Luster

Pre-Filed Testimony of Thomas R. Luster

Submitted on behalf of Appellant
Airport Communities Coalition

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

February 22, 2002

INTRODUCTION:

I am submitting my testimony in this matter to provide the Board the benefit of my several years of experience as Ecology's senior expert on water quality certifications and my associated experience as the agency's lead reviewer on the certification that is the subject of this appeal.

My testimony includes a brief citation of my qualifications and experience; several general concerns I have about aspects of the proposed project and Ecology's certification that do not meet the necessary requirements of Section 401 of the Clean Water Act and the state water quality standards; and, specific examples of where the proposed project and the certification do not comply with the applicable requirements.

I raised several of these issues previously as part of my declarations (Exhibits A and B) and deposition (Ex. C) in this appeal, and will reiterate and summarize some of those issues discussed previously. Those documents are key elements of this prefiled testimony. Later in this document, I will also discuss in some detail two significant changes that have occurred since I provide my declarations several months ago. First, the Port submitted an update of its Low Flow Augmentation Plan, as required in Condition I of the certification. This Plan continues to be speculative, and offers about the same level of detail and certainty as did the Plan submitted in July 2001, which was itself not sufficient to provide reasonable assurance. This most recent plan also shows that flows in Des Moines Creek will continue to not support beneficial uses. Second, earlier this month, Ecology issued an NPDES permit for another facility that requires some of the same measures the agency says it cannot require of the Port. By Ecology not requiring these measures of the Port, it is resulting in ongoing violations of water quality standards at the airport that are not rectified through Ecology's certification decision.

QUALIFICATIONS AND EXPERIENCE:

I invite the Board to assess my qualifications for providing this testimony. As stated previously in my declarations and deposition, from 1993 until 2001, I was a part of Ecology's federal permits unit reviewing proposed projects requiring water quality certifications. From 1998 until 2001, when I left the agency, I served as Ecology's expert for matters related to water quality certifications. My job description at Ecology (Exhibit #202) stated that I was the "...senior expert to the Shorelands and Environmental Assistance Program and the Department of Ecology on technical and policy issues related to Section 401 of the federal Clean Water Act (CWA), Coastal Zone Management Act (CZMA) Consistency Determinations, and coordinated state responses under Executive Order 81-18." It further stated that I was to represent the agency as its lead policy and technical advisor on legislative, interagency, and project-related issues having to do with water quality certifications and other associated permits and approvals.

Despite some testimony from Ecology to the contrary, my job description, along with the numerous e-mails and other documents developed during Ecology's review, clearly indicates that I was expected to fully participate in the agency's review and deliberations on this proposed project, and that I did participate in that manner. I led discussions on various issues with other experts, I was involved in the numerous questions and debates that came up over the course of Ecology's review, and I established various agency positions on both this proposed project and on issues more broadly applicable to 401. For example, it was through my involvement (along with other experts) that the agency established the need for the Port to provide wetland mitigation within the affected watersheds rather than concur with the Port's initial proposal to focus its mitigation out of those watersheds. I also determined that there was a need for low flow augmentation in the Des Moines Creek basin, and recommended that the agency hire experts

from King County to help review the Port's stormwater proposal. I was intensively involved for at least two years in developing the agency's policy between the Water Quality and Shorelands Program on the interaction between water quality certifications and NPDES permits, an issue that came from my early involvement in the proposed airport expansion. My role, therefore, was certainly much more than a facilitator or compiler of other experts' opinions, and in fact, I was fully involved as a senior staff member during my several years of reviewing this proposal.

I also wish to briefly clarify some of the reasons that I am continuing to stay involved in this matter. During the majority of my years with Ecology, I worked to help develop its federal permitting program. During the last several years of that time, I spent a significant amount of time reviewing the Port's proposals for the airport expansion. I believe I have a continuing professional responsibility to address the commitments I made to the agency, to the Port, and to the various interested parties regarding my work during that time both to develop water quality certifications as an appropriate regulatory mechanism and to make a defensible decision on this particular proposal. In addition, based on my experience with, and knowledge of, the regulations and practices that apply to this proposed project, I believe that the current certification, if upheld, would result in violations of water quality standards rather than compliance with those standards, and would establish a poor precedent for future certification decisions by Ecology.

As a closing comment on my experience and previous involvement with the proposed project, I wish to state again, as I did in my declarations, that I reviewed this proposal from as unbiased a position as I could. I am not now nor was I then a proponent or opponent of the third runway or the airport expansion. My role in the review was to determine whether the proposal met the applicable aquatic protection regulations – if it did, Ecology would issue a certification; if it did not, Ecology would have to deny certification. In fact, despite some of Ecology's

statements to the contrary, I believe my extensive review of the proposal over several years showed that I was interested in providing Ecology with a thoroughly defensible decision. I was aware from the significant amount of staff time and resources Ecology dedicated to reviewing this proposal that the agency was clearly interested in a similar goal. I was also aware of a preference on the part of many at Ecology that the agency issue a certification rather than a denial; however, at several points in my review, I was able to successfully convince Ecology's management that such a decision was not yet defensible, and that I would continue to work towards defensibility. As I stated in my deposition, I was not aware that my removal from the third runway review team was a topic of discussion between the Port and Ecology until January and February of this year when I read several declarations from Ecology's staff and management.

OVERARCHING CONCERNS:

My primary concerns about Ecology's certification are that it is not based on the required standard of "reasonable assurance"; it does not adequately address the direct, indirect, and cumulative impacts of the proposed project as required by both the Clean Water Act and state water quality standards, and it does not comply with several goals and specific provisions of the federal and state water quality requirements. I discuss these concerns in greater detail below and in my attached declarations.

The water quality certification does not meet the standard of "reasonable assurance" necessary to comply with Section 401 of the Clean Water Act: Section 401 of the Clean Water Act requires that issuance of a water quality certification be based on "reasonable assurance." The PCHB defined reasonable assurance in its Order granting a stay on this certification as "reasonably certain to occur," and "[s]omething more than probability; mere

speculation is not sufficient." The 401 Desk Manual (Deposition Exhibit 207), for which I was lead author, and that Ecology has testified was used as the basis for its finding of reasonable assurance on this certification, further states that reasonable assurance involves a two-step process: first, determine through a preponderance of evidence that water quality standards can and will be met, and identify any areas of uncertainty; and second, address those areas of uncertainty by including measures that will remove or reduce the uncertainty. Both the Desk Manual and my previously-provided declarations go on to provide more detail on how these steps should be implemented, and make it clear that the first step needs to be completed before moving to the second step.

In issuing this certification, Ecology did not address many of the impacts associated with the proposed project that are currently adversely affecting water quality or that will adversely affect water quality as a result of the project. The agency also identified a number of significant impacts during its review and in the certification, but required only that they be handled through future submittals by the Port. This approach is highly speculative, and does not meet the need for reasonable assurance to be based on information available at the time of certification. This is even more problematic, given that the Port submittals since the certification was issued still do not provide the necessary level of information needed for reasonable assurance.

Ecology has also offered testimony stating that a major basis for its finding of reasonable assurance in this case is that the certification includes a condition stating that water quality standards must be met. However, reasonable assurance requires more than a declaration that standards must be met – it needs to be based on an orderly assessment of available facts leading to support of a conclusion. The level of certainty required for reasonable assurance is based on information available at the time of the review and the decision, not on speculation over what

some future source of information might suggest. Ecology issued the certification with requirements for a significant number of future submittals to address various impacts, mitigation measures, and monitoring requirements associated with the proposed project. While Ecology has sometimes stated that these future submittals are needed only for clarification, it is clear from deposition testimony provided by Ecology's witnesses that significant doubt remains as to how various impacts will be adequately identified, mitigated, and monitored to ensures water quality standards will be met. While in some cases, these future submittals may turn out to be adequate to ensure water quality standards are met, in other cases, they clearly will not unless both Ecology and the applicant go far beyond the stated requirements in the certification.

The orderly assessment of facts required to reach a determination of reasonable assurance can be carried out in several ways. One process is to:

1) Identify impacts to aquatic resources. The Clean Water Act and the water quality standards require that this evaluation include direct, indirect, and cumulative impacts associated with the proposal and the affected waterbodies.

2) Determine whether those impacts can be mitigated. Once impacts are identified, Ecology needs to determine whether they can be mitigated through avoidance, minimization, and compensatory mitigation.

3) If they can be mitigated, ensure the necessary mitigation measures will occur.

Reasonable assurance also requires a high degree of certainty that necessary mitigation measures will be carried out, and that monitoring and contingency measures are in place as part of that assurance. In its review and issuance of this certification, Ecology did not adequately address impacts, did not adequately determine whether impacts could be mitigated, and did not ensure necessary mitigation measures would occur. While Ecology's review did result in a

number of findings that will require various mitigation measures to be completed, its review and certification falls far short of assuring water quality standards will be met. Many of the shortcomings are due to insufficient review of available information and many others are due to delaying resolution of significant issues until some future date, if ever. The insufficient review of currently available information results in a much reduced ability for the proposed project and the nearby waterbodies to meet water quality standards, and the delay in resolving significant issues means Ecology's claim of having reasonable assurance is based largely on hope and speculation that future submittals might somehow be adequate to ensure water quality standards are met.

This approach of requiring future submittals to identify impacts, mitigation, and monitoring measures provides even less assurance when the proposed monitoring is to be submitted in support of proposed mitigation that has not yet been identified, reviewed, or approved. For some elements of this proposed project, Ecology has put off completing each of the three review steps above until some time in the future. Not only does this prevent Ecology from having reasonable assurance, it does not meet the requirements of 401(d), which requires all certifications to include necessary measures to ensure water quality standards are met along with the monitoring necessary to determine the standards are met.

Even if this approach of basing reasonable assurance on future submittals was in some way acceptable, the submittals provided by the Port since the certification was issued last September fall far short of assuring that water quality standards will be met -- in fact, for the most part, they maintain the same high degree of uncertainty that existed at the time of certification.

Reasonable assurance and the July 1998 certification: Ecology has spent some time arguing that the current 401 is better than the one originally issued to the Port in July 1998, and that because the agency issued that original 401, it should be alright to issue the current one. Regarding the first point, it is clear that for some elements of the proposed project the 1998 certification (Ex. E) includes more stringent requirements than the current certification. For example, the 1998 certification would have required the Port to "double up" its stormwater treatment BMPs, based on findings of a Reasonable Potential Analysis study Ecology did on the Port's stormwater discharges (Ex. F). This "doubling up" may still not have resulted in stormwater discharges always meeting the applicable criteria, but would have increased the likelihood that criteria would be met more often. The current certification essentially allows the Port to continue using the same BMPs that Ecology found were inadequate several years ago and that are continuing to result in violations of water quality criteria (see additional testimony on this point later in this document).

Regarding the second point, Ecology's argument seems to be that because it issued an inadequate certification several years ago, it should be alright to issue another one. As I testified previously in my declarations and deposition on this matter, the 401 issued in 1998 dealt with a very different set of circumstances and a different understanding of the impacts involved with the Port's proposal. It was also issued prior to the PCHB's ruling in Okanogan Highlands Alliance vs. Ecology, which established a more stringent limit on Ecology's dependence on future submittals and future permits to deal with known or predicted impacts to aquatic resources. Based on my experience and knowledge of both the Okanogan case and the Port's certification, I believe the 1998 certification would be considered inadequate today, and I would not again recommend issuance of such a permit.

The certification is not based on an adequate assessment of direct, indirect, and cumulative impacts associated with the proposed project: Despite extensive documentation of existing impacts to local waterbodies, effects of the current and proposed Port operations, and known or likely associated proposed projects that would result in further adverse effects to nearby waterbodies, Ecology chose to inappropriately limit the scope of its review under this certification. As a result, the certification will result in ongoing noncompliance with water quality standards in affected waterbodies and by the airport, and does not comply with federal and state requirements.

As I stated in previous declarations, Ecology initially included in its review of this proposed project other known or probable projects that would affect, or be affected by, the proposed airport expansion. This is an appropriate and necessary part of Ecology's review under the Clean Water Act and water quality standards, since both state and federal requirements recognize the need to determine the direct, indirect, and cumulative impacts of proposed projects to aquatic resources. It is also appropriate given Ecology's stated interest in having the agency take more of a "watershed approach" to decision-making in all or most of its programs.

Three primary examples of proposed projects that Ecology initially determined should be included in the Port's certification review are the Port's Industrial Waste System expansion, the extension of State Route 509 and associated construction the airport's South Access Road, and the Regional Detention Facility. These are all on Port property at the south end of the airport, immediately adjacent to the areas affected by the airport's expansion activities covered under the certification, and immediately on or adjacent to significant areas of surface waters, including Des Moines Creek and the Northwest Ponds, which form one of the single largest remaining wetland complexes in the watershed.

These each should have been fully incorporated into the certification decision-making process, as they would clearly affect, and be affected by, the Port's proposed expansion, and would result in direct, indirect, and cumulative impacts to the same waterbodies that would be affected by the Port's proposed project. All three were initially included, but later inexplicably dropped from the review, even as they each became more defined and detailed as they moved through their various design and review processes.

Another significant example of Ecology neglecting part of its review of direct, indirect, and cumulative impacts is the Port's clearing, grading, and fill placement that have already occurred on the west side of the airport in anticipation of getting its certification and Corps of Engineers permit. Section 401 of the Clean Water Act states that a certification is to cover the construction and operation of a facility, not just placing fill in a wetland. By ignoring the extensive landscape alterations that have already occurred at the airport and that are only occurring because of this proposed project, Ecology did not meet the Clean Water Act requirement to assess the impacts of the whole proposal. These extensive changes that occurred without benefit of Ecology's certification review include removal of large areas of vegetation, construction of very large stormwater detention facilities, and large-scale grading, all of which result in changes to stream and wetland hydrology, but none of which have been evaluated adequately to determine impacts and necessary mitigation measures.

It is clear from Ecology testimony (see, for example, the Hellwig and Kenny depositions) that the agency did not know the full scope of the proposed project, related impacts, and necessary mitigation at the time of certification, and does not yet know the full scope of the proposal needed to be reviewed and certified under the 401, even nearly half a year after certification. For example, at the time of certification, Ecology did not know with any certainty

what design, contaminant treatment method, or flow control requirements would result from the Port's conceptual low flow augmentation proposal. It also did not know with the required degree of certainty what the Port would propose as mitigation for the 2.05 acres of wetland impacts described in certification condition D.4. As stated previously in my declarations, it is not acceptable for purposes of 401 to provide a certification, and then to later decide on the scope of the project being certified. Neither is it appropriate to find that a proposed project will result in impacts, but to then issue a certification allowing mitigation for those impacts to be determined at some future date.

As part of its review, Ecology reviewed a number of documents related to the airport, the proposed project, and the conditions of the nearby waterbodies. Many of these documents showed that several waterbodies that would be affected by the proposed project were already not meeting water quality standards. For example, the Des Moines Creek Basin Plan, the Port's Discharge Monitoring Reports (DMRs), various SEPA-related documents, and the Port's de-icing study ("Examining the Effects of Runway Deicing on Dissolved Oxygen in Receiving Waters: Results of the 1999-2000 Winter Season," by Port of Seattle, dated November 2000) showed that ambient conditions in nearby streams and associated wetlands were not meeting water quality standards for such things as temperature and various contaminants, and were not supporting beneficial uses in these waterbodies due to those exceedances and due to extreme high and low streamflows. These and other documents also showed that the watersheds had a high percentage of impervious surfaces and a significant percentage loss of wetlands. More recently, other publications have cast additional doubt on the likelihood that this proposed project and Ecology's decision will result in water quality standards being met – for example, Ecology's recently published report on the high rate of failure of mitigation wetlands, more

recent evidence of widespread arsenic contamination in soils in Pierce and King County, and others.

The certification does not adequately acknowledge the local waterbodies' existing noncompliance with water quality standards, and it does not include measures adequate to ensure those waterbodies will ever meet water quality standards. For example, Ecology's approach of allowing the majority of wetland mitigation to occur outside the watershed of the affected waterbodies clearly goes against supporting their needed levels of beneficial uses in those waterbodies. The proposal for wetland mitigation occurring primarily outside the locally affected watersheds was largely a residual of the Port's initial contention that the Federal Aviation Administration would not allow any wetland mitigation within 10,000 feet of active runways due to safety concerns. When the various agencies involved in reviewing the proposal determined that wetland mitigation was allowable and appropriate near the airport and would also allow for the needed aircraft safety, the Port had already made significant commitments to the out-of-watershed mitigation site; thus, the Port's current Natural Resource Mitigation Plan does not focus sufficiently on the needs of the local watersheds. As a result, the uncertainty about whether various elements of the Port's current mitigation plan will work may result in Ecology essentially "writing off" the locally affected waterbodies. This approach clearly does not comply with requirements for antidegradation, support of beneficial uses, and other specific elements of the water quality standards. For the most part, Ecology's review and certification does not acknowledge the baseline conditions in receiving waters described in these various documents and therefore falls short of ensuring compliance with the water quality standards.

Another example is in Ecology's treatment of the Northwest Ponds, located just south of the airport and adjacent to some of the Port's proposed wetland mitigation sites. The Port's de-

icing study showed that discharges from the Port are resulting in water in the Ponds with levels of metals in excess of water quality criteria. These Ponds are the largest remaining wetlands in the immediate vicinity of the airport. However, rather than address this impact and identify necessary mitigation measures, Ecology removed consideration of the Northwest Ponds from the certification review. The result is an ongoing impact that will likely increase with additional discharges from the Port. Another result is that Ecology is essentially granting the Port a de facto mixing zone for its discharges without requiring compliance with provisions in the water quality standards that address how mixing zones are to be established.

The certification does not comply with Section 401(d) of the Clean Water Act: Section 401(d) of the Clean Water Act states in part that all certifications must include effluent limitations and monitoring requirements necessary to ensure an applicant complies with applicable water quality standards. The certification for this proposed project does not require the applicant to meet effluent limitations for several of its discharges and does not include monitoring requirements for many aspects of the proposed project. For some of the discharges from this proposed project, the certification requires the applicant to submit future proposals on how they intend to meet effluent limitations or monitor for compliance with water quality standards, but these requirements for future submittals are merely speculative and clearly do not meet the directly stated requirements of 401(d).

SPECIFIC CONCERNS:

In addition to the overarching concerns above, I have several concerns about specific elements of Ecology's certification and the Port's proposed project. The elements below show that particular aspects of the certification do not comply with specific sections of the applicable federal or state regulations.

The Port's proposed stormwater management plan will not result in required compliance with water quality standards and with water quality criteria: As stated above, Section 401(d) of the Clean Water Act requires that all certifications include effluent limits and monitoring requirements to ensure water quality standards will be met. In Washington State, the applicable effluent limits are contained in the criteria of WAC 173-201A-040 and other sections of the water quality standards. The certification issued for this proposed project does not include measures adequate to ensure that the Port's discharges and the local waterbodies will meet required water quality criteria. This lack of necessary measures will also result in several beneficial uses not being supported.

During its review, Ecology had available a number of documents regarding existing contaminant levels in nearby waterbodies and in the Port's discharges. These included the Port's Discharge Monitoring Reports (DMRs), the Port's de-icing report, the Reasonable Potential Analysis ("RPA"), the Des Moines Creek Basin Plan, and others. The DMRs provided monitoring data required pursuant to the Port's NPDES permit, which Ecology has since incorporated into the certification. The de-icing study was provided by the Port in response to Ecology concerns about low dissolved oxygen levels in the Northwest Ponds. Results from this study showed the Port's discharges resulted in elevated levels of metals in those ponds. The RPA, done in response to sampling results in those DMRs, showed that the BMPs the Port used to treat stormwater runoff were resulting in exceedances of criteria for several contaminants, including copper.

Generally, these documents showed that the Port's discharges and ambient conditions in the nearby receiving waters had levels of various contaminants exceeding the water quality criteria. These documents provide the majority of information available to Ecology when the

agency reviewed the several Port applications for certification. I am not aware of any testimony offered by Ecology or the Port that shows the findings in these various reports has been changed or refuted.

As a result of the information in these documents, Ecology required in its July 1998 certification that the Port "double up" on stormwater treatment BMPs to reduce the contaminant levels so that discharges could meet the applicable criteria. For example, rather than just routing runoff through a bioswale, the Port would have been required to route runoff through a bioswale and a sand filter or some other BMP.

Subsequent events resulted in the Port withdrawing its application, but Ecology said then that conditions of that 401 would at the very least serve as a baseline for any future certifications. However, the BMPs being required of the Port in the most recent certification fall short of those required in that July 1998 certification, even though there has been no documentation provided showing that the more recent and less stringent BMPs required in the current certification will result in compliance with water quality criteria. In fact, the available documentation strongly suggests that the currently required BMPs will result in violations of water quality criteria.

These currently required BMPs are based primarily on those required under the King County stormwater manual. Testimony provided by Ecology and others in this appeal make it clear that compliance with the King County manual or the Ecology stormwater manual does not ensure compliance with the water quality standards. When Ecology initiated its review of the Port's proposed stormwater management plan for compliance with requirements of the King County manual, the agency made it clear that this was to be a first step in the review, and that the Port could expect additional BMPs to be required above and beyond what was likely to be

required through the manual. Despite this, and despite evidence provided by the documents mentioned above showing the existing and proposed BMPs resulted in exceedances of criteria, Ecology accepted the Port's stormwater plan as adequate for purposes of compliance with Section 401 requirements and with water quality standards.

As a result, exceedances from existing discharges are likely to continue and new discharges are likely to result in similar exceedances. For example, the Northwest Ponds, as waters of the state, are subject to the numeric criteria in the water quality standards. Ecology has not taken steps to reduce metals contaminant concentrations in the ponds, and the certification does not include conditions that would result in the ponds meeting water quality standards. Ecology is therefore essentially allowing the Northwest Ponds to serve as a de facto mixing zone for the Port and other dischargers without undergoing the necessary review for compliance with water quality standards, including the numerous requirements that must be met before establishing a mixing zone.

A much more significant shortcoming of Ecology's certification in this regard is its dependence on conditions of the Port's NPDES permit to ensure compliance with requirements of Section 401 of the Clean Water Act. Ecology's claims that stormwater discharges will meet water quality standards are based largely on monitoring done in response to the requirements of the NPDES permit issued to the Port. Ecology stated in its initial brief in this appeal that while the Port's stormwater discharges have exceeded water quality criteria on an instantaneous basis, there is no evidence that they have violated water quality standards. In support of this contention, Ecology's Fitzpatrick states that the monitoring requirements of the NPDES permit cannot be used to determine compliance with the standards.

There are several difficulties with Ecology's claims in this matter. First, as stated previously, reasonable assurance is supposed to be an affirmation by the agency, based on a majority of available information, that water quality standards will not be violated. The available documentation provided by the Port's monitoring results shows an ongoing history of discharges with various contaminants exceeding numeric criteria. These results have not been refuted by other data, and are part of a much larger set of data from the above-reference documents showing an ongoing pattern of exceedances. Ecology's testimony on these monitoring results, therefore, provides a choice among two alternative interpretations of the data:

1) If the data and monitoring are inconclusive and Ecology is indeed unable to confirm whether or not the discharges are meeting water quality criteria, the decision to depend on this data as the basis for its certification decision and its required conditions falls short of the affirmative finding necessary to reach reasonable assurance. Therefore, Ecology should not have issued the certification as it is currently constructed.

2) If the data and monitoring are instead conclusive and therefore adequate to determine whether discharges are meeting water quality criteria, then the results show a large number of violations of water quality criteria, and Ecology must ensure those violations are corrected before issuing a certification. Ecology cannot have reasonable assurance that a facility currently out of compliance with water quality standards will come into compliance if it receives a certification that results in additional contributions to the same problems already present. In this case, the proposed airport expansion would result in a net contribution to ongoing problems already occurring at the facility.

Ecology has chosen to interpret the monitoring results as being inconclusive. This is based in part on sworn testimony that the agency does not yet know how to ensure stormwater discharges comply with water quality criteria and does not yet know how to monitor stormwater discharges to determine compliance with water quality criteria. Therefore, its decision to issue a water quality certification based in part on the inadequacy of these stormwater monitoring requirements falls short of the reasonable assurance requirement.

Additionally, Ecology has stated that because of this uncertainty, it cannot include improved measures in the updated NPDES permit or the certification that would allow more conclusive monitoring results. The certification and associated NPDES permit therefore depend largely on the Port continuing to provide the same stormwater treatment BMPs and monitoring methods that currently exist at the airport and that currently result in ongoing discharges of contaminants in excess of the criteria. This then, falls short of complying with requirements of Clean Water Act Section 401(d), which, as stated above, requires that all certifications include effluent limits and mitigation requirements necessary to ensure and determine compliance. It is therefore inappropriate to issue a water quality certification without adequate monitoring requirements. Had Ecology chosen instead to interpret the monitoring results as conclusive and the monitoring as adequate to determine compliance with water quality criteria, then the agency would have had to deny certification, due to existing noncompliance and due to the absence of reasonable assurance that either the existing facility or proposed project would meet water quality standards.

The agency's choice to interpret the airport data and monitoring as inconclusive is made significantly more difficult with Ecology's recent issuance of an NPDES permit for another facility that implements almost exactly what Ecology states it cannot do at the airport. On

February 7, 2002, Ecology issued an NPDES permit to an industrial facility (#WA 0037953 to Cascade Pole and Lumber, in Tacoma – see attached Ex. D), that, among other things, requires stormwater discharges to meet numeric criteria and bases compliance with water quality criteria on instantaneous grab samples. Cascade Pole has apparently had a history of stormwater discharges in excess of various water quality criteria. This NPDES permit requires the discharger to meet effluent limitations in stormwater for arsenic, chromium, copper, pentachlorophenol, oil and grease, pH, polynuclear aromatic hydrocarbons, and total suspended solids. To determine whether the discharges are complying with these criteria, Ecology is requiring the permittee to sample the stormwater discharges once per month, including taking "first flush" samples to capture the likely maximum contaminant flows in stormwater being discharged from the facility.

The facility in question is similar to SeaTac airport in that they are both industrial facilities with identified high levels of contaminants in stormwater discharges. Without assessing the overall adequacy of this recent NPDES permit in its entirety, it is clear that Ecology believes it is appropriate to require Cascade Pole's stormwater discharges to comply with numeric criteria and to base that compliance on grab samples. Ecology also recognizes that the types and concentrations of contaminants in new stormwater discharges from the airport are likely to be similar to existing discharges, and recognizes that the Port's existing discharges sometimes exceed water quality criteria. It is not clear, however, why the same requirements applicable to Cascade Pole are not applicable to the airport.

The certification allows a "de facto" compliance schedule for new discharges, in violation of WAC 173-201A-160: Ecology is also providing the Port a de facto compliance

schedule for its new discharges, in violation of WAC 173-201A-160(4)(a). This section of the water quality standards states:

> "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. Decisions regarding whether to issue schedules of compliance will be made on a case-by-case basis by the department. Schedules of compliance may not be issued for new discharges." (emphasis added.)

By allowing the Port to treat new stormwater discharges using the same BMPs currently in place at the airport, Ecology should expect that the resulting contaminant levels from the new discharges will be no different from those in existing discharges. Since those BMPs are currently resulting in exceedances in the existing discharges, it is likely they will result in exceedances in the new discharges. The primary response Ecology offers to this situation is to condition the certification to assert that the discharges must comply with state water quality standards, and that if they don't, the Port may propose additional BMPs. Along with inadequately conditioning the certification to ensure criteria will be met, Ecology has allowed the Port to put off implementing improved BMPs for its discharges until some future date, including the new discharges that would result from the proposed project.

Ecology's approval of the proposed Low Flow Augmentation Plan is not based on reasonable assurance: The proposed Low Flow Augmentation Plan is highly speculative and does not provide reasonable assurance. Additionally, based on currently available information, the Plan is more likely to violate water quality standards than to meet them.

As is evident in the discussion above about the shortcomings of the Port's stormwater BMPs and the requirements of Ecology's NPDES permit, the Port's stormwater discharges are resulting in adverse impacts to receiving waters. Unfortunately, this same inadequately treated

stormwater serves as the basis for the Port's proposed Low Flow Augmentation Plan. And, perhaps ironically, the Port's plan does not provide enough of this inadequately treated stormwater to allow beneficial uses to be maintained and protected.

The Des Moines Creek Basin Plan describes Des Moines Creek as being subject to significant adverse impacts primarily due to the creek's heavily urbanized watershed. The Plan shows that the creek is subject to extreme high flows after precipitation events and extreme low flows in late summer and fall These types of flows are characteristic of watersheds in the Pacific Northwest that have a high proportion of impervious surfaces or have been subjected to a significant historic loss of wetlands, both of which affect a stream's ability to buffer the wide range in flow rates that occur over the course of a year. The flows in Des Moines Creek appear to be linked directly to the watershed's high percentage of imperviousness (over 30%) and loss of wetlands, and the low flows are well below levels supportive of fish and other aquatic life in the stream. The Plan also describes ambient water quality in the creek as exhibiting ongoing exceedances of various water quality criteria, and describes a number of ways in which the creek, a Class AA water of the state, is not fully supporting the beneficial uses expected to be found in those waters.

The certification Ecology issued in July 1998 for a previous version of this proposed project acknowledged this low flow problem by accepting the Port mitigation proposal to augment streamflows any time flows fell below 1 cfs (about 450 gallons per minute). This was in recognition of Ecology's obligation to ensure the waterbody met water quality standards, and was also based in part on the characteristics of the stream channel and watershed, which suggested that providing a minimum low flow of about 1 cfs would allow the creek to support fish life and other beneficial uses. At the time, the Port believed it had adequate water available

(through well water being used to irrigate the Tyee Golf Course) to support such a proposal, and had provided relatively detailed designs for a pump system that would deliver the necessary amount of water to the creek and relatively detailed site plans showing locations of pumps, transport systems, monitoring locations, and the like. Absent this mitigation from a willing permit applicant, Ecology informed the Port that it would have been difficult, if not impossible, for Ecology to find in its certification decision that Des Moines Creek was supporting water quality standards.

Since then, despite Ecology's claims that the July 1998 certification would serve as a baseline for any future certification, the current low flow augmentation proposal is much more speculative and would result in a much lower level of streamflow mitigation. As a result, the waterbody will likely continue to not support beneficial uses, and would therefore continue to not meet water quality standards. The low flow proposal the Port provided in July 2001 was highly speculative at the time Ecology issued its water quality certifications in August and September 2001, and it remains highly speculative, even after the Port submittal in December 2001 the updated proposal as required as a condition of the certification.

The concept behind the proposal is to capture partially treated stormwater, store it in underground vaults for several months along with ongoing inputs of additional stormwater and sediments, and then release the water in measured amounts to the affected waterbodies. Neither the July nor the December documents provide any degree of assurance that the captured contaminated stormwater will be adequately treated to meet water quality criteria, identify where the water will be discharged, or determine with any specificity whether the conceptual plan will work. They also do not identify the type or location of monitoring required and generally put off further determinations until development and completion of a pilot project several years from

now. This conceptual proposal clearly falls short of reasonable assurance, given that it is speculative, that it is significantly dependent on future submittals and completion of a pilot project some distance in the future, and that, according to Ecology testimony, no one is aware whether this highly problematic approach has been tried or been successful before.

Additionally, the current proposal, even if implemented according to concept, would result in far less flow augmentation that Ecology originally determined was needed to support beneficial uses. As stated above, the flow augmentation proposal included in the July 1998 certification would have resulted in minimum flows of 1 cubic foot per second (cfs) in Des Moines Creek. The current proposal now requires no more than about one-tenth of a cfs for flow augmentation, regardless of the existing level of low flow in the creek. During extreme low flows or during times in late summer where reaches of the creek may dry up completely, this amount of streamflow mitigation will be nearly meaningless in terms of supporting beneficial uses. If, for example, the creek is completely dry, a one-tenth cfs flow would provide much less than the minimum flow needed for fish and in warm weather would likely heat up to a level that fish would not survive. On the other hand, the requirement in the July 1998 certification requiring augmentation of up to 1 cfs whenever flows fell below that rate would maintain a continual baseline flow amount to allow continual support of beneficial uses. Also, the Port's current low flow proposal uses a 7-day average low flow to determine when augmentation water would need to be delivered to the creek, which is likely to be a much less protective standard that that in the July 1998 certification, which required water to be delivered whenever flows fall below an instantaneous measurement of 1 cfs.

Ecology does not have reasonable assurance that the Port's proposed wetland mitigation plan will result in water quality standards being met: Similar to the issue above,

Ecology used the same highly speculative approach in elements of the Port's proposed wetland mitigation plan. Certification condition D.4, for example, requires the Port to provide a future submittal to Ecology address significant shortcomings of the Port's July 2001 Natural Resource Mitigation Plan, elements that should be in place as a necessary part of the assessment used to reach a determination of reasonable assurance. Condition D.4 establishes that Ecology has determined there are 2.05 acres of wetland impacts not yet adequately addressed through Port mitigation. This impact represents roughly ten percent of the proposed project's direct wetland impacts. Rather than identify the necessary mitigation measures and monitoring requirements as part of its review for certification, Ecology merely required the Port to provide a conceptual mitigation plan in the future. Again, this does not comply with the reasonable assurance standard and, in addition, does not meet the specific requirements of Section 401(d).

