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 APPELLANTS AIRPORT COMMUNITIES COALITION AND CITIZENS AGAINST SEATAC EXPANSION'S PRE-HEARING BRIEF

Appellants Airport Communities Coalition and Citizens Against Seatac Expansion describe below the legal arguments on their appeal issues, including the facts they expect to establish through exhibits and witness testimony at Hearing. The issues are addressed in the sequence stated in the Board's Pre-Hearing Order, dated November 14, 2003.

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

15. Is the permit illegal, inadequate, or otherwise unlawful because it fails to protect Lake Reba as waters of the state? (¶¶ 4t, 5t)

"Waters of the state" include lakes, rivers, ponds, streams, inland waters, underground waters , salt waters and "all other surface waters and watercourses within the jurisdiction of the state of Washington." RCW 90.48.020. "Surface waters of the state" includes wetlands. WAC 173-201A-020. In short, wetlands are "waters of the state." However, the term "wetlands" does not include "artificial wetlands intentionally created **from nonwetland sites**, including, but not limited to, . . . detention facilities[.]" WAC 173-201A-020 (emphasis added).

The evidence produced at Hearing will demonstrate that Lake Reba was built on the site of a pre-existing pond. The Port agreed to expand the pre-existing pond's storage capacity in order to settle a lawsuit about the impacts of the airport's stormwater runoff on properties adjacent to Miller Creek. Exh. 52, Appendix C at C1.1; Exh. 68; and Exh. 69. When the Port created Lake Reba as an "in-line" detention facility, it expanded the pre-existing pond's storage capacity by excavating peat soils and building a berm. These activities took place along a stream coursing through a delineated wetland complex. Exh. 183; Exh. 184; Exh. 185. In short, Lake Reba fully qualifies for protection as waters of the state for all of the same reasons supporting Ecology's correct conclusion that the Northwest Ponds are waters of the state.

The evidence will also show that, based on nothing more than a conclusory and unsupported assertion in a letter dated March 24, 1997, the permit fails to protect Lake Reba as waters of the state. Testimony at the Hearing will confirm that the letter's conclusion was

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

not supported by any formal wetland delineation. Nevertheless, as a result of the letter's unsupported conclusion, the permit does not hold the Port's stormwater discharges into Lake Reba to the same standards as the stormwater discharges to Des Moines Creek and the Northwest Ponds. And as discussed under Issue 16 below, the permit does not hold the discharges from Lake Reba to Miller Creek to any standards at all.

16. Is the permit illegal, inadequate, or otherwise unlawful because it contains fails to properly regulate or control discharges from Lake Reba to Miller Creek? (¶¶ 4w, 5w)

As discussed above, Lake Reba's legal status is disputed. However, no party disputes that Miller Creek is a water of the state. Lake Reba discharges industrial stormwater from Sea-Tac Airport into Miller Creek. Therefore, the Lake Reba discharge should be subject to the same kinds of effluent limitations and monitoring requirements as the airport's discharges to Des Moines Creek, Gilliam Creek, and the Northwest Ponds. *See,* Permit Part II, Cond. S1A, Table 1 (Exh. 1 at 36-37).

At Hearing, the evidence will establish that the permit contains no controls for Lake Reba's discharges into Miller Creek. Indeed, Lake Reba's discharge point is not even identified as an outfall under the permit. (*See,* Permit at 36-38.) The permit contains neither effluent limitations nor benchmark limits for Lake Reba. There is no routine monitoring of any identified pollutant or parameter in Lake Reba's discharge. There are no regular monitoring or reporting requirements for the Lake Reba discharge. There is no monitoring of Lake Reba's discharge for compliance with effluent limitations, benchmark limits, or water quality criteria.

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

In short, the permit reflects a near-total abdication of Ecology's responsibility to assure that the Port's discharges from Lake Reba into Miller Creek comply with state water quality standards.

AKART

17. Does the permit satisfy legal requirements to apply all known, available, and reasonable methods of prevention, control, and treatment (AKART) to:

a. Industrial Wastewater Treatment Plant (IWTP) discharges (¶¶ 4a, 5a)

NOTE: With respect to the IWTP discharge, the AKART issue has been fully briefed. ACC and CASE reincorporate their briefs filed in support of the motion for partial summary judgment regarding AKART. For the Board's convenience, the following summary is also provided.

In summary, the permit does not require AKART for IWTP discharges for numerous reasons. In 1998, the Port determined that sending IWTP discharges to a sewage treatment plant for secondary treatment is AKART, and Ecology agreed. Yet in 2002, Ecology agreed to allow the Port to continue discharging IWTP effluent into Puget Sound whenever the BOD level is at or below 250 mg/L, without requiring the Port to demonstrate that secondary treatment is not known, available, or reasonable for such effluent. Deposition testimony confirms that Ecology did not bother to determine King County's ability to handle additional volumes of effluent, or the Port's ability to pay for secondary treatment of additional volumes.[1] Ecology also agreed to waive secondary treatment without first determining that exempted discharges are not toxic. Ecology also approved the Port's AKART determination without requiring the Port to update the study and reconsider its early determinations in light of the significant physical changes in the IWS, including the Lagoon 3 expansion. Thus, the AKART Engineering Reports do not address the feasibility of converting the recently

[1] Under the Civil Rules, appellants may use the transcript of the 30(b)(6) deposition for "any purpose" at the hearing. CR 32(a)(2); *Young v. Liddington*, 50 Wn.2d 78, 309 P.2d 761 (1957).

