicity testing during time periods where BOD_5 levels (and related toxicity) were at or below 250 mg/L. [13] *Id.* at 17-25. In effect, because the only time the BOD_5 levels are below 250 mg/L are when the Port is not using deicing and anti-icing fluids, Ecology's toxicity testing is designed to avoid testing of some of the highest levels of toxic discharges. *See infra, at*

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[11] *See* Ex. 57. (June 25, 2002 Letter from Fitzpatrick to Feldman).

[12] The 2003 NPDES permit establishes a maximum daily effluent limitation for BOD_5 at 250mg/L - a level that is significantly too high and is not consistent with AKART.

[13] The 2003 NPDES permit requires the Port to sample its effluent for acute and chronic toxicity only during periods where the BOD5 is at or below 250mg/L – the maximum daily limit established in the permit after implementation of the Port's AKART determination. Thus, while the Port is free to discharge effluent with significantly higher BOD (and corresponding toxic pollutants) until the 2007 "deadline" the Port is not required to sample these higher pollutant discharges.

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5, fns 5-6. Moreover, since testing is only required when BOD_5 levels are at or below 250 mg/l, the Port could chose to conduct testing when BOD_5 is at zero – when toxic discharges are unrealistically low.

III. ISSUES PRESENTED FOR HEARING

1. Does the permit satisfy legal requirements to apply all known, available, and reasonable methods of prevention, control and treatment (AKART) to Industrial Wastewater Treatment Plant discharges? [Pre-Hearing Order Issue 17(a)]

2. Does the permit satisfy legal requirements regarding compliance schedules for implementation of AKART in the IWTP discharges? [Pre-Hearing Order Issue 19(a)]

3. Does the permit satisfy legal requirements regarding compliance schedules for compliance with water quality standards from IWTP discharges?[Pre-Hearing Order Issue 19(c)]

4. Do the permit provisions for toxicity testing satisfy all applicable legal requirements? [Pre-Hearing Order Issue 22]

IV. DISCUSSION

A. The Permit Does Not Satisfy Legal Requirements to Apply AKART to Industrial Wastewater Treatment Plant discharges

PSA will not present independent evidence or argument on this issue. PSA incorporates the argument of CASE and ACC and testimony of Timothy Fann on this issue.

B. The Compliance Schedule for IWTP Discharges to Puget Sound is illegal

As discussed above, the 2003 NPDES permit approved a compliance schedule allowing the Port until July 2007 to fully implement AKART and allowing the Port to operate without (1) an enforceable effluent limitation for BOD_5; (2) compliance with water quality standards for dissolved oxygen; (3) required toxicity testing; (4) without toxicity effluent limitations; and (5) compliance with water quality criteria for toxic discharges. The compliance schedule is illegal.

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Ecology's regulations require that compliance schedules be no longer than 10 years. The Port's June 30, 1994 NPDES permit started the compliance schedule "clock" for AKART, BOD_5 discharge limitations and toxicity testing and effluent limitations. Compliance was required by June 2004.

1. Washington State Law limits compliance schedules to ten years after the date the discharges were first covered by a permit

Washington allows limited compliance schedules for existing dischargers. WAC 173-201A-160(4) provides:

> (a) Permits, orders and directives of the department for existing discharges may include a schedule for achieving compliance with water quality criteria contained in this chapter. Such schedules of compliance shall be developed to ensure final compliance with all water quality-based effluent limits in the shortest practicable time. . . .
>
> * * *
>
> (c) Prior to establishing a schedule of compliance, the department shall require the discharger to evaluate the possibility of achieving water quality criteria via nonconstruction changes (e.g. facility operation, pollution prevention). **Schedules of compliance may in no case exceed ten years, and shall generally not exceed the term of the permit.**

(emphasis added).

There should be no dispute that all discharging facilities must comply with the water quality standards in chapter 173-201A WAC. WAC 173-201A-010(3). WAC 173-201A-160(4) does not relax or eliminate the requirement for full compliance. Instead, by its plain terms, this provision requires allows Ecology to grant existing dischargers a schedule of compliance to achieve these standards. A schedule of compliance may in no case exceed 10 years and shall generally not exceed the term of any permit.

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2. The permit illegally allows implementation of AKART to exceed the maximum10 year compliance schedule requirement

In 1994 Ecology first required the Port to prepare an engineering plan to identify and implement AKART. As PSA argued in its earlier Motion for Partial Summary Judgment, Ecology's decision to extend compliance with AKART until 2007, violates the ten year limitation in WAC 197-201A-160. Both Ecology and the Port argue that the 10 year limitation in WAC 173-201A.160(4) is inapplicable to this case because AKART is not a water quality criteria – but instead a technology based standard. This argument should fail Respondents ignore that Washington's AKART requirement is codified as a part of the "water quality criteria" in Ch. 173-201A WAC. Specifically, the antidegradation policy in WAC 173-201A-070(4) requires:

> Whenever waters are of a higher quality that the criteria assigned for said waters, the existing water quality shall be protected and pollution of said waters which will reduce the existing water quality shall not be allowed, except in those instances where:
> (a) It is clear, after satisfactory public participation and intergovernmental coordination, that overriding considerations of the public interest will be served;
> (b) All wastes and other materials and substances discharged to said waters shall be provided with **all known, available, and reasonable methods methods of prevention, control, and treatment by new and existing point sources before discharge**. . . .