Ecology does not have reasonable assurance that facility construction and operations in areas of contaminated soil and groundwater will ensure water quality standards are met: Again, similar to the above examples, Condition F of the certification describes Ecology's concerns that contaminated groundwater may be intercepted and transported in utility corridors to surface waters. Instead of requiring the Port during certification review to identify the type and extent of contamination present, the measures necessary to prevent the contamination from moving to nearby surface waters, and contingency plans that would be put in place should these measures fail, Ecology merely required the Port to provide a future submittal that it hopes will identify the known or likely impacts and will identify whether there are BMPs available to prevent or mitigate the associated impacts. From the language in this condition, it is clear that Ecology does not know the level or scope of the anticipated impact (e.g., what contaminants are expected to be found? at what concentrations? what pathways are they likely to

take to reach surface water? etc.), and does not have adequate assurances that such an impact can be mitigated. In response to this condition, the Port submitted its required proposed plan for dealing with this impact; however, the plan provides no assurance beyond what Ecology had available at the time of certification on the level and scope of the impact or on the measures that will be employed to deal with the impact. The recently submitted plan generally states that the Port will develop BMPs as needed when contamination is found, and will determine then what mitigation and monitoring measures should be used. The submittal, therefore, provides no more assurance about the eventual response to an anticipated impact than is provided in the already inadequate certification condition.

The certification's condition for fill criteria violate the state's antidegradation provisions:

In addition to several problems previously identified with Ecology's acceptance of the Port's placement of fill – inadequate sampling measures, timing Ecology's review to allow fill to be placed before the agency determines whether it meets the necessary requirements, and allowing the Port to already place tens of thousands of cubic yards of material without adequate review – the fill criteria included in the certification do not meet the antidegradation requirements of WAC 173-201A-070. The antidegradation section of the standards includes several requirements for maintaining and protecting existing water quality and existing beneficial uses in waterbodies. Placing fill using the criteria in the certification would violate the antidegradation provisions of the standards because it would introduce several contaminants into the nearby waterbodies at levels that would degrade the existing water quality. For example, the criteria allow the fill to contain total petroleum hydrocarbons (TPHs). The embankment is designed to allow groundwater to move through it and to percolate into nearby surface waters.

TPHs are generally mobile in the soil/groundwater matrix, and in fact, many cleanup sites around the state and nation are based in part on plumes of TPHs and other petroleum byproducts being carried along in groundwater flows. When these TPHs reach surface waters at levels above naturally occurring background, it would result in a violation of the subsection (4) of the antidegradation provisions.

In some instances, the antidegradation provisions allow for a lowering of water quality, but only after public participation and a specific determination by Ecology that the proposed discharges to the waterbodies meet "AKART" (which is shorthand for "all known, available, and reasonable methods of prevention, control, and treatment," as established in definitions under WAC 173-201A-020). However, it is clear in this instance that Ecology has not made that determination and has not ensured that AKART is in place. If AKART were to be applied to the discharge, Ecology would have to first determine whether there are known, available, and reasonable methods to prevent, control, or treat the fill to avoid this impact. Clearly, and most simply, the primary means to avoid this impact would be for Ecology to not allow fill containing TPHs. Because Ecology has not made the AKART determination necessary to meet this antidegradation provision, the fill criteria fall short of compliance with water quality standards. Further, I know of no reason related to compliance with water quality standards that would allow fill containing TPH to be placed in a wetland or in an area where contaminants could move through groundwater into nearby surface waters.

CLOSING:

In closing, it is clear that the preponderance of evidence available to Ecology during its review, at the time it issued the certification, and up until the present, show that:

- the receiving waters affected by both the existing and the proposed facility are not fully supporting beneficial uses;
- the discharges from the current facility are violating water quality criteria, and the discharges from the proposed facility are likely to continue violating water quality criteria and therefore cannot provide the basis for reasonable assurance; and,
- conditions of the certification will result in continued nonsupport of beneficial uses and continuing violation of water quality standards.

I am not aware of any information made available since the certification was issued that contradicts these findings.

It is clear that Ecology did not base its decision on the "reasonable assurance" standard required in Section 401 of the Clean Water Act, as defined by the Board, and as generally practiced by the agency in other water quality certification decisions. In addition, the certification violates specific provisions of both the Clean Water Act and of state water quality standards.

By issuing this certification, Ecology attempts to establish a new precedent that would not allow the state of Washington to meet its obligations to ensure clean water for its citizens. This certification, if it stands as issued, would allow Ecology to base its decisions regarding wetland fills, stormwater discharges, and other impacts to waters of the state on speculation and hope, rather than on technically-based findings and regulatory requirements. It would allow expedience to replace an orderly review of the facts at hand, and would result in the continuing degradation of Washington's waterbodies to the detriment of all citizens and others dependent on the "fishable, swimmable" waters envisioned by the Clean Water Act and the "highest possible

standards" meant to insure the purity of state waters, as envisioned by the Washington Legislature through the state's Water Pollution Control Act.

DATED this 22nd day of February, 2002.

Thomas R. Luster

Thomas R. Luster

Pre-Filed Testimony
of
Thomas R. Luster

INDEX TO EXHIBITS

A. Declaration of Thomas R. Luster, dated September 10, 2001

B. Reply Declaration of Tom Luster in Support of Stay, dated October 7, 2001

C. Deposition Upon Oral Examination of Thomas Luster, dated February 1, 2002

D. NPDES Permit No. WA0037953, dated February 7, 2002, for Cascade Pole and Lumber Company

E. 1998 401 Certification issued by Dept. of Ecology to Port of Seattle for Third Runway Project

F. 1998 Dept. of Ecology Reasonable Potential Analysis

EXHIBIT A

POLLUTION CONTROL HEARINGS BOARD
FOR THE STATE OF WASHINGTON

AIRPORT COMMUNITIES COALITION, Appellant, v. STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY; and THE PORT OF SEATTLE, Respondents.	No. 01-133 DECLARATION OF THOMAS R. LUSTER (Section 401 Certification No. 1996-4-02325 and CZMA concurrency statement, issued August 10, 2001, Related to Construction of a Third Runway and related projects at Seattle Tacoma International Airport)

Thomas R. Luster declares under penalty of perjury as follows:

1. I am over the age of 18, am competent to testify, and have personal knowledge of the facts stated herein. I have been asked to review the water quality certification that is the subject of this appeal and to provide the Board with information useful in determining whether the proposed project and the certification comply with applicable requirements of the federal Clean Water Act (CWA) and state water quality standards, and whether, consequently, the Board should issue a stay of the certification.

2. My professional background includes 12 years at the Department of Ecology (Ecology) working on water quality, wetland, and sediment-related issues. During my first four

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years at Ecology from 1989 to 1993, I worked in the Sediment Management Unit. I evaluated proposed freshwater sediment criteria, managed laboratory contracts related to developing these criteria, and conducted public education and outreach. I was part of the team that prepared the state's sediment management rule, which was adopted as part of the state's water quality standards in the early 1990s.

3. From 1993 until January 2001, I was a member of Ecology's Federal Permits Unit reviewing proposed projects pursuant to CWA Section 401 and the state's Coastal Zone Management Program (CZMP).

4. In 1998, based on my experience at the agency, Ecology appointed me senior policy and technical expert for issues related to Section 401 review, CZMP consistency determinations, and coordinated state responses under Executive Order 81-18, which directed Ecology to provide a state response to federal agencies. I remained in that position until January 2001. I provided statewide technical and regulatory guidance to Ecology staff and management on proposed projects that required federal and state permits and involved work in state waters, including wetlands. My responsibilities included developing policy, preparing rules and guidelines, responding to legislative initiatives and inquiries, negotiating with public officials, the regulated community, tribes, citizen groups, staff of Ecology and other federal, state, and local agencies to ensure that state aquatic resource protection requirements were met. I was also responsible for updating Ecology's 401 and CZMP practices based on regulatory or legal developments at the federal level or in other states, and for informing Ecology staff and

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management about these changes. I was lead author of the desk manual used by Federal Permit Unit staff members at Ecology's headquarters and regional offices around the state to ensure consistent technical, procedural, and substantive review of projects requiring 401 and CZM decisions.

5. As part of my duties at Ecology, I also served as its lead advisor providing statewide oversight and coordination for management and staff on a wide range of projects requiring state CWA section 401 certifications for U.S. Army Corps of Engineers' Clean Water Act Section 404 permits. Beginning in 1995, I was delegated signature authority for such decisions by Ecology's directors. I was also responsible for training Federal Permit Unit staff and ensuring that staff evaluated proposed projects consistently and in compliance with applicable aquatic protection regulations.

6. During my tenure in the Federal Permits Unit, I reviewed and made certification decisions or recommendations on more than 700 water quality certifications covering several hundred acres of wetlands and mitigation sites throughout Washington State. I negotiated the state's position on two rounds of CWA Nationwide Permits issued by the Corps of Engineers to ensure the state's interests and aquatic protection regulations were addressed in the hundreds of permit actions across the state having to do with wetland fill, streambank protection projects, and other projects affecting aquatic resources. As a representative of Ecology, I also made presentations on various aspects of 401 and CZMA at conferences and workshops.

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7. In my twelve years at Ecology, I received several awards from the agency, including its Environmental Stewardship Award in 1997. This award is given to a staff member each year in recognition of carrying out Ecology's goals. I received it in part due to my work successfully reviewing several complex and contentious projects seeking 401 certification.

8. Prior to joining Ecology, I worked at the Snohomish County Public Utility District doing environmental assessments for sites suspected of having PCB contamination due to the presence of older model electrical transformers. I was required to assess each site's potential for environmental and human health risk and develop a prioritized list for replacing the transformers based on level of risk.

9. My educational background includes a Masters of Science degree in resource geography from Oregon State University and a Bachelor of Science degree in geography from Humboldt State University. For both degrees, my work focused on various environmental issues, including watershed analysis, riparian and stream function, visual resource analysis, and others. I have actively continued my education since then by attending courses and workshops on subjects such as wetland delineation and mitigation, stormwater management, salmon ecology, aquatic toxicology, the legal and regulatory basis of water quality standards, and others. I have also taught a number of courses and workshops on topics including Nationwide Permit compliance, regulatory aspects of dam decommissioning, and other issues related to my 401 and CZMP work at Ecology, and am also a member of the Society of Wetland Scientists.

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10. Although I currently live in California, I still own a home and property in Washington State that includes part of a large wetland complex.

11. As I gained experience in Ecology's Federal Permits Unit, I was assigned several large, complex, and controversial proposed projects around the state that required 401 review, including the Emerald Downs racetrack, Battle Mountain Gold, U.S. Navy dredging projects, and the proposed SeaTac expansion and third runway. My role as Ecology's lead staff on the proposed SeaTac expansion continued from sometime in 1995 or 1996 until October 2000 until Ecology reassigned me. As part of my work on the proposed project, I wrote a 401 water quality certification that was withdrawn after the discovery of significant additional wetland and aquatic resource-related impacts that had not been disclosed earlier in the review. The Port subsequently applied a second time for a 401 in the fall of 1999, but withdrew its application in September 2000, shortly before the one-year decision deadline imposed by the Clean Water Act. The Port withdrew its application when Ecology informed the Port its certification request would be denied because the proposed project had not yet met numerous regulatory requirements. A denial letter to that effect had been prepared.

12. I have reviewed the current 401 certification issued by Ecology in August 2001 and understand it is based on review of the Port's third application for which notice was first published on December 27, 2000. While I left Ecology in January 2001 to work in a similar regulatory capacity for the state of California, I have continued to maintain familiarity with the proposed project through review of various documents associated with the proposal and

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occasional discussions with Ecology staff involved in the 401 review. I am therefore familiar with the proposed project, the water quality-related impacts and issues, and the applicable regulatory requirements.

13. My role as lead 401 reviewer during the several years I was responsible for developing Ecology's decision on the proposed SeaTac Expansion and Third Runway project included informing both the Port and Ecology of applicable requirements related to 401 and water quality standards, reviewing Port submittals, requesting additional information as necessary, and determining on behalf of the agency whether we had reasonable assurance that water quality standards would be met. I represented Ecology at a number of site visits and numerous meetings with Port officials and staff from other agencies, and convened public hearings pursuant to the public notices. I attempted to obtain necessary information about the proposal, its expected effects on water quality, wetlands, and other aquatic resource-related issues. I also reviewed documents provided by the Port and its consultants, public comments and documents provided by interested parties, and other materials necessary to inform Ecology's decision on whether the proposed project would meet applicable aquatic protection requirements.

14. My role as 401 reviewer did not require an evaluation of whether a third runway was needed. From a regulatory perspective, that question is primarily a part of the Corps' alternatives analysis to determine whether a proposal needs to be built in waters of the U.S. The 401 review is based only on whether a project proposed to be built in state waters meets the applicable water quality standards. If it does not, then it cannot be approved.

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15. The proposed project is undeniably complex from both an environmental and regulatory perspective. It is one of the largest proposed projects in the history of the state's 401 review process, and involves permanent and temporary impacts to several hundred feet of streams and about 20 acres of wetlands in several different watersheds. It includes both existing and future discharges to several waterbodies that already show evidence of impairment, and it requires compliance with several interacting federal and state regulations. The proposed project is located in an area subject to highly complex interactions between surface water, wetlands, and groundwater, and is in or adjacent to areas of known or suspected soil and groundwater contamination.

16. This declaration primarily addresses requirements related to Section 401 of the CWA, which also involves compliance with state water quality standards. I first discuss some of the significant regulatory elements of 401 review applicable to this proposed project, including some general provisions of 401, the role of "reasonable assurance" in Ecology's decision making, and the relationship between the different requirements of Section 401 and Section 402 (NPDES) as they relate to this proposed project. I then describe several broad concerns about this proposed project and evaluate several specific conditions of the August 2001 certification regarding their compliance with applicable requirements. My conclusion is that many of the same problems that prompted Ecology to inform the Port it would have to deny the previous 401 application have still not been resolved. As a result, the August, 2001 401 certification is not based on reasonable

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assurance that water quality standards will be met, and, in fact, the decision is likely to result in water quality standards being violated.

17. Purpose of Section 401 certification: Section 401 of the CWA provides states an opportunity to review projects requiring federal permits to place fill waters of the United States. The state's review is to determine whether the construction and operation of a proposed project meets all applicable federal and state water quality requirements, including portions of the CWA as well as state water quality standards. The state may certify the proposed project as being in compliance, may certify the proposal subject to various conditions, or may deny the certification. The state's decision is binding on the federal agency. The state has up to one year to make its decision, or the federal agency may consider the state to have waived.

18. A 401 certification is required only when an applicant proposes to place fill in a waterbody, an activity that most of the time results in a permanent loss of waters of the state. Unlike other permits, such as the 402 NPDES permit, which generally include a regular schedule allowing initial permit requirements to be updated as necessary, a 401 decision is a one-time opportunity to ensure compliance with state water quality standards and to inform the federal permitting agency whether the proposed activities will meet the applicable requirements. Therefore, the 401 review and decision is critical because it is the state's sole opportunity to determine whether the proposed permanent loss of all or part of a waterbody is adequately avoided, minimized, and mitigated, and whether the activities associated with construction and operation of the facility requiring the certification meet water quality standards.

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19. "Reasonable Assurance": For a certification to be issued, the agency must have "reasonable assurance" that the proposed project will meet applicable water quality standards. Requiring "reasonable assurance" as the standard for a 401 decision is in part a recognition of the "one-time" nature of the permit – the state must be certain at the time of certification that the proposed project will meet standards, because it will generally not have another opportunity to weigh in. Section 401 does include provisions allowing certifications to be suspended or revoked under certain circumstances, but there is no guarantee such suspensions or revocations could occur before all or part of the permanent loss to a waterbody occurs.

20. During my several years of 401-related experience, Ecology's practice for meeting the "reasonable assurance" standard generally meant that certifications could not be issued until the agency had reviewed and approved complete and final documents submitted by the applicant for critical project elements such as wetland delineations, wetland mitigation and monitoring plans, a description of BMPs that would be employed at the project, and the like. In limited instances when future approvals were anticipated, the "reasonable assurance" standard required that the documents approved at the time of certification provide sufficient information to allow a high degree of certainty that the water quality standards would be met.

21. Interaction of Sections 401 and 402 of the CWA: As mentioned before, the proposed SeaTac expansion project requires both certification under Section 401 of the CWA and NPDES permit coverage under Section 402 of the Act. Approvals issued under either section 401 or 402 require compliance with similar aquatic protection requirements (e.g., Section

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401 requires compliance with CWA sections 301, 302, 303, 306, and 307 for 401 permits, and Section 402 requires compliance with CWA sections 301, 302, 306, 307, 308, and 403).

22. However, to address the immediate and permanent losses of waterbodies that occur under 401 certifications, Ecology's practice has been to recognize that the CWA imposes a stricter standard of review in 401 than it does in 402. Section 401(d) of the Act states that a 401 certification must include all necessary effluent limitations to ensure standards are met, while Section 402(a) states that a 402 permit may include either those limitations or other measures that would eventually lead to standards being met. In practice, this often results in an iterative process occurring over one or more five-year section 402 permit cycles in which a permit will require certain BMPs to be implemented, the resulting discharges to be monitored, the monitoring data assessed to determine if additional BMPs need to be implemented, discharges resulting from those new BMPs being monitored, and so on, until the applicable criteria are eventually met. Also, 402 permits generally regulate the concentration or volume of effluent being discharged from a point source (although they often include source control BMPs meant to reduce contaminant loads at a facility before they enter the point source discharge).

23. In contrast, and as stated earlier, 401 certifications are only required when an applicant proposes to place fill in a waterbody, thereby resulting for the most part in a permanent loss of all or part of a waterbody. A 401 decision is the one-time opportunity for the state to determine whether the proposed activity meets the applicable aquatic resource regulations and to inform the federal permitting agency of its decision. Unlike the 402 process, it is not meant to

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initiate an iterative multi-year process for bringing a noncompliant activity and project into compliance, and its interaction with the federal permitting process generally does not allow the initial decision to be revisited. For projects such as the proposed SeaTac expansion, it is not sufficient to base a 401 decision on the adequacy of a 402 permit. For instance, if the 402 permit does not include specific effluent limitations or does not require BMPs that are known to adequately treat discharges to meet the applicable water quality criteria, then the 401 must serve to "fill the gaps" and include conditions that address those shortcomings. It is in this context that the third runway's project's 401 certification must be reviewed.

24. The issues raised by this review fall into several categories. First, in some instances, the necessary information does not exist for Ecology to have reasonable assurance that the applicable water quality standards will be met. In other instances, based on the information that has been provided, it is apparent that there is no assurance that standards will be met. In some of those instances, there is actually reasonable assurance that standards will not be met. In addition, several specific conditions of the certification are flawed in that they are likely to lead to noncompliance with the water quality standards.

25. In summary, and as explained below, based on my knowledge of the environmental circumstances at and near the site, the certification overall is based on speculation rather than reasonable assurance, and therefore the project as proposed and certified does not conform to regulatory requirements. The conditions of the certification will not result in water

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quality being adequately protected from project impacts associated with stream and wetland fill, stormwater discharges, decreased streamflow, and other effects on the aquatic environment.

26. The environmental conditions at and near the proposed project site and the approach chosen to design, review, and certify the proposal make it difficult, if not impossible, for the proposed project to comply with Section 401 requirements: During Ecology's review of the Port's second 401 application, it became apparent that, due to the scope of the Port's proposal, the applicable regulations would require Ecology's review to be based on a comprehensive, watershed-focused approach to determine whether the many interacting project elements and associated impacts could meet 401 requirements. This would require both the Port and Ecology to comprehensively re-assess the design, impacts, and mitigation elements of the proposed project if Ecology was to eventually approve a valid and defensible 401 certification.

27. This conclusion was based largely on information available about the environmental setting showing that several waterbodies were not fully supporting beneficial uses, and that the existing levels of impairment in those waterbodies were being caused in part by activities of the Port and facilities associated with the Port, as well as by non-Port-related activities in the watersheds. The Port's third runway proposal did not adequately address these activities, even though they were resulting in the effected waterbodies not meeting water quality standards. It was apparent that the Port's proposal would likely continue and increase the existing impairment. Because 401 review was required to address compliance of the waterbodies with water quality standards, this issue could not be avoided. Examples of information leading

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to this conclusion included data in the Des Moines Creek Basin Plan, prepared by a consortium of local communities and the Port, which established that a number of beneficial uses in the stream had already been impaired, including fish habitat and fish passage, and that the stream was subject to regular exceedances of water quality criteria. The Port's discharge monitoring reports required as part of its NPDES permit also showed ongoing exceedences of water quality criteria. Monitoring also showed in many cases that criteria were being exceeded in the receiving waters upstream and downstream of the various discharges. In addition, Des Moines Creek was on Ecology's list of impaired waterbodies (pursuant to CWA Section 303(d)) due to high levels of fecal coliform.

28. The different kinds of existing impairment in the waterbodies along with the connections among them and the various elements and impacts of the proposed airport project made it problematic whether an adequate mitigation plan could be implemented that would avoid violations of water quality standards. Many of the solutions and mitigation measures the Port was proposing for its new activities and project would have aggravated existing harm to aquatic resources, thereby requiring additional evaluation and new mitigation measures. For instance, some of the Port's proposed stormwater mitigation measures led directly to problems with low streamflow or decreased the possibilities of success at wetland mitigation sites. The Port's proposed resolution of low streamflow issues then resulted in significant questions about water rights, groundwater contaminant levels, and other issues that needed to be resolved before Ecology could reach the required level of reasonable assurance for this certification request.

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29. As the review progressed, I became aware of other sources of information that confirmed or expanded upon those identified above showing watershed-wide problems in the area of the proposed project. I explained to the Port several times during the review that impacts identified due to this information needed to be addressed as part of the 401 review because they provided further documentation that the waterbodies affected by the existing and proposed facilities were not meeting water quality standards. This additional information included:

- De-icing study: The Port provided a study of the effects of de-icing fluids in the Des Moines Creek watershed. The study showed that several metals exceeded water quality criteria in the Northwest Ponds. These ponds represent the single largest remaining wetland complex in the watershed, are subject to discharges from the Port and other facilities, and are a part of or adjacent to several mitigation elements of the Port's proposal and other related proposed projects that would result in additional cumulative impacts to the ponds. From my review, it appears that the 401 certification issued in August 2001 does not address these metals concentrations and their deleterious effects on water quality and beneficial uses in the wetlands and downstream waterbodies. It appears instead to include tacit approval of a de facto mixing zone in the Northwest Ponds that does not comply with requirements of the state water quality standards in WAC 173-201A-100. Applicable requirements for mixing zones are discussed in more detail below.
- Studies of urban stream impacts and functions: Studies by Dr. Richard Horner and Dr. Derek Booth of the University of Washington and others about the relationship between

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the increase in percentage of impervious surface in a watershed and the resulting decline in stream functions showed that once the percentage of impervious surface in several urban watersheds in the Puget Sound area reached between 10 and 20 percent, stream functions would begin to decline, due to factors such as increased water velocities and scouring, greater differences between storm flows and low flows, increased contaminant loads, and other factors. Both the Des Moines and Miller Creek watersheds include over 30% impervious surface, which is a level likely to not allow beneficial uses to be adequately supported in the waterbody unless a number of significant measures are implemented throughout the watershed to address these impacts. While the stormwater plan being developed by the Port addressed reduction of streamflow velocity from Port facilities during storm events, it did not necessarily reduce high contaminant loads resulting from increased stormwater runoff, and not in a manner that would allow the waterbody to meet standards.

- Reasonable potential analysis: Sometime in the spring of 1999, due to concerns about the Port's early proposed stormwater plans and due to monitoring data from the Port showing that existing BMPs did not adequately treat discharges to meet water quality criteria, staff in Ecology's Water Quality Program were asked to assess the effectiveness of the BMPs the Port was required to implement as a condition of its NPDES permit. That assessment, known as a reasonable potential analysis, compared the characteristics of the Port's runoff, the types of BMPs used to detain and treat the runoff, and the resulting

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contaminant concentrations in the discharges. The analysis found that the BMPs were not adequate to reduce contaminant concentrations in typical Port runoff to levels that met water quality criteria. Of particular concern were results showing that copper and other metals were not adequately treated, since very low levels of copper are known to adversely affect fish. It appears that Ecology's analysis was not used to establish the new BMP requirements in either the Port's current NPDES permits or in the recently issued 401 certification, despite it showing that water quality criteria would likely continue to be exceeded.

- Reports on failure of mitigation sites: Reports published while the Port's 401 application was pending showed that wetland mitigation projects in King County and throughout the state of Washington had very low levels of success and often did not meet permit requirements. These reports reaffirmed the need for better understanding up front during the various review processes as to the likelihood of mitigation success and the specific steps needed to ensure that success. These do not appear to have been incorporated into the current 401 certification, which leaves key elements of the Port's wetlands mitigation plan unresolved and allows the Port to submit significant elements affecting the success of the various mitigation plans at some point in the future.
- Additional cumulative impacts: Both the CWA and state water quality regulations require that the cumulative effects of a proposed project be included in the state's review for compliance with water quality standards. Along with the proposed SeaTac expansion's

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direct and indirect effects on about 20 acres of wetlands and several streams, it is also associated with several other interrelated, known, or likely proposed projects that would result in additional impacts to waters of the state. Several of these proposed projects needed to be included as part of the 401 certification's cumulative impact analysis. These include the proposed extension of State Route 509 and the airport's South Access Road, which is planned to be built with Port funding and on Port property on the southern end of the airport immediately adjacent to mitigation sites proposed as part of the current project. It also includes the Des Moines Creek Regional Detention Facility, also proposed to be built on Port property, between the SR-509 extension and the airport. These proposed projects would require significant wetland, streamflow, and stormwater mitigation measures in the same areas where mitigation is necessary for the Port's current project, and where the Port and Ecology have experienced significant difficulty in assuring adequate mitigation can be provided for just the current proposal. The current 401 certification does not appear to address this fundamental gap in analysis.

- Soil and groundwater contamination: The existing airport includes several areas of known or suspected soil and groundwater contamination that have not yet been adequately characterized to determine that they are not affecting surface waters. The Port and Ecology recognized this years ago and developed an Agreed Cleanup Order under the state's Model Toxics Control Act (MTCA) for part of the airport. To ensure that contamination that may affect surface water quality was identified during the 401 review

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and that necessary mitigation measures were included as 401 conditions, Ecology also included compliance with the agreed order as a requirement of the Governor's certification letter to the Federal Aviation Administration regarding the proposed SeaTac expansion. This was done in recognition that the 401 was the key regulatory tool available to the state to comprehensively address water quality impacts of the proposed project.

30. All of the sources of information described above increased my concern about whether the proposed project could meet water quality standards and whether Ecology could issue a valid and defensible certification. Shortly before Ecology reassigned me in October 2000, I realized that the proposed project had reached a point where it would be nearly impossible, if not entirely impossible, to attain the level of reasonable assurance needed to approve a certification due largely to the proposal's interconnected impacts, the difficulty the Port was having with providing the necessary information, the limitations on mitigation opportunities at the various sites, and other issues.

31. Despite issuance by Ecology of the August 2001 certification, it is evident that the fundamental problems, which we had previously identified, still exist. The August 401 decision does not adequately address the regulatory requirements needed to ensure compliance with water quality criteria, support beneficial uses in the receiving waters, and ensure cumulative impact requirements are met, and does not provide certainty that the proposed project would be

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constructed and operated in a manner that ensures consistency with water quality standards. Some examples which illustrate these shortcomings follow.

32. Information needed to issue a certification based on "reasonable assurance" and compliance with water quality regulations is either lacking or is insufficient: As noted above, there was already during my review of the Port's application a preponderance of evidence that water quality standards were being violated and that existing and proposed activities by the Port would continue and aggravate this non-compliance. The majority of conditions in the August 2001 401 certification essentially concede that information provided since I left Ecology is also significantly incomplete and speculative at best, and consequently falls short of the scope and detail needed to provide reasonable assurance. In fact, several conditions essentially state that Ecology expects water quality standards to be violated unless and until the Port submits additional information necessary to determine otherwise. These include the following:

- Certification Condition A.2.d. & g. (page 3) – these conditions show that Ecology has either implicitly approved mixing zones, assumed mixing zones will be necessary, or determined that the proposed project will not comply with the water quality standards unless mixing zones are approved. However, Ecology has not met the requirements of WAC 173-201A-100(1) through (16) that requires specific review and approval of proposed mixing zones. These certification conditions therefore do not comply with the water quality standards and are likely to result in violations of water quality in the streams subject to these mixing zones. For example, subsection (1) of the mixing zone

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regulations requires that the allowable size of mixing zones be established in discharge permits or orders. Subsection (4) allows mixing zones to be authorized only when supporting information clearly indicates they would not result in the loss of sensitive habitat, interfere with existing or characteristic uses of the waterbody, and other requirements. Subsection (7) establishes maximum allowable sizes for mixing zones (e.g., no more than 25% of the width of a waterbody, no more than 300' downstream from a discharge, etc.) that can be exceeded only after further specific review and findings by Ecology under other subsections. The 401 decision does not reflect that Ecology has completed any of this required analysis, and the certification does not address, incorporate, or refer to any such analysis. These omissions are significant in part because the receiving waters – Des Moines, Miller, and Walker Creeks – that would be subject to these mixing zones are so narrow as to make it impossible to meet the applicable width requirement and the existing levels of impairment make it unlikely that mixing zones would support beneficial uses of the waterbodies. Therefore, the certification does not provide a basis for ensuring compliance with water quality standards and, in fact, does not conform to those standards.

- Certification Condition F.1 (page 18) requires the Port to submit by September 30, 2001 proposed Best Management Practices showing it can prevent the transport of contaminated groundwater that may be intercepted by utility corridors. The condition is meant to address significant but inadequately addressed impacts associated with both

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known and suspected soil and groundwater contamination in many areas at and near the airport that may migrate to nearby surface waters. Again, this condition relates to a significant issue that was not resolved during my 401 review, despite numerous discussions with the Port in an attempt to develop an effective solution. It does not comply with WAC 173-201A-160(3)(b), which requires BMPs for non-point sources to be applied so that violations of water quality criteria are prevented. Because the condition does not describe the contaminants of concern, their concentrations, or what specific BMPs will be used to meet this requirement, it cannot be a basis for reasonable assurance for purposes of the current certification. Additionally, no explanation is provided as to why the condition allows the Port to defer its submittal and Ecology to defer its review until sixty days after issuance of the 401 certification itself. This issue is of special significance, given the existing inadequacies in the characterization of areas of known and unknown contaminated areas on and adjacent to SeaTac, and the likelihood that some of these areas may discharge to surface waters. As shown during the several years of negotiations attempting to resolve the terms, meaning, scope, and analysis of the Agreed Order, this matter is not likely to be adequately addressed in the next sixty days. It is likely to take substantial and lengthy effort by the Port and Ecology to further assess the types and locations of contaminants, their fate and transport during construction and operation, and their interaction with groundwater at the airport. Until those issues are

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addressed, it is not possible to have reasonable assurance that aquatic resource-related impacts that may be associated with these contaminated areas will be resolved.

- Certification Condition C.4. (page 5) allows the Port to request extensions of the various post-certification deadlines, which would allow further deferral of the information needed to determine whether there is a basis for reasonable assurance. Given the long history of difficulty we at Ecology had in convincing the Port to submit necessary and adequate information, required mitigation measures, and the like, it is highly unlikely that various submittals required of the Port due to certification conditions will be timely and complete, and will be submitted and approved before various impacts to waterbodies occur. This condition could easily result in discharges and their associated impacts occurring without adequate mitigation and without complying with Section 160(4)(a) of the water quality standards, which prohibits compliance schedules for new discharges. This section of the water quality standards essentially recognizes that new discharges designed and operated with the benefit of current knowledge about available and effective BMPs do not need a compliance schedule, because recently-developed BMPs, including improved source control measures, improvements in treatment technology, and the like, are available that allow discharges to fully comply with water quality criteria.

33. Again, the difficulty we at Ecology had in obtaining necessary information from the Port is exemplified by the history of Port's stormwater plan. When Ecology hired experts from King County to review the Port's proposed stormwater plan, they estimated it would take

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about 6 – 8 weeks to review it for consistency with measures contained in the King County stormwater manual. Because the Port's various submittals associated with this plan were incomplete, used internally inconsistent data, incorrect assumptions, and other flaws, the review took over a year and a half, and as is evident from the certification, is still not complete.

34. Certification Condition A.2.a. (Page 2) requires the Port to submit a monitoring plan for each in-water or shoreline construction project. For purposes of reasonable assurance, approved plans should have been submitted as part of the certification review and incorporated into the final decision if they are part of the basis for determining the proposed project will not violate water quality standards.