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

expanded Lagoon 3 into an aerated lagoon; nor do they reconsider sending some part of the IWTP effluent to the Midway STP, now that the storage capacity of the lagoons has been increased. Likewise, since the Port's reconsideration of its proposal to send all IWTP effluent to King County for secondary treatment, the AKART Engineering Reports did not reconsider providing additional treatment to the effluent that will be discharged to Puget Sound.

b. discharges to Des Moines Creek, Gilliam Creek, and the Northwest Ponds (NWP) (¶¶ 4n, 5n), ***and***

c. discharges to Lake Reba (¶¶ 4v, 5v)

The legal requirement of providing all known, available, and reasonable methods of pollution prevention, control, and treatment applies to all discharges, including stormwater. RCW 90.48.520; RCW 90.54.020(3)(b); RCW 90.52.040.

The permit does not require AKART for stormwater discharges to Des Moines Creek, Gilliam Creek, the Northwest Ponds, and Lake Reba. Ecology has determined that AKART for stormwater discharges means complying with the most recent version of the Stormwater Management Manual for Western Washington (SWMM). Exh. 121. Yet rather than requiring all STIA facilities to comply with the latest SWMM, permit Part II, Cond. S5.A.5 essentially grandfathers the Port's existing facilities. The permit states, "For Permittee's existing facilities, the Permittee is not required to redo its SWPPP and BMPs to incorporate changes to BMPs that were designed and implemented according to an earlier version of the SWMM." Exh. 1 at 48. In other words, the permit does not require the Port to utilize modern methods of preventing, controlling, and treating the stormwater discharged from its existing facilities.

Moreover, evidence to be introduced at Hearing will confirm that the Port's Stormwater Pollution Prevention Plan (SWPPP) does not satisfy the minimum standards for air

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

transportation facilities conducting deicing activities identified in the Stormwater Multi-Sector General Permit (MSGP) for Industrial Activities. (*See,* discussion under Issue 32, below.) As these MSGP-required BMPs are known, available, and reasonable methods of pollution prevention, control, and treatment, the permit's failure to require them means it does not require AKART for the Port's stormwater discharges.

d. discharges from Lake Reba to Miller Creek (¶¶ 4w, 5w)

The permit does not require all known, available and reasonable methods of preventing, controlling, and treating the pollutants in Lake Reba's discharges to Miller Creek because, in essence, the permit does not require anything for Lake Reba's discharges. As discussed under Issue No. 16, above, the permit does not effectively regulate or control the Port's discharges from Lake Reba to Miller Creek.

At Hearing, witness testimony will establish that although the Port calls Lake Reba an engineered stormwater detention facility, the Port does not operate Lake Reba pursuant to an approved Operation and Maintenance Manual. Testimony will also establish that the Port has never drained Lake Reba or removed its accumulated and contaminated sediments.

Compliance With Water Quality Standards

18. Does the permit satisfy legal requirements to include any more stringent limitation, including those necessary to meet water quality standards, for:

a. [Withdrawn by letter dated July 2, 2004.]

b. discharges to Des Moines Creek, Gilliam Creek, and NWP (¶¶ 4o, 5o); *and*

c. discharges to Lake Reba (¶¶ 4x, 5x); *and*

d. discharges from Lake Reba to Miller Creek (¶¶ 4y, 5y)

Under Clean Water Act sections 301 and 402(p)(3)(A), the permit is required to include any more stringent limitations necessary to assure that the Port's stormwater discharges to

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

Des Moines Creek, Gilliam Creek, the Northwest Ponds, Lake Reba, and Miller Creek meet water quality standards and treatment standards under state law. 33 USC §§ 1311 and 1342(p)(3)(A).

At Hearing, appellants will introduce abundant documentary evidence showing the Port's stormwater discharges are causing or contributing to exceedances of numeric water quality criteria for dissolved metals in the receiving waters. This evidence includes: the 1997 Stormwater Receiving Environment Monitoring Report (Exh. 86); the 1998 Reasonable Potential Analysis (Exh. 95); sampling data reported in the Port's Annual Stormwater Monitoring Reports (Exh. 80); as well as more recent sampling data (Exhs. 165, 166, 178). This evidence confirms that the Port's stormwater discharges frequently exceed numeric water quality criteria for dissolved copper and zinc at the point of discharge. Since the Port has no authorized mixing zones for stormwater, these discharges cause or contribute to exceedances of numeric water quality criteria in the receiving waters. Accordingly, more stringent limitations, including but not limited to water quality-based effluent limitations, are necessary to assure these discharges comply with state water quality standards.

However, the permit does not impose such limitations. For more than the first four years of the permit's five-year duration, there are no numeric effluent limitations for stormwater discharges. Exh. 1 at 36 (effluent limitations for discharges to Des Moines Creek and the Northwest Ponds do not become effective until December 31, 2007). And with respect to the stormwater discharges to Miller Creek and Lake Reba, there are no numeric effluent limitations at all. Exh. 1 at 38-39. In addition, the permit does not require the Port to use enhanced treatment BMPs to prevent exceedances of water quality criteria for dissolved metals. (*See,* discussion of Issue 24, below.)

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

Compliance Schedules

NOTE: The compliance schedule issues have been fully briefed. ACC and CASE reincorporate their briefs filed in support of the motion for partial summary judgment regarding compliance schedules. For the Board's convenience, the following summary is also provided.

19. Does the permit satisfy legal requirements regarding compliance schedules with respect to the permit provisions governing:

Industrial Wastewater[2]

a. implementation of AKART at the IWTP (¶¶ 4b, 5b; 4l, 5l)

The permit provides a compliance schedule for the Port's industrial wastewater discharges in permit Part I, Cond. S10. Exh. 1 at 32. As interpreted by Ecology, this compliance schedule excuses the Port's industrial wastewater discharge both from the requirement to implement AKART *and* from the obligation to comply with state water quality standards until July 1, 2007. The first element is discussed here; the second is discussed under issue 19c, below.