(emphasis added)

The antidegradation policy in WAC 173-201A.070(4) (and its AKART requirement) are part of Washington's water quality standards. Indeed, "state water quality standards must include a statewide antidegradation policy to ensure that [e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." *PUD No. 1 of Pend Orielle Cy. v. Ecology*, 146 Wn.2d 778, 807 (2002) *quoting PUD No. 1 of Jefferson Cy. v. Ecology,* 511 U.S. 700 705 (1994); 40 C.F.R. 131.12 (internal quotations

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omitted). Because AKART is part of Washington's water quality standards, achievement must be limited to a 10 year compliance schedule.

3. The permit illegally delays compliance with water quality criteria beyond the maximum 10 year compliance schedule requirement

As the evidence demonstrates, discharges from Sea-Tac's IWS/IWTP facility currently do not comply with (and there is no evidence that they ever have complied with) the water quality criteria within Ch. 173-201A WAC.

In January 2002, the Port reported discharges with an average BOD_5 concentration of 2100 mg/l and a maximum concentration of 13,000 mg/l. Ex. 54. In December 2003, the Port reported the maximum sampled BOD_5 concentration in industrial wastewater discharged from the IWTP into Puget Sound was 2988 mg/l. In January 2004, the IWTP discharged industrial wastewater containing 3970 mg/l BOD_5 into Puget Sound. *Id.* The Port's own analysis shows that a BOD_5 concentration approaching 1,000 mg./l will drop Dissolved Oxygen levels below Washington's Water Quality Standards. Ex. 57 at 3-3. Since the Port's discharges already exceed the threshold of 1000 mg/L for BOD_5, it is undisputed that during high BOD_5 runoff, the Port is not in compliance with the water quality criteria for Dissolved Oxygen (through BOD_5).

By its plain language, WAC 173-201A.160(4), allows no more than ten years for construction necessary to bring a facility into compliance with water quality criteria. The June, 1994 permit did not establish effluent limits for BOD_5. The 1994 permit instead left these limits subject to completion and approval of the engineering report. The 1998 permit again left BOD_5 limitations open for determination after approval of and implementation of AKART. The 2003 permit continues this delay until 2007 – thirteen years after the 1994 permit. Ecology has now allowed over 13 years of non-compliance – in direct contradiction of its regulation.

Similarly, pursuant to the water quality criteria, 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

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the most sensitive biota dependent upon those waters …" WAC 173-201A.040(1). While Ecology is required to use acute and chronic toxicity testing to evaluate compliance with this section, it has never done so for the Port's discharges. WAC 173-201A.040(2). It is uncontested, however, that "[b]ecause of the high BOD_5 content in the pre-AKART pipeline effluent, we are virtually certain that the IWTP effluent, if tested today, would fail the acute and chronic WET tests laid out in Conditions S3 and S4. Ex. 15.

As with BOD_5 effluent limits, the Port's 1994 permit discussed WET testing, but deferred any requirement for WET testing until after completion of construction approved through the AKART engineering report. The 1998 permit again delayed testing requirements until implementation of AKART. Similarly, while the 2003 NPDES permit does finally establish a March 2005 deadline for the Port to conduct acute and chronic toxicity testing of its effluent, Ecology required the Port only to conduct its toxicity testing during time periods where BOD_5 levels (and related toxicity) were "at or below" 250 mg/L. [14] *Id.* at 17-25. In effect, because the only time the BOD_5 levels are below 250 mg/L are when the Port is not using deicing and anti-icing fluids, Ecology's toxicity testing is designed to avoid testing of some of the highest levels of toxic discharges.

Again, WAC 173-201A-160(4), allows no more than ten years for construction necessary to bring a facility into compliance with water quality criteria. In this case, Ecology has now allowed over 13 years of non-compliance – in direct contradiction of its regulation.

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[14] The 2003 NPDES permit requires the Port to sample its effluent for acute and chronic toxicity only during periods where the BOD5 is at or below 250mg/L – the maximum daily limit established in the permit after implementation of the Port's AKART determination. Thus, while the Port is free to discharge effluent with significantly higher BOD (and corresponding toxic pollutants) until the 2007 "deadline" the Port is not required to sample these higher pollutant discharges.

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C. The Toxicity Testing Requirements are Illegal

WAC 173-201A-040 requires:

> (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 dependant upon those waters, are 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 characteristic beneficial uses of waters are being fully protected.

The 2003 permit fails to satisfy this requirement. As discussed above, even the Port's engineers assume that current discharges will fail acute and chronic toxicity testing. Ecology, however, had deferred since 1994 any requirement that the Port submit its effluent to toxicity WET testing. While the 2003 permit does finally require WET testing, it requires the Port only do so when the effluent is "at or below" 250 mg/l BOD_5. Thus, despite a direct correlation between BOD_5 levels and toxicity, by allowing testing only when BOD_5 is "at or below" 250 mg/l, the Port is free to conduct its testing when the BOD_5 level is zero.

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IV. CONCLUSION

For the foregoing reasons, the Board should remand the NPDES permit to Ecology pursuant to WAC 371-08-540(2).

DATED this ___ day of _____, 2004.

Respectfully submitted,

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By: _____
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