35. I have an additional concern related to these delayed submittals. The certification requires many of them to be submitted for Ecology review and approval during the next several weeks or months, and well within the maximum allowable time period for certification review of one year. If, as the certification indicates, these submittals are needed for Ecology to have reasonable assurance, then the certification should not and need not have been issued without them since there was time for the Port to complete them before the one-year 401 decision deadline for its application. My experience at Ecology was that while we did not unnecessarily attempt to use the full year of review time, we did use as much of it as was necessary to ensure all the relevant issues of a proposed project were addressed and we had final approved plans that resulted in reasonable assurance of compliance with water quality standards. Examples in the

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August 2001 certification of these unnecessary delays and significant gaps resulting from them include:

- Certification Conditions D.1 – 3 (pages 5-9) require the Port to submit a revised Natural Resource Mitigation Plan (NRMP) by November 30, 2001. Most of the required revisions are specified in the conditions; therefore, it should have been relatively simple for Ecology to have waited until the Port agreed to and submitted the changes for Ecology approval. This would have resulted in reasonable assurance at the time of certification, rather than speculation that it will come at a point several months in the future. This delayed assurance is of particular concern given the numerous inadequate or incomplete revisions the Port has made to its NRMP, miscommunications between Ecology and the Port regarding mitigation requirements, and past delays in Port submittals of parts of the NRMP.

Also, this approach of allowing future submittal of a final mitigation plan needing further Ecology approval conflicts with other recent agency "reasonable assurance" determinations on 401 certification requests. In my experience as Ecology's senior 401 expert, Ecology would regularly either deny certifications or have the applicant withdraw its request for certification if mitigation plans or other documents were not adequate. One significant recent example of this is Ecology's denial in September 2000 of a request for certification from the Corps of Engineers for the proposed channel deepening in the

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lower Columbia River. Ecology denied certification of this proposed project in part due to the Corps' failure to submit complete and final wetland mitigation plans.

- Certification Condition D.4 (page 9) requires the Port to submit an additional mitigation proposal for further Ecology approval by September 30, 2001. This mitigation plan is to address 2.05 acres of additional wetland impacts Ecology identified in December 2000 as part of the Port's stormwater management plan. The wetlands impacted represent about 10% of the proposed project's total direct wetland impacts – a significant amount, given the identified historic loss of wetlands in the area and the approval in this certification of a mitigation plan allowing wetland mitigation to take place outside the affected watersheds. Despite this significance, the condition requires only that a conceptual mitigation plan be submitted. There is no requirement or timeline for submittal of a final, approvable plan. The condition also requires such measures as establishing a hydrologic connection between wetlands "if feasible", and evaluating the potential for wetland success within an area set aside for mitigation. These requirements again point to a lack of certainty both about whether and how mitigation will occur, and whether it can be completed successfully to ensure compliance with water quality standards. As noted above, Ecology has in the recent past refused to allow such leeway in a 401 certification, and in the example above, to a fellow regulatory agency, the Corps of Engineers, which is responsible at the federal level for regulating wetlands fills.

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- Certification Condition E.3 (page 18) requires the Port to submit a Surface and Groundwater Monitoring Plan within 60 days of issuance of the certification. This plan is to ensure that impacts to receiving waters and groundwater caused by placing fill in the embankment area can be detected. Given the many significant and valid concerns identified during the public review process regarding the issue of the embankment, its stability, and its effects on water quality, and the still conceptual design of many aspects of its design, it is clear that this aspect of the proposed project does not meet the standard for reasonable assurance. At various times during Ecology's review of the embankment design, the Port claimed that it was variously meant to hold back stormwater to some degree, store it internally for some length of time, or let stormwater and groundwater pass through it. This issue is also significant because the success of many elements of the Miller and Walker Creek mitigation sites, stormwater facilities in those areas, and other parts of the Port's proposal will be affected by how water either passes through or is retained within the embankment.

The certification also includes criteria developed to determine acceptable contaminant levels in fill materials used in the embankment; however, these criteria are untested and there is no evidence of how contaminants in the accepted fill material will interact with storm and groundwater as it passes through the embankment to the surface waters, wetlands, and mitigation sites immediately downslope.

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- Certification Condition G (page 19) requires that stormwater facilities requiring dam safety permits obtain those permits before construction begins. These facilities should be a part of a stormwater plan approved at the time of certification, and Ecology should know their final design and know whether they will require a dam safety permit. This condition appears to be necessary because it is anticipated that the design of some of these facilities may change. This is important because many of these facilities are in or adjacent to wetlands, streams, and mitigation areas. If it is determined later that dam safety permits are needed, the requirements of those permits may result in an increase in the footprint of those facilities, resulting in significantly greater impacts to wetlands, surface waters or associated groundwaters. However, mitigation needed for these probable impacts has not yet been identified, thereby increasing the level of uncertainty that water quality standards will be met.
- Certification Conditions I.1-a-e (pages 21 – 24) require that a revised Low Flow Impact Offset Facility Proposal be submitted within 45 days of the certification being issued. These conditions list about four pages of information and analysis needed to determine whether this proposed streamflow augmentation method will work. The conditions establish that numerous design aspects, maintenance and operations practices, monitoring requirements, and other elements, have yet to be developed, evaluated or approved. Additionally, one of the conditions requires that a pilot project be developed within three years to determine if the Port's approach to streamflow augmentation will work. This is a

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highly speculative approach for a critical mitigation component needed to address low flows already experienced by the nearby streams and expected to increase further as this proposed project is built. These low flows have, and will lead to higher stream temperatures, degradation of fish habitat, and other forms of impairment and water quality criteria exceedances. Approving the certification based on the information provided to date is premature. To my knowledge, this approach of storing stormwater in very large vaults and releasing it at a measured rate several months later to implement low streamflows has never been tried before. It is being proposed for first time where it will affect streams in which water provided from such a system would represent a high proportion of the water available in the stream during critical summer low flow periods. Relatively small design errors, pollutant inflows, temperature variations, maintenance shortcomings or other similar problems could harm the biota dependent on these streams and/or result in these streams drying up completely.

36. In closing, neither the proposed project nor the 401 certification meet the applicable water quality standards. Based on my experience in reviewing this proposal over the past several years, and my review of the 401 issued in August 2001, there is a strong likelihood, and even certainty, that water quality standards will be violated if the proposed project is constructed and operated in a manner consistent with the certification requirements. Additionally, contrary to the August 2001 certification, and particularly in light of the proposed project's history of untimely and inadequate submittals by the Port on every significant element

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of its proposal, the continuing lack of information regarding the project's final design, impacts, mitigation needs, and final conformity to standards cannot be the basis for reasonable assurance and cannot ensure that beneficial uses will be protected and maintained.

37. In addition to this declaration and in the interest of full disclosure, fairness, and any legal requirements, I will try to make myself available for any depositions or hearings that may be necessary for this appeal.

I declare under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

DATED this 10th day of September, 2001, at SAN FRANCISCO, California.

Thomas R. Luster

Thomas R. Luster

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EXHIBIT B

POLLUTION CONTROL HEARINGS BOARD
FOR THE STATE OF WASHINGTON

AIRPORT COMMUNITIES COALITION, Appellant, v. STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY; and THE PORT OF SEATTLE, Respondents.	No. 01-133 No. 01-160 REPLY DECLARATION OF TOM LUSTER IN SUPPORT OF STAY (Section 401 Certification No. 1996-4-02325 and CZMA concurrency statement, issued August 10, 2001, Reissued September 21, 2001, under No. 1996-4-02325 (Amended-1))

Tom Luster declares as follows:

1. I am over the age of 18, am competent to testify, and have personal knowledge of the facts stated herein.

2. I am responding to the briefs and declarations provided by Ecology and the Port of Seattle in response to the ACC's request for a stay of certification that the proposed project will meet water quality standards.

3. I have reviewed several recent documents relevant to the 401 review and certification, including the certifications issued by Ecology in August and September, 2001, the July 2001 low flow analysis (Low Flow Plan), the December 2000 Stormwater Plan (including all July 2001 replacement

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pages), and the August 2001 Cumulative Impacts Study. I have also reviewed briefs, declarations, and accompanying documents related to the above-referenced appeals.

4. My primary concern in this matter is the 401 certification issued for this proposed project is based largely on speculation rather than the required "reasonable assurance" standard. The decision to certify the proposed project is clearly not based on a "preponderance of evidence" showing that water quality standards will be met. The result is a certification that does not meet applicable requirements for water quality protection, and a project approved and conditioned so as to almost certainly lead to unmitigated or inadequately mitigated degradation of the state's waters. Additionally, I believe that if this approach is determined to be acceptable, it would provide precedence to allow similar results on most, if not all, projects undergoing 401 certification review in the state of Washington.

5. I have structured this declaration as follows: I first address several basic elements of the laws and regulations guiding 401 implementation as they apply in general and to this proposed project. These include:

* the applicability of the goal statements contained in the federal Clean Water Act, the state Water Quality Control law (RCW 90.48), and state water quality standards (WAC 173-201A);

* the regulatory requirements regarding the scope of the project being reviewed; and,

* the definition and interpretation of "reasonable assurance". For reasonable assurance, I also focus on specific critical elements of the proposed project and identify several that fall far short of the

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level of reasonable assurance needed for 401 decisions, including the proposed stormwater plan, low flow mitigation plan, and the 401 certification's dependence on current and future 402 permits.

6. I then address several other issues or contentions raised in the various documents submitted by the respondents regarding my earlier declaration. These include questions regarding my capability to evaluate the 401, my level of familiarity with the review process, and other issues.

7. In the interest of brevity, I have focused my response primarily on those briefs and declarations submitted by Ecology rather than the Port, as I am most concerned about Ecology's assertions of regulatory adequacy.

A) Basic Elements of Laws, Regulations, and Guidelines Applicable to 401 Certification:

8. Goal statements of the primary applicable laws and regulations: As important as the proposed airport expansion may be, it is still required to comply with applicable water quality laws and regulations. These include sections of the federal Clean Water Act, the state Water Quality law (RCW 90.48) and state water quality standards (WAC 173-201A), as well as other appropriate requirements of state law including, for example, the water code. Ecology is the state agency designated to implement these laws and regulations.

9. At the state level, the water quality law and water quality standards not only contain requirements for fairly specific elements of water quality such as establishing beneficial uses, establishing narrative and numeric criteria, determining compliance with the standards, and the like, but also include policy statements meant to guide their implementation:

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RCW 90.48.010 *Policy enunciated. It is declared to be the public policy of the state of Washington to maintain the highest possible standards to insure the purity of all waters of the state consistent with public health and public enjoyment thereof, the propagation and protection of wild life, birds, game, fish and other aquatic life, and the industrial development of the state, and to that end require the use of all known available and reasonable methods by industries and others to prevent and control the pollution of the waters of the state of Washington. Consistent with this policy, the state of Washington will exercise its powers, as fully and as effectively as possible, to retain and secure high quality for all waters of the state. The state of Washington in recognition of the federal government's interest in the quality of the navigable waters of the United States, of which certain portions thereof are within the jurisdictional limits of this state, proclaims a public policy of working cooperatively with the federal government in a joint effort to extinguish the sources of water quality degradation, while at the same time preserving and vigorously exercising state powers to ensure that present and future standards of water quality within the state shall be determined by the citizenry, through and by the efforts of state government, of the state of Washington.*

WAC 173-201A-010 *Introduction. (1) The purpose of this chapter is to establish water quality standards for surface waters of the state of Washington consistent with public health and public enjoyment thereof, and the propagation and protection of fish, shellfish, and wildlife...*

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10. At the federal level, the Clean Water Act includes similar guidance:

Section 1251. *Congressional declaration of goals and policy (a) Restoration and maintenance of chemical, physical, and biological integrity of the Nation's waters. In order to achieve this objective, it is hereby declared that, consistent with the provisions of this chapter -*

(1) it is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985;

(2) it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water by achieved by July 1, 1983;

(3) it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited;

(4) it is the national policy that Federal financial assistance be provided to construct publicly owned waste treatment works;

(5) it is the national policy that areawide waste treatment management planning processes be developed and implemented to assure adequate control of sources of pollutants in each State;

(6) it is the national policy that a major research and demonstration effort be made to develop technology necessary to eliminate the discharge of pollutants into the navigable waters, waters of the contiguous zone, and the oceans; and

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(7) it is the national policy that programs for the control of nonpoint sources of pollution be developed and implemented in an expeditious manner so as to enable the goals of this chapter to be met through the control of both point and nonpoint sources of pollution.

11. These goal statements may sound lofty or may in some ways seem to be wishful thinking; however, they are still a part of the regulations applicable to 401 review and are meant to serve as guidance to Ecology in carrying out its responsibilities as the state agency designated to implement water quality regulations.

12. In reviewing and issuing this 401 certification, Ecology has taken an approach that is certainly significantly less than ensuring "the highest possible standards" or the "restoration and maintenance of chemical, physical, and biological integrity" for the subject waterbodies. The 401 certification instead ensures that existing discharges of various contaminants will continue to receive less than adequate treatment, anticipates that future discharges will be subject to weaker standards than are in place now, and provides a mechanism for the continued decline in water quality in several urban watersheds. Even assuming for a moment that Ecology's position in this appeal is valid, it is unfortunate for the people of the state that the agency is arguing emphatically to weaken the process it uses to assure water quality standards are met.

13. If this 401 certification is found to be valid and thereby provides precedence for future 401 review, I believe it would result in an inadequately protective agency review and decision-making process based on a very high degree of speculation and uncertainty. The 401 review process would

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move steadily away from the goals cited in the three laws and regulations above and would establish a standard allowing project elements to be no more than conceptual, monitoring requirements to be no better than inconclusive, and mitigation measures to be more suggestion than certainty.

14. Regulatory basis for the scope of the project being reviewed: The 401 certification improperly ignores substantial elements of the proposed project that are currently affecting or may soon affect the quality of state waters. Some project elements that have or will result in adverse effects to waters of the state are either not addressed at all or have been put off to be evaluated at some point in the future. Therefore, it is proper and necessary to impose a stay to prevent further adverse impacts to waters of the state. These adverse effects have occurred for some time as a direct result of the proposed project, despite Ecology not issuing the 401 certification until recently and despite the Corps not yet issuing its 404 permit.

15. The 401 certification describes the project being reviewed as the construction of a third runway and related project components, including taxiways, runway safety areas, a South Aviation Support Area, and other elements (p. 1 of the WQC). Ecology's brief (p. 24) correctly states that in a 401 review, the agency is to evaluate an entire project, and cites the U.S. Supreme Court's decision in P.U.D. No.1 vs. Ecology: "401(d) is most reasonably read as authorizing additional conditions and limitations on the activity as a whole once the threshold condition, the existence of a discharge, is satisfied." Additionally it is Ecology's practice to generally evaluate the direct, indirect, and cumulative water quality-related impacts associated with a proposed project. Section 401(a) states that

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the certification covers both the construction and operation of a facility, thus including associated long-term anticipated developments with the review.

16. Several years ago, at the beginning of Ecology's 401 review for this proposed project, the agency recognized the project scope described above, and included essentially the entire airport along with several proposed projects associated with the airport expansion or located nearby in the affected watersheds. From a practical standpoint, it would have been difficult to do otherwise and somehow separate the existing airport from the proposed project elements – for instance, both the airport and the proposed elements included existing and proposed discharges to waters of the state; the functions of the proposed project elements were integrally related to the rest of the facility (e.g., the third runway did not exist in isolation -- it was dependent on taxiways, stormwater systems, terminals, etc. either existing or proposed at the airport); and it was believed at the time that many of the discharges from new project elements would be intermingled to some degree with existing discharges. In actuality, however, as time went on, the scope of Ecology's review and eventual issuance of the 401 certification was continually reduced, generally after discussions with the Port about their difficulties in complying with various requirements of the project review, and generally despite recognition of the regulations and legal decisions cited above. Most recently, through Condition B of the September 2001 401 certification, Ecology further separated elements of the project through timing constraints, and making some elements subject to 401 conditions only until a future NPDES permit was issued, without adequate assurance that such a permit would adequately provide the level of reasonable assurance necessary for project components approved through issuance of a 401 certification.

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17. As a result, there are a number of activities directly and indirectly related to, or integrated with, the proposed project that have not been adequately evaluated for their impacts on waters of the state. One of the most significant examples is the extensive fill and grading activities that the Port has already carried out on the west side of the airport. These activities are for the sole purpose of constructing the proposed project. The activities have included removal of vegetation, placement and compaction of fill, and construction of several sizable stormwater control structures that intercept surface runoff generated by these new surfaces. All of these actions have very probably resulted in adverse effects to nearby surface waters, including wetlands. However, these impacts have not been adequately evaluated as part of the 401 review and the degraded conditions likely resulting from these activities now serve as the baseline for stream and wetland functions.

18. These fill and grading activities started several years ago when the Port asked Ecology if its application and review for 401 certification allowed it to stockpile fill dirt on the airfield for eventual use in third runway construction. The 401 review had started but had not yet been completed, and the 401 decision had not been made. Ecology's position, based on the appropriate regulatory scope of 401 described above, was that the Port could proceed as long as the activity of placing fill for the proposed project did not affect water quality and as long as the Port knew it was assuming the risk and costs of the activity if the project was not approved.

19. The Port's request moved quickly beyond stockpiling fill dirt on the airfield, and turned into the large-scale filling and grading activities that have occurred over the past several years. The Port's contention was that its activities were allowable as long as they did not result in fill being placed

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in surface waters, including wetlands. As was my responsibility as senior 401 reviewer, I explained the scope of 401 as outlined above to others at Ecology and to the Port. However, rather than fall back on the basic premise of Section 401 that the agency is to review and decide on the project as a whole, and the ability to impose "limitations on the activity as a whole" as stated by the Supreme Court, Ecology allowed the activity to continue, despite its evident impacts to nearby streams and wetlands. In fact, in its brief (p. 25), Ecology argues that the requested stay is not in the public interest because it needs the 401 in place to allow regulation of fill in the upland parts of the proposed project. This is in direct opposition to the law and legal decision it cites on the previous page. Ecology has merely chosen not to regulate these activities that are taking place solely to support a project subject to 401 review and that may result in a discharge to waters of the state. If applied to other projects, Ecology's argument would result in the agency reviewing projects for 401 certification that are essentially complete except for the portion sited above a wetland or stream. This clearly is not the intent of the regulations and does not reflect past practices and legal decisions regarding 401 authority.

20. A less critical but similar example of inappropriately reduced project scope is Ecology's justification for not including an area of impervious surface at the airport in the hydrologic model used to develop the low flow plan. Ecology's brief (p. 12) and Kenny's declaration (35) state that effects of the new impervious surface at the airport's Industrial Waste System (IWS) is outside the scope of the 401 review. This might be true if the IWS was independent of the project elements being reviewed; however, part of the proposed South Aviation Support Area would drain to the IWS, and in fact, the IWS is being enlarged as part of the Port's overall upgrade. The IWS is clearly an integral element of

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the overall project to be considered as part of the 401 review and decision. By leaving this area of impervious surface out of the models, the resulting stormwater plan very likely underestimates impacts to the nearby receiving waters.

21. Other similar examples of activities integral to the proposed project that have either not been adequately evaluated or are not planned to be evaluated for purposes of this 401 include the proposed expansion of State Route 509, the Port's South Access Road, and the proposed regional stormwater detention facility to be located in the southern part of the airport. These projects are not evaluated as part of the cumulative impacts analysis necessary for projects undergoing Clean Water Act review. Cumulative impacts, as defined in 40 CFR 1508.7, include "...the impact on the environment which results from incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." While at the start of the initial 401 review for this project in 1997, the State Route 509 extension was deemed speculative, with each Port resubmittal of an application for 401, the highway became less speculative, and in the past two years has been subject to extensive documentation and review (including NEPA/SEPA) and discussions between the Port, the Washington Department of Transportation, and various regulatory agencies. Part of the highway is proposed to be built on Port property, and will fill wetlands that will be affected by the Port's proposed expansion. It is likely to require wetland mitigation in the same area south of the airport where the Port had great difficulty identifying adequate mitigation opportunities. Similar circumstances exist for the Port's South Access Road and for the regional detention facility – they are being paid for in part by the Port,

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being built on Port property, and are planned to be located over, under, or adjacent to streams, wetlands, or other elements that are part of the Port's current project and mitigation plans. All these projects would be hydrologically connected to Port expansion projects, Port mitigation sites, or waterbodies affected by the Port's expansion. However, for each of these proposed projects, when Ecology raised the issue of adequately incorporating them into the 401 review, the Port essentially refused to cooperate.

22. The Port and Ecology apparently believe these projects don't exist or don't matter to the project review at hand. This is exemplified in the August 2001 Cumulative Impacts Study (Port of Seattle), which was generated in response to questions and comments made during the recent Corps of Engineers and Ecology 404/401 public comment process. The report is meant to answer questions from the agency, including a question regarding future proposed projects in the area. The report's only mention of future projects is to state that any future projects will be subject to regulations in place at the time they are reviewed. There is no specific mention at all of projects noted above, even though they fall well within the category of "reasonably foreseeable", as they are well into their planning and funding stages, and well within the timeframe generally used by the Corps in conjunction with Ecology when evaluating project impacts. The result, again, is a significant understatement of impacts associated with the proposed project.

23. Reasonable Assurance: Despite its statements to the contrary, Ecology cannot currently have reasonable assurance that water quality standards will be met. Ecology's brief (p. 3-4) and Kenny's declaration (5-7) both cite the definition and explanation of "reasonable assurance" contained

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in the Draft Federal Permits Team Desk Manual, Version 1.01, January 24, 2000 (the 401 Manual). Ms. Kenny states that it provided the basis for her finding of reasonable assurance in Ecology's 401 decision (p.8). As noted in Kenny's declaration, I was the primary author of that manual, and I wrote it with the help and guidance of Ecology's 401 staff and under the direction of Ecology management. The purpose was to ensure more conformity among permit reviewers when evaluating requests for 401 certification and to provide Ecology staff and management consistent understanding of the 401 process and requirements. It was written to be a "living document" to be updated as necessary when new regulations were promulgated, new court decisions needed to be incorporated, or new permit processes were implemented. The version Ecology cited in its brief and in Kenny's declaration is the version I wrote and used when I was at Ecology.

24. Ecology points out correctly in its brief and in Kenny's declaration that reasonable assurance does not require absolute certainty, and spends considerable effort attempting to show I believe otherwise. Actually, I agree fully with the definition and explanation contained in the 401 Manual. I used it as the basis of my review during my tenure as lead 401 reviewer on the proposed project as well as in my training of Ecology staff and management on 401 review. My statements in this response and my previous declaration are based on that definition.

25. Ecology erroneously interprets a statement in my previous declaration as meaning that reasonable assurance requires absolute certainty or something akin to "beyond a reasonable doubt". In that declaration, I state that Ecology "...must be certain at the time of certification that the proposed project will meet standards..." (emphasis added). The focus and context of my statement is the time at

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which reasonable assurance is needed (that is, when the 401 decision is made), not the degree of certainty. The 401 Manual's definition of reasonable assurance also refers to "levels of certainty", which is clearly something short of absolute knowledge, and meshes well with the above statement in my declaration.

26. The 401 certification is not based on a "preponderance of evidence" showing that water quality standards will be met: In citing the 401 Manual, Ecology correctly presents reasonable assurance as a two-step process. Step 1 is to determine, through a "preponderance of evidence" that water quality standards can and will be met, and identify any areas of uncertainty. Step 2 is meant to address those areas of uncertainty identified in Step 1 and require measures that will remove or reduce the uncertainty. The two steps are not equal and are not interchangeable. Reasonable assurance requires that Step 1 be completed – that is, a finding must be made, based on a preponderance of evidence, that standards will be met – before moving on to Step 2. Doing Step 2 first, or before Step 1 is completed, could result in a finding of compliance based on no evidence and entirely dependent on future monitoring or contingency measures. Step 2 is more properly seen as a means to further confirm the findings of Step 1.

27. In Ecology's 401 certifications of the past two months, some significant project elements are subject to conditions based exclusively or nearly exclusively on the measures described in Step 2 without having an adequate basis in the requirements of Step 1. They would therefore be implemented based not on a preponderance of evidence showing they will meet the standards, but on yet-to-be developed designs and monitoring approaches that Ecology hopes may eventually result in

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compliance. The result is an unacceptable level of uncertainty as to whether the project can and will meet water quality standards. For some of the project elements, the level of uncertainty is such that it is more likely the project will exceed standards rather than meet them.

28. A primary example is the proposed low flow plan. Certification Condition I requires the Port to submit elements of this plan that are currently missing or are believed to be inaccurate. Its eventual design is to be based on future submittals and documentation, future findings that the models used as the basis for this plan may turn out to be accurate, and a not-yet-developed monitoring plan that may well be inadequate or inconclusive. The 401 does not require that any of these future submittals be reviewed and approved by Ecology. Therefore, there is no basis for reasonable assurance.

29. The low flow plan as presented in the 401 certification and as described in Ecology's brief and declarations is at best conceptual and speculative. The plan, based on an apparently untested proposal, inadequate data, and preliminary designs, is meant to mitigate for a significant project impact. Failure of the necessary mitigation meant to be provided by the plan would result in significant degradation to area streams during critical low flow periods.

30. Ecology's brief states that low flow impacts will be mitigated by implementing this plan and cites Whiting's description of the plan (p. 10) as a "substantial proposal that goes beyond requirements of the King County Stormwater Design Manual". Compliance with that manual is not at issue, since the regulations that apply to conditions of the 401 certification are the state water quality standards and the federal Clean Water Act. Additionally, neither King County's nor Ecology's stormwater manual are intended to assure compliance with water quality standards. In my numerous

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discussions with Ecology's water quality staff and King County's staff, they are generally very careful to distinguish between meeting the requirements of stormwater manuals and those of the water quality standards, and are careful not to state that compliance with a manual means compliance with the standards (see, for example, the O'Brien declaration, which does not claim that the provisions of the stormwater manual adequately address the standards). Ecology's citation above should therefore not be construed as ensuring compliance with water quality standards.

31. Elsewhere in Whiting's declaration (p. 6), he states that the manual does not address mitigation needed for low flow caused by fill or impervious surfaces, thereby again raising the question of why the stormwater manual was used as part of Ecology's assurance that the low flow plan is adequate. He identifies specific elements of the plan that are incomplete or "design challenges", also states that additional calibration is required to determine the accuracy of the model used, and that there is not sufficient monitoring data to confidently predict water quality resulting from the discharge of stormwater from these vaults to the creeks. This reiterates the concern I raise above regarding the inadequacy of determining reasonable assurance based on the future submittal of significantly important documents.

32. Ecology's brief (p. 10) attempts to address the shortcomings identified by Whiting by referencing Condition I.1. of the 401 certification, which requires the Port to later show the adequacy of model calibrations, revise the conceptual drawings to show how the proposed vaults will provide a constant rate of mitigation water, provide an operations and maintenance plan showing how accumulated sediments will be dealt with, develop a pilot program to test whether this proposal will

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work, and identify unspecified contingency measures if water quality resulting from this plan is not adequate to meet standards. Again, this is an example of relying on future design submittals, monitoring results, and other significant plan elements to ensure compliance with water quality standards without first having a preponderance of evidence that standards will be met. These requirements are essentially the types of criteria one would use to design an experiment, not to use as the basis for reasonable assurance. In my opinion, and based on my experience with the 401 review done for the proposed Crown Jewel Gold Mine project, this low flow plan is in many ways more conceptual than the water quality treatment and streamflow mitigation plan developed by Battle Mountain Gold -- a plan that was rejected by the Board as being too speculative.

33. In further support of its approach with this low flow proposal, Ecology states (p. 11) that the areas of "alleged uncertainty" will be resolved through the Port's submittals due within 45 days of issuance of the 401. If that is the case, it would have been a very simple matter to wait an additional 45 days, review the submittals, and then make the 401 decision based on their adequacy.

34. As additional justification, Ecology cites Friends of the Earth PCHB 87-63 ("The 'reasonable assurance' requirement is met if we find by a preponderance of evidence that acute or toxic conditions are not ... likely to occur."). This is apparently due to Ecology's belief that there are not likely to be toxic conditions resulting from an untested method of releasing moderately treated stormwater from several months storage in an underground vault with unknown amounts of accumulated contaminated sediments to provide a substantial percentage of flow to a stream at critical low flow periods. I have not found any adequate description of the basis for this belief, and a belief

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with no evidence and no plans or studies to support it does not result in reasonable assurance. This is clearly a long way from reasonable assurance's simple requirement that there be a preponderance of actual evidence showing water quality standards will be met.

35. As long as these significant elements of the proposed plan are missing, it remains speculative at best and cannot be used as the basis for reasonable assurance that water quality standards will be met. Despite that, Ecology chose to accept the plan as it currently exists and condition the 401 to require the Port to eventually figure out if the plan will work. If it doesn't work, the Port is then required to figure out an as-of-yet unspecified contingency plan. This is especially difficult to accept as reasonable assurance, given the trouble the Port has had throughout both the recent and more distant history of this project review with regards to coming up with an acceptable low flow augmentation plan. There is currently no reason to believe that this proposed plan will be any more successful than the ones Ecology rejected in the past as inadequate for purposes of reasonable assurance and for purposes of meeting water quality standards.

36. Another example of Ecology moving to the second step of reasonable assurance before completing the first is evident in Condition D.4. It identifies a currently unmitigated 2.05 acre wetland impact. Rather than ensure this impact is adequately addressed at the time of certification, Ecology requires the Port to later submit a conceptual mitigation plan that includes, among other things, an evaluation of the feasibility of improving the hydrologic connection between two wetlands, an evaluation that certainly affects wetland functions and eventual mitigation success. Given Ecology's difficulty over the years in obtaining adequate and accurate wetland mitigation from the Port, it is

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curious as to why resolution of this fairly significant project element (representing about 10% of the project's direct wetland impacts) has been put off until after certification, even with the requirements of the Port's submittal spelled out elsewhere in the condition. Additionally, the condition requires a conceptual plan to be submitted by November 9, 2001 which begs the question as to why Ecology could not wait a few weeks more to receive the information, review it, and then determine whether it met applicable requirements. And finally, while the condition requires that the plan, when approved by Ecology, be incorporated into the overall Natural Resource Mitigation Plan, it requires nothing more than a conceptual plan be submitted for this area of wetland mitigation.

37. Ecology attempts to address the shortcomings described above in its brief and in Kenny's declaration (29) by citing Condition A.1 of the certification as its fallback assurance that the proposed project will meet standards. Condition A1 is a standard condition included on all or most 401 certifications that, when based properly on other information and conditions that provide reasonable assurance, is useful to declare Ecology's expectation to the permittee. However, as applied to this proposed project with its currently inadequate level of information, this condition has very little meaning – it essentially does little more than inform the Port, the Corps, and the public that the project will meet standards because Ecology says it has to. If reasonable assurance could be based on a simple declaratory condition such as A.1, then a 401 certification would need no other conditions at all to ensure water quality standards would be met.

38. Reasonable assurance is a positive assertion based on known information, not a negative assertion based on the lack of information: The 401 and Ecology's brief and declarations include a

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number of instances where the lack of information is inappropriately interpreted to ensure compliance with water quality standards. Similarly, there are several instances where the agency ignores or discounts information that suggests standards are likely not being met.

39. As I stated in my previous declaration, and as presented in the 401 Manual cited above, reasonable assurance requires a positive finding based on information showing that standards will be met. It does not mean that because there is insufficient evidence to show standards are being violated, that standards are likely being met. This is an important distinction, as not only does it require that compliance with standards be affirmed, it also avoids putting the agency in the position of trying to "prove a negative", which is logically impossible.

40. Despite this necessary element of reasonable assurance, Ecology in several places describes its 401 decision as being based on the lack of information, or puts the burden on the appellant to prove standards will be violated. For example, in its brief at p. 19, Ecology charges that the ACC has no evidence that water quality standards will be violated. That is entirely misleading -- it is Ecology's obligation when issuing a 401 to base its certification on evidence that standards are being met. This point is further illustrated in the discussion below.

41. <u>The 401 certification inappropriately defers significant elements of reasonable assurance to current and future 402 permits</u>: Another significant issue related to reasonable assurance for this proposed project is the relationship between the 401 certification and 402 permit. Several 401 conditions largely or entirely defer to the 402 (e.g., Conditions B.1.f, H., J.2.c., and K.1), and a number

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of statements in its brief and declarations explain that reasonable assurance for the 401 relies to a great extent on the adequacy of the 402.

42. This reliance on the 402 permit is misplaced. For example, Ecology's brief (p. 21) states that while the Port's stormwater discharges have exceeded water criteria on an instantaneous basis, there is no evidence that they have violated water quality standards. This is apparently due to the NPDES permit not requiring monitoring adequate to determine whether the discharges comply with water quality standards (Fitzpatrick declaration at 3). Fitzpatrick goes on to state that Ecology cannot determine if the discharges are meeting standards. At the very least, this should mean Ecology does not have reasonable assurance to affirm that standards will be met, and therefore should not issue the certification without resolving this issue. What Ecology does have, however, are data that show regular criteria exceedences in the discharges, so if the data suggest anything, they should suggest the likelihood of violation rather than compliance.