The compliance schedule for the Port's implementation of AKART at the IWTP is illegal in two significant and independent ways. First, the compliance schedule exceeds the Clean Water Act's mandatory deadlines and time limits. Second, the compliance schedule lacks the interim dates and reporting safeguards the law requires to make sure the Port actually implements AKART within the time allowed.

Mandatory Deadlines and Time Limits. As discussed in appellants' Motion for Partial Summary Judgment regarding AKART, the Port's IWTP is a "publicly owned treatment

[2] For analytic clarity, we discuss the compliance schedules pertaining to industrial wastewater (Issues 19a and 19c) first. Then, we discuss the compliance schedules pertaining to stormwater discharges (Issues 19b, 19d, and 19e).

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

works" -- a POTW -- because it is owned by a municipality and it treats liquid industrial wastes in furtherance of the Act's objectives. Section 301(b) of the Clean Water Act established a mandatory deadline for all POTWs to achieve effluent limitations based on secondary treatment. 33 U.S.C. § 1311(b)(1)(B). That deadline expired on July 1, 1977. 33 U.S.C. § 1311(b). Ecology has no authority to give the Port additional time to come into compliance.

In addition, the permit's extension of the IWS compliance schedule beyond the ten-year maximum allowed by WAC 173-201A-160(4)(c) is illegal. Although respondents now assert that this section's ten-year maximum cannot be applied to the AKART requirement, they neglect to consider that the IWS compliance schedule also governs the Port's compliance with the state water quality standard for toxicity under WAC 173-201A-030. Evidence at Hearing will establish that the Port's industrial wastewater discharges are toxic. Ecology has no authority to allow the Port to continue discharging toxic levels of pollutants beyond the ten-year maximum time period for attaining compliance with water quality standards allowed by WAC 173-201A-160(4)(c).

Interim Dates and Reporting Requirements. The IWS compliance schedule is illegal because it includes interim dates that are more than one year apart, and fails to require progress reports adequate to assure that the Port attains compliance within the time allowed.[3] Under unequivocal federal regulations,

> if a permit establishes a schedule of compliance which exceeds 1 year from the date of permit issuance, the schedule shall set forth interim requirements and the dates for their achievement.
>
> (i) The time between interim dates shall not exceed 1 year, except that in the case of a schedule for compliance with standards for sewage sludge use and disposal, the time between interim dates shall not exceed six months.

[3] This argument applies to the IWS compliance schedule both with respect to implementation of AKART (Issue 19a) and with respect to compliance with water quality standards (Issue 19c).

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

(ii) If the time necessary for completion of any interim requirement (such as the construction of a control facility) is more than 1 year and is not readily divisible into stages for completion, the permit shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date.

40 CFR § 122.47(a)(3) (emphasis added). The IWTP compliance schedule provided in permit Part I, Cond. S10 facially and substantively violates this requirement because it provides interim dates more than one year apart -- specifically, a 35-month gap between the commencement and completion of construction -- without specifying any interim dates or requiring any progress reports in that period.

c. compliance with water quality standards for IWTP discharges (¶¶ 4d, 5d)

The permit schedule for the IWTP's compliance with water quality standards is illegal in two significant and independent ways. First, the compliance schedule is too long, because it gives the Port more than the legal maximum of ten years to come into compliance with water quality standards. Second, the compliance schedule lacks the interim dates and reporting safeguards the law requires to make sure the Port actually comes into compliance within the time allowed. (The second element was discussed above, under Issue 19a.)

The Ten-Year Maximum Time Limit. Washington state law allows compliance schedules -- that is, "a schedule for achieving compliance with water quality criteria[.]" WAC 173-201A-160(4)(a). However, this allowance is explicitly limited: "**Schedules of compliance may in no case exceed ten years**, and shall generally not exceed the term of any permit." WAC 173-201A-160(4)(c) (emphasis added). Ecology exceeded its limited authority by illegally extending the IWTP compliance schedule beyond the ten-year maximum allowed by law.

Appellants' Hearing evidence will show that the compliance schedule for IWTP discharges began on June 30, 1994 -- the effective date of the permit that authorized the

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

compliance schedule. *See,* Exh. 3; Exhs. 7-9 (Ecology Responses to Comments). The 1994 permit also identified interim effluent limits to apply during the compliance schedule, thereby eliminating any question as to whether the compliance schedule had in fact started. *See,* Exh. 3.

The record confirms that the Port has failed to bring the IWTP discharges into compliance with water quality standards. At Hearing, the evidence will demonstrate that the IWTP discharges violate state water quality standards in two distinct ways -- by violating the numeric water quality criterion for dissolved oxygen, and by violating the narrative water quality standard prohibiting discharges of toxic substances in toxic amounts.

The permit's extension of the IWTP schedule for complying with state water quality standards beyond the ten-year maximum is illegal. WAC 173-201A-160(4)(c). Interim Dates and Reporting Requirements. (See discussion above, under 19a.)

Stormwater Associated with Industrial Activities

b. implementation of AKART for stormwater discharges to Des Moines Creek, Gilliam Creek, and NWP (¶¶ 4p, 5p); *and*

d. compliance with water quality standards for stormwater discharges to Des Moines Creek, Gilliam Creek, and NWP (¶¶ 4q, 5q), *and*

e. compliance with water quality standards for discharges to Lake Reba and Miller Creek (¶¶ 4z, 5z)

The permit provisions authorizing compliance schedules for stormwater discharges associated with industrial activity -- permit Part II, Cond. S9 (Exh. 1 at 62) -- fail to satisfy legal requirements regarding compliance schedules. Like the compliance schedules discussed above, the compliance schedules for the Port's stormwater discharges are illegal for two major reasons. First, the compliance schedules exceed the Clean Water Act's mandatory 3-year time limit for stormwater compliance. Second, the compliance schedules lack the

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

interim dates and reporting safeguards the law requires to make sure the Port actually comes into compliance within the time allowed.

The Clean Water Act's 3-Year Time Limit for Stormwater Compliance. The Clean Water Act's section 402(p) unambiguously requires all permits authorizing discharges of stormwater associated with industrial activity to "provide for compliance as expeditiously as practicable, but in no event later than 3 years after the date of issuance of such permit." 33 U.S.C. § 1342(p)(4)(A). As this Board has previously held, this section of the Act requires strict compliance with water quality standards within three years of the initial permit coverage for stormwater. *See, Puget Soundkeeper Alliance et al. v. Ecology*, PCHB No. 02-162 at ¶¶ XX-XXI (Order Granting Partial Summary Judgment, June 6, 2003).

Stormwater at Sea-Tac was first covered by the NPDES permit issued on June 30, 1994. Exh. 3 at 1. Under section 402(p)(4)(A) of the Clean Water Act, Ecology was required to provide for compliance with any more stringent limitation of state law, including state water quality standards and treatment standards (*i.e.,* AKART), in no event later than three years after the date of issuance of the 1994 permit. 33 U.S.C. § 1342(p)(4)(A). Moreover, the Act's 3-year time limit for compliance for the Port's stormwater discharges expired on June 30, 1997.

It should be noted that even under the most favorable interpretation of CWA section 402 possible, the Port could be given -- *at most* -- three years from the date of *this* permit's issuance to bring its stormwater discharges into compliance. The permit under appeal was issued on September 4, 2003 (Exh. 1 at 1). Accordingly, even under the flawed reading urged by respondents, Ecology could not legally authorize a compliance schedule for stormwater extending beyond September 4, 2006 -- three years from the permit issuance date.

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

Nevertheless, Ecology did so. The compliance schedules authorized in permit Part II, Cond. S9B and S9C (Exh. 1 at 62) extend well beyond the Act's three year maximum time limit for compliance. The deadline for completing construction of BMPs is nearly four years (46 months) from the permit issuance date. *Id.* And the compliance deadline for meeting effluent limits under Part II, Table 1.A is December 31, 2007 -- more than four years after the permit issuance date.

The compliance schedule for Lake Reba -- if it can be called that -- contains no compliance deadline at all. *See,* Exh. 1 at 54 (directing the Port to "work with other entities contributing to Lake Reba . . . to develop an action plan to attain compliance with the water quality standards[.]") While the "action plan" is to be submitted with the final comprehensive receiving water report on April 1, 2008 (more than four and one-half years after the permit issuance date), there is no deadline for attaining compliance.

Ecology has no authority to issue a permit with new compliance schedules allowing the Port to delay implementation of AKART and compliance with water quality standards beyond the time period allowed under federal law. The permit's compliance schedules for discharges of stormwater associated with industrial activity are plainly illegal.

Interim Dates and Reporting Requirements. The stormwater compliance schedules are also illegal because they include interim dates that are more than one year apart, and because they fail to require progress reports adequate to assure that the Port attains compliance within the time allowed.

Although the permit became effective on October 1, 2003, the first interim date identified by the compliance schedule is sixteen months later -- January 31, 2005. Exh. 1 at 62. This violates 40 CFR § 122.47(a)(3), discussed above. In addition, permit Part II, Cond. S9 fails to include any progress reporting requirement during this sixteen-month period. This violates 40 CFR § 122.47(a)(3)(ii), discussed above.

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

In both respects, the permits compliance schedules for stormwater are illegal, and fail to satisfy the requirements of federal law.

Mixing Zones

20. Did Ecology satisfy all applicable legal requirements in authorizing a mixing zone for IWTP discharges? (¶¶ 4f, 5f; 4g, 5g)

Ecology did not satisfy all applicable legal requirements in authorizing a mixing zone for IWTP discharges because the Port has not yet implemented AKART at the IWTP. Under WAC 173-201A-100(2), "A discharger shall be required to fully apply AKART prior to being authorized a mixing zone." The permit authorizes a mixing zone for IWTP discharges in Part I, Cond. S1.C (Exh. 1 at 13), even though the maximum allowable compliance schedule expired on June 30, 2004 and the permit does not require AKART implementation until July 1, 2007.

In addition, Hearing evidence and testimony will show that Ecology does not possess supporting information clearly indicating that the mixing zone does not have a reasonable potential to cause a loss of sensitive or important habitat, substantially interfere with the existing or characteristic uses of the waterbody, or result in damage to the ecosystem, as required by WAC 173-201A-100(4). For example, it is uncontested that critical salmon habitat exists in the vicinity of the IWTP Outfall. *See,* Exh. 90. Moreover, the Port has stated it is virtually certain the IWTP discharges would fail toxicity testing. *See,* Exh. 15 at 10. Nevertheless, Ecology authorized a mixing zone for the IWTP discharge (Exh. 1 at 13), even though the Port is not required to submit the results of toxicity testing until March 2005. Exh. 1 at 17.

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

21. [Withdrawn by letter dated July 2, 2004.]