43. Using this justification as the basis for reasonable assurance in the 401 certification is unacceptable. While imposition of a future NPDES permit with monitoring requirements adequate to determine compliance may someday alleviate this concern, such a permit is not now in force, and the current permit should not be found to be adequate for purposes of 401. Additionally, this situation makes Condition J.2.b an essentially meaningless or unenforceable permit condition -- it sounds like a good idea, but there are no measures in place to implement it.

44. The 401 contains no requirements to correct this deficiency in monitoring other than the possibility of addressing it in future NPDES permits. The reason given (Fitzpatrick 3) is that there are

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no established federal or state protocols for stormwater monitoring. Absent these established protocols and absent the ability to determine whether these discharges are meeting water quality standards, Ecology cannot have reasonable assurance.

45. Because of this shortcoming in monitoring techniques, I suggested several times during my tenure as Ecology's 401 reviewer that interim monitoring methods be developed that would at least give a better indication of whether standards were being met and would provide a stronger basis for reasonable assurance for purposes of 401 review (e.g., 20 grab samples taken five minutes apart during certain storm events could provide sufficient data to interpolate the one-hour average concentration needed for some acute criteria). While they may or may not have been useful for NPDES purposes, I believed they would have helped with the level of assurance needed in 401 – however , they were not acted on and others were not developed, and Ecology therefore still does not have any evidence other than the knowledge that water quality criteria are regularly exceeded. This does not equate to reasonable assurance that standards are being met.

46. In a related example of Ecology's reliance on a 402 inadequate for purposes of 401's reasonable assurance standard, Ecology's brief (p. 22) states that the BMPs required in the 401 and 402 "may be partially effective" in treating metals. This again is an inadequate basis for reasonable assurance, especially given such things as the known criteria exceedences in the Port's discharges, the high metals concentrations in the Northwest Ponds identified in the Port's de-icing study, and the ambient concentrations of various metals in the receiving waters already subject to extensive discharges of inadequately treated stormwater.

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47. One final problem with the 401 certification's reliance on the 402 permit is illustrated by Condition J.2 and described in Kenny (26). The assurance provided in the 401 is that the Port will not be allowed to discharge stormwater from various surfaces until a site specific study is completed that would allow Ecology to change the water quality standards on a site-specific basis (though not stated in the certification, I assume this refers to the provisions of WAC 173-201A-040(3)). The new limitations and monitoring requirements would then be established in a future 402 permit. This approach ignores the fact that reasonable assurance is based on the standards as they exist at the time of certification. It also ignores the very practical consideration of what to do with the water if the study takes longer than anticipated, or if the required public process and rule revision identifies problems not yet anticipated that would delay or prevent adoption of different criteria. It also improperly assumes that the decision to change the standards will be made, despite whatever findings are made or public comments are received.

48. The above activities subject to the 401 certification are therefore dependent on some future changes in the water quality standards. The certification does not include sufficient measures to address what happens if the anticipated changes are not made. If, for instance, construction is completed before the necessary study is done or different standards are adopted, the Port would have to either stop rain from falling on the airport, route water away from the waterbodies to some other as-of-yet unknown location, or institute other unspecified BMPs adequate to control and store stormwater so as to prevent it from being discharged.

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49. It may be appropriate in some proposed projects for Ecology to rely on a 402 permit for purposes of compliance with 401 requirements, but in this case it is not. For this project in its current state, it would lead to continued uncertainty, likely ongoing degradation of the nearby waterbodies, and non-compliance with regulatory requirements.

B) Other Issues:

50. There is insufficient assurance that the Port will have adequate water to carry out required mitigation plans: The 401 inappropriately does not require a water right or other regulatory mechanism to ensure low flow stream mitigation will be provided in perpetuity.

51. For purposes of mitigation required for 401 and 404 permits, an applicant is generally required to provide mitigation "in perpetuity". Ecology's position is that a water right is not needed for the proposed low flow plan. The 401 does not prescribe a water right or any other regulatory mechanism to ensure the necessary water will be provided. It instead includes a condition (#B.1.e) that states the low flow facilities and plan are to remain in effect in perpetuity. This is similar to the situation described above where Condition A.1 is essentially a declaratory statement without adequate information or studies behind it. Despite the assurance from the Port that it plans to be around for a long time, absent a water right or similar mechanism for this proposed mitigation element, there is inadequate assurance that this water will be available when it is needed during each low flow period in the coming years and decades. This is especially important given the difficulty the Port has had over the years in identifying a source of water to draw upon, purchase, or otherwise obtain for its needed streamflow mitigation.

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52. Effect of my removal from the project and absence from Ecology on my ability to review the 401 certification: Several statements in Ecology's brief, and in Kenny's and Fendt's declarations challenge my ability to weigh in on this appeal because I am not familiar with documents issued since I left Ecology in January 2001. As I stated above, it is evident that the 401, on its face, is inadequate, and various statements in Ecology's brief and declarations further emphasize that fact. The examples cited in support of that statement make it clear that familiarity with the underlying documents is less important than familiarity with the 401 process and requirements, and I am still familiar with the 401 regulation and its implementation. Additionally, I am very familiar with the site and impacts of the proposed project, which remain the same or very similar to when I was the 401 reviewer.

53. However, as I stated near the beginning of this declaration, I have also had an opportunity to review several of the most recently issued documents on which the 401 was apparently based. For the most part, they raise many of the same concerns about adequacy, completeness, and accuracy as the previous versions.

54. Ecology also asserts in its brief and in Kenny's declaration that I should be unable to comment credibly on the 401 certification because I have not been officially involved in the project over the past several months. This contradicts Ecology's stated position when I left the agency in January, when I was asked to be available to provide any guidance or project history that might be needed in the course of the ongoing review. In Ms. Kenny's declaration (12), she states our discussions since I left Ecology have been limited to "the status of the project in very general terms." However, I recall at least three instances where we discussed her 401 review in more detail:

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- On May 31, 2001, I provided at her request a brief explanation of the Water Effects Ratio study the Port had discussed much earlier in the 401 review.
- On June 5, 2001, she called me to ask about the relationship between the 401 certification and the Agreed Order mentioned in the Governor's certification letter to the FAA – in that conversation, I informed her that I had written the letter, that it was written in part to tie the Agreed Order to the 401, and the work done under the Agreed Order was seen as necessary in part to provide reasonable assurance under the 401 to determine whether contaminants at the airport were affecting nearby surface waters. I explained that Ecology had determined at the time that the 401 was the only regulatory handle available to ensure the Agreed Order would be implemented as planned and scheduled. She stated that Ecology was now interested in separating the Agreed Order from the 401 review and was looking for another means to establish the necessary reasonable assurance.
- On June 7, 2001, we spoke about the relationship between the Port's NPDES permit and the 401 review, and whether the NPDES permit was adequate for purposes of 401. I explained that for purposes of 401, the required Best Management Practices (BMPs) should be those shown to result in compliance with water quality standards. She said that this NPDES modification would be limited to something less than that, but that Ecology had informed the Port that the next permit would be more stringent.

55. The Section 401 Certification is the only state permit addressing permanent loss of waterbodies and determining whether the activities associated with construction and operation of the

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facility requiring the certification meet water quality standards. In Ms. Kenny's declaration, she apparently misunderstands this statement in my original declaration (at ¶ 18) as somehow meaning that there are no other state permits addressing water quality. Of course there are, but they are narrower, have a more limited perspective and do not address all that is encompassed in 401 review, especially permanent loss of waterbodies.

56. It is also suggested by Ecology and the Port that the Certification condition allowing for "mixing zones" has been misconstrued. However, if the intent was to limit a possible mixing zone to turbidity from construction, the Certification should have said so and cited a different section of the WACs. The WAC provision actually cited is not limited in that way.

57. Issuance of incomplete 401 certifications: As partial justification for its current 401 decision, Ecology presents five 401 certifications from 1995 through 2000 that were issued based on less than final project designs or mitigation plans, including two I wrote – Auburn Racing and O'Hagan – in 1995. Both of those certifications were issued before Ecology had a 401 Manual and before the Board had made its decision in Battle Mountain Gold regarding the adequacy of information needed for 401 review. Additionally, it is difficult to compare the issues in the proposed SeaTac expansion with those in these two certifications. In the case of O'Hagan, the impacts – conversion of one type of wetland to another (cranberry bog) – and the required mitigation – preservation of two other acres of forested wetland – are substantially less than the extent and types of impacts and mitigation involved in the proposed airport expansion. In the case of Auburn Racing, there is no comparison between the relatively minor remaining clarifications there (e.g., minor changes to planting

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plan) and the fundamental gaps in knowledge necessary for a 401 decision which typify the airport certification.

58. Ecology's current 401 Manual provides guidance that 401s should be issued based on adequate information and a finding of reasonable assurance, and should be denied if the agency does not have adequate information. Two recent examples of 401 decisions involving certification denial based on inadequate information are the proposed Columbia River channel deepening in September 2000, and the previous application of the Port of Seattle for the airport expansion (withdrawn under threat of denial), again in September 2000.

59. By presenting these five selected 401s, Ecology seems to be arguing that because the agency issued 401s in the past based on less than the current standard for reasonable assurance, it should be justified in continuing to do so. This approach, however, is not supported by its current guidance manual and other recent examples of Ecology decision-making. It would also disregard the increased understanding of the regulatory and legal requirements for 401 decisions, and discounts the findings of recent studies by King County and Ecology showing a very low success rate for wetland mitigation projects, due in part to the lack of adequate information at the time permits were issued as to whether the proposed mitigation would work.

60. The Northwest Ponds are "waters of the state": I raise this issue only to address a statement by the Port describing the Northwest Ponds as man-made peat bogs. Ecology's position has been that these are waters of the state, in part due to their pre-existing natural presence in the landscape, in part to the cessation of peat mining activity in the wetlands, and in part due to their

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functioning as natural wetlands. During my tenure at Ecology, the Corps considered the Ponds to be waters of the U.S., and any placement of dredge or fill material in those wetlands would have required 404 and 401 review.

61. Closing: In closing, I believe the 401 certification, on its face, exhibits significant areas of uncertainty and speculation. The decision to issue the 401 was based largely on incomplete and inaccurate documents. The 401 requires future submittals of documents that Ecology expects will provide justification for its decision, but in many instances, as described in this declaration, that expectation is not supported by evidence or adequate information. These future submittals, in many cases, are meant to address significant impacts and provide substantial mitigation, so if inadequate, they could result in significant degradation to waters of the state. While the detailed requests contained in the numerous certification conditions show that Ecology has done considerable work to identify the current shortcomings of the proposed project, the high level of uncertainty remaining after the 401 is a fatal flaw of its validity.

62. Unless reversed, this 401 would provide a harmful precedence in the role of 401 certification review in protecting and maintaining water quality in the state.

I declare under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

DATED this 7th day of October, 2001, at Ft. Bragg, California.

Thomas R. Luster

Tom Luster

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EXHIBIT C

POLLUTION CONTROL HEARINGS BOARD

AIRPORT COMMUNITIES COALITION,

Appellant,

vs.) PCHB NO. 01-160

DEPARTMENT OF ECOLOGY and THE PORT OF SEATTLE,

Respondents.

DEPOSITION UPON ORAL EXAMINATION
OF
THOMAS LUSTER

8:57 A.M.
FEBRUARY 1, 2002
1191 SECOND AVENUE, SUITE 2200
SEATTLE, WASHINGTON

MARY L. GREEN, CCR, RPR
CSR NO. GREENML497RZ

APPEARANCES

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ALSO PRESENT:
ELIZABETH LEAVITT

INDEX

SEATTLE, WASHINGTON; FRIDAY, FEBRUARY 1, 2002
8:57 A.M.
--oOo--

THOMAS LUSTER
sworn as a witness by the Notary Public,
testified as follows:

MR. REAVIS: Do you want to go ahead and make your objections?

MR. SMITH: Sure. My name is Richard Smith. I am here representing Tom Luster, the deponent today, and as we get started, I have some objections I'd like to make a record of with respect to the document request that was attached to the notice of deposition.

I'd like to object to the form of the document requests. There is no provision in the rules for a document request to a nonparty witness made by or with a notice of deposition. Second, I'd like to object that these document requests are overbroad and unduly burdensome, and, finally, I'd like to object that the fifth document request here is beyond the scope of the parties' agreement as I've understood it with respect to document disclosures. My understanding is that communications between counsel and experts are

not being disclosed by anyone in this case.
That being said, without waiving those objections, we have brought some documents here and made an attempt to meet those requests.
MR. EGLICK: I'll add I think that the requirements for discovery in this case are being met, and anything that was requested of Mr. Luster beyond those requirements is subject to objection from ACC as well.

EXAMINATION

BY MR. REAVIS:

Q. Will you please state your name for the record.
A. My name is Thomas R. Luster, L-u-s-t-e-r.
Q. Mr. Luster, my name is Gil Reavis, and I think we just met for the first time this morning. You understand I'm representing the Port of Seattle in connection with an appeal of a 401 certification issued to the Port for a project at Sea-Tac International Airport, do you not?
A. I do understand that.
Q. And you understand that you've been given an oath to tell the truth just as if you were in court testifying before a judge or jury?

A. I do.
Q. If during the course of the deposition today any of my questions is unclear to you, I would appreciate it if you would stop and ask me to rephrase it. Will you do that?
A. Okay.
Q. That way before you answer a question, everyone will know that you understood it. Is that fair enough?
A. Right.
Q. For the court reporter's benefit, if you could please answer audibly instead of shaking your head or nodding.
A. Yes. I understand that.
Q. You've given depositions before, I understand.
A. Correct.
Q. On how many occasions?
A. I think five or six.
Q. Can you tell me what matters those were in connection with?
A. All but one were in regards to other 401 certification issues. The one that wasn't had to do with a general NPDES permit.
Q. Why don't we go through briefly, then, and if

you could tell me about which cases you gave depositions in in connection with 401 certifications.
A. The first deposition, I believe, was O'Hagen versus Ecology, and that was a 401 that Ecology had issued several years ago. I don't remember the exact date. And there may have been one or two different depositions in that case.
Q. Do you remember the time frame that those were given?
A. Probably mid '90s. I don't know more specifically than that. I also provided a deposition in the Battle Mountain 401 case, which was Okanogan and Highlands Alliance versus Ecology and Battle Mountain, I believe.
I gave a deposition on a matter between the LRI Landfill Company and Ecology. Actually, now that I think about it, that may not have been a 401-related one. Ecology was involved with the review, but I think eventually a 401 was not required for that instance, but regardless, I provided a deposition on that case.
Last January 2001, I was deposed on an appeal of the general NPDES permits for industrial and construction stormwater, I believe, and today's deposition. I believe that's the complete list as far as I can remember.

Q. In connection with that appeal of the general NPDES permit, you were actually deposed by Mr. Smith, who is here representing you today; is that correct?
A. Correct.
Q. The O'Hagen case, did that involve a 401 certification that you authored?
A. Yes, it did.
Q. Did you testify or have you testified at any hearings before the PCHB or other court proceedings in connection with 401 certifications?
A. I testified before the board in that proceeding, the O'Hagen proceeding.
Q. By the board, that's the Pollution Control Hearings Board?
A. Yes.
Q. I take it you did not testify at the hearing or any of the hearings before the Pollution Control Hearings Board with regard to the Battle Mountain Gold case?
A. Correct.
Q. Let me go over with you if I could some of the documents that you brought with you today and get you to identify them for the record.
(Deposition Exhibit No. 200 was marked for identification.)

Q. (BY MR. REAVIS) Exhibit No. 200 to these depositions appears to be a copy of your resume; is that correct?
A. Yes, it is.
Q. Is that current to the best of your knowledge?
A. Yes. It's also -- the first two pages are my resume, and the last three are letters from the past two directors of Ecology that delegated signature authority for 401 to me.
Q. Let's do this, then. Why don't I pull those letters off the back of that and mark those as another exhibit.
(Deposition Exhibit No. 201 was marked for identification.)
Q. (BY MR. REAVIS) Just so the record is clear, Exhibit 200 is now your resume, and Exhibit No. 201 is a copy of two letters or actually a memorandum and a letter to you -- let me strike that. Why don't you tell me what the first page of 201 is.
A. 201 is a memo from Tom Fitzsimmons, director of Ecology, regarding delegation of signature authority. It essentially continues the delegation of authority that was provided by the previous director, Mary Riveland.

Q. So this is dated February 11, 1997?
A. Yes. And attached to it is from December 14 of 1995 a letter to me from Director Riveland delegating signature authority for 401 certifications and CZM consistency determinations.
Q. So the second letter is dated December 14, 1995, to you from Mary Riveland?
A. Right.
Q. And that one specifically is delegating signature authority to you personally?
A. Correct.
Q. The first page, the memorandum from Mr. Fitzsimmons, does not mention you personally, correct?
A. Correct.
(Deposition Exhibit No. 202 was marked for identification.)
Q. (BY MR. REAVIS) Can you describe for the record what Exhibit 202 is?
A. Actually, this isn't complete. Those last -- keep going.
Q. Why don't you make it a complete document.
A. Actually, there are -- I think there are nine sheets here that comprise the recommendation for my upgrade from an environmental specialist 4 to

environmental specialist 5 at Department of Ecology. It includes a cover memo from my supervisor, the job description known as a classification questionnaire, and some personnel forms related to that and signature blocks from various people, so that's the full --
Q. So Exhibit 202, the first page is a memorandum dated November 25, 1998, from Paula Ehlers to Al Jacobs?
A. Correct.
Q. And as I understand what you just told me, the succeeding pages after the first two were attachments to the memorandum?
A. Yes.
Q. So this is the document as it was intended to be with all attachments?
A. Correct. That's the complete document.
(Deposition Exhibit No. 203 was marked for identification.)
Q. (BY MR. REAVIS) Can you describe for me what Exhibit 203 is?
A. This is a bibliography that I believe was prepared by the Corps of Engineers staff. It's a list of documents related to the proposed Sea-Tac master plan expansion and goes back from the early '90s until the last document noted was October of 2001.

I haven't done a count. There's probably a little over a hundred documents listed, and I've check marked a number of those documents that I either reviewed or am familiar with or I know were part of my earlier involvement with the project. There may have been some I missed, but these are the ones that I remember.
Q. So the purpose for putting the check marks on the documents was what?
A. It's in response to the request for documents as part of this deposition. I believe all these are in the public record, and I think the request said something about I didn't have to bring documents that were part of the public record. I'm assuming that all the parties have copies of these or have had opportunities to get copies.
Q. So is it your testimony, then, that all of these items with check marks on were either reviewed or relied upon by you in the formulation of the opinions that you're expressing in this case?
A. I either reviewed them, discussed them with other people involved in the review, or am somehow familiar in those ways.
Q. Let me just see if I can make sure I understand, then. You're not necessarily testifying

that you reviewed all the documents that are marked with checks on Exhibit No. 203?
A. Correct. Well, it varies by document. Some of them I did do a pretty thorough review of. Some of them I reviewed portions of the documents. For instance, with some documents that had a number of appendices with perhaps raw modeling data or something like that, I didn't personally review every page of an appendix like that. So my level of review or familiarity varies with each document.
Q. To the best of your knowledge, are there documents that are marked with a check on Exhibit No. 203 that you never reviewed at all?
A. I believe that the ones I checked are ones that I'm at least familiar with and have some personal knowledge of. I have done some level of review of those. As I said, I may have missed some or I may have inadvertently marked the wrong version perhaps of one.
In some instances, we had four or five or six different drafts of a document, and I didn't have them all in front of me when I made this list or check marked this list, so I may have mismarked one draft and mistaken it for an earlier or later draft.
Q. I take it, then, that the time frame in which you reviewed these documents may have been while you

were working for the Department of Ecology in addition to after you left the Department of Ecology?
A. Correct.
MR. EGLICK: Objection to the form of the question.
Q. (BY MR. REAVIS) Do you understand the question?
A. That this list includes documents I reviewed several years ago as well as during the last year?
Q. Yes.
A. Yes, it does.
(Deposition Exhibit Nos. 204 and 205 were marked for identification.)
Q. (BY MR. REAVIS) Will you please describe for the record what Exhibit 204 is?
A. Exhibit 204 is a note to myself essentially from June 7, 2001, after I talked with Ann Kenny from Department of Ecology about -- I had just received a request from Senator Julia Patterson to review the NPDES permit that had been issued sometime right near this date, and I had called Ann letting her know that Senator Patterson had made the request, left a message for Ann, and then Ann called back and we talked some about that request.
Q. So you describe this as a note that you wrote

to yourself?
A. Correct.
Q. Was this created in an e-mail program?
A. Yes.
Q. Did you create this document, this note to yourself, at the time that you were working for Ecology?
A. No. This was after I had left Ecology.
Q. I take it, then, that Exhibit No. 204 wasn't sent to anyone. You just kept it in your files?
A. Correct.
Q. Could you describe for us, then, what Exhibit 205 is?
A. 205 is again a note to myself, Tuesday, June 5, 2001. Ann had called me with a question about how the 401 review was connected with the agreed order that was being negotiated with Sea-Tac and with the certification letter that the governor's office had issued some years earlier, and so this just is my notes on that conversation with Ann.
Q. Dated June 5, 2001?
A. Yes.
Q. So that would have been the date it was created?
A. Yes.

Q. But I take it again with Exhibit No. 205 that was kept in your files and not sent to anyone?
A. Correct.
(Deposition Exhibit No. 206 was marked for identification.)
Q. (BY MR. REAVIS) Can you describe for the record what Exhibit No. 206 is?
A. This is a document I wrote dated January 21, 2001. I wrote this in response to a request from Senator Patterson that before I left Ecology I would memorialize my understanding of where the agency was with its review of the proposed Sea-Tac 401 review, and this is a several page summary of my understanding at the time, the status of various issues we were dealing with.
Actually, I believe the original had a cover letter on it, but I imagine that was provided as part of public disclosure, because this was during my time at Ecology.
Q. Maybe I'll find that one later, but it's your belief, then, that Exhibit No. 206 was in fact attached to the letter that was sent to Julia Patterson?
MR. EGLICK: Objection as to the form of the question; no foundation.
Q. (BY MR. REAVIS) Did you send a letter to

Julia Patterson at or about the time you left the Department of Ecology?
A. Yes.
Q. And do you believe that Exhibit No. 206 was attached to that letter?
A. Yes, I do.
Q. Have you brought any other documents with you to the deposition today pursuant to the document request that was provided along with a notice of deposition?
A. No. I think this is the complete set.
Q. Have you been retained by any party to this case as an expert witness?
MR. EGLICK: Objection as to the form of the question; calls for a legal conclusion.
Q. (BY MR. REAVIS) Can you answer the question?
A. I don't know what the definition of an expert witness is.
Q. You have been asked to express opinions in this case, have you not?
A. Correct.
Q. Has any party contacted you and engaged you as a witness to express opinions on their behalf?
MR. SMITH: Objection. Engaged is vague.
A. Yeah. I don't know what engaged means.

Q. (BY MR. REAVIS) Do you have any contractual relationship with any party to this case in which you've agreed to serve as an expert witness?
A. I don't think so. I don't know. I haven't signed anything. I'm not being paid. There's no arrangement like that.
Q. So there's no letter in which any party to this case has asked you to agree to serve as an expert witness on behalf of that party?
A. Correct.
Q. What did you do to prepare for this deposition today?
A. I read and reread a number of documents that had been generated during this review and over the last year mostly to familiarize or refamiliarize myself with the documents and to get a better idea of the timing and the process that we went through to get to this point. That was the main focus of my preparation.
Q. Did you review any documents in preparation for your deposition other than the ones that are identified in Exhibit No. 203 or that you have brought with you to the deposition today?
A. I read a number of declarations that were written by various parties back in, I believe, September and October 2001. I read some of the more

recent depositions. I read some of the documents that had gone to the board, the PCHB; for instance, the requests for stays and replies to those requests. I read the board's decision from, I believe, December of last year regarding the stay. There may have been some others. Those are the ones I remember right now, though.
Q. Have you met with anyone in preparation for your deposition today?
A. My attorney.
Q. Anybody else?
A. No.
Q. Was there anybody else in the meeting with you and your attorney besides the two of you?
A. No. Just the two of us.
Q. And your attorney would be Mr. Smith?
A. Correct.
Q. You've given us your resume, so I don't want to spend a lot of time going over some of the issues or some of the background that you have, but as I understand it, you have a BS in geography?
A. Correct.
Q. And an MS in resource geography?
A. Correct.
Q. Can you tell us what resource geography is?

A. Well, geography in general is the study of places and how various elements interact in the landscape, and those can be anything from biological components of the landscape, human components, economic components, so it's a very broad discipline. Resource geography is primarily focused on elements of the environment and how they interact in the landscape.
At Oregon State where I got my MS degree, the focus was on ecological relationships in the landscape, specifically geomorphology, riparian studies, stream dynamics, wetland biology, that sort of thing.
Q. So did you in the course of getting your MS take courses in wetlands biology?
A. Yes, I did.
Q. Do you recall how many?
A. There were several courses that covered various aspects of either wetlands or biology or the combination, probably in total three or four different courses.
Q. In your declaration you say that your course work focused on watershed analysis.
A. Correct.
Q. What type of course work was that?
A. That included the ones I just mentioned. I also took some courses on stream hydrology, stream

dynamics, landscape ecology, the wetlands ecology. Those are the ones that come to mind right now. There may have been some more. Excuse me. Geomorphology was an important part of that.

Q. Now, other than the work that you did in connection with getting your BS or your MS, have you had other formal training with regard to wetlands biology, stream hydrology, or some of those other matters you just talked about?

A. I took a number of workshops or training courses during my career at Ecology. Specifically I remember taking the Corps of Engineers' wetland delineation course, which is a four- or five-day workshop that covers wetland hydrology, wetland plants, and wetland soils.

I remember a course through the University of Washington extension on -- I don't remember the exact title, something about stream dynamics and fish habitat that was taught by a hydrologist and a fish biologist.

I have taken at least one course on aquatic toxicology, a number of other courses on various aspects of wetlands. I also attended several of the annual conferences of the Society of Wetland Scientists northwest chapter where there were different workshops or training opportunities provided and presentations

and papers delivered on particular aspects of wetland science.

Over the course of the years, I probably had 20 or 30 different training opportunities at Ecology on those and other similar subjects. I just can't remember all of them right now.

Q. The course at UW on stream dynamics and fish habitat, how long did that course take?

A. It was -- I don't remember exactly. It was over the course of several days, I believe.

Q. What about the course on aquatic toxicology? First off, where did you take that course?

A. I don't remember the details of that other than -- well, I don't even remember when I took that. I'm sorry. I don't recall exactly.

Q. Do you recall how long a course it was?

A. I don't recall that.

Q. More than one day?

A. I don't remember.

Q. Do you consider yourself a technical expert in wetlands issues?

MR. SMITH: Objection to the form.

A. I don't know that it's my role to call myself an expert. I think that's something that other people may consider someone. I would say I'm knowledgeable on

some issues. Expertise is a matter of degree, and I'd say part of the definition of an expert is what other people think of someone's work or level of knowledge.

Q. (BY MR. REAVIS) Have you ever actually yourself performed a study to delineate a wetland?

A. At the Corps of Engineers delineation training, we did at least a couple of delineations as part of that course, and I participated in some number of delineations primarily with other Ecology staff at various sites or with Ecology staff and staff from various local governments as part of Ecology's technical assistance work in various areas.

Q. So as a participant or student in the Corps of Engineers course, you assisted in a delineation of a wetland?

A. I believe we went to two or three different sites and did a delineation using the knowledge we had just learned in the course.

Q. Did you take any samples?

A. I believe part of the training was taking soil samples and showing us how that's done properly, yes.

Q. So you observed somebody else doing that?

A. I think I actually put the shovel in the ground a few times and looked at the soil and did the

feel test and that sort of thing.

Q. Did you write a report then reflecting that delineation?

A. No, I didn't.

Q. In these other instances where you participated with other Ecology staff or staff from other agencies, did you yourself perform any analyses or writing reports reflecting those delineations?

A. I don't think I've ever written a wetland delineation report, no.

Q. So in those instances, were you there as an observer watching someone else perform a wetlands delineation?

A. Observer or assistant.

Q. Have you ever designed or built a mitigation project for the wetland impact?

A. On my own?

Q. Yes.

A. No.

Q. Have you ever participated in such a project apart from your duties in reviewing reports generated for mitigation projects?

A. Well, as part of our review of 401 proposals, I would often be on-site on a proposed project site with an applicant and with Ecology's wetland staff or

wetland staff from other agencies discussing the design of a proposed mitigation site, why it would or wouldn't work in a particular location or what the likelihood of success might be for one type of vegetation or another, where we thought the wetland hydrology would be supported and where it wouldn't be supported. So I was involved to that degree on probably several dozen different projects around the state.

Q. Ecology does have people who are specifically tasked with the responsibility of evaluating wetlands, correct, and impacts on wetlands?

MR. EGLICK: Objection as to the form of the question.

A. Yes, I guess. I guess so.

Q. (BY MR. REAVIS) During your time at Ecology, were there people who worked for the agency who were more knowledgeable about wetlands issues than you were?

A. There were a number of people at Ecology who had very good, very high level of expertise on different aspects of wetland ecology and delineations and that sort of thing, yes.

Q. What program would those people have been working in?

A. Over the course of my career there, it changed. Most recently, I believe the wetland staff

are all in the shorelands and environmental assistance program.

Q. Can you identify for me some of the people that you believe worked in Ecology on wetlands issues during the time that you were there who have particular expertise with regard to wetlands issues?

A. Well, as I said, the staff there had expertise in different areas of wetland technical areas. Andy McMillan is considered Ecology's expert on the wetland policy arena. Dr. Tom Hruby, H-r-u-b-y, is our -- is Ecology's expert on the HGM method, which is the way Ecology is working to determine wetland functions.

I would say the various staff in Ecology's regions are all very knowledgeable on information needed for wetland fieldwork such as making delineations, helping review proposed project impacts and mitigation proposals, that sort of thing. So there is a lot of expertise at Ecology in my opinion on wetland issues, and it's embodied in different people for different issues.

Q. And in the course of performing your work, did you at times rely on the opinions expressed by those technical experts on wetlands issues?

A. Yes, I did.

Q. And if there was a difference of opinion between yourself and one of those experts on a technical issue, would you generally defer to the opinion of the expert?

MR. SMITH: Objection; lack of foundation.

A. Well, it would depend on the person involved and the area of difference on a particular technical issue.

Q. (BY MR. REAVIS) But on occasion you did that, defer to the technical expertise of someone else?

A. Oh, yes.

Q. I take it you're not a geologist?

A. No.

Q. You're not a hydrogeologist?

A. No.

Q. Not a seismic expert?

A. No.

Q. Do you consider yourself to be a wildlife biologist?

A. No.

Q. Fisheries biologist?

A. No.

Q. Toxicologist?

A. No.

Q. A minute ago you mentioned the Society of

Wetland Scientists. You are a member, correct?

A. I am.

Q. As I understand it, there's two types of memberships. One is a general membership where you pay your fee and become a member, and the other is some sort of certification program?

A. I understand there's probably four or five different categories of membership -- active members, student member, corporate, emeritus -- and separate from that is the professional wetland certification component that the society offers.

Q. Have you been certified by the association?

A. No.

Q. What type of membership do you hold?

A. An active membership, I believe.

Q. And is that one that's open to anyone who wants to join?

A. I believe so, yes.

Q. So you pay a fee and you can become a member of the Society of Wetland Scientists, correct?

A. That's correct.

Q. I think the fee is $50. Is that correct?

A. Yes.

Q. So if I were to pay $50, I could become a member, correct?

A. That's correct.
Q. So the fact you're a member of that society doesn't necessarily in and of itself mean that you have particular expertise in wetland science?
A. That's correct. It provides me an opportunity to keep up with the state of the science. Along with the membership comes a quarterly journal and a bulletin that have peer-reviewed papers and articles on various aspects of wetland scientists, so I'm a member in order to just keep up on those sorts of things.
Q. Let me go over your work experience briefly starting with where you first went to work after receiving your BS. Can you tell me what you did after receiving your BS in geography in 1981?
A. Let's see. I had a number of different jobs. I worked in a salmon cannery, several different salmon canneries in Alaska, waited tables, had a number of temporary positions, worked in a law firm for a while as an administrative assistant, just a number of jobs.
Q. Well, let me ask a different question. In between the time that you received your BS and the time that you went back to school for your MS, is there anything about your work experience in that time period that helps you better understand the issues in

connection with 401 certifications or any experience that you're relying on to allow you to express opinions in this case?
MR. SMITH: Objection; form, compound question.
A. During that period, I didn't really have any professional experience in the area of 401 certification, but it's hard for me to separate general life experience during that time. For instance, working in a law office, I had a better sense of learning procedures and learning to read complex documents and things like that. Working in various settings perhaps helped me prepare for my life now. Other than that general sense, that's what comes to mind.
Q. (BY MR. REAVIS) Now, after getting your MS, what did you do first in terms of employment?
A. I took a position with the Snohomish County public utility district, and that's listed on my resume. I was hired to do an environmental assessment of -- let me start over.
The PUD had identified a number of electrical transformers around the county at various locations that they suspected may have been contaminated with PCB-containing oil, and my job was to go around the

county to each of these sites and do an environmental assessment to determine the risks and hazards associated with -- or the potential risks and hazards of that transformer at that setting, so I came up with a template that listed various types of risk to the environment and to human health such as proximity to a stream or wetland, proximity to a schoolyard, proximity to a hospital, that sort of thing, and went to each of these sites. A lot of them were on power poles. They were on a road somewhere in Snohomish County. Some of them were in substations throughout the county.
Based on the proximity of these transformers to critical areas, the pathways leaking oil could take to reach these areas, that sort of thing, I prioritized these transformers. I think in total there were several hundred, and the county or the PUD used that to prioritize the order of removal or replacement of those transformers over the next couple of years.
Q. Now, did the work that you were doing involve any sampling of soil or groundwater for the presence of PCBs?
A. No. I didn't do any sampling.
Q. Did you ever work with the Model Toxics Control Act in connection with your work regarding those transformers?