Toxicity Testing

22. Do the permit provisions for toxicity testing satisfy all applicable legal requirements? (¶¶ 4i, 5i; 4j, 5j; 4ii, 5ii; 4kk, 5kk)

The NPDES permit provisions for toxicity testing of IWTP effluent are found in permit Part I, Conds. S3 and S4. Exh. 1 at 17-25. As will be established at Hearing, numerous pollutants present in the Port's IWTP effluent, including the BOD, COD, and tolytriazoles contributed by aircraft anti-icing and deicing fluids, are known to contribute to toxicity. *See, e.g.,* Exhs. 65, 83-86.

However, neither of the permit conditions requires the Port to test the Port's actual ("full strength") IWTP effluent for toxicity. Instead, both of these conditions allow testing of IWTP effluent toxicity when the effluent BOD concentration is "at, or below, 250 mg/L to simulate the post AKART effluent quality." Exh. 1 at 17, 21 (emphasis added). In light of the emphasized phrase "or below," the permit allows the Port to test for toxicity when there are no deicing agents present in the discharge.

Nevertheless, the permit authorizes discharges of effluent containing unlimited levels of BOD for many years beyond the permit issuance date. Effluent limits for BOD5 in the IWTP discharge do not become effective until July 1, 2007 -- nearly four years after the permit issuance date. Exh. 1 at 11. The Port's testing of IWTP effluent also fails to test for impairment or loss of function, including sublethal toxicity.

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

In addition, the permit provisions governing acute toxicity testing of stormwater (Part II, Cond. S8) do not specifically require toxicity testing of samples collected from the primary airfield outfall, SDS-3, during ground deicing or anti-icing events. At Hearing, appellants will show that the permit conditions are inadequate in these respects.

Monitoring

23. Do the monitoring provisions in the permit satisfy all applicable legal requirements? (¶¶ 4dd, 5dd; 4r, 5r; 4k, 5k; 4bb, 5bb; 4kk, 5kk)

The permit's monitoring provisions do not satisfy all applicable legal requirements because the permit does not affirmatively require the Port to determine whether its stormwater discharges cause or contribute to exceedances of numeric water quality criteria.

Section 308(a) of the Clean Water Act directs the NPDES permitting authority to require collection of monitoring information that is sufficient to determine whether a discharger is in violation of a permit limitation:

> Whenever required to carry out the objective of this chapter, including but not limited to (1) developing or assisting in the development of any effluent limitation, or other limitation, prohibition, or effluent standard, pretreatment standard, or standard of performance under this chapter; (2) determining whether any person is in violation of any such effluent limitation, or other limitation, prohibition or effluent standard, pretreatment standard, or standard of performance; (3) any requirement established under this section; or (4) carrying out sections 1315, 1321, 1342, 1344 (relating to state permit programs), 1345, and 1364 of this title –
>
> (A) the Administrator **shall** require the owner or operator of any point source to (i) establish and maintain such records, (ii) make such reports, (iii) install, use, and maintain such monitoring equipment or methods (including where appropriate, biological monitoring methods), (iv) sample such effluents (in accordance with such methods, at such locations, at such intervals, and in such manner as the Administrator shall prescribe), and (v) provide such other information as he may reasonably require …

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

33 U.S.C. § 1318(a) (emphasis added). This provision means that the permit must include monitoring sufficient to determine whether a monitored discharge constitutes a violation of permit discharge standards. For industrial stormwater discharges, Section 402(p)(3)(A) requires that these permit discharge standards must require strict compliance with water quality standards. 33 U.S.C. § 1342(p)(3)(A); *Defenders of Wildlife v. Browner*, 191 F.3d 1159, 1164-65 (9th Cir. 1999).

Part II of the challenged permit includes a condition requiring compliance with standards. It provides, in pertinent part:

> S3. COMPLIANCE WITH STANDARDS
>
> Permittees must comply with Washington State Surface Water Quality Standards (Chapter 173-201A WAC) . . . . Compliance with standards applies to all discharges.
>
> Compliance with surface water quality standards means that stormwater discharges from this facility will not cause or contribute to a violation of water quality standards in the receiving water.

Exh. 1 at 43 (emphasis added).

It is particularly important that monitoring information allow a determination of compliance with Condition S3. because the permit's requirement to implement stormwater treatment methods depends on such a determination: "Treatment BMPs are required when operational and source control BMPs are not adequate to reduce pollutants below a significant amount and maintain compliance with water quality standards." Exh. 1 at 52 (Part II, Cond. S5.B.3.c.). If the monitoring does not enable the Port to determine compliance with water quality standards as defined by Condition S3., the Port will not know whether the requirement to implement treatment BMPs is applicable.

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

At Hearing, appellants will demonstrate through evidence and witness testimony that the permit monitoring provisions do not enable the Ecology or the Port to determine whether the Port's discharges cause or contribute to exceedances of the water quality criteria found in WAC 173-201A-030 and –040. In the 401 Order, the Board explained that

> Any analysis of whether there is an exceedance of the zinc and copper standards in WAC 173-201A-040 requires: (1) hardness data measured in the receiving water, (2) sampling over a set period of time, (3) the sampling to be conducted in receiving waters (waters of the state), not upstream of those receiving waters, and (4) measurement of the dissolved fraction of metals.

Airport Communities Coalition, PCHB No. 01-160 at 27. The permit does not require monitoring sufficient to provide this information.

In addition, the permit does not require the Port to sample and report waste streams diverted from any portion of a treatment facility under the exceptions to the prohibition on bypasses identified in permit Part I, Cond. S6.B. (Exh. 1 at 28-29). Under certain conditions identified in that section, the Port is allowed to "bypass" treatment and to discharge -- without monitoring -- industrial wastewater and contaminated stormwater that has not been treated. In addition, the permit's stormwater monitoring provisions are inadequate because they do not require monitoring for COD at all outfalls that collect stormwater runoff from areas where deicing and/or anti-icing activities occur, as required by EPA's MSGP. *See,* Exh. 82. The permit monitoring provisions are also inadequate because the Port is not required to use stormwater grab samples taken within the first 30 minutes of discharge.

Failure to Implement Conditions of the PCHB's 401 Order

24. Does the permit fail to implement Condition 1 of the PCHB's 401 Order, requiring enhanced treatment BMPs? (¶¶ 4s, 5s)

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

Condition 1 of the PCHB Order requires the Port to select BMPs from the enhanced treatment list of the Stormwater Management Manual for Western Washington (SWMMM) for better removal of dissolved metals from stormwater. The Board found this condition was necessary to provide reasonable assurance that the Port's stormwater discharges will not violate numeric water quality criteria for copper and zinc. The PCHB imposed this condition after: reviewing the provisions governing BMPs under the Port's then-existing (now previous) NPDES permit; finding that filter strips and biofiltration swales are not effective in removing dissolved metals from stormwater; reviewing the results of the reasonable potential analysis conducted by Ecology and the Port in late June of 1998; reviewing the requirements of the SWMMM; reviewing the 1997 Stormwater Receiving Environment Monitoring Report; reviewing the metals concentrations in the stormwater sampling data generated under the Port's NPDES permit; reviewing the City of Des Moines' five-year water quality monitoring program report released in 2001; and reviewing the 401 Hearing testimony of Ecology witness Ed O'Brien, who testified biofiltration swales should be used in combination with other treatment options such as a basic or amended sand filter. Neither Ecology nor the Port appealed Condition 1 of the PCHB Order.

The new permit addresses the stormwater treatment BMPs in Part II, Cond. S5. Exh 1 at 46-53. Cond. S5 fails to implement Condition 1 of the PCHB Order because it does not direct the Port to select BMPs from the enhanced treatment list of the Stormwater Management Manual for Western Washington (SWMMM) for better removal of dissolved metals from stormwater. Instead, the permit only requires the Port to provide a schedule in the SWPPP for implementation of any additional or enhanced BMPs that are necessary

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

because of a notice from Ecology, facility changes, or self-inspection. In addition, although requiring treatment BMPs when operational and source control BMPs are not adequate to maintain compliance with water quality standards, the permit does not affirmatively require the Port to determine whether its stormwater discharges cause or contribute to exceedances of numeric water quality criteria.

25. [Withdrawn by letter dated July 2, 2004.]

26. Does the permit fail to implement Condition 2 of the PCHB's 401 Order, requiring upstream/downstream and hardness monitoring? (¶¶ 4cc, 5cc)

Condition 2 of the PCHB Order requires the Port to sample stormwater above and below stormwater outfalls and to monitor the hardness of the receiving waters. The PCHB imposed this condition after: reviewing the monitoring data generated under the Port's then-existing (now previous) NPDES permit; reviewing the information needed to determine compliance with numeric water quality criteria for zinc and copper; noting that knowing the hardness of the receiving water is necessary to determine the numeric criteria for dissolved metals in stormwater; noting Ecology and the Port's argument that sampling both upstream and downstream of discharges is needed to establish a violation of the water quality standards for metals in the receiving waters; and finding the permit's lack of required monitoring to result in, at best, confusing and at worst, inaccurate data. Neither Ecology nor the Port appealed Condition 2 of the PCHB Order.

The only requirements in the new NPDES permit for sampling stormwater above and below stormwater outfalls, and for monitoring the hardness of receiving waters, are found in

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

Part II, Cond. S6, "Comprehensive Receiving Water and Stormwater Runoff Study." Exh. 1 at 53-55. These study-related requirements fail to implement the Board's Condition 2, because they do not apply to the Port's ongoing sampling of stormwater, to which Condition One of the Board's Order was addressed. The study requirements do not address the systemic deficiencies the Board identified in the Port's monitoring program. And, as discussed further under Issue 28 below, the study requirements are inadequate because they do not enable the Board or others to determine whether the Port's stormwater discharges are causing or contributing to violations of water quality criteria for zinc and copper in the receiving waters.

27. Does the permit fail to implement Condition 3 of the PCHB's 401 Order, requiring sublethal toxicity testing? (¶¶ 4jj, 5jj)

Condition 3 of the PCHB Order imposed the requirement of testing stormwater quality for injury to sensitive organisms, as well as mortality of those organisms. The Board reviewed the toxicity testing conducted pursuant to the then-existing (now previous) permit, and concluded "Testing for mortality, but not testing for impairment, or loss of function, we find does not measure injury to existing beneficial uses." The Board therefore "added" a condition to monitor and measure "not only mortality, but impairment and loss of function of the tested organisms." Ecology did not appeal Condition 3 of the Board's Order, and the Port abandoned its appeal of Condition 3.

The previous permit required acute toxicity testing of stormwater, including whole effluent toxicity testing of an unmodified sample of final effluent. *See,* Exh. 2. The new permit addresses the "sublethal toxicity" testing requirement in permit Part II, Cond. S8.

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

(Exh. 1 at 60-62.) As evidence to be introduced at Hearing will demonstrate, this permit term fails to implement Condition 3 of the PCHB Order because it allows the Port to conduct sublethal toxicity testing on "stormwater discharges reflected as in-stream samples" rather than on the actual stormwater discharges themselves. The permit also fails to define "sublethal toxicity," and thereby fails to assure that the Board's intent to monitor and measure "not only mortality, but impairment and loss of function of the tested organisms" will be satisfied.