A. No. I'm not certain of the timing, but that may have before Model Toxics Act had been passed.
Q. What about any federal statutes that may have been in existence at that time? Did you work with any clean-up regulations promulgated by the EPA?
A. No, not me directly.
Q. During the course of your career, have you ever had occasion to work with clean-up regulations and particularly the Model Toxics Control Act?
A. My first position at Ecology was to help develop the sediment management standards for the state, which included a clean-up component, and during that time, we in my work group had some interaction with staff of -- the toxics staff at Ecology.
Since then I've had occasion on a few particular projects where projects proposed -- projects requiring a 401 were being proposed at a clean-up site or a site with existing or suspected contamination, and in those cases, I would interact with the clean-up staff at Ecology.
Q. I'm kind of jumping ahead here, but why don't you describe for me the sites that you recall that were 401 projects where there was a contaminated site.
A. The primary one that comes to mind is on Lake Washington. I'm trying to remember the full name. The

Baxter site.
Q. Was it a former wood treating facility?
A. Yes. That's the one. There were two properties adjoining there, and there was a proposal to or there was -- it hadn't reached the 401 stage, I believe, but there was an initial proposal to develop those sites and a lot of concern about the contamination issue and how that would eventually fit into the requirements for a 401, so I was involved with that one.
Q. And was there a 401 ever issued for that?
A. I don't believe so. Not that I recall. There were some other sites. I believe I had one on Lake Union that had some contaminant issues. I know there were some others. I just can't think of them right now.
Q. Do you recall whether or not a 401 was issued for the site on Lake Union?
A. I don't recall right now.
Q. After leaving Snohomish County, then you went to work for the Department of Ecology?
A. Correct.
Q. Why don't you describe for me what your work at the sediment management unit consisted of.
A. I had several different roles in that

position. I was there for about three years. My initial work was to guide the public involvement portion of rule development. I also facilitated the technical work group that was instituted to help guide the technical development of the rule. That involved a group of perhaps 20 to 30 different representatives from different groups and organizations, industry, environmental groups, scientists with expertise in different areas of sediment and sediment contamination.
I believe I completed most of those two roles and then moved into helping develop freshwater sediment criteria as part of the agency's rule, and my primary work there was to manage one or two different laboratory contracts that Ecology set up to look into particular aspects of freshwater sediment criteria development determining what appropriate bioassays should be used, doing a compilation of the existing literature and state of knowledge on the effects of freshwater sediment contamination on various organisms, that sort of thing.
Q. So were you doing that literature review yourself?
A. No. We had contracted with a laboratory to do that. I was managing that contract.
Q. And then in 1993 you became an environmental

specialist 1; is that correct?
A. Yes. I believe so. Well, I was an environmental specialist 1 when I was doing the sediment work and just did a lateral transfer to the 401 group.
Q. At that time, who was the person in charge of the 401 group? I guess by in charge, I mean who was the 401 coordinator or the lead person in connection with evaluating 401 applications?
A. There have been a number of changes since then, so it's hard to remember the exact order. I believe at the time my supervisor was Keith Phillips, and there were two or three other staff that did 401 certification review. Rick Vining, Russ McMillan, and Maria Peeler, I believe, were all there when I joined that group.
Q. What were your duties when you first started in the 401 group?
A. My primary duties were to review proposals needing a 401 certification to determine whether or not they met the requirements of the Clean Water Act and the state water quality standards and also to ensure that they conformed with the state's coastal zone management program if that was applicable.
Q. Now, in your declaration, I believe that you

say that you have either made decisions with regard to or recommendations with regard to over 700 401 certifications.
A. Correct.
Q. And I take it when you first started, were you making recommendations at that time instead of decisions?
A. Well, I guess I'd have to understand the difference in those terms. I would say my role throughout was to determine whether or not Ecology had a reasonable assurance to issue a 401. Sometimes that determination took the form of a recommendation to my supervisor, who would ask me questions about it and then decide whether or not to approve and sign a decision. At other times, after I got the signature authority from Ecology, I made the determination and the decision, so it was a mix during that whole time period.
Q. Let me ask it this way. Did the shift or did the time frame at which you began to make decisions on 401s coincide with the time that you were delegated signature authority for 401s?
MR. SMITH: Objection to the form of the question.
A. Well, I guess throughout my time doing 401s

it was up to me to determine compliance and present the findings and my perspective initially, to present that to my supervisor, and depending on the project, he would have some very detailed questions or not too many questions at all. I think in part that may have depended on his level of comfort with my conclusions. I'm trying to differentiate between decision and recommendation. I'm not really clear on what you're --

Q. (BY MR. REAVIS) That's what I was doing. I'm just taking the language that was in your declaration and trying to figure out whether in your mind there's a clear distinction between when you were making recommendations and when you were making decisions.

A. I'd say an umbrella term would be determination. That would apply to both a decision or a recommendation.

Q. After you were given signature authority for 401 certifications, did you always sign those certifications or were there instances where someone else signed them?

A. Again, I don't remember the exact timing, but sometime in the mid '90s our unit -- the 401 review unit started doing 401 reviews so that one person would review a project, make the determination, write up the draft decision, and then that would be reviewed by

another person in our unit. It was essentially a peer review process, and at that time there were probably four or five of us. We each had signature authority and could review and sign each other's certification.

Our practice was to never sign our own certification. We always ran it by someone else. So if it was a project I was reviewing, I'd make the determination, write up the conditions, that sort of thing, and then have that reviewed by someone else, and they would do the same with me. In some instances, on more complex or projects that had other issues, we would have that signed by our supervisor rather than do this peer review process.

Q. Did you ever sign certifications that you yourself authored and made the recommendation to issue?

A. I don't believe so. I think this type of review process I described was always in place.

Q. So if I were to find a certification that you actually signed, would that be an indication that that was one that you probably didn't author?

A. As far as I can remember, that's correct. It would have been a certification that someone else reviewed and I signed. I'm trying to remember if there are any instances where that didn't happen, but I can't think of any right offhand.

Q. Is there any way to your knowledge to review the certification itself and determine who is the author?

A. I don't think there is an extra signature block or review notation on who the original reviewer was. I suppose if you went back through the records and determined -- well, let me back up just a minute.

For most of the time I was -- for most of the time that the 401 review process was centralized at Ecology's headquarters office, different staff had been assigned different regions of the state, and so if you could somehow tie in a project in Snohomish County in a certain year and determine which staff did that county at that time, you might be able to determine who the likely reviewer was.

However, that varied some based on workload and different areas of expertise. For instance, one of our reviewers really focused in on dredging projects, and he tended to do those regardless of where they were in the state, although I did an occasional dredging project as well, so there's no absolute way of determining that.

Q. So when you first started working for the 401 group, that function was at headquarters, correct?

A. Yes.

Q. And when did that particular 401 function be reorganized in a manner to where it was distributed to different regions?

A. I don't remember the exact date. It was probably around '97, '98, something in there.

Q. What to your knowledge was the reason for making that change to regionalize the 401 function?

A. My understanding was that Ecology wanted to have more functions in general occur in the regional offices than at the headquarters in order to be closer to local concerns and to be more responsive to local jurisdictions, that sort of thing, and so this regionalization of 401 fit within that more general approach Ecology was taking to regionalize a lot of different functions.

Q. And did you agree with that proposal to regionalize the 401 function?

A. I thought it was best to keep that as a centralized function, because we had built up a lot of knowledge, and the group that was doing 401 at headquarters all worked together and sat together, and as issues came up, we could interact very easily and quickly, so I saw it as a good thing to stay centralized, but once it became -- once the decision was made to regionalize, part of my job was to help

carry that out, so I got behind it and did.
Q. Now, at the time that the decision was made to regionalize the function, can you tell me who was in headquarters office working on 401s?
A. Let's see. Besides myself, Sandy Manning, Bonnie Shorin.
Q. I'm sorry?
A. Bonnie Shorin, S-h-o-r-i-n, Rick Vining, and there's someone I'm forgetting, one or two people I'm forgetting unfortunately.
Q. Can you tell me how the 401 group was structured in terms of reporting requirements? Was there a clear lead or was it your group of peers as you've discussed earlier?
MR. SMITH: Objection. What period of time are you talking about?
MR. EGLICK: Objection as to form of the question.
MR. REAVIS: Let me start over again.
Q. (BY MR. REAVIS) At the time that the decision was made to regionalize the function, can you describe for me the reporting requirements and structure or hierarchy of the 401 group?
A. I believe at that time we were using this peer review structure. I'm trying to recall whether --

I'm just trying to recall the supervisor at that time. During that period, we had, I think, three different supervisors in a relatively short period of time, so I'm a bit confused on what happened first and what happened next.
Q. Maybe it would be helpful, then, to go through during the course of your work for Ecology's 401 group who your supervisors were over time. I think you told me a minute ago that Keith Phillips was the initial supervisor when you started.
A. Right. The ones that come to mind are Keith Phillips, Jim Pendowski, Dave Bradley, Carrie Berry, B-e-r-r-y, Maria Peeler, and most recently Paula Ehlers. I hope I didn't leave anyone out.
Q. Now, during that time frame or with regard to these people that you've mentioned, was the supervisor for the 401 group always at headquarters?
A. Yes.
Q. Let me back up a minute to this signature issue and ask if for 401 certifications that you actually signed, is that an indication that you were the person who peer reviewed someone else's work?
A. Yes. That's generally correct.
Q. And so would that indicate, then, that you agreed with the determinations that were made by the

person who authored the 401?
A. Correct.
Q. So you would substantively review those documents as opposed to just signing something that someone put in front of you?
A. Generally, yes. We'd ask questions or review certain aspects of it in more detail, but for the most part, yes.
Q. Now, when the 401 function was regionalized, did any of the people who were working at headquarters at the time take positions with the various regions and essentially move from headquarters to the region?
A. I believe -- and, again, I'm trying to remember the timing of things. I believe the headquarters person moved to the southwest region, and that may have been Joe Sahnerone at the time, although I can't recall the exact details. Other than that, I don't think anyone from headquarters moved to a region.
Q. So was it necessary, then, to hire new people in the regions to perform the 401 function?
A. Yes.
Q. Do you recall who was hired in the regions as the first 401 reviewer?
A. I believe Ann Kenny was the first one.
Q. For northwest region?

A. Correct.
Q. How about any other regions? Do you remember who was hired in other regions?
A. Mark Schuppe and Cathy Reed were -- actually, there may have been people before them in the central region.
Q. So they were both in central region?
A. Yes. I'm embarrassed to say I can't remember all the 401 reviewers from that period right now.
Q. Whose responsibility was it to train those new 401 reviewers?
A. Largely mine.
Q. And how did you go about doing that? Would you travel to the regions or did they come to headquarters to receive training?
A. It was a combination. I went there and they came to headquarters at various times over some period of time.
Q. Was there a formalized training program that you used in order to educate those people about how to evaluate 401s?
A. We had put together a 401 training manual that consisted of the applicable regulations, a lot of the early guidance documents that we had, examples of different types of 401s and the other permits we dealt

with. I'm using 401 throughout this, I guess, as a shorthand for 401, CZM, nationwide permit, section 10, that sort of thing. So we had a manual that compiled a lot of information that we used to do this training and updated that as necessary and also put together a recommended training list for the new staff to help them further their education in 401-related issues.

Q. So this was a document apart from the desk manual?

MR. EGLICK: Objection as to form of the question and foundation.

Q. (BY MR. REAVIS) Why don't you tell me what document you were referring to when you said there was a list of material to be reviewed.

A. Well, I know the manual consisted of the regulations and guidance and examples of certifications, and we also had a list that we developed -- I'm not sure if this list was part of the manual or something separate, but it was the suggested training for 401 staff to make sure that they each took the corps delineation, wetland delineation training; that they developed some expertise in some particular aspect of 401-related issues.

That was meant as a document to support training requests by staff so that as opportunities

came up, they could point to this document and say it would help my professional development if I took this course because it's part of the 401 recommendation.

(Deposition Exhibit No. 207 was marked for identification.)

Q. (BY MR. REAVIS) Let me ask you about what's been marked Exhibit 207. Does that appear to be a copy of the 401 CZM review desk manual?

A. It does.

Q. And is that the document that you were referring to just a minute ago?

A. Actually, no. This is a more recent document. The training manual was a looseleaf binder that consisted of things like the water quality standards for the state, the applicable sections of the Clean Water Act, the Federal Rivers and Harbors Act, and things like that. The manual here in front of us is somewhat an outgrowth of some of the documents in that training manual.

Q. Did you prepare the training manual yourself?

A. I was the lead author, but I prepared it in conjunction with the other 401 staff and other staff at Ecology.

Q. And was that a document that was given to these new regional 401 reviewers?

A. I don't believe we had a desk manual during the first phase of regionalization.

Q. Let me just stop you there. Maybe my question was unclear. I was asking about the training manual. Was this a document that was delivered or a copy given to the new 401 reviewers in the regions?

A. I believe everyone got the training manual when they were hired, yes.

Q. And was the training manual updated as time went on?

A. I believe there were occasional updates as necessary, yes.

Q. Let me ask you, then, about Exhibit 207. Can you tell me how or what the process was for creating the desk manual that's referenced or represented in Exhibit 207?

A. I believe one of the main drivers behind creating this desk manual was the move from a centralized 401 function to a regional approach. When we were all centralized, it was easy to discuss things in person and get immediate feedback and have questions answered on procedure or technical elements of a proposed project, that sort of thing.

When we moved the function to the various regional offices, it was much more difficult to

maintain the kind of consistency we strove for at headquarters. It wasn't as easy for people to get immediate feedback to their questions, and so we did the -- put together the desk manual in order to help maintain some consistency and help answer some of the basic questions people might have during project review.

Q. Now, a minute ago I asked you who the people were at headquarters in the 401 group or the federal permits group, I guess, is another name for the same group; is that correct?

A. It's had a number of names. The federal permits unit I think was the last name, yes.

Q. So at that time that the function was regionalized, there were a number of people at headquarters who previously had been performing the 401 function. My question is, did any of those people continue to work at headquarters doing 401 type work after the regionalization apart from yourself?

A. Yes. I believe Sandy Manning remained, although her job was statewide review of projects related to Department of Transportation. Rick Vining remained at headquarters, and his focus was on dredging projects throughout the state. Myself. Bonnie Shorin, I believe, remained, and she did some 401-related work

as well as her focus was more on CZM issues as they related to 401.

So the people at headquarters generally had positions that required some level of statewide review or knowledge about things throughout the state. I believe that's the complete list. There may have been a couple other folks.

Q. Do you recall who your supervisor was at the time that the function was regionalized?

A. I believe it was Dave Bradley at the time. I'm not exactly certain, though.

Q. Do you recall what Mr. Bradley's position was?

A. He was the supervisor for our unit, the federal permits unit, as well as, I believe, the SEPA unit and one other work group. There have been a number of reorganizations over the years, so it's hard to remember exactly what came when.

Q. But you reported to Mr. Bradley at some point in time?

A. Yes.

Q. Did any of these other 401 reviewers either in headquarters or in the regions report directly to you at any time?

A. As far as personnel matters and things like

that, no. My role was the policy lead and technical guidance lead, and so matters directly related to 401 review I was, I suppose, the primary consultant for people on that, but I did not serve as their official supervisor, no.

Q. I'm trying to figure out what is intended by the term "lead," the technical guidance lead or the policy lead. Can you tell me how that worked in practice?

A. Well, there are a number of people at Ecology who are the technical or policy lead for a particular issue, and I believe most of those people don't directly supervise staff, and during my last position at Ecology, that's the kind of role I had, so when questions arose as to an issue that needed a decision on guidance or policy, that sort of thing, related to 401, CZM, it generally was up to me to help develop that position.

My position was meant to be analagous to Andy McMillan's, who was Ecology's wetland technical lead. I don't believe Andy directly supervised anyone, but he was considered by the staff in headquarters and the region to be the lead for any policy or guidance questions that came up, and I modeled my role on Andy largely.

Q. While you were serving as the policy lead or the technical guidance lead, did you have the authority to overrule decisions on 401 certifications made by other 401 reviewers in the federal permits unit?

A. I don't know what you mean by overrule exactly.

Q. Well, were the other 401 reviewers required to submit their determinations to you before making any decision on a particular 401?

A. No. In the regions, most of the 401s to my knowledge were done by the reviewer and signed by their supervisor in the region. For those that they had questions about or wanted me to weigh in on, then I would hear about those and provide my guidance. Depending again on the project and the issue, I would be involved to a greater or lesser degree and make my recommendation or advise the staff or the supervisor what I thought, but I didn't have any sort of official override or veto power, no.

Q. So is it fair to say, then, that you served as a resource for other 401 reviewers when they had questions or concerns?

A. Yes. I'd agree with that.

Q. But you didn't have any sort of veto or overriding decision-making authority for the decisions

made by those other reviewers?

A. Correct.

Q. Let me just mention this, because I didn't earlier. If you want to take a break at any time, let me know and we'll be happy to do that.

A. Okay. I'm fine right now.

Q. To your knowledge, is there a copy of the training manual for 401 reviewers at headquarters for Ecology?

A. There were several when I left Ecology, and I don't know right now.

Q. Where were those kept?

A. Well, each reviewer should have one. I think all the 401 staff were given one, so I would assume they still each have one.

Q. Did you have a copy yourself?

A. Yes.

Q. Where did you keep your copy?

A. In my cubicle with me.

Q. What happened to the materials, then, that were in your cubicle at the time that you left Ecology?

A. I believe most of them remained there. I distributed some to the other staff depending on if they were taking on part of my workload. At the time I left, there hadn't been a decision made as to who to

hire in my absence, so I think a lot of the material just remained there until someone else came in. As far as I know, the training manual that I had was in the cubicle when I left.

Q. Do you know if someone is currently filling the same role that you did as technical and policy guidance lead?

A. I believe when I left there was a decision to move Marie Randall into my position but to also move her in as a lateral as an environmental specialist 4 rather than make her an environmental specialist 5, so there's someone there, but they don't have my exact classification, I guess. That's the last I know anyway.

Q. Do you know whether or not Marie Randall is serving as the lead for the technical and policy guidance issues?

A. I'm not sure what her exact role is right now.

Q. Is there any correlation between an environmental specialist 5 and the lead function or can a person who is an environmental specialist 4 also be the lead?

A. I don't know, actually.

Q. Were you serving as the lead prior to the

time that you became an environmental specialist 5?

A. Actually, I guess I was, yes. When I was an environmental specialist 4, Maria Peeler left the agency, and she had been the previous lead, and I moved into her role, and based on that, about a year later, I think, or two years later I was given the upgrade to level 5.

Q. Let me ask you if you could to trace for me the organizational changes in Ecology with regard to the 401 unit. For example, if it moved from one department to another over time, can you tell me how that happened?

MR. EGLICK: Objection as to the form of the question. It's vague.

Q. (BY MR. REAVIS) Do you understand that?

MR. EGLICK: And no foundation.

Q. (BY MR. REAVIS) Do you understand the question?

A. I believe so.

Q. Why don't you try answer it, and if you need clarification, I'll be happy to provide it.

A. When I arrived at Ecology, the 401 function, I believe, was in what's called central programs, and that was a program largely at headquarters that included many of the cross-program or cross-media

aspects of Ecology's work such as the 401, SEPA, things like watershed planning sorts of things, elements of Ecology's work that would draw on expertise or staff in toxics or shorelands or water quality, that sort of thing.

During one major reorganization, central programs, I guess, was dissolved, and in its place was the combination of a lot of those same functions with many of the functions that had been in Ecology's shorelands program, and that became the shorelands and environmental assistance program. During both central programs and the SEA program was the acronym, the 401 function had different names at times, the 401 team, the federal permits unit, federal permits team.

Until it was regionalized in the time period I mentioned earlier, '97 or '98, I believe, it was, I believe, pretty much a stand-alone unit where 401 and CZM was done, and then there was also a SEPA unit and a wetlands unit, but the 401 group was a unit in and of itself.

Then with regionalization, the 401 unit remained at headquarters, and then the agency added the regional staff, and they became part of the regional shorelands and environmental assistance program staff. So that in a nutshell is what I remember of a number of

changes throughout the years.

Q. Now, during the course of your work on 401 issues, did you have occasion to rely on the technical expertise in other divisions of the Department of Ecology?

A. Yes. Fairly often.

Q. And what divisions were those for the most part?

A. Again, it depended on the specific proposed project we were reviewing. I think most often it was the wetlands staff. It was also the stormwater staff, clean-up program staff, sediment staff. Occasionally water resources or water rights would become an issue, and we'd consult with staff from that group. More recently Ecology has some watershed staff that were involved in some of our review. Shoreline permitting staff were often involved. So it was quite a mix and depended heavily on the specifics of a proposal and which regulations applied in a particular case.

Q. When you refer to stormwater staff, can you tell me what group that is?

A. It's largely in the water quality program.

Q. And would you rely on the expertise of water quality people in headquarters as well as the region, regions?

A. Yes. I believe we called on help from both headquarters and regions.
Q. Was Kevin Fitzpatrick the head of the northwest region water quality program during at least a portion of the time that you were at Ecology?
A. I believe Kevin was -- I don't believe he was the head of the region's program when I was there. That was John Glynn, and I think John has retired. I think that happened after I left, though, and I've heard that Kevin moved into that position.
MR. YOUNG: Excuse me. Can you spell Mr. Glynn's name, please?
THE WITNESS: Glynn is G-l-y-n-n.
MR. YOUNG: Thank you.
Q. (BY MR. REAVIS) During the course of your work on 401 issues, did you have occasion to rely on the technical expertise of Mr. Glynn?
A. I don't know that Mr. Glynn ever weighed in on a specific 401 proposal. He and I talked on several policy or general broader guidance issues, and that was more his role.
Q. What about Mr. Fitzpatrick? Did you rely on his technical expertise?
A. Kevin and I worked on the Sea-Tac proposal, and there may have been some other projects in the past

that don't come to mind right now, but I would have drawn on his knowledge as well as a couple other people at the northwest region, yes.
Q. Do you believe that Mr. Fitzpatrick knows more about water quality impacts from stormwater than you do?
A. Certain aspects of it, yes.
Q. What aspects would those be?
A. I think Kevin's primary focus is NPDES requirements and how those are part of a facility's operations, that sort of thing.
Q. Have you reviewed Mr. Fitzpatrick's declaration in this case?
A. Oh, yes. That's the one from September or something. Yes, I have.
Q. In connection with the stay motion. Is that the one that you recall?
A. Yes. Yes.
Q. Have you reviewed his deposition in this case?
A. I only got a copy yesterday, and I took a brief glance at it, but I haven't really read it, no.
Q. Let me come back to that in just a minute. Can you tell me when you first started working on the Port's proposal to construct a new runway at Sea-Tac

International Airport? By proposal, I mean in connection with 401 issues.
A. I believe that was '95 or '96, perhaps as late as '97. I think my first involvement was around the time that the supplemental draft EIS was issued, and I don't remember the exact date of that. I think I either reviewed that or reviewed and made comments on that document. There may have been a meeting before then or concurrent with that review. I think that was the first time I was involved.
(Deposition Exhibit No. 208 was marked for identification.)
Q. (BY MR. REAVIS) Let me ask you if you recognize Exhibit 208.
A. It's been awhile, but this looks like the original application for a 401 and 404 from the Port.
Q. This is dated December 18, 1996, the cover letter?
A. Yes.
Q. Do you believe that you first started working on the 401 for Sea-Tac airport sometime after this application was filed?
A. I would have definitely started after this and perhaps started before depending on when that supplemental draft EIS came out. I do remember

reviewing that, but I don't know which of the documents came first.
Q. Do you recall whether there was someone in the 401 team or program who worked on the 401 for Sea-Tac prior to your involvement?
A. I believe it was assigned to me initially, and I don't think -- I don't recall anyone else having it before me, no.
Q. In the course of your work on that 401 proposal, 401 application that's represented by Exhibit 208, did you become familiar with the project that was being proposed by the Port of Seattle for which this 401 was necessary?
A. Yes.
Q. Were you familiar with the various components of the project; for example, the third runway and other improvements?
A. Yes, I was.
Q. Now, I believe there's a statement in one of your declarations -- and I have it here if you'd like to look at it, and I'm trying to find this particular reference -- a statement that you made with regard to your belief that over the course of the 401 process with regard to the Sea-Tac project that the scope of projects being considered under that 401 application

got smaller and smaller. Do you remember a statement to that effect?
A. I do.
Q. Can you tell me what you recall about elements that may have been removed from the scope of that project over time?
A. Well, the proposal for a 404 and 401 was related to the Sea-Tac master plan expansion, which included a number of different elements. The shorthand has been the third runway. That's been used a lot, but there's actually a number of elements besides that. The south aviation support area, I believe, was a part of the proposal, various upgrades to other parts of the airport, runway safety areas, that sort of thing.
During the course of our review, as we were trying to determine the full extent of the proposed project and its elements, we discussed changes to the Port's stormwater system, its industrial wastewater system, changes related to navigation equipment needed, as well as wetland or other mitigation requirements near the airport. I think there were probably a few other elements, but those are the ones that come to mind right now.
Q. I want to get into some of those in a little bit. I think my question was more directed to the size

or scope of the the project itself and whether or not it's your testimony that you believe that the matters under consideration, the projects under consideration with regard to that 401 application got smaller as time went on apart from the issues that you mentioned, the scope or size of the project.
A. The scope of the review of the project was -- got smaller as time went on; for instance, the need to do a cumulative impact evaluation. At one point, I think originally the Port hadn't anticipated, for instance, that the change to the IWS system would be included in Ecology's review. For some period of time, I did review that change as part of this proposal, but I believe that's since largely dropped out of the review.
Q. And what do you base that on?
A. The 401 that was issued back in September and also some of the discussions in the various declarations and depositions and also some of the information in the stormwater plan that's been presented by the Port, also some of the modeling discussions.
Q. So is it your belief, then, that certain issues related to the IWS are no longer being considered as a part of the cumulative impacts for the

Third Runway Project as a whole?
MR. EGLICK: Objection as to the form of the question.
A. I would say that if they are being considered, it depends on elements of review that have not yet occurred, and some of those elements should have occurred as part of the 401 determination.
Q. (BY MR. REAVIS) So as I understand that answer, then, you're saying that while they might possibly be still on the radar screen for Ecology, they have dealt with that by requiring future submittals to address those issues?
MR. EGLICK: Objection as to the form of the question.
Q. (BY MR. REAVIS) Is that a fair characterization of your answer?
A. Could you repeat the question, please?
MR. REAVIS: Would you read that back, please?
(The reporter read back as requested.)
MR. REAVIS: Let me rephrase that. Maybe a better objection would be vague.
MR. EGLICK: That's part of the form, isn't it?
MR. REAVIS: Yeah, true.

Q. (BY MR. REAVIS) Let me see if I can paraphrase your answer, and tell me if this is correct. As I understood your last answer, what you were saying was Ecology has decided to deal with certain issues concerning the IWS by requiring future submittals to address some of those issues, correct?
A. Yes.
Q. So you're not necessarily saying that Ecology has decided that those IWS issues are irrelevant or beyond the scope of their review, but they have decided to deal with them in a manner that requires future submittals?
A. Well, I wouldn't characterize it that way. I guess until those future submittals come in and Ecology weighs in on them, we won't know whether or not, for instance, the IWS issue is resolved adequately, and that would apply to pretty much any of the future submittals that the 401 requires.
Q. Well, whether or not it's resolved adequately in your words, what I'm trying to figure out is whether you're saying that Ecology has taken certain parts of the project or certain issues and simply said those are beyond the scope of our review here, we're not even going to consider issues that were previously included within the first JARPA applications that's Exhibit 208.

MR. EGLICK: Objection as to the form of the question. Just to give you some feedback if you want it, Gil, it's because you're talking about what scope of review, but you're not saying scope of review of what. 401? IWS? Some other permit?

Q. (BY MR. REAVIS) Let me be a little bit more specific, because this all comes from a statement in your declaration, so I want to go ahead and have those marked, both declarations.

MR. SMITH: Counsel, we've been going for about two hours. If you could find an appropriate time to take a break any time soon, that would be good.

MR. REAVIS: Why don't we do that.

(Recess taken.)

(Deposition Exhibit Nos. 209 and 210 were marked for identification.)

Q. (BY MR. REAVIS) Let me show you a couple of exhibits that were marked during the break. Can you confirm for me that Exhibit 209 is a copy of the first declaration that you submitted in this case in connection with the stay order?

A. It looks like the one.

Q. And is Exhibit No. 210 the second or reply declaration you submitted in connection with that same motion?

A. Correct.

Q. Now, the question that I was trying to get to a minute ago comes from a statement on page 8 of your reply declaration, which is Exhibit 210. If you look at line 15, the sentence reads, "In actuality, however, as time went on, the scope of Ecology's review and eventual issuance of the 401 certification was continually reduced, generally after discussions with the Port about their difficulties in complying with various requirements of the project review, and generally despite recognition of the regulations and legal decisions cited above."

And maybe my question was asking you something different, but can you tell me what was it about the scope of Ecology's review that was being continually reduced?

A. Originally you'd asked about the scope as reflected in the Exhibit 208, the JARPA from December of '96, and I would have to go through this and look at each specific element to compare that statement with what was in the JARPA.

The statement in my declaration reflected primarily later determinations by Ecology of how large the project was and what aspects of the facility under review should or shouldn't be included and the

development of various mitigation scenarios and both the impacts of those mitigation elements and subsequent causes of other areas of concern that may come out of the mitigation elements, also changes in the cumulative impacts associated with this proposal.

Q. But you're not saying in that statement that the scope of the project as reflected in the JARPA has been reduced by Ecology or by the Port over time?

A. Well, I would have to look at the description of the project in this JARPA and also in the subsequent applications to look at what elements were and weren't included in each one.

Q. And those would be the sources for determining what the scope of the project was that was under review for Ecology, correct, the JARPA that supports the application for a 404 permit?

A. Those would describe the proposed project. Ecology's review would include determining the direct and indirect impacts associated with the proposed project, and the scope of those impacts as they relate to the project have changed quite a bit over time.

Q. So you believe that there may be certain impacts from the project that are no longer under consideration by Ecology in connection with the 401 application?

MR. EGLICK: Objection as to the form of the question; vague. I mean, the 401 application has been approved.

A. They're either not under consideration by Ecology or their consideration has been put off until the future, but right now it's kind of hard to tell which that is, because we're depending on some future application by the Port and determination by Ecology.

Q. (BY MR. REAVIS) Now, the first application, the one we discussed a minute ago, Exhibit 208 from December 18, 1996, did Ecology issue a 401 certification based upon or in response to that application?

A. Yes.

Q. And is that a 401 certification that you worked on?

A. Yes, it is.

Q. Who actually wrote that certification?

A. I believe it was largely my work in conjunction with the other staff involved with the project.

(Deposition Exhibit No. 211 was marked for identification.)

Q. (BY MR. REAVIS) Can you tell me whether or not Exhibit 211 is a copy of the 401 certification that

was -- that you just referred to?
A. It is.
Q. Now, this certification is signed by Gordon White, correct?
A. Actually, the cover letter is signed by Paula Ehlers for Gordon White. The certification itself is signed by Gordon White.
Q. Now, this certification was issued at a time when you had signature authority for 401 certifications, correct?
A. I believe so, yes.
Q. Is there any particular reason that you can recall why Mr. White signed this one as opposed to you?
A. During that time, even though a number of us had signature authority, on projects of particular high profile or complexity or controversy, we would often move the signature up the chain of command to someone higher up in management, and that's what happened in this case.
Q. Now, did you make a recommendation to Mr. White that he approve this 401 certification and sign it?
A. As I recall, this 401 came about after Ecology had reviewed quite a few documents from the Port and had continued a number of meetings and

technical discussions with the Port and their consultants and had reached agreement on some areas of what the project entailed, and I think Ecology had determined that certain parts of it that we believed needed to be covered under a 401 were appropriate, but there were some areas where the Port had essentially disagreed with Ecology's conclusions and had not wanted to go any further, and after discussions with Mr. White and a number of other folks at Ecology, we decided that we could issue a 401 essentially forcing the issue that even though the Port hadn't submitted a final stormwater mitigation plan, we could compel them to submit that through issuance of this 401 in anticipation of getting the Port to comply that way.
At the time, there were a lot of questions about this approach. I believe a number of people at Ecology were arguing that in this instance the 401 should be denied. Other people were arguing that it could be approved if it was conditioned the way it was. I believe it was Mr. White's decision to go ahead with this approach. So that's how this 401 came about.
Q. Now, as the author of this 401, though, did you make a recommendation that Mr. White sign it?
A. I believe on this one I was more on the side of we weren't there yet with reasonable assurance and

should hold out for more information, but I was convinced by Mr. White and others that this approach was appropriate, and as a result, I was the primary author for this 401.
Q. At the time that you wrote it and submitted it to Mr. White, did you believe that Ecology had reasonable assurance that water quality standards would be met as a result of the 401 certification?
A. Well, I believe at the time that was still an open question, because we were going into waters that hadn't been tested very well yet. We didn't have -- let me back up. This was a very complex project. There was a sense at Ecology that denying the project wouldn't allow things to move forward and that approving it would be a better course of action, and so we ended up with this certification.
Q. Well, did you yourself, though, believe that Ecology had reasonable assurance that water quality standards would be met by issuance of this 401 certification?
A. At the time, I believed that if we got all the documents that we required of the Port and if they implemented them as Ecology directed them to, then we could have reasonable assurance, yes.
Q. So at that time, you were relying on these

future submittals to give you reasonable assurance at some point on down the road after the 401 was issued?
A. That's correct.
Q. And, in fact, there are a number of items that are in the current 401 that were not in existence at the time that this 1998 401 was issued, correct?
MR. SMITH: Objection to form.
Q. (BY MR. REAVIS) Well, you mentioned a stormwater management plan, correct?
A. Yes.
Q. And that did not exist at the time Exhibit 211 was issued, did it?
A. I believe at the time there was a stormwater management plan that the Port had submitted. I'd have to look through this to --
Q. Why don't you look at condition C1. It's on page 10.
A. Condition C1 requires submittal of a stormwater plan, although I believe the airport had a stormwater plan for at least the existing facility at that time.
Q. Do you recall why it was necessary at that time to require the submittal of a final comprehensive stormwater management plan as referenced in condition C1?

A. Why it was required?
Q. Why it was necessary for reasonable assurance.
A. To ensure that the discharges from the Port would meet water quality standards for both the existing and the proposed new parts of the airport.
Q. Do you recall what kind of stormwater management plan the Port had submitted prior to issuance of this 401 in July of '98?
A. I don't recall right offhand, no.
Q. Would you agree with me that it is less comprehensive and detailed than the stormwater management plan that was developed by King County prior to issuance of the current 401?
MR. SMITH: Objection; form.
A. Well, since I can't recall what was submitted under this or before this certification, I can't compare the two, no.
Q. (BY MR. REAVIS) Obviously at the time that this certification was issued you believed that additional work needed to be done and a new stormwater management plan needed to be submitted, and that's the -- by this certification, I'm referring to the July '98 certification. Is that correct?
A. Yes. That's correct.

Q. And you can't as you sit here today testify regarding whether the plan that existed in July of '98 was more or less comprehensive than the one that currently exists?
A. Right. I can't recall the details of that plan from 1998.
Q. Ecology while you were the 401 technical and policy lead engaged the services of King County to develop -- assist the Port in developing a stormwater management plan, correct?
A. We engaged King County as Ecology's consultant, so their primary role was to assist Ecology rather than the Port.
Q. But in any event, King County was involved in reviewing the proposals and the draft stormwater management plan prepared by the Port in connection with the 401 that was finally issued in 2001?
A. Yes. Correct.
Q. And there was a lot of work that went into that process, wasn't there?
A. Yes.
Q. Did you have any serious doubt that that work that was done by King County and the Port in connection with later efforts failed to add additional requirements and other measures necessary to create a

comprehensive stormwater management plan beyond what was in this July '98 plan?
A. Well, I think we're talking about two entirely different approaches, and it's hard to compare them. From reading the July '98 401, I can see that we required the Port to, for instance, do multiple BMPs or submit the plan that included multiple BMPs for some of their discharges, and the review for compliance with the King County manual resulted in a different set of BMPs being proposed, so it's kind of hard to compare. I don't believe, for instance, there's a requirement in the current King County manual that under C4b in this 401 it says --
MR. EGLICK: Excuse me. When you say "this 401," which one are you referring to?
THE WITNESS: Excuse me. That's the July '98 401.
A. At the bottom of page 11, there's a series of bullets describing the types of BMPs that are to be put at each stormwater treatment facility. I don't think there's an equivalent requirement in the current 401 or that came out of the county's review of the stormwater plan.
Q. (BY MR. REAVIS) But these requirements that you referenced on the bottom of page 11 were

requirements that Ecology was requiring the Port to include in the new comprehensive stormwater management plan that was to be submitted after this 401 was issued, correct?
A. That's right.
Q. So wouldn't that indicate to you that those particular elements were not in the stormwater management plan that you had in front of you when this July '98 401 was issued?
A. That's correct. They were either not in it or not in it in enough places or in sufficient quantity around the airport.
Q. So my question is not what stormwater plan was either in existence or to be developed by this July '98 401. My question is the stormwater management plan that you had in front of you when this 401 certification in July '98 was issued, is it your testimony as you sit here today that you don't know and can't determine whether that stormwater management plan was more or less complete and comprehensive than the one that the August 2001 401 was based upon?
A. I guess my testimony is that I can't make a fair comparison between the two. In both cases, there's a dependence on future submittals, and until those are submitted, it's hard to tell what's going to

result. The requirements here under C4b in the 1998 401 I believe are somewhat different than what is described in the most current 401 from last September.

Q. Who made the decision to request the assistance of King County in development of a stormwater management plan for Sea-Tac airport?

MR. EGLICK: Objection as to the form of the question; no foundation.

Q. (BY MR. REAVIS) Do you know how the decision was made to retain King County to assist in the stormwater management plan?

MR. EGLICK: Objection as to the form of the question; no foundation.

Q. (BY MR. REAVIS) Can you answer that question?

A. Yes. Yes, I do.

Q. Why don't you tell me what you recall about that.

A. We had been meeting with the Port for some time, we being myself, Kevin Fitzpatrick, Ray Hellwig, Erik Stockdale -- I believe those were the main Ecology staff involved in management -- in order to resolve the whole issue of coming up with a stormwater plan that met the requirements, and we'd had some difficulty, either miscommunication or misunderstanding, between the Port and Ecology on what was required and the

submittals and the type of information that was presented.

During that process, the Port had been saying that they intended not only to meet Ecology's stormwater manual requirements but to meet the King County manual requirements. Because we were having difficulty figuring out the Port's proposal, I believe Kevin and I actually after one of the meetings, we decided that if we were to review the Port's proposal and try to see if it actually did meet the King County manual requirements, that would take quite a bit of time on our part to get up to speed with the manual and review the Port's proposal against that, and so we went to Ray Hellwig and proposed that we hire King County as our technical experts, and Ray presented that to the Port, and the Port agreed to pay for that review, and that's how we ended up with the county doing the review.

During that time, I believe we made it clear to the Port that compliance with either the Ecology manual or the county's manual didn't ensure compliance with state water quality standards but that finding compliance with the county's manual would be a good step towards that, and so the Port agreed to pay for that review, and we worked with the county's watershed

lead in that area, David Masters, and he recommended Kelly Whiting as the county's lead reviewer for us.

Q. As a result of that process, there was, in fact, a comprehensive stormwater management plan submitted. I think that's the title. I'm not asking you to agree that it's comprehensive, but I believe that's the title of the document.

A. Yes. There were several submittals during that review.

Q. Was the final of that document submitted before or after you left Ecology?

A. I don't believe a final has been submitted yet.

Q. What's the latest -- strike that.

Since you left Ecology, have you reviewed any stormwater management plans that were developed or submitted after you left?

A. Yes. I believe there was -- I'm trying to remember the dates. There was a December 2000 submittal. I believe parts of that were updated in July 2001, and I believe there may have been a subsequent update in November or December 2000, and I reviewed some portion of each of those. I'm trying to remember if that's the full list or not.

Q. Have you formulated any opinions about what

you believe might be deficiencies in that stormwater management plan as necessary for a 401 reviewer?

A. Yes, I have.

Q. Can you tell me what those are?

A. The primary deficiency is the speculative nature of the plan. It leaves a lot of the development of designs and eventual BMPs to some future decision point. Apparently some of those future submittals may not even require review or approval by Ecology.

There's no certainty provided in the current plan or the potential future submittals that water quality standards will be met from the various discharges. It lays out an iterative process that may or may not lead to eventual compliance with the standards, but at this point it's pretty speculative as to when or whether the Port will get there. So that's the primary difficulty I have with the plan as it stands today.

I also have questions about its interaction with other elements of the project such as the wetland mitigation sites, water quality and general beneficial uses in the nearby streams, its interaction with the low flow proposal as it currently stands. So I guess the common thread is the speculative nature of the proposal.

Q. At the time that the July 1998 401 was issued, did you believe that reliance on a future submittal of a stormwater management plan rendered that 401 certification speculative?
A. Yes. I would say that's a speculative 401.
Q. But wasn't it your belief that through development and approval of those future submittals that could lead Ecology to reasonable assurance at the time that the July '98 401 was issued?
MR. SMITH: Objection to the form of the question.
A. I would say it was more my hope than my belief. Because we had no assurance that the -- given the history of the Port's submittals and our history of misunderstanding or miscommunication or inadequacy of Port submittals, I would say there was a great deal of doubt at Ecology as to what we would see in the future, but the decision was made to issue that 401 anyway.
Q. (BY MR. REAVIS) Do you believe that Ecology lacked reasonable assurance that water quality standards would be met at the time of issuance of the July 1998 certification?
A. I would say -- well, at the time it's hard for me to recall. I would say with subsequent events that a certification like that would not be issued or

should not be issued today.
Q. Did you ever express opinions to Mr. White or anyone else at Ecology at or around the time that the July '98 certification was issued that you believed that Ecology lacked reasonable assurance and therefore that that certification should not be issued?
A. I believe I had several conversations with Mr. White and with others basically asking can we do this? Is this something that we want to do? This is far more speculative than the approach we have taken with the majority of 401s in the past. And the result of those discussions was still the issuance of this July '98 401.
Q. Did you ever express to Mr. White the view that you believed this certification lacked reasonable assurance and therefore should not be issued?
A. I don't recall specifically those words. I think that may have come up in these discussions. I mean, the whole basis of whether or not to issue this was reasonable assurance, precedents established by previous work in 401, that sort of thing.
Q. But you actually wrote this July '98 401, correct?
A. Correct.
Q. And so whether or not it came up in

discussions whether there was or wasn't reasonable assurance, you don't recall ever going to Mr. White and saying, no, there is no reasonable assurance and I believe this should not be issued?
A. Yeah. I don't recall one way or the other on that if I used those words. I imagine what happened in the discussions was weighing the pros and cons and what we knew or didn't know about the proposal at that point, so I would -- I don't remember specifically, but I imagine there was some discussion of reasonable assurance, yes.
Q. So did you just give the document to Mr. White and say sign it if you believe there's reasonable assurance, don't sign it if you don't believe there's reasonable assurance?
A. No. It was much more complex than that.
Q. But you don't recall making a recommendation that he specifically sign it?
A. I don't think this was solely my recommendation or I don't recall what part of my view was reflected in this overall recommendation. There were a number of people involved at the time.
Q. Well, I don't want to beat a dead horse, but do you recall Mr. White ever saying, Tom, you wrote this 401 certification, is it okay for me to sign, do

we have reasonable assurance?
A. I don't recall that specific discussion. It very well could have occurred, maybe not in those exact words, but I doubt Mr. White would have signed something where he didn't have some questions for me on a project of this scope, and I believe during the discussions, as I mentioned, he had conferred with a number of us. The technical experts I had mentioned before, other people in management and at the staff level came to that conclusion.
Q. Do you ever recall an instance where you went to Mr. White and said, I don't believe you have reasonable assurance to issue this 401, and he did it anyway?
MR. EGLICK: Objection; asked and answered.
A. Do I recall an instance where that happened?
Q. (BY MR. REAVIS) Yes. With regard to this 401 or any other 401, did you ever go to Gordon White and say, I don't think we have reasonable assurance, don't issue this 401, and he did it anyway?
A. That occurred on the Battle Mountain proposal, yes.
Q. Any others?
A. That's the main one that comes to mind. I believe -- well, the other one that comes to mind is a

slightly different situation is the lower Columbia deepening project where Ecology denied a 401. I was less directly involved in that proposed project, but in that case the recommendation was to deny certification, and Mr. White concurred with that recommendation.

Q. Does the July 1998 certification contain any criteria for constituents in the fill that will be used to build the third runway?

A. May I take a moment to look through it?

Q. Sure. Look at page 14.

A. Thank you. It has several conditions that address requirements for fill material.

Q. Now, let me just refer you then to the beginning paragraph of that section E7. It says, "The Port shall adhere to the Final Third Runway Soil Fill Quality Criteria provided by memo to Ecology on July 17, 1998." Do you recall what document that reference is with regard to?

A. I don't recall the specifics. I know the Port had submitted a proposal that they be able to use certain sources of fill and not use certain sources and that they would do certain sampling and monitoring, that sort of thing, but I don't recall the specifics of it.

Q. At the time that this July '98 certification

was issued, did you believe that Ecology had reasonable assurance that fill in compliance with condition E7 would not cause any adverse effects on water quality?

A. I believe that based on our understanding at the time that this condition would be adequate to protect water quality, yes.

Q. Were you involved in the development of the criteria that are described in that beginning paragraph in condition E7?

MR. SMITH: Objection to the form of the question. It's vague.

Q. (BY MR. REAVIS) Let me ask it a different way. Do you recall being involved in the development of any criteria for acceptable fill prior to the time that this July '98 certification was issued?

MR. SMITH: Same objection.

A. I don't understand. For this project or --

Q. (BY MR. REAVIS) For this project.

A. Okay. During our review of this proposal, the issue of clean fill came up, and at the time, Ecology's only guidance was from the Corps of Engineers, and they had a requirement that fill not contain toxic materials in toxic amounts, and part of what the Port was proposing was to use fill from sources that Ecology had concerns about, and so I

believe it was my question raised to a number of the technical staff at Ecology on how to interpret that Corps of Engineers guidance specifically for this proposal. What did we need as far as fill criteria or the 401 condition to meet that no toxic materials in toxic amounts requirement?

Q. Do you recall if in July of '98 when this certification was issued you had before you numeric criteria for various constituents in fill?

A. I believe the Model Toxics Clean-up Act, the criteria contained in documents related to the act, I think those were available. I think as part of our review we may have looked for other sources of clean fill criteria used elsewhere in the state or around the country. That's all I recall at the moment. There may have been some other things we looked into.

Q. Have you yourself ever written or approved a 401 certification that had numeric criteria for fill?

A. I don't recall right offhand, no.

Q. Do you recall ever in the course of your work for Ecology learning that numeric criteria had been applied in other 401 certifications whether in Washington or someplace else for acceptable fill?

A. Actually, let me back up to my previous answer. During my review of the 401 for the Navy

shipyard in Bremerton, that was an underwater fill in part and dredging of an area near a pier that had contaminated sediments, and so in that sense, there were numeric criteria in place. That was a little different situation. I believe on some other dredging projects the issue of contaminated fill has come up, but mostly as a sediment-related issue.

Q. Do you recall where those criteria came from to deal with contaminated sediments that were used in 401s?

A. Those were developed through the process I mentioned earlier during the sediment management rule development, through technical work group, through various contracts with scientists and Ecology's rule development. Those were -- at the time, those were only applicable to marine sediments, and I'm not certain whether or not Ecology's adopted freshwater criteria yet for sediments.

Q. Now, with regard to upland soils, at the time that this July '98 certification was issued, were you aware of any sources to which you could refer for the development of acceptable fill criteria to be used in a 401 certification?

A. No. That was the large part of the difficulty was that we had the guidance from the corps

saying no toxic materials in toxic amounts but weren't aware of information beyond that that we could use as a 401 condition.

Q. In the course of that work leading up to the July '98 401 certification, did you do any research yourself to determine whether or not there were any standards for use of upland fill in a project that requires a 401 certification?

A. I believe I may have made some phone calls to various staff at the Corps of Engineers, perhaps some other agencies, just to make general inquiries about that. At the same time, other staff at Ecology were looking to other sources.

Q. Did you ever have anyone tell you, yes, we have done this in another 401 certification -- by this I mean propose numeric fill criteria -- and here are the numbers that we used?

A. I don't think we ever found that, no.

Q. So is it true, then, that you were essentially trying to create numeric fill criteria for use in this 401 certification without any real precedent for what number should be used?

A. Well, what we were trying to do was get reasonable assurance that the water quality criteria would be met, and if placing contaminated fill on a

site requiring a 401 would result in an exceedence of the criteria, we couldn't allow that, and so I would say the basis of our concern was the water quality criteria, those numbers, rather than trying to come up with clean fill numbers.

Had the Port proposed, for instance, using fill that was only -- that only contained contaminants in levels that wouldn't cause concern about possible violations of the water quality criteria, I don't think this would have been an issue.

Q. Well, how do you determine, then, or do you know how you determine what levels of contaminants can exist in soil without causing violations of water quality standards?

A. Well, I think at the time of this July '98 401 we didn't know as much about that as we do today. I think a lot of the work that has been carried out since then has helped us address that to some degree. I don't know that we're entirely there yet.

Q. Are there methodologies to your knowledge that attempt to calculate how much of a particular constituent can exist in soil without it causing water quality violations?

A. Yes, there are.

Q. What are those to your knowledge?

A. Some of those are described in the documentation related to the Model Toxics Control Act. I believe there's guidance in RCRA, R-C-R-A, the federal clean-up, and CERCLA, C-E-R-C-L-A, guidance from EPA. I don't know how closely those are related to compliance with particular water quality criteria. I think those are more focused on human health risk and that sort of thing.

But there are methods to determine how a contaminant either moves through the soil or is bound to soil, and there is some ability to use that information to determine eventual impact on surface waters.

Q. Have you reviewed the biological opinion that was issued by the US Department of Fish and Wildlife?

A. I know I've reviewed at least part of that, yes.

Q. Have you reviewed that in connection with -- or have you reviewed the portion of that document that relates to fill criteria?

A. I don't recall either way right now.

Q. So you don't know whether that document in fact did incorporate an approach to fill criteria that does calculate the amount of constituent that can exist in soil without injuring or impairing or violating

water quality standards?

A. I'd have to look at the document to be sure. Right now I'm not certain one way or the other.

Q. Have you formulated any opinions about whether or not the numeric criteria in the September 2001 401 certification are adequate to prevent violations of water quality standards?

A. My opinion is based on that document and other documents that I've read that there is still considerable doubt as to whether or not those criteria will result in the standards being met. If I were reviewing this 401, I would work to have those questions answered beforehand, before I issued the 401.

Q. Well, it sounds like what you're saying is that you believe that there is doubt about whether or not those are protective.

A. Correct.

Q. But do you have any opinions based upon your own research or evaluation that those criteria are in fact not protective of water quality?

A. As of right now, I don't think I can tell one way or the other.

MR. REAVIS: This is probably a good place to break for lunch.

(Lunch recess taken 12:02 to 1:05 p.m.)

AFTERNOON SESSION
1:05 P.M.
--oOo--

CONTINUING EXAMINATION
BY MR. REAVIS:

Q. I just had a couple of questions about the July '98 401 certification, which is Exhibit 211. One thing I noticed about this document is in several places it requires that submittals be given to Ecology, and in the course of doing that, it says specifically Ecology's Tom Luster, and my question for you is was that a normal way to draft a 410 certification or is that different for this particular project?

A. That was fairly standard at the time. We either specified which of the 401 staff should receive documents or would say in general provide it to the federal permits team or something like that. It varied by project, but it wasn't unusual to have a particular person's name there.

Q. What I'd like to do now is have you describe for me what all you have done since you left the Department of Ecology as it relates to the Port's 401 application or the 401 certification. Maybe if you could start with the list of documents that you brought

with you today, which I believe is Exhibit 203, and tell me if you can which of those documents that you put check marks by you have reviewed since leaving the Department of Ecology.

A. Okay. I think I reference some specifically in my declarations and deposition. I don't recall right at the moment which ones those were, but those along with --

Q. So just to clarify, that would be in one of the two declarations you submitted in this case that you had a list of certain documents you --

A. I believe I referenced the fact that I had reviewed documents as part of my declaration or preparing my deposition. I could go through those and point them out if need be.

Q. Well, maybe I'm confused by documents that you reviewed in preparing your deposition. Are you talking about -- did you mean to say declaration?

A. Excuse me. What's the question again? Just preparing for --

Q. No, no. This is a broader question than the one I asked you earlier. The one earlier related to documents you reviewed in preparation for this deposition. The question I'm asking you now is can you tell me which documents or what documents you have

reviewed relating to the Port's 401 application since you left the Department of Ecology?

A. Okay. So those that I included in the declarations as well as -- it may be easier to start from the back of this list. I've looked at the low flow analysis from either November or December of 2001. I looked at some part of the stormwater monitoring plan, I believe. I believe I've looked at the sand and gravel pollution prevention plan, that one or another document with a similar title.

Q. Let me stop you there just to be clear we're on the same page here. You're looking at the last page of Exhibit 203, and there's one document on there that you did not mention having reviewed since you left Ecology being the spill prevention control and countermeasures plan, which apparently was finished in August of 2001, so is that a document you believe you reviewed since you left Ecology?

A. That one I believe I may have reviewed. I'm not certain sitting here right now.

Q. I guess there's a check mark by it, and that's why I'm confused.

A. Right. If I had it to look at, I could probably be more certain about all of these.

Q. Well, let me ask you how you prepared this

list in Exhibit 203 and how you went about checking off the items that you have in fact reviewed and specifically with regard to things you reviewed since you left Ecology. Did you make these check marks based upon documents you had in your file; therefore, you knew that you had them in your possession and reviewed them?

A. No. I got this list and made the check marks in response to the -- I don't know the name -- the request for this deposition today, but I didn't have all the documents in front of me when I made the check marks. I did this -- I put together this check marked list yesterday.

Q. So some of this was done based upon memory?

A. Correct.

Q. And that particular document, the spill prevention control and countermeasures plan, you may or may not have reviewed?

A. Correct. Going to the previous page, page 9, the cumulative impacts to wetlands and stream, I believe that's the version I reviewed. Low flow analysis flow impact, I believe that's the version I reviewed. I'm looking quickly to see if these other documents I didn't check I might have reviewed. As I said earlier, the biological opinion, I reviewed at

least a portion of that.
Near the top of that page, the natural resource mitigation plan and appendices, the wetland functional assessment, possibly some others on this page based on not that I remember the title exactly, but I know I reviewed some reports done by Hart Crowser, and they're listed as the author on some of these. I'm trying to remember if some of these may have been appendices to documents that I reviewed.
Q. Do you remember what the subject matter was of the Hart Crowser documents you reviewed?
A. I believe there was at least one document on a geotechnical report on the MSE wall. There may have been another one to do with a flow analysis. Again, it's kind of hard to tell without the stack in front of me.
Going to page 8, I believe I've seen a document that had to do with the abandoned wells. I'm not certain that this is the same document, but it might have been.
Q. Let me stop you there and ask you: Page 8 seems to run in terms of document finish dates from September of 2000 to December of 2000, so I wanted to make sure that your answer now is confined to documents that you have reviewed since you left Ecology.

A. Right. Yes. I believe -- well, for some of these that were issued before I left Ecology, I probably reviewed them at the time, and for some of them I've also looked at them over the past year. Other ones on this page, the low flow stream flow analysis, the stormwater -- the comprehensive stormwater management plan. I don't recall if I mentioned earlier the final wetland delineation report. Those are the ones that are apparent right now to me.
On page 7, I think we're getting into -- well, at the top of that page, those may be documents that were before I left Ecology primarily, but let me just make sure. Right at this moment, I can't recall which of them on this page I reviewed in the last year versus before then, and the same for the ones on page 6.
I think as we go back in this document, we're getting into documents that were made out of date by subsequent submittals by the Port, and so I think in the last year I focused on most recent versions of various plans and analyses, that sort of thing. I may have missed some, but --
Q. Do you have any estimate about the amount of time that you have spent in the last year reviewing documents related to the third runway 401 application

or certification?
A. Probably several dozen hours overall. That seems to be about right.
Q. Did you keep any record of the amount of time you've spent doing that?
A. No.
Q. Several dozen could be a pretty broad range. Can you tell me whether or not you believe it's more or less than 50 hours?
A. I would say over the course of the year, over 50, yeah. It's hard to estimate exactly, because I would do it for two or three hours in an evening or a chunk of time on a weekend or things like that. I didn't dedicate like a solid week to reviewing documents, for instance.
Q. Do you believe that the amount of time you spent was less then a hundred hours?
A. Probably, yeah. I'd say between 50 and a hundred.
Q. Where did you obtain the documents that you reviewed that you've just testified about?
A. I think most of them were sent to me by ACC.
Q. By ACC directly or by ACC's attorneys?
A. That I'm not sure of. It may have been both in different instances. One may have sent them or the

other. I'm not sure of the difference, I guess.
Q. In addition to the documents themselves that you've testified about, were there other materials that came along with the communications from ACC or its counsel relating to the 401 certification?
MR. EGLICK: Objection as to the form of the question; no foundation.
A. I also received from ACC or its counsel the notes from the meetings that occurred last -- in the fall of 2000. This was the series of meetings with Kate Snider facilitating. Those meetings included a number of notes, so I got a copy of those.
MR. EGLICK: Can I just clarify? We're talking about last fall?
THE WITNESS: Of 2000.
MR. EGLICK: Thank you.
A. I may have -- I think I received some e-mails that ACC had obtained from Ecology. That's all that comes to mind right now.
Q. (BY MR. REAVIS) Do you remember what the subject of those e-mails was?
A. In general, just having to do with the review for 401 of various aspects. I can't bring to mind specifically right now.
Q. Any particular e-mail stand out?

A. At the moment, no. I'm trying to -- I doubt very much that I got a complete set. From reading the various declarations and depositions, it appears there were a lot of e-mails that I haven't seen during the last year, but I was provided some subset of those.
Q. Were there any transmittal letters or memoranda forwarded to you by anyone in connection with the 401 issues at the Port since you left Ecology?
A. I think with each packet I think there was a cover memo saying here are and then a list of the documents, but nothing other than that.
Q. So no memoranda, for example, explaining the theory of the case or outlining the issues?
A. No. Nothing like that.
Q. To the best of your recollection, then, it was documents with a transmittal letter saying here are documents?
A. Correct.
Q. Who all have you talked to since you left Ecology that was either with ACC or representing ACC?
A. I've talked with Mr. Eglick a few times. I believe I talked with Mr. Stock once or twice. Let's see. Ms. Grad at Mr. Eglick's and Mr. Stock's office. That's all that comes to mind right now.
Q. How many times do you think you've talked to

Mr. Eglick since you left Ecology?
A. Probably half a dozen or so.
Q. And what was the substance of those conversations?
MR. EGLICK: Wait a minute. You're asking him what the subject matter was or the substance?
MR. REAVIS: Either one. I asked substance.
MR. EGLICK: So because I want to understand the Port's position on this, is it the Port's position that in this case it is not asserting that there is a work product protection or attorney/client privilege, however it's characterized, that applies to conversations between, for example, Port counsel and witnesses that the Port is going to call or has listed?
MR. REAVIS: Well, my understanding of this -- and let me say I wasn't involved in the details of it -- was that with regard to the production of documents that both parties were agreeing that those materials would not be produced; in other words, communication between counsel and experts. My understanding, though, was that in depositions those matters can be inquired about. I guess I would ask you if you have a different understanding to let me know now.
MR. EGLICK: Well, that wasn't mine, so why

don't we do this. Let's go ahead. You can ask subject to my motion to strike on the understanding that there will be absolutely no question that when similar questions are asked of Port witnesses that there will be no instruction not to answer similar questions of any Port witness.
MR. REAVIS: Let me do this. I'm going to move on for now.
MR. EGLICK: Well, no. I'm urging you to ask the question subject to that agreement.
MR. REAVIS: No. What I'm going to do is call co-counsel and ask them whether they have an understanding of a different agreement, and at a break I'll call them. If I get an answer, I'll go into this area or not. I'm doing that based upon my own volition and not as a result of your objection, but I do want to clarify it before I agree to waive some sort of privilege that co-counsel may have agreed to.
MR. EGLICK: I'm not waiving any, but what I'm saying is I'm not going to ask or instruct or request him not to answer. I'll leave it for a motion to strike, but only on the understanding, of course, that what's sauce for the goose is sauce for the gander.
MR. YOUNG: I have one question, which is is

it then your position, Peter, that Tom Luster is a retained expert on behalf of ACC?
MR. EGLICK: Well, I guess if you want to talk about that, we can go off the record and talk about it, but I'm not being deposed here. The word "retained" kind of implies some sort of commercial transaction, and I don't think that's applicable here.
MR. YOUNG: But you're saying he is your expert for purposes of asserting work product privilege?
MR. EGLICK: Well, he is going to testify on his opinions having been qualified as an expert by Ecology before we ever appeared on the scene. I think Exhibit 202, the third page, Ecology's description of Tom is that he, quote, serves as senior expert to the shorelands and environmental assistance program and the Department of Ecology on technical and policy issues related to section 401 of the Federal Clean Water Act, Coastal Zone Management consistency determinations, and coordinated state responses and so on. I guess --
MR. YOUNG: He's not working for Ecology now.
MR. EGLICK: Right. But you asked me -- there are two parts to the question. One, is he an expert? As far as I know, Ecology described him as an expert -- how many years ago is this now, five? -- on

401, so, yes, he's an expert, and, yes, we have asked him to testify in the presentation that we will make to the board.

MR. YOUNG: That's what I was looking for. Thank you.

MR. REAVIS: And do you believe that conversations between you and Mr. Luster are privileged?

MR. EGLICK: Well, I think the question that I raised was whether or not there had been an agreement among counsel that conversations, communications with witnesses such as Mr. Luster were not going to be inquired into whether those communications were in writing or in some other way. I don't know whether that falls under attorney/client or work product. I believe that Mr. Pearce's letter from December suggests it falls under both, and that's the letter that I thought was the load star here. Have you seen Mr. Pearce's letter?

MR. REAVIS: I have.

MR. EGLICK: You know Mr. Pearce, right? He's the other counsel for the Port. What I've also said here again is please go ahead and ask your questions subject to my objection and motion to strike so long as it's understood that the Port will not

interpose any instruction not to answer or anything else when our turn comes, and that way we can just move right ahead here.

MR. REAVIS: As I said a minute ago, I'm going to defer that and come back to it later.

MR. EGLICK: It's your choice.

Q. (BY MR. REAVIS) Do you have any recollection about the total amount of time you have spent in conversations with Mr. Eglick?

A. I don't remember any calls being more than 10 to 20 minutes at most. Most were shorter, I think.

Q. How about Mr. Stock? And, again, the question being how much time have you spent in telephone calls or meetings with Mr. Stock?

MR. EGLICK: Object to the form of the question; compound question, no foundation.

Q. (BY MR. REAVIS) Let me ask you how much time have you spent in telephone calls with Mr. Stock?

A. Probably 15, 20 minutes total.

Q. Can you tell me who prepared the first draft of the two declarations that you submitted?

A. Oh, I did.

Q. And did you send that to counsel for ACC in draft form?

A. I did.

Q. Did you make changes after having sent it to them in draft form? Let me refer to both declarations for now.

A. Right. There were a few minor edits. The primary changes were formatting. I don't think I've written a declaration before these two, so I wasn't sure on the structure and format, that sort of thing. But the words are mine, and there were a couple minor edits or grammatical corrections, but nothing of substance.

Q. Have we covered, then, the list of people that you have talked to from ACC or representing ACC since you left Ecology? Are those three, Mr. Eglick, Mr. Stock, and Ms. Grad, the entire list?

A. As far as I know, yes. I'm not certain who all are members of ACC, but I don't recall conversations with other people from that general area.

Q. Let me exclude Ecology people from this question for now, but who else have you talked to since you left Ecology about the Third Runway Project or the 401 certification in connection with that?

A. I've probably mentioned it to some of my friends just -- they knew it was a big part of my life for several years.

Q. You mean friends in California or friends up

here in Washington?

A. Some of both, actually.

Q. Have you talked to Mr. Wingard about this project since you left Ecology?

A. I don't think Mr. Wingard and I have talked. I believe he and I exchanged an e-mail or two, but I don't believe it was anything about this project. He was working on something else having to do with the Clean Water Act, and I know at one point I forwarded him an article that I had read that I thought he might find of interest, but I don't think we had any exchange on the third runway in particular.

Q. Have you talked to Brett Fish since you left Ecology?

A. No.

Q. Who have you talked to or what Ecology employees have you talked to since you left Ecology with regard to the Third Runway Project?

A. I've talked with Ann Kenny I think three different times. I've talked with Erik Stockdale several times, probably half a dozen or less. I've talked with Gordon White once or twice. I talked with Dave Peeler. Those are all that come to mind right now.

Q. Some of the documents you brought with you

today, Exhibits 204 and 205, are notes that you made to yourself relating to conversations that you had with Ann Kenny?

A. Correct.

Q. One's on June 5, 2001, correct? That's Exhibit 205.

A. Right.

Q. Now, do you recall whether you created this Exhibit 205 on the same day that you talked to Ms. Kenny?

MR. EGLICK: Objection; asked and answered.

A. This one shows or the first line starts "call today from Ann Kenny," so in this case, yes, I made it the same day.

Q. (BY MR. REAVIS) Would that be true of Exhibit 204 as well?

A. 204 may be a little different. I think we had a little back and forth on voice mail for a day or several day period perhaps until we spoke live in person.

Q. So this represents two occasions that you talked to Ann Kenny, this being 204 and 205. You mentioned a third occasion.

A. I believe there was one other occasion, but I did not make notes on that call.

Q. Do you recall what that other conversation was about?

A. It may have been a continuation of one of these two issues, but I don't recall specifically right now.

Q. What was the purpose for your conversations with Mr. Stockdale?

A. Early last year right after I left Ecology, Erik and I talked several times just because we're friends and colleagues, and he called me to find out how I was doing in my new job, and I called him to find out how he was doing, and we discussed how the Sea-Tac review was going.

A little later, I believe, sometime this summer he was planning a trip to California with his family, and we talked to see if we could get together, if he had any time to visit and that sort of thing. It turns out he didn't, so we didn't get to see each other. Those are the two main issues, I believe.

Q. Do you recall what Mr. Stockdale told you about how the Sea-Tac project was doing?

A. Oh, I think generally he was saying it was going like it always had, kind of in fits and starts and they were trying to get through the review.

Q. Did he talk to you about the substance of any

of the matters that he was working on?

A. I don't recall any great details about the substance. It was more of a conversation on how things were going in general. I don't think we discussed the particular details of a wetland issue, for instance.

Q. What did you discuss with Gordon White on this one or two times that you talked to him?

A. Mr. White actually came to California as part of a review team looking at the California coastal zone management program, and that review was held at my office in San Francisco, and so Gordon was there over several days, and I saw him once or twice during that review. He was pretty busy during that whole time, so we just exchanged pleasantries primarily. I don't think we discussed Sea-Tac at all, actually.

Q. Was there another time that you were referring to a minute ago?

A. I think I saw him once or twice during that several-day period is all.

Q. Now, in your work for the California Coastal Commission, are you dealing with 401 issues?

A. Not directly. California Coastal Commission doesn't have 401 authority. That's held in a different agency, although a number of the projects that we work with in the commission are required to obtain a 401,

and so part of my review for the commission is to make sure the 401 is in place or find out the status of the 401 review on a particular project, and some of the work I do involves the same sort of water quality concerns that the 401 work I did here involved.

Q. What agency in California does handle 401 work?

A. There's a state water quality control board and nine different regional water quality control boards.

Q. Since leaving the Department of Ecology, have you talked to any legislators about the Third Runway Project?

A. No. I haven't talked with any of them about that.

Q. You hesitated a minute. Is there something that you're thinking of as a conversation?

A. At one point I got a letter -- I didn't talk with but I got a letter from Senator Patterson asking if I would care to comment on the NPDES permit that Ecology had issued to the Port in spring or early summer of 2001.

Q. And did you do that?

A. I believe one of the conversations I had with Mr. Stock -- he called on the senator's behalf, I

believe, and we had a brief discussion. I believe the gist of it was I referred to my earlier letter to the senator that I wrote in January 2001 and the issues I raised there.

Q. But you don't recall submitting any written comments on the NPDES permit in 2001?

A. I don't think I wrote anything on that issue, no. I don't remember that.

(Deposition Exhibit No. 212 was marked for identification.)

Q. (BY MR. REAVIS) Is Exhibit 212 -- does that appear to be a copy of the letter that you were referring to a minute ago that was sent by you to Julia Patterson in January of 2001?

MR. EGLICK: Object as to the form of the question. I don't recall anyone referring to a letter a minute ago.

MR. REAVIS: Maybe I misunderstood the question.

Q. (BY MR. REAVIS) Did you send a letter to Senator Patterson in January of 2001?

A. Yes.

Q. Does Exhibit 212 appear to be a copy of that letter?

A. Yes, it does.

Q. Now, the first sentence in that letter says, "Thank you for your letter of congratulations last week." I assume that you got a letter from Senator Patterson shortly before this Exhibit 212 was sent, correct?

A. Correct.

Q. Do you recall what was in that letter?

A. She wrote a letter saying, I understand that you've accepted a job in California, congratulations on my new position, and asked that before I left if I could provide her a summary of my understanding of the current status of Ecology's 401 process on the Sea-Tac application.

Q. Exhibit 212 is a two-page letter, and then there's an attachment to that letter, correct?

A. Right.

Q. Is that attachment to the letter in response to Senator Patterson's request for a -- for information from you about the current status of the Sea-Tac project?

A. Yes.

Q. And did you create that attachment to Exhibit 212?

A. I did.

Q. I think that was one of the documents that you brought with you today, correct?

A. Correct. I had provided -- Exhibit 206 is the attachment without the cover letter, and so 212 is the cover letter and the attachment together.

Q. In paragraph 2 of Exhibit 212, the cover letter, it says, "I've included with this letter a brief assessment of my view of the issues - due to several time constraints, it is not complete, but it does focus on what I believe are some of the primary issues to be resolved in the project review."

Do you know if either during your tenure at Ecology or shortly thereafter there was a list put together of all of the outstanding issues related to the Port's application for 401 certification?

A. Yes. I believe at different times there were several different lists put together depending on the status of the project.

Q. I have a few examples that I'm not sure I want to get into a memo-by-memo review of those, but let me ask you if during the course of your work on the 401 project you yourself kept a list of what you believed to be outstanding issues.

A. I believe earlier in the process I was asked to keep track of the different issues as they came up. Very early in the process I believe there was a list

that was generated through meetings between the Port and Ecology. The regional director at the northwest office before Ray Hellwig was Mike Rundlett, and we had a series of meetings with the Port during that time where I think we had a list of issues.

During different phases of the Port's project, the project changed. For instance, at one point there was a proposal to use irrigation water from a well on the golf course south of the airport, and that proposal had issues related to it that went away after that proposal went away, so there might have been a list at that time that was later supplanted by another list.

Q. I guess I'm not asking you whether there were items that came and went from the various lists. I was just trying to determine whether or not you yourself tried to keep a running list of what you thought were the issues that were outstanding.

A. Yeah. I tried to keep tabs on where we were with the review, and I probably had several different lists over time.

(Deposition Exhibit No. 213 was marked for identification.)

Q. (BY MR. REAVIS) Let me ask you about Exhibit No. 213, which at the top left on the first page says

"Sea-Tac issues short list October '99.doc." Can you tell me whether or not this exhibit is a document that you created?

A. This looks like something I created, yes.

Q. And is that your handwriting on the first page of that document?

A. It is.

Q. Now, do you know during the course of the 401 consideration by Ecology whether you updated this Exhibit 213 or tried to keep sort of your own running list of issues?

A. I don't recall right now whether this was one of a series of -- or if I used this list and continually updated it or created a new list, so I guess my answer is I don't recall right now.

(Deposition Exhibit No. 214 was marked for identification.)

Q. (BY MR. REAVIS) Exhibit No. 214 is entitled Draft October 9, 2000. It appears to be a memo from you to Ecology Sea-Tac reviewers; is that correct?

A. That's right.

Q. The re line says, "my most current list of issues to be resolved for Sea-Tac 401 review"; is that correct?

A. That's correct.

Q. Do you recall whether it was your intention in preparing documents like No. 213 and No. 214 to try to be as comprehensive as possible with regard to what the outstanding issues were at any given time?

A. The main focus was to keep tabs on the various issues as they arose. I'm not certain right now whether any could be considered comprehensive. They were fairly complete but often didn't go into, for instance, the level of detail necessary. If I mentioned that the natural resource mitigation plan isn't complete, I may not have gone into each wetland delineation and each mitigation site and what's necessary for each one.

Q. At some point in the fall of 2000, there was a process created which you referred to earlier in connection with what Kate Snider was doing, correct?

A. Correct.

Q. Can you tell me what the purpose for that -- and I'll call it a facilitated meeting process -- was?

A. I think the main purpose was to have a structured format for Ecology and the Port to sit down and work out clear understandings on what issues needed to be resolved and how to go about resolving them.

(Deposition Exhibit No. 215 was marked for identification.)

Q. (BY MR. REAVIS) Let me ask you if you recognize Exhibit No. 215.

A. Yes.

Q. What is it?

A. This is one set of notes from one of the meetings held as part of that process on October 13, 2000.

Q. That shows you as an attendee, correct?

A. Right.

Q. Now, if you refer to page 2 of that document and on to page 4, so the bottom half of 2, all of page 3, and the top of page 4. It appears to be a list of what are called 401 technical issues requiring resolution. Do you see that in the left column on the table there?

A. Right.

Q. Was it your understanding that this facilitated process was designed to make a comprehensive list of the issues that remained to be resolved in connection with consideration of the Port's 401 application?

A. I believe that was its intent, yes.

Q. And did you have an opportunity after this October 13 meeting to comment on the list that was set forth in Exhibit No. 215?

A. I believe so. This is noted as final draft meeting notes, so I'm not certain on this particular memo, but I know that the format for the series of meetings was that Ms. Snider would send out draft meeting notes for both Ecology and Port review and then would create a set of final notes for each meeting.

Q. So do you recall receiving draft minutes of the meeting before the final version came out?

A. That was the general approach, yes.

Q. Do you believe that you received them on one or more occasions, the drafts?

A. I believe so. I'm not certain when this process started, so this may have -- I don't know if this was the first meeting or what, third or what.

(Deposition Exhibit No. 216 was marked for identification.)

Q. (BY MR. REAVIS) Let me ask you to review Exhibit No. 216, which appears to be an e-mail sent by you to Ray Hellwig, Paula Ehlers, Kevin Fitzpatrick, and Joan Marchioro on October 18, 2000.

A. Correct.

Q. Do you recall this particular e-mail or the attachment to it?

A. Yes.

Q. The attachment that starts on page 2 of this

exhibit, does that appear to be the same attachment that's referenced by this little icon on the first page of the e-mail?

A. Yes. I believe it is.

Q. Do you recall -- well, let me just read the first sentence of the attachment. "I have identified several issues that need to be better resolved for Ecology to issue a defensible 401 certification that meets regulatory requirements." My question for you is, do you know whether or not Exhibit No. 216 was an attempt by you to supplement the list of issues that were referenced in Exhibit No. 215, which was the facilitated meeting minutes on October 13?

A. I believe my October 17 document was meant to be -- meant to include some issues that I thought had been left off of the October 13 issue list, yes.

Q. So at that time in October, were you attempting to give your input to Kate Snider and the facilitated process in order to develop a comprehensive list of issues that needed to be resolved in the 401 process?

A. The memo I wrote didn't go to Kate Snider. It was an internal Ecology memo. I believe at this or perhaps other meetings before this October 13 meeting I had raised some of these issues, but this draft didn't

go directly to Ms. Snider.

Q. So regardless of whether or not Exhibit No. 216 was sent to Ms. Snider for the purpose of expanding or modifying her list, do you recall in October of 2000 yourself attempting to give your input into the list that was being created by Kate Snider in order to make this a comprehensive list of outstanding issues?

A. Yes.

Q. Let me just ask you a question about the e-mail itself, No. 216. The second bullet there says, "While some of them may be, quote, internally resolved through consensus (minus 1), close quote." Do you know who the minus one was?

A. That would be me.

Q. Is that an indication that other people at Ecology had agreed on the resolution of some of these issues but you hadn't necessarily agreed?

A. I believe so, yes.

Q. Now, in an instance where that is the case, where you have consensus among other 401 reviewers or other technical people working on a 401 and you don't agree with the consensus of the rest of the group, was there a procedure at Ecology for resolving those types of differences of opinion so you could reach a

decision?

A. Well, I don't know that there was an official procedure in that case. I think that's a very general question, and it would depend on the specifics of a given project.

Q. Was there any general rule that if an issue was a technical issue and you as the 401 lead disagreed with a technical person on some other part of the team that you were supposed to defer to the technical expertise of that particular technical person?

A. I don't think that was an absolute. Again, it would depend on the specifics. In most cases where there was a difference of opinion, it didn't necessarily have to do purely with a technical issue. It was mostly the relationship between an area of technical expertise and an area of regulatory expertise.

Q. If it were a purely technical issue as to which you disagreed with a technical expert, do you believe it would have been your duty to defer to the recommendations made by the technical expert?

A. Again, not necessarily. I'll provide a specific example. If a proponent is proposing to put in a stormwater BMP and the documentation Ecology has shows that that BMP is able to treat a certain type of

run-off to a certain degree but the resulting discharge doesn't meet the water quality standards, the technical expert may say this is all that's required in the stormwater manual and we've determined that this meets the stormwater manual. The regulatory person may say, that's fine from a technical perspective, but that doesn't meet the requirement for reasonable assurance.

And so it's not so much a disagreement between the two, but it's applying a certain area of technical expertise to a regulatory situation in which the technical finding doesn't allow the regulatory standard to be met.

Q. Well, let me ask you a question, then, to follow up on that. There may be instances where there's a regulatory answer and a technical answer, but, for example, if you have an issue that comes up regarding whether or not a particular sampling result represents a violation of water quality standard, would you consider that to be a technical issue or is that more a regulatory issue as you've described the difference?

A. Well, in this particular case, I recall several conversations with different people in the water quality program about that very concern, and Ecology's experts in stormwater had varying opinions on

something as simple as your question. Can you determine compliance with water quality criteria if you take a grab sample or do you need a series of samples? How do you determine that?

I got different answers from different experts on that, and so in that sense, until that question was resolved, the whole idea of having reasonable assurance that the water quality standards would be met was in question, and I don't think Ecology could base a decision on having reasonable assurance as long as it didn't know whether or which sampling method could ensure the standards were being met.

Q. With regard to that type of issue, first off, is that an issue that would be addressed by the water quality program?

A. That's where the primary expertise would be, I believe, yes.

Q. Isn't there a chain of command in the water quality program for resolving those differences of opinion among people in the water quality program in order to develop a decision on behalf of the waste quality program about those types of technical issues?

A. I'm not certain. I imagine there is a certain chain that would lead to a conclusion one way or the other.

Q. So then getting back to your example, if you have differences of opinion among technical people over whether or not a sample indicates a violation of water quality criteria and the head of the water quality program or, say, the head of a region of the water quality program concluded that, no, a particular sample did not necessarily represent a violation of the water quality criteria, would you believe it's your duty to defer to that decision that has been reached by the water quality program?

A. Oh, in that case, if that was the decision that sampling could not determine whether or not water quality standards were being met, then my response would be that Ecology would not have a basis for reasonable assurance for purposes of 401.

Q. So if Ecology is unable to determine whether or not a particular sampling is a violation of water quality standards, then that would prevent Ecology from having reasonable assurance that water quality standards would be met?

MR. EGLICK: Objection as to the form of the question. It's vague, and in particular you're referring to a particular sampling, and I don't know whether, Gil, you're talking about a method, a result of a sampling, or what.

MR. REAVIS: Let me be a little more specific.

(Deposition Exhibit No. 217 was marked for identification.)

Q. (BY MR. REAVIS) Showing you what has been marked Exhibit No. 217, which is a declaration from Kevin Fitzpatrick signed by him on the 28th of September, 2001. Have you seen this declaration before?

A. Yes, I have.

Q. Let me ask you about some statements in paragraph number 3. Well, let me back up just a minute. In paragraph number 2, Mr. Fitzpatrick said he is a section manager employed by the Department of Ecology in the northwest regional office in the water quality program. Now, in terms of the hierarchy of the water quality program in the region, do you know where Mr. Fitzpatrick would fall if he's the section manager?

A. As section manager, I believe he would report both to Mr. Hellwig, the regional director, and to someone at headquarters in the water quality program, although I'm not sure who that is.

Q. Mr. Hellwig is the regional director, correct?

A. Correct.

Q. He's not necessarily the water quality -- he's not in the water quality program?

A. Right.

Q. So in terms of water quality chain of command, is Mr. Fitzpatrick the top of that chain of command in the northwest region as the section manager?

A. I believe so, yes.

Q. And then is there to the best of your knowledge a reporting from Mr. Fitzpatrick to someone else in the water quality program at headquarters?

A. I believe he reports to -- I don't know for certain, but I believe it would be the program manager at headquarters.

Q. Do you know who that is?

A. When I left, it was Megan White, but I'm not sure who it is right now.

Q. Now, let me refer you to paragraph number 3, the third sentence there. "The Port's stormwater discharges from the STIA have exceeded state water quality criteria for copper, lead, and zinc on an instantaneous basis, but those exceedences do not necessarily mean that the Port violated state water quality criteria."

I think that is one example of the type of issue I was asking you about earlier. To be specific

about the sampling that we're talking about, we're talking about instantaneous samples showing an exceedence, and it appears that Mr. Fitzpatrick's opinion here is that those do not necessarily represent violations of water quality criteria, correct?

A. Correct.

Q. Now, is that the type of issue that is a technical issue as to which you would ordinarily defer to a technical expert?

A. I would say it's a combination of a technical issue and in this case a regulatory issue.

Q. In what sense is that a regulatory issue?

A. Well, as the statewide 401 policy and guidance person, my job was to ensure consistent application of reasonable assurance, and the description here by Mr. Fitzpatrick stating that those exceedences do not necessarily mean the Port violated state water quality criteria does not equate to a statement that the state of Washington has reasonable assurance that standards will not be violated, and so that's the interaction of the technical finding and the regulatory requirement, and as long as that remained unresolved, it was difficult to get to that standard of reasonable assurance.

Q. So to the extent that Mr. Fitzpatrick is

saying he doesn't know whether or not that type of instantaneous sample is or is not a water quality violation, what you're saying is you can never have reasonable assurance?

A. I'm saying not knowing is not the same as reasonable assurance. If the reasonable assurance standard is a more positive declaration by the state saying we have a preponderance of the evidence showing that the standards are being met and here we're saying we have documentation of an instantaneous exceedence but we don't know what to make of that, and so given that, it certainly doesn't meet the preponderance of the evidence requirement.

This -- I mean, this statement by Mr. Fitzpatrick was evident in a number of other -- or a number of monitoring reports from the Port, and that same situation held true over quite a bit of time and for different discharges from the Port, so overall, the preponderance of the evidence available at the time was that we had these ongoing instantaneous exceedences or apparent exceedences and not enough documentation to adequately counter those for reasonable assurance.

Q. Well, let me ask you about some additional statements made in the same paragraph. Skipping down to line 9, Mr. Fitzpatrick says, "A single

instantaneous exceedence of a numeric water quality standard in a stormwater discharge does not mean that that same standard has been violated. A violation exists only if the discharge exceeds the numeric standards for the period of time set forth in the regulations. Data from the Port's self-monitoring reports of its stormwater discharges from its STIA operations, required by the NPDES permit, do not show that the numeric criteria standards were exceeded at a constant level for the required duration of those standards."

Now, isn't Mr. Fitzpatrick saying based upon that statement that the standards were not violated?

MR. EGLICK: Objection. The declaration speaks for itself.

Q. (BY MR. REAVIS) Have you discussed this issue with Mr. Fitzpatrick on a number of occasions?

A. Yes. Quite a few.

Q. Do you know if he's saying that because you don't have the required duration for these samples that water quality standards are not being violated or is he saying he doesn't know whether they're being violated?

MR. EGLICK: Objection as to the form of the question; vague. Are you referring to what he's saying in the declaration or what he said in the particular

conversation?

Q. (BY MR. REAVIS) Let me ask you about the conversations if you have any understanding of his position on this issue apart from the declaration.

A. Well, I'd have to go back over meetings that occurred over, I think, a two-year period at least, actually longer, between myself, other people in the water quality program, along with Mr. Fitzpatrick.

I think other programs may have been involved to some degree trying to deal with this issue of connecting stormwater discharges with the compliance with the water quality standards and determination of reasonable assurance, and so over the course of that several year process, I think we all expressed a lot of different opinions and weighed the pros and cons and explored different avenues on how to resolve this issue, so I don't know if this is Mr. Fitzpatrick's final conclusion on the matter or if it was an opinion he expressed previously.

Q. Well, is it your understanding of the position of the water quality program that either, A, they don't know whether or not water quality standards are being violated by an instantaneous sample showing an exceedence or, B, that they do know and there is no violation?

A. Could you repeat the choices you offered?
MR. REAVIS: Could you read the question back?
(The reporter read back as requested.)
MR. EGLICK: Objection as to the form of the question.
A. I believe those are two possible choices right now, but there may be some others. I've seen other opinions expressed that an instantaneous grab sample can be used to determine whether criteria are being violated.
Q. (BY MR. REAVIS) I think my question was do you know what the position of the water quality program is on that issue?
MR. EGLICK: Objection to the form of the question; argumentative.
Q. (BY MR. REAVIS) Do you know what their position is?
A. I don't.
Q. Now, the water quality criteria, the numeric water quality criteria that we're talking about here are in WAC 173.201A040?
A. Most of them, yes.
Q. Now, if the water quality program determines that a certain instantaneous sample does not represent

a violation of numeric water quality criteria, is that the type of determination as to which you would defer in deciding whether or not there's reasonable assurance to issue a 401?
A. Probably. It would depend on the basis for that determination. If it followed the requirements of the water quality standards 173.201A and it was supported by that regulation and perhaps case law in the matter, yes.
Q. But that is within the province of the water quality program to determine, correct?
MR. SMITH: Object to the form of the question.
A. I don't know that it's solely in their province.
Q. (BY MR. REAVIS) But certainly they deal with those issues all the time?
A. Correct.
Q. And certainly they have the expertise to determine whether or not water quality criteria are being violated?
A. I'm not certain of the last part, no. In some instances, it's clear that there appears to be significant doubt as to whether or not they have the expertise to determine whether criteria are being

violated.
(Deposition Exhibit No. 218 was marked for identification.)
Q. (BY MR. REAVIS) Showing you what has been marked as Exhibit No. 218, which appears to be draft meeting notes of one of these facilitated meetings held on October the 27th, 2000; is that correct?
A. Right.
Q. And it shows you as being in attendance?
A. Correct.
Q. Do you recall the date that you were reassigned such that you were no longer responsible for the Third Runway Project's 401 certification?
A. I believe my change in assignment was the week before this meeting. I notice that one of the bullets is Ecology staffing 401, and I see that Ann Kenny is in attendance, so this probably was the following week.
Q. But, nevertheless, you were at the meeting on the 27th?
A. Right.
MR. EGLICK: Off the record.
(Discussion off the record.)
(Deposition Exhibit No. 219 was marked for identification.)

Q. (BY MR. REAVIS) Let me ask you about Exhibit No. 219, and the question is do you recall ever having seen that document before?
A. I may have seen it as part of the overall packet of notes on the series of meetings. I don't remember it in detail, though.
Q. The first sentence of that exhibit says, "This Meeting Notes Summary is a compilation of discussions regarding issues related to a potential 401 Permit from the Department of Ecology for the Port of Seattle's proposed Stormwater Master Plan Update and third runway construction."
Do you know whether there was ever a list put together as a part of this facilitated process that the participants agreed was the final list at least as of the date that the list was created of the outstanding issues to be resolved in connection with the Port's 401 certification application?
A. I don't know that this -- I know that there was a list created as part of this process. I don't know that it was presented as the final list for all purposes of 401. I think the list was used for purposes of this series of meetings, but I believe other issues arose either during or after these meetings that required further resolution.

Q. And certainly issues will come up over time -- for example, if the Port submits a new document -- that may raise issues that weren't previously on this list, but I guess my question is at the end of 2000, do you know whether there was acknowledgment by the participants in this process that at that snapshot in time that they had created what they believed to be the final or complete list of all outstanding issues?
A. I don't know that for certain, because I wasn't a part of the process at the end.
Q. Did you yourself at that time try to create a list of what you believed to be all outstanding issues after the facilitated process started?
A. I know I created -- oh, after the process.
Q. After the process started.
A. After the process started.
Q. In other words, we've seen some of your lists that you talked about earlier, and my question was, did you continue to keep your own lists after the process started or did you attempt to incorporate your list within the facilitated process?
MR. EGLICK: Object to the form of the question, because it's not the question that was asked earlier, so I think you should clarify for the witness which question you're asking him to answer, the earlier

question or the one you just articulated.
Q. (BY MR. REAVIS) Let me ask you to answer that question, the one I just articulated.
A. Could you repeat it, please?
(The reporter read back as requested.)
A. The two lists I remember were the earlier list -- and I believe it was dated October 17 -- excuse me. It's Exhibit 216 -- that I created during the process. The only list I can remember after that was the summary that I created in response to Senator Patterson's request, but I don't recall right now if I had any lists between those two.
Q. (BY MR. REAVIS) But to the best of your recollection, the last list you created was the one that was attached to your letter to Senator Patterson?
A. I believe so, yes.
Q. Which I think the cover letter that we discussed a minute ago says was not a complete list.
A. Right.
(Deposition Exhibit No. 220 was marked for identification.)
Q. (BY MR. REAVIS) Let me ask you about Exhibit No. 220, which appears to be an e-mail from Ray Hellwig to you dated January 3, 2000; is that correct?
A. Correct.

Q. Do you remember receiving this e-mail?
A. I don't remember specifically, but it must have come to me, yes.
Q. Now, the subject matter of this e-mail relates to issues that were being discussed regarding how to coordinate 401 certification review with review of NPDES permits. Is that a fair characterization?
A. I believe the third paragraph refers to that, yes.
Q. Now, the next to the last sentence in that paragraph says, "You will recall that the outcome of the internal meetings resulted in a decision that the regulation of stormwater discharges from facilities covered under both 401 Certifications and NPDES permits would be covered under the NPDES permit." Now, is that your understanding of a decision that was reached by the Department of Ecology with regard to that issue?
A. No, it isn't, actually.
Q. What about that is not consistent with your understanding of the decision?
A. Well, there was a policy developed between the water quality program and the shorelands and environmental assistance program that spelled out the relationship between 401 and 402, and I believe that policy says something along the lines that discharges

covered by an NPDES permit may be used during 401 review to ensure compliance. However, the 401 may add conditions if necessary to meet the standard of reasonable assurance.
Q. Now, this Exhibit 220 shows a cc to a number of people, correct?
A. Right.
Q. Let me just run down the list, and if you can, tell me what position these various people occupied with the Department of Ecology. First Ron Langley.
A. He was the public information officer at the northwest region.
Q. Dave Garland?
A. He was at the northwest region. I don't recall which program, but he was involved in some modeling efforts we had regarding the third runway embankment.
Q. Erik Stockdale we've talked about, but what was his position?
A. He was wetland staff at the northwest region.
Q. Gordon White?
A. The program manager for the SEA program.
Q. Jeannie Summerhays?
A. She was the section head for the SEA program

in the northwest region.
Q. John Glynn?
A. Was the head of the water quality section at northwest.
Q. Kevin Fitzpatrick?
A. Was in the northwest region water quality program.
Q. Paula Ehlers?
A. Was the headquarters supervisor of the environmental coordination section, which is where the federal permits unit was housed. She was my supervisor.
Q. Megan White?
A. Was the program manager for the water quality program.
Q. And Dan Silver?
A. Was then -- I believe his title was deputy director of the department.
Q. So this appears to be an e-mail from Mr. Hellwig declaring a departmental policy that these issues would be resolved or covered under the NPDES permit, and the e-mail was sent up the chain of command all the way to the deputy director. Is that a fair statement?
MR. EGLICK: Objection as to the form of the

question; no foundation.
A. Does it appear to be that? Yes.
Q. (BY MR. REAVIS) Now, did you ever receive any calls from any of these people on the cc list to say, no, Mr. Luster, actually Mr. Hellwig was wrong and this is not an accurate statement of department policy?
A. I don't believe I received any calls. I think this was done during the development of the policy between the SEA program and the water quality program and may not have reflected the final language in that policy.
(Deposition Exhibit No. 221 was marked for identification.)
Q. (BY MR. REAVIS) Exhibit 221, the first page of that is an e-mail from Ray Hellwig to Kevin Fitzpatrick and Ann Kenny. Further on down in the document it appears to be an e-mail sent from you to Ray Hellwig November 7 of 2000. Attached to it is the document that's entitled Water Quality and Shorelands and Environmental Assistance Programs Joint Policy, correct?
A. Right.
Q. Is that the policy that you were referring to just a minute ago in your answer?
A. I believe so. I'm not certain this is the

final.
Q. This one says effective March 31, 2000. Was there a final version actually adopted and signed?
A. I'm not certain. At the time -- I believe the timing on this was the version here was considered final minus a couple of edits, minor edits that needed to be made. I'm not certain if or when it was signed, though.
Q. If it was not final or at least you're not clear whether or not it was final on November the 7th of 2000 when you sent it to Ray Hellwig -- is that true? Maybe I shouldn't presume that. Do you know if it was final at the time that you forwarded this document to Ray Hellwig on November 7, 2000?
A. I don't know if it was signed. I know that it was being used by staff at Ecology as an interim guidance sort of document.
Q. Do you know for a fact that this was ever signed?
A. I don't know if it was.
Q. Let me ask you to refer to page 2 of the attachment and part B there. Is that the policy that you were talking about with regard to the relationship between 401 certifications and NPDES permits?
A. Yes. Section B1 in particular. I don't

remember if there were other sections.
Q. Well, B1 relates to whether a project's discharges are covered by an individual 402 permit, correct? That's the introductory clause there?
A. Right.
Q. B2 is when discharges are covered by a general stormwater permit, correct?
A. Right.
Q. B3, projects covered by an individual or general permit that are determined to be out of compliance with that permit, correct?
A. Right.
Q. And B4 are projects that don't yet have a 402 permit?
A. Right. And I might add that those are all subsets of instances where both 401 and 402 apply.
Q. Now, is it true, then, that this policy -- well, during the time that you were working on the Port's 401 application -- strike that. Let me start over.
During the time that you were working on the Port's 401 application, were you utilizing this policy that's reflected in Exhibit 221?
A. Yes. Near the end of the review when this became -- when we got to, I believe, this version or a

similar version, we started -- this became our guidance, yes.

Q. And were you evaluating the Port's project under section B1 of this memo; in other words, covered by an individual 402 permit and the project is in compliance with that permit as determined by the water quality program?

A. In part, yes.

Q. And what's the other part that would be no?

A. Well, elements of the Port's proposal that fell outside of the particular discharges mentioned here that were covered by the 402. The 401 included discharges that weren't yet covered by 402 or weren't under the regulatory purview of the 402, so 401 had a different set of discharges as part of its review. I'd have to reread this, but there may have been some other instances in here. I can't recall right now, though.

Q. Do you recall what discharges were outside the scope of the 402 for the airport?

A. Well, specifically the proposal to discharge fill into water bodies were outside the scope of the existing 402. Also at that time, I don't believe the issue of whether or not a major or minor modification to the existing 402 had been resolved, and so at the very least, section B4 of this policy may have been

under consideration at that time, which would have required -- if Ecology determined that a modification to the existing 402 was needed for the work in the Walker Creek basin, then B4 would have applied.

I don't recall right offhand, but section C may have been a piece of that. Part 2 or 3 may have been under consideration. Part 4 may have been under consideration. I think the project was still in flux at that time, and so trying to determine the adequacy of the existing 402 may have put any of those into play.

Q. I've seen copies of a matrix that tries to sort all this out. Do you recall that? In other words, maybe that's a vague question, but I've seen copies of a matrix that relate to this issue. Do you recall having --

A. Not offhand.

(Deposition Exhibit No. 222 was marked for identification.)

Q. (BY MR. REAVIS) Exhibit 222, the first page of it appears to be an e-mail string. The second e-mail in that string at least on this page was from you to Ray Hellwig and some other folks on Friday, May the 14th, 1999?

A. Right.

Q. And it attaches an updated 401 permit matrix, and I guess I'm wondering what this document, the matrix, was intended to do. Let me first ask you: Is the matrix that you were referring to in your e-mail actually attached to Exhibit No. 222?

MR. EGLICK: Are you asking about the -- you're saying there's a reference to this matrix in the e-mail that's on the first page of Exhibit 222?

MR. REAVIS: Correct. On the re line, it says "updated 401 permit matrix."

A. Right. I believe this matrix is what I'm referring to on the first page.

Q. (BY MR. REAVIS) Can you tell me if you know what the intent of that matrix was?

A. On page listed as page 51, there's a statement from Michael Cheyne at the Port listed on page 50 stating that the matrix is to act as an agenda for the Monday, May 17, meeting between the Port and Ecology.

Q. Maybe I'll have to try and find the document I was thinking about a minute ago, but I thought there was some sort of matrix or decision document that was set forth in table form relating to consideration of various projects and where they would fall within the 401, 402 regulatory schemes. Does that ring a bell at

all?

A. I have a vague recollection from your description, but I don't recall the details of it, no.

Q. Is that a document that you had any part in creating?

A. I don't remember.

Q. Maybe here in a little bit I'll look through the documents and see if I can find it.

As you mentioned a little while ago, your job duties changed in about October of 2000, correct?

A. Right.

Q. And as a result of that change, you were no longer responsible for working on the Port's Third Runway Project, correct?

A. I was no longer the lead project reviewer, correct.

Q. Did you continue to play a role after that date with regard to the project?

A. I continued my role as the lead 401 policy person for the state. I also had some interaction with Ann Kenny in handing off the project to her and making her familiar with the history and the documents, that sort of thing. I probably talked a time or two with the other people involved, Ray Hellwig and Kevin Fitzpatrick and Erik Stockdale. There may have been

some other people as well.
Q. After the 401 function was regionalized as we talked about this morning, did you maintain direct responsibility for evaluating any 401 applications besides that related to the Third Runway Project?
A. I believe during that period I had another number of projects. I'm trying to remember specifically what those might have been. I know at the very least I provided support for the regional staff. For instance, when they were gone on vacation, I would take on review of some of their projects while they were gone. I believe there were some others that came directly to headquarters rather than going to regional staff for one reason or another, and I would have provided the review for those.
Q. Prior to the regionalization or at the time of the regionalization, do you recall how many 401 projects you were working on as the person primarily responsible for making recommendations or decisions?
A. Depending on workload and how many staff were there, I would say at any given time we each could have had 20 to 40 active projects, perhaps a few less or a few more. That included projects requiring individual 401 certifications, some projects requiring nationwide permits, some requiring just coastal zone management

determinations, but within that range, I think.
Q. After the beginning of this regionalization, did you attempt to transition out of certain of those projects and transfer those to the regions?
A. I think for the most part the ones I was doing at the time of regionalization I kept. I saw those through to the end. I think some of them may have transitioned to the region. I think it largely depended on when we hired somebody in the regional office whether a project was in their region or not and their degree of knowledge and taking on projects on their own, so it was kind of a transitional period where I kept some and some may have gone directly to the regions.
Q. Do you recall when Ann Kenny first started doing 401 work for the northwest region?
A. Not specifically, no.
Q. But did you train her in 401 issues or had she previously been doing 401 proposals before the regionalization?
A. I trained her, and I don't think she was doing 401 before that. I believe she was doing shoreline permit review before she took the 401 position.
Q. Now, in the fall of 1999, the Port reapplied

for the 404 permit, correct?
A. I believe that's the timing, yeah.
Q. And you worked on that 401 application that's necessary for the 404, correct?
A. Correct.
Q. During your work on that particular application -- strike that.
After the July 1998 401 was issued, it's my understanding that the Port appealed that certification, correct?
A. I believe so, yes.
Q. And then because of some issues related to additional wetland impacts, the Port withdrew the application?
A. Correct.
Q. And did the 401 evaluation continue after the withdrawal of that application or did you stop and wait for a new application to be filed in order to work on these issues related to the third runway?
A. I believe we continued to work with the Port during that period to clarify what their next application should include. I think the Port made it clear that they wanted to come back with a new revised project, and I believe there were some meetings between the withdrawal in '98 and the resubmittal in '99.

Q. Somewhere in the course of that work after the withdrawal of the 1998 application or after the withdrawal of the application in 1998, did you believe that Ecology's position on the Port's application was that Ecology was not going to say no to that application and that somehow Ecology was going to have to find a way to say yes?
A. Was that Ecology's position, are you asking?
Q. I'm asking was that your belief about what Ecology's position was; that no was not an acceptable option?
MR. EGLICK: Objection as to the form of the question.
A. My belief was that it was the same as any other proposed project for 401. If the applicant met the regulatory requirements, they got their permit, and if they didn't, we couldn't issue a permit. So if the Port met the requirements, they would get a 401, and if they didn't, we couldn't issue a 401.
(Deposition Exhibit No. 223 was marked for identification.)
Q. (BY MR. REAVIS) Showing you what has been marked as Exhibit 223. Down at the bottom half of the page it appears to be an e-mail from you to Ray Hellwig and Erik Stockdale and a copy to Paula Ehlers. Let me

ask you to refer to the last paragraph of your e-mail, which is on the top of the next page. The last two sentences say, "Based on the regs and the literature, it would be easier and more justifiable under 401 to deny the project because of the scope and extent of the project's impacts and the current conditions in the waterbodies. However, since 'no' is not seen as an acceptable option, we are looking for creative and regulatorily appropriate ways to get to 'yes' -- this approach may provide one of those ways."

I guess my question is, were you led to believe that no was not an acceptable option on the Port's proposal?

A. Yes.

Q. And how did you come to that belief?

A. During at least one of my discussions with Ray Hellwig, he at one point said no is not an option, and that's why I put the no in quotes there.

Q. Now, if you look then at the first page, which is Mr. Hellwig's response, in the third sentence there he says, "Therefore, the 'no' option is still alive -- always has been." Now, after this e-mail exchange, did you ever have any discussions with Mr. Hellwig as to whether or not no was in fact an acceptable option on the Port's proposal?

A. Yes. After this exchange, I know Ray and I talked about it, I believe with -- I'm trying to recall who else was there. The no is not an option was essentially changed to no is not an option if the Port does all that's required.

Q. Now, in fact, later on in 1999 the Port reapplied, correct?

A. Right.

Q. And a year or so later the application was withdrawn in the fall of 2000?

A. Right.

Q. Isn't it true that it was withdrawn because Ecology had indicated to the Port that the 401 certification was going to be denied?

A. Correct.

Q. And does that indicate to you that in fact no was not only an option, it was the option that Ecology ultimately selected for that particular application?

A. Yes. At that time, Ecology chose to deny it, yes -- excuse me -- have the Port withdraw.

Q. So were your concerns about being able to say no to this project resolved in the course of these intervening months between the e-mail that's No. 223 and the withdrawal of the Port's application?

A. I don't think I had concerns about being able

to say no or yes. My concerns were determining whether or not the proposal was going to meet the standards, and in my mind, both options were equally available.

Q. Let me ask you, then, about the change in your duties in October of 2000. First off, how did you find out about that change?

A. I think my supervisor, Paula Ehlers, told me.

Q. And do you recall what she told you about the reason for that change?

A. She said that she wanted me to be able to work on -- free up my time to work on some other important policy issues and that this seemed like a good opportunity to do that.

Q. And why was the timing of that change a good opportunity?

A. That I'm not sure of.

Q. Well, the change was made in October of 2000, correct?

A. Right.

Q. The Port's application was withdrawn in the previous month or so, correct?

A. Right.

Q. So there was going to be a new application submitted assuming the project was going to move forward, correct?

A. Right.

Q. So isn't that a natural time if there's a transition to be made to bring in a new person?

A. It very well could be. I know in other situations like that there was some benefit seen to having continuity of staff, but that may have been -- the reason you mentioned may have been a good opportunity as well to do a transition.

Q. Now, did you resist this change or did you tell Paula Ehlers that you didn't want the change to occur?

A. I believe I expressed some regret about not seeing this review through until whatever conclusion came about, and at the same time, I recognized that there were other things that I could be spending my work time doing that I hadn't been doing, so it was kind of a mix of wishing I could continue and glad to work on some other things.

Q. Were there other parts of your duties such as statewide policy guidance that prior to the change you weren't able to devote as much attention to as you would like to have?

A. Yes.

Q. So was the change then beneficial in allowing you to devote more time to those types of duties?

A. Yeah. I started working on a number of other things.
Q. Now, were you ever led to believe by anyone at Ecology that the change in your duties was due to your decisions or performance with regard to the Third Runway Project?
A. What do you mean by led to believe?
Q. Did anyone ever say that to you?
A. A number of staff at Ecology said, What, did the Port have you pulled off, or, Boy, who did you make angry to have this happen, that sort of thing, so there was some -- there were some comments along those lines, yes.
Q. So those were questions about what the reasons were?
A. Or assumptions on the part of different staff.
Q. Did anyone at Ecology ever tell you that one of the reasons for the change -- and by anyone at Ecology, I mean people who were involved in the decision to change your duties -- did anyone of that nature ever suggest to you that the change was motivated by your work on the Third Runway Project?
A. No, they did not.
MR. SMITH: Counsel, we've been going for

more than two hours. Anytime you want to take a break, it would be welcome.
MR. REAVIS: That's fine.
(Recess taken.)
Q. (BY MR. REAVIS) Do you have any opinions as to whether or not the current 401 certification issued in September of 2001 fails to meet regulatory standards governing or relating to stormwater?
A. My concerns about the 401 are related to the water quality standards in general and to some degree the stormwater discharges associated with the Port's proposal.
Q. What is it about the water quality standards as applied to stormwater that causes you a concern?
A. Well, it's hard to separate out just stormwater, but based on documentation from a number of sources, it appears that Des Moines Creek itself is not meeting or not supporting all the beneficial uses. It appears Miller Creek may be in the same situation. Given the existing levels of impairment, any discharges to those water bodies need to deal with those elements, and because the proposed discharges include stormwater, that is part of my overall concern.
I also have concerns about the speculative nature of the number of elements of the project that

will result in some -- would likely result in a difference between -- it's hard to tell right now what the eventual stormwater discharges will do in regards to other project elements such as wetland mitigation. Also because the quality of stormwater in some portions of the airport will drive the success or failure of the proposed low flow plan, stormwater quality is likely to be an issue there. Those are the ones that come to mind right now.
Q. Let me ask you about the first one of those regarding the existing levels of impairment. Is it your opinion that the Port in connection with the Third Runway Project has an obligation to restore all beneficial uses to neighboring streams even though those beneficial uses aren't currently being -- or don't currently exist?
MR. EGLICK: Objection as to the form of the question; foundation.
A. I don't think that's the Port's duty, no. I think it's Ecology's obligation to ensure that the water quality standards are met in both water bodies and discharges to water bodies, and that applies in this case as well.
Q. (BY MR. REAVIS) Well, let me make sure I understand what you're saying. Is the Port's

obligation as you understand it in order to be issued a 401 certification to make sure that its discharges don't further impair beneficial uses or is it the Port's obligation to attempt to restore beneficial uses that aren't currently being maximized?
MR. SMITH: Objection to form.
A. Again, it's -- the obligation is on Ecology. Ecology has the obligation to ensure standards are met in water bodies and discharges, and Ecology doesn't have an obligation to issue a 401. However, if a project proponent is willing to as part of its proposal address the issues that exist in a water body, that would help Ecology meet its obligations. The proponent doesn't have to do that, in which case Ecology's obligation is to determine other ways to ensure the standards are met in a given water body.
Q. (BY MR. REAVIS) So if a project applicant decided not to do that as you described and do something which further enhances the beneficial uses, are you saying that Ecology could in that instance still issue a 401 despite that refusal to enhance the beneficial uses as opposed to just deal with its discharges not further degrading the water body?
MR. EGLICK: Could you read back that question, please?

(The reporter read back as requested.)
MR. REAVIS: Let me just stipulate that's a bad question.
(Deposition Exhibit No. 224 was marked for identification.)
Q. (BY MR. REAVIS) Let me ask you if you recognize Exhibit 224 as being an e-mail exchange between yourself and Paula Ehlers, at least the first three pages of it. Let me just ask you what Exhibit No. 224 appears to be.
A. It's a series of e-mails between myself, Paula Ehlers, Ray Hellwig, Tom McDonald, Joan Marchioro, Gordon White on several issues related to the Sea-Tac review. The last in the series is dated June 13, 1999.
Q. Now, these e-mails sort of relate to the question I was trying to formulate a minute ago. In order to receive a 401 certification, do you believe it's necessary for the project applicant to enhance the beneficial uses in an impaired water body or simply to make sure that the applicant's discharges don't further degrade the water body?
A. I don't think that's the choice necessarily. The requirement is to ensure that the water quality standards are met, and the water quality standards

include meeting the beneficial uses and characteristic uses of the different classifications of a water body as well as the numeric and narrative criteria and the anti-degradation provision, and that's the general response, I guess. On a specific proposal, we could talk about what's required.
Q. Let's take an example of stormwater that may be flowing onto the Port's property from upstream on the Port's property into water bodies that are downstream of the Port's property. In your view, is the Port obligated to deal with that stormwater in a manner that improves its condition beyond the condition it was in when it entered the Port's property?
A. Again, the obligation is on Ecology. Your example describes to some degree the analagous situation with a 303-D listed water body. If Ecology determines that a water body has a certain type of exceedence or impairment, then further impairment is not allowed absent development of a TMDL or similar mechanism to bring that water body back into compliance, and Ecology's decisions are supposed to be based on meeting that obligation.
Now, if an applicant wants to help out with that process in order to get a permit, then that's something Ecology can include in its review, and then

if Ecology determines that by the project proponent improving upstream conditions or removing sources of impairment, that sort of thing, the water body itself is then meeting standards, then that would be an appropriate part of a project review.
Q. To use your words, if a project applicant decides not to help out to restore beneficial uses but instead limits itself to making sure that its contributions to the water body do not further degrade that water body, the applicant should still be entitled to get or should be able to get a 401 certification; is that correct?
A. Well, again, in a particular situation -- let's say under a 303-D listing, which is the normal version of carrying this out, if a water body is on the 303-D list for fecal coliform, further discharges of that particular contaminant should not be approved by Ecology.
Now, if an applicant comes in and has a proposal that initially includes a discharge that includes fecal coliforms, Ecology can work with the applicant to develop a series of BMPs or management measures or other mechanisms so that their discharge is not -- does not include fecal coliform, and I'd say that general approach applies to the water quality

standards in general.
Q. Well, putting aside the question of whether a water body is on the 303-D list, isn't it true that if a project applicant is proposing a discharge that does not further degrade the water body but on the other hand does not improve the water body, that that is permissible in the 401 context?
A. Again, it would depend on the condition of the water body. If the water body is already degraded, then it's not meeting water quality standards. If a discharge is going to accentuate that existing degradation, then I believe it's improper for Ecology to approve such a discharge.
Q. But I think my question was assuming that the discharge does not accentuate the degraded quality but on the other hand does not improve it.
A. Right. Well, I would say if a water body is listed for turbidity violations and a discharge -- a proposed discharge doesn't include any issues regarding turbidity, then that could be approved. If the existing discharge would result in additional turbidity in the stream, then that's something Ecology would have to either figure out a way to not have happen or not approve a discharge.
Q. Right. But, again, that answer assumes that

you have a listed water body for a particular --
A. Listing is the formal way to carry that out. I don't think that's the only mechanism. For purposes of -- clearly the 303-D list provides that mechanism.
For purposes of 401 where you have the standard of reasonable assurance based on a preponderance of the evidence, if you have documentation showing ambient water quality in a stream exceeding various standards, even though that's not -- even though the stream may not be on the 303-D list, unless there's contravening evidence showing that the ambient water quality is fine, I think that documentation showing exceedences can be used in the decision and needs to be addressed as part of Ecology's decision.
Q. We're talking around something here. What my question assumes is that you have a water body that's not on a 303-D list and that you have a discharge that does not cause any further degradation of that water body, and my question is, under that scenario, is there any reason why that discharge would not be allowable in the 401 context?
MR. EGLICK: Objection; asked and answered.
A. Can you give me a specific example, or I could provide one.

Q. (BY MR. REAVIS) Why don't you tell me what you're thinking.
A. Well, let's take fish use and copper. If a water body is or isn't on the 303-D list but there is documentation showing that that water body doesn't support fish life or fish life is impaired in the water body and that's due to exceedences of copper, dissolved copper in the water body, I would say that further discharges of copper into that water body should be prohibited until or unless the ambient quality is below the criteria for copper, thus allowing fish use to be fully supported.
Q. So even if the discharge itself complies with water quality criteria, you believe that discharge should be disallowed?
A. Well, the discharge wouldn't comply if it included copper and the water body was exceeding copper criteria. The standards apply both to a water body and to a discharge, and you've got to meet both conditions to be in compliance with the standards. That's the whole basis of the structure of the Clean Water Act is to regulate discharges and regulate conditions of the water body. It's also the structure of the state water quality standards.
Q. Let me go back to an issue that we were

talking about earlier briefly regarding sampling. It sort of relates to your last answer. In terms of numeric water quality criteria, where are samples to be taken in order to determine if those criteria are being violated, in the receiving waters or some other place?
A. Well, it depends on the intent of the sample. In some instances you would sample the receiving water. In some instances you would sample the discharge itself before it entered the receiving water. Depending on the intent of the -- I'm assuming this is under some sort of permit condition -- you could determine whether or not standards were being met.
For instance, if you monitored the discharge itself, that might -- you may be able to model from those results whether or not criteria in the water body itself were being met. You may use those sampling results to change processing or processes somewhere up the pipe at the facility.
Q. But the water quality criteria themselves are applicable in the receiving waters?
A. Correct.
Q. I think that's all I have for now. Thanks.
A. Okay.
EXAMINATION
BY MR. YOUNG:

Q. I have some. In the documents that you've reviewed since your departure from Ecology -- and you enumerated a number of them while you were looking at your list. I think what you said is you said you reviewed part of the stormwater management plan. Did I hear that correctly?
A. Yes.
Q. So does that mean that you did not review the entire stormwater management plan since your departure from Ecology?
A. Right. I think there are several appendices to that that I didn't review in their entirety, so I don't recall right now which parts I reviewed and which parts I didn't.
Q. Did you receive the entire document?
A. I believe so. I believe I received -- it consisted of several volumes of I think loose bound volumes, so I think that's the document I'm remembering is the stormwater plan.
Q. And you can't remember now which parts you reviewed and which you didn't review?
A. Not at the moment, no.
Q. Did you review the majority of it or just little bits and pieces of it or can you recall just kind of generally?

A. I'm trying to remember. I think there were several appendices that had lots of raw data or tabular compilations of data, and I don't think I reviewed those in great detail. The overall description and layout and best management practices being included in the plan, I don't think I reviewed those sorts of things primarily.
Q. Do you know how much time approximately you spent with the plan?
A. Probably several hours in total. I can't recall specifically.
Q. Would that be -- put a number on that if you can.
A. More than four, less than 12.
Q. What about the December low flow analysis? Did you review that after your departure from Ecology, the December 2001?
A. Yes. I have reviewed that.
Q. Did you review that in its entirety?
A. Again, I reviewed parts of it. I believe there are a number of tables and graphs that I didn't look at in great detail, but I did look at the project description and the rationale and in general description of what those tables and graphs entailed.
Q. And approximately how much time did you spend

with that?
A. Probably two to four hours perhaps.
Q. And going back just for a second to the stormwater management plan, do you remember when it was that you reviewed that?
A. I believe I reviewed it in part -- let's see. Well, there was a December plan from 2000, I believe, and it was updated in part in July of 2001, and I reviewed some portion of it, I believe, for my declarations back in September and October, and I know I've looked at it at least once or twice since then.
Q. For what purpose have you looked at it once or twice since then?
A. In part for preparing for today. I think that's one of the documents I've listed on the earlier Exhibit No. 203.
Q. And what were you looking for?
A. I think just to refresh my memory on some of the key points.
Q. The key points being what?
A. I remember it having a lot of speculative elements in it and depended to some degree on future submittals.
Q. What were those speculative elements?
A. I don't recall right off the bat right now.

Q. What were the future submittals?
A. Again, I don't recall the details right now.
Q. You're aware that Kelly Whiting from King County has reviewed on behalf of Ecology the stormwater management plan?
A. Yes.
Q. And you're aware that Mr. Whiting has certified that that manual or that the plan is in compliance with the King County Surface Water Design Manual?
MR. EGLICK: Objection as to the form of the question.
Q. (BY MR. YOUNG) Are you aware that he has certified that?
MR. EGLICK: Objection as to the form of the question.
A. I'm aware that he reviewed it and said that at least portions of it met the requirements of the manual. I am aware from his deposition, I believe, that he has some concerns about the current state of the plan, so I'm not sure if he's fully certified it or not.
Q. (BY MR. YOUNG) In terms of determining whether it is in compliance with the King County manual or not, would you defer to Mr. Whiting to make that

decision?
A. Yes. He's far more aware of requirements of the plan than I am.
Q. So if he were to say that it is in compliance with the substantive requirements of the King County Surface Water Design Manual, you wouldn't have any reason to disagree with him, would you?
A. I may want to ask him questions about how he came to that conclusion about certain areas I may be aware of or the speculative elements, his level of comfort with those, that sort of thing.
Q. But if he were comfortable with what you termed the speculative elements of it, would you defer to him?
A. If he was able to answer my questions well enough to provide me with reasonable assurance, then I think that would be -- yes, I would -- I guess that would be considered deferring to him.
Q. And what questions would you have for him?
MR. EGLICK: Objection as to the form of the question.
Q. (BY MR. YOUNG) You said you might ask him some questions, and I'm asking you what questions you might ask him.
MR. EGLICK: I think the string started back

somewhere with saying whether or not there were going to be concerns and whether or not Mr. Whiting could address them. I think we're kind of way out on a string of speculative questions. We've kind of lost the thread. I'm just replying to your argumentative response to my objection, but go ahead.

A. Well, a specific instance, I recall seeing some discussions in a deposition or perhaps two -- and I'm not certain it was Mr. Whiting's -- about King County concern about increased pH levels in new concrete stormwater vaults and that King County had not yet resolved that issue, so I would -- that's one specific example where I would find out the state of knowledge about that issue and what options might be available to ensure pH from those vaults didn't result in water quality violations.

Q. (BY MR. YOUNG) When you said earlier that you thought that Kelly Whiting had some concerns from your review of his deposition, was that what you were talking about?

A. I think that was one. I believe he had several others, and I do recall he had some concerns about the modeling done for the low flow plan. However, because that's connected with the stormwater management plan, I'd say that was a concern he had with

both plans.

Q. Well, I'm trying to ask questions only about the stormwater management plan for the time being.

A. Okay.

Q. So is it your understanding that Mr. Whiting had concerns about the stormwater management plan modeling?

A. At least as it applies to the low flow, which is integral to the stormwater plan.

Q. And the concern about the pH levels, was that Mr. Whiting's concern or somebody else's at King County?

A. That's what I'm not certain of right now. I know it came up in at least one or two depositions, and it may have been Mr. Whiting's.

Q. Now, it's your opinion as I understand it that compliance with the King County manual is not sufficient for there to be reasonable assurance; is that correct?

A. I think it's Ecology's understanding that compliance with both the Ecology stormwater manual and the King County manual do not ensure compliance with the water quality standards, and so in that regard, my opinion is compliance with either manual doesn't necessarily lead to reasonable assurance.

Q. I'm asking about your personal opinion. Your personal opinion is as I understand it that compliance with the King County manual does not necessarily provide reasonable assurance that water quality standards will be met?

A. Correct.

MR. SMITH: Asked and answered.

Q. (BY MR. YOUNG) And what do you base that opinion on?

A. My discussions with Mr. Whiting and Ecology -- various staff at Ecology's water quality program and also statements in the -- I know it was a statement in the previous -- well, let's see. Let me back up here just a moment. I don't think either manual includes a statement that compliance with this manual equals compliance with water quality standards.

Q. I think you said you had discussions with Mr. Whiting?

A. Right.

Q. Have you had discussions with Mr. Whiting?

A. Not in the last year, but during my review of the 401, I had quite a few meetings with Mr. Whiting and also Mr. Masters from King County, with other Ecology staff, with Ecology staff and Port personnel, and several meetings just between Mr. Whiting and

Mr. Masters and myself.

Q. And those meetings took place prior to your departure; is that correct?

A. Right.

Q. And why is it that compliance with the King County stormwater design manual does not provide reasonable assurance that water quality standards will be met?

A. Well, there are a number of reasons. I think the primary one is the King County manual and the Ecology manual are -- how shall I put it? -- more of a cookbook approach or a menu-driven approach where you take general characteristics of a project site and general information about the anticipated run-off and discharges and apply BMPs that are meant to meet a certain level of pollutant removal. I think the goal in both manuals is removal of 80 percent, for instance, of total suspended solids.

Reasonable assurance on the other hand for purposes of 401 is far more specific to a project site and requires a more detailed look at what specific contaminants are expected to be in the run-off and the specific effectiveness of BMPs and the resulting discharge to a water body. So in a number of cases, compliance with either manual may result in standards

being met, but that's by no means a guarantee, nor does it meet the level of reasonable assurance.

Q. Well, is it your opinion, then, that the BMPs that are set forth in the King County manual are not sufficient to ensure compliance with water quality standards?

A. In some cases they may be, and in some cases I would say definitely not.

Q. And what do you base that on?

A. Discussions with the same group of people I mentioned earlier and my general familiarity with the manuals and some of the stormwater training I've had in the past.

Q. Now, you mentioned discussions with various Ecology staff. Who were those staff?

A. Kevin Fitzpatrick, Ed O'Brien. Those are the main two that come to mind right now. I know earlier in this whole review process both Bill Moore and Steve Saunders were involved, although I'm not certain whether my discussions with them were about compliance with the manual and compliance with the stormwater, but it was at least that group of people that I discussed stormwater-related issues with.

Q. I'm trying to find out what you base your opinion that the BMPs and the manuals are not

sufficient to meet water quality standards on. Do you base that on a scientific study, do you base that just on discussions that you've had with people, or do you base that on papers that you've seen or studies that you yourself have conducted or what?

A. I haven't conducted any studies myself, but I would say some mix of the other things you mentioned. I'm aware of papers on the subject and presentations. In fact, I took a training on the King County manual when it first came out several years ago, discussions with Kelly Whiting, discussions with Ed O'Brien.

I remember particularly discussing whether or not a manual could ensure compliance, and both Kelly and Ed made it clear that the intent of the manual was not to ensure compliance with water quality standards in all situations but served at least as a good first step in that direction.

Q. So if I understand you correctly, in some cases compliance with the manual does equate to compliance with water quality standards?

A. I believe so, yes.

Q. What kinds of cases is that?

A. It depends on the type of project and the run-off it generates and the BMPs that are put in place. For instance, if you had a site where the

run-off was largely turbid, say suspended soil, and the BMPs that you put in place were sized to either infiltrate the discharge or remove a lot of the suspended soil as it ran through a bioswale perhaps, if there is a wet vault in place that allows some of that suspended soil to be removed, by the time the discharge reached a receiving water, it could well meet the water quality standards.

Again, it's a very site-specific application of run-off characteristics and the efficiency of BMPs that are put in place and also how the BMPs are maintained once they're constructed.

Q. Could you give me an example of a type of project where that would be the case where compliance with the stormwater manual would be compliance with water quality standards in your opinion?

A. Well, if you had a -- it's hard to say that in general without the specifics of a site, but if you had a run-off that had a very low load of contaminants and BMPs that were sized to remove those contaminants with a high degree of efficiency and there was enough quote-unquote treatment distance within those BMPs before the discharge met a receiving water, then I think it would be relatively easy to meet the standards in that situation.

Q. Now, we've been talking about BMPs, and there's different types of BMPs as I understand it; is that correct?

A. Yes.

Q. There's source control BMPs and then there's also water quality BMPs. Would that be fair to say?

A. Right.

Q. Which BMPs are you talking about when you use that term, both or --

A. I realized in my answer that I was thinking more of the water quality treatment BMPs, but source control BMPs are equally important as part of the mix.

Q. So you think, then, that with the right mix of source control and water quality BMPs and the proper sizing of the facilities that compliance with water quality standards could be achieved?

A. Yes. Depends on the type of contaminants you're dealing with and the efficiency of the BMPs, yes.

Q. And who would be in the best position to make that decision, you or, for example, Kevin Fitzpatrick?

MR. SMITH: Object to the form of the question.

A. I don't know what decision you're referring to.

Q. (BY MR. YOUNG) The decision as to whether or not in a particular case with BMPs that were proposed, their size and efficiency and the contaminants involved, whether or not those were sufficient to meet water quality standards, who would decide that, you, or would Kevin Fitzpatrick or Kelly Whiting or Ed O'Brien be better able to make that decision?

A. For what purpose?

Q. Well, for a given project.

A. For meeting -- to determine whether or not those BMPs would result in the manual requirements being met, I'd say Kelly is qualified to make that determination for the King County manual. I believe Kevin is qualified to do that for Ecology manual. To meet the requirement for reasonable assurance for water quality standards being met, I believe I've got a great deal of knowledge about that if that was the decision.

Q. Would Kevin be able to make that decision for purposes of an NPDES permit?

MR. SMITH: Objection to the form of the question.

A. I don't know that compliance with either of those manuals is the only part of a decision in determining whether or not to issue an NPDES permit.

Q. (BY MR. YOUNG) Well, for purposes of issuing

an NPDES permit, would Kevin Fitzpatrick in your view be in a position to decide whether a particular mix of BMPs and a particular mix of contaminants, sizing of the facilities and so forth and so on -- would he be in a position to be able to decide whether that particular mix was a sufficient basis upon which to issue an NPDES permit?

A. I believe so, yes.

Q. And he would be in a better position to do that than you, do you think?

A. For an NPDES permit, yes, I believe so.

Q. And isn't the issuance of an NPDES permit by the state a determination that the discharges meet water quality standards?

A. For purposes of section 402 of the Clean Water Act, which is a different standard of review than the 401, I would say yes.

Q. So is it your opinion, then, that there's a different standard of review between 401 and 402?

A. Yes, it is.

Q. How would you describe that difference?

A. Section 401D of the Clean Water Act requires that the certification -- any certification issued include specific effluent limitations, monitoring requirements, that sort of thing. Section 402A of the

Clean Water Act requires that either that same set of standards be met or another set that may be established to lead towards eventual compliance with Clean Water Act requirements.

So 401D has a shall requirement. 402A has a may requirement. That's illustrated best by the ongoing nature of NPDES where you have a five-year permit cycle and each cycle is supposed to be a notching up of requirements towards eventual compliance with the standards, whereas 401 is a one-time review by the state to provide a statement to the federal agency saying at this point in time, we have reasonable assurance that this project -- the discharges of this project will meet water quality standards. So in that sense, 401 includes a more stringent review requirement than the 402 or a more immediate requirement anyway.

Q. Is that a legal conclusion, do you think?

MR. EGLICK: Objection as to the form of the question.

Q. (BY MR. YOUNG) Because you're saying now that there's a different standard under the two parts of the statute, and I'm just asking you is that in your view a legal conclusion or is that --

MR. SMITH: Objection to the form.

A. I don't know what a legal conclusion is. I

might add to that --

Q. (BY MR. YOUNG) There's no question in front of you. Your counsel can ask you.

MR. EGLICK: I think if there's not a question on the floor and the previous question is still on the floor and it hasn't been superceded, he's entitled to complete his answer.

MR. YOUNG: You can ask him that when it's your turn.

MR. EGLICK: You're not entitled to cut him off.

MR. YOUNG: I'm not cutting him off.

MR. EGLICK: You just did.

MR. YOUNG: No. He answered the question, and then he wanted to go on and add something else.

MR. EGLICK: He wanted to add to his answer before you asked another question, and he is entitled to do that. I'll note an objection for the record to that and ask that counsel refrain from cutting off the witness.

Q. (BY MR. YOUNG) When Mr. Reavis was asking you about folks that you had talked to subsequent to your departure from Ecology, he asked you if you talked to anybody from Ecology and whether you talked to anybody from the ACC. Did you talk to any of their

consultants; the ACC's consultants, that is?
A. I don't think so. I don't know their full list of consultants, but I don't recall any conversations --
Q. With, for example, Amanda Azous?
A. No. I don't know that I've ever met or talked with Amanda.
Q. How about Bill Rozeboom?
A. No. Not since I left Ecology.
Q. Mr. Leytham, Malcolm Leytham?
A. No.
Q. Peter Willing?
A. No. I don't think so.
Q. How about Greg Wingard? Did he ask you about Mr. Wingard?
A. Right. He and I had, I believe, exchanged a couple of e-mails but not on third runway-related issues. It was something -- some other Clean Water Act issues he was working on and an article that I sent him that I thought he might be interested in.
Q. I think you said you had talked to Dave Peeler at Ecology. What did you talk to Mr. Peeler about?
A. He was in San Francisco for a conference at the EPA headquarters down there. He and Maria Peeler

and my wife and I had dinner with them one evening.
Q. And did you talk about the third runway?
A. No, we didn't. I don't think that came up at all.
Q. I think we were just asking about conversations about the third runway.
A. Okay. I thought it was anybody at Ecology that I had talked with.
MR. YOUNG: I think that's all the questions that I have.
MR. EGLICK: Could we go back to the question that was asked of Mr. Luster and then the answer he gave and then that he got cut off by Mr. Young and could you read that back, please?
(The reporter read back as requested.)
EXAMINATION
BY MR. EGLICK:
Q. Mr. Luster