Further, Cond. S8 requires testing for sublethal toxicity on arbitrary dates (May 1, 2004 and an unspecified date six months later), and fails to assure that testing for impairment and loss of function will take place during an aircraft or ground de-icing event.

Comprehensive Receiving Water Study

28. Are the permit provisions governing the Comprehensive Receiving Water Study illegal, inadequate, or otherwise unlawful? (¶¶ 4ff, 5ff; 4gg, 5gg; 4hh, 5hh)

The permit provisions governing the "Comprehensive Receiving Water and Stormwater Runoff Study" ("CRW Study") are contained in permit Part II, Cond. S6 (Exhibit 1 at 53-55). The study requirements are illegal, inadequate, or otherwise unlawful in part because they do not require the Port to evaluate the impacts of deicing chemicals in the receiving water, and because they do not require the Port to determine whether its stormwater discharges are causing or contributing to exceedances of numeric water quality criteria in the receiving waters. Like the inadequate Facility SWPPP discussed in Issue 32 below, the CRW Study largely disregards the essential nature of the permitted facility -- the

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

fact that Sea-Tac is a major air transportation facility conducting deicing activities, and that chemical deicers and anti-icers exert biochemical oxygen demand in the receiving waters.

As a result, Cond. S6 does not require the Port to address BOD, COD, or dissolved oxygen in the CRW Study. Exh. 1 at 54. Moreover, of the outfalls specifically mentioned in Cond. S6, the study requires the Port to include only a single, relatively minor airfield outfall -- SDS4. Cond. S6 does not require the Port to study discharges from SDS3, which drains an area over seven times greater than that drained by SDS4. (*See,* Exh. 81 at Table 1.) In addition, Cond. S6 does not require the Port to evaluate grab samples taken during the first thirty minutes of stormwater discharge. Exh. 1 at 54.

With respect to water quality standards, Cond S6 does not require the Port to take time-averaged samples needed to determine compliance with acute and chronic numeric criteria. *Id.* Under Washington's water quality standards for toxic metals, compliance with acute criteria is assessed over a one-hour period. *See,* WAC 173-201A-040 (Note c). Compliance with chronic standards is assessed over a four-day period. WAC 173-201A-040 (Note d). But Cond S6 does not require the Port to conduct monitoring averaged over these time periods. As a result, the Study will generate information that is legally irrelevant.

In addition, as discussed under Issue 17.e above, Cond. S6's provisions regarding the development of an "action plan" for Lake Reba and the Northwest Ponds are vague, unstructured, and not tied to any specified milestones or completion deadlines. Cond. S6's provisions regarding Ecology's review and approval of the study plan are likewise vague and inconclusive.

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

Cond. S6 is also illegal, inadequate, or otherwise unlawful because the Port is given far too much time -- 46 months -- to complete the CRW Study and submit the final report, with the result that addressing any identified concerns during the present permit cycle will be impossible. In contrast, the 1997 Stormwater Receiving Environment Monitoring Report was required to be designed and completed within 3 years of the permit issuance date. *See,* Exh. 3.

Other

29. Is the permit illegal, inadequate, or otherwise unlawful because it is based on an inadequate Permit Application? (¶¶ 4c, 5c; 4kk, 5kk)

At Hearing, evidence and witness testimony will confirm that the Port did not provide the detailed information required by federal regulation -- and by the explicit permit application instructions (*see*, Exhs. 22-27) -- when it applied to renew the permit under appeal. The permit application itself confirms that the Port did not comply with the application instructions, and that the Port did not provide the information it was instructed to provide. Exh. 11.

For example, the Port did not provide information about: the average flow contributed by each operation contributing wastewater to Outfall 001; the maximum daily value of chemical oxygen demand in the IWTP effluent; or the maximum daily value of total organic carbon in the IWTP effluent. Exh. 11 at Page V-1. Contrary to instructions, the Port did not provide any information about bromide, chlorine, color, fluoride, or nitrate-nitrite in the IWTP effluent; any information about 2,3,7,8-Tetrachlorodibenzo-P-Dioxin in the IWTP

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

effluent; or any information about nineteen (19) of the pollutants listed on Page V-2 of EPA Form 3510-2C. Exh. 11 at V-2, V-3.

Likewise, the Port did not provide required sampling data concerning stormwater pollutants. For example, the Port did not provide: maximum or average values for a grab sample taken during the first 30 minutes for BOD, COD, TSS, total organic nitrogen, total phosphorus, copper, lead, or zinc for twelve (12) or more different stormwater outfalls; or maximum or average values for flow-weighted composite samples for COD, total organic nitrogen, total phosphorus, fecal coliform, fluoride, or surfactants for thirteen (13) different stormwater outfalls. Exh. 11, Form 2F.

The Port's failure to provide required sampling data with its permit application is especially troubling because, as the NPDES permit fact sheet states, "The limits in this permit are based in part on information received in the application." *See,* Exh. 4. Indeed, Ecology's permit writer confirmed in deposition testimony that he relied on the information provided in the Port's permit application in establishing permit limits. *See,* Exh. 70.

30. [Withdrawn by letter dated July 2, 2004.]

31. Is the permit illegal, inadequate, or otherwise unlawful because it fails to protect marine sediment quality? (¶¶ 4m, 5m)

The NPDES permit must assure that the discharges authorized by the permit do not violate the sediment quality standards of WAC 173-204. This requirement is addressed by permit Part I, Condition S12. (Exh. 1 at 34.) However, Cond. S12 does not assure compliance with marine sediment quality standards, because it does not require the Port to

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

determine the actual status of the sediments near the IWTP's marine outfall. Instead, the permit allows the Port to resubmit sediment sample data taken many years ago.

As will be established at Hearing, Cond. S.12.C allows the Port to resubmit a "Sediment Data Report" based on sampling conducted in April 1995 and October 2000. *See,* Exh. 67 at 14 (Ecology's Response to Appellant's Interrogatory No. 22). Moreover, the data was previously rejected as "not adequate." *Id.*

In addition, Cond. S.12.A directs the Port to follow the outdated guidance provided in the "Sediment Source Control Standards User Manual, Appendix B: Sediment Sampling and Analysis Plan (Ecology, 1995)", rather than the guidance provided in the "Sediment Sampling and Analysis Plan Appendix", as revised in April, 2003. In these respects, Cond. S12 fails to adequately protect marine sediment quality.

32. Is the permit illegal, inadequate, or otherwise unlawful because the Stormwater Pollution Prevention Plan (SWPPP) provisions are inadequate for an air transportation facility conducting deicing activities? (¶¶ 4ee, 5ee)

In the Stormwater Multi-Sector General Permit for Industrial Activities (MSGP) (Exh. 82), EPA established minimum requirements for Stormwater Pollution Prevention Plans for air transportation facilities conducting deicing activities. *See,* 65 FR 64746, 64844-45. Comparing the two confirms that the permit's SWPPP requirements do not satisfy the minimum requirements mandated by the MSGP.

The Stormwater Pollution Prevention Plan (SWPPP) provisions are contained in Part II, Cond. S.5 of the Port's NPDES permit. (*See,* Exh. 1 at 46-53.) The permit's "General Requirements are stated in subsection A (Exh. 1 at 46-48). Comparing the General

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

Requirements set forth in the MSGP with those included in the permit confirms the latter is deficient with respect to: drainage area site map requirements; description of potential pollutant sources; certification regarding allowable and prohibited non-stormwater discharges; description of sampling data; nonstructural controls for minimizing exposure; requirement that all BMPs identified in the SWPPP be maintained in effective operating condition; description of comprehensive site compliance evaluations; requiring consistency with state, tribal, and local plans; requiring documentation of permit eligibility with regards to ESA and NHPA requirements; requiring keeping a copy of the permit with the SWPPP; and requiring recordkeeping and keeping the SWPPP current. In short, the permit is not up to snuff, and does not require the SWPPP elements that EPA has determined are necessary and appropriate.

Specific "SWPPP Contents and Requirements" are identified in permit Cond. S5.B (Exh. 1 at 49-53). Comparing the specific requirements for air transportation facilities conducting deicing activities set forth in the MSGP with the SWPPP requirements in the Port's permit indicates the latter is materially deficient. Unlike the MSGP, the permit does not require descriptions of good housekeeping measures relating to: aircraft, ground vehicle and equipment maintenance areas; aircraft, ground vehicle and equipment cleaning areas; aircraft, ground vehicle and equipment storage areas; material storage areas; and airport fuel system and fueling areas. Exh. 1 at 51. In addition, the permit SWPPP requirements relating to source reduction are not designed to address runway deicing operations, aircraft deicing operations, and management of runoff. Exh. 1 at 52. The permit SWPPP requirements are also deficient with respect to specifying the frequency of required inspections, and requiring

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

that comprehensive site compliance evaluations be conducted during periods of actual deicing operations. *Id.*

In short, the permit-required SWPPP provisions are not designed to address the airport's high-volume use of deicing fluids and ground-based anti-icing and deicing chemicals. The permit has not kept pace with EPA-mandated advances in stormwater pollution prevention and control for air transportation facilities conducting deicing activities.

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

33. Are the permit provisions reserving the authority to informally modify the permit terms illegal, inadequate, or otherwise unlawful? (¶¶ 4ll, 5ll)

In numerous places, the NPDES Permit reserves to Ecology the authority to informally modify specific requirements of the NPDES permit by, for example, qualifying a requirement with the phrase "unless otherwise . . . approved in writing by the Department of Ecology[.]" *See, e.g.,* Exh. 1 at 15 (Cond. S2.B.), 41 (Cond. S.1.F.), 47 (Cond. S.5.A.4.), and 68 (Cond. S.1.C.). However, federal and state regulations set forth mandatory requirements for major and minor modifications of NPDES permits. *See, e.g.,* 40 CFR 122.62, 122.63, 124.5, 124.6, 124.8, 124.10, 124.11, 124.12, 124.17, 124.53, 124.56, 124.57; and WAC 173-220-050, 060, 150, and 190. Ecology's use of the phrase "unless otherwise . . . approved in writing by the Department of Ecology" indicates Ecology has attempted to reserve the authority to approve measures other than those specified in the permit without first satisfying the substantive and procedural requirements for permit modifications set forth in the state and federal regulations just cited. This attempted reservation of authority conflicts with the plain language of the state and federal regulations, and has been rejected as contrary to law by the Pollution Control Hearings Board. *See, Puget Soundkeeper Alliance et al. v. Ecology*, PCHB No. 02-162 at ¶¶ XXXV-XXXVIII (Order Granting Partial Summary Judgment, June 6, 2003).

CONCLUSION

For the many reasons identified above and to be demonstrated at the Hearing, the permit is invalid. Under WAC 371-08-540, the Board should remand the permit to Ecology.

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883

DATED this 6th day of July, 2004.

SMITH & LOWNEY, P.L.L.C.

By: _____
Richard A. Poulin, Of Counsel
WSBA # 27782
Attorneys for Appellants
Airport Communities Coalition
Citizens Against Seatac Expansion

Smith & Lowney, P.L.L.C.
2317 EAST JOHN STREET
Seattle, WA 98112
(206) 860-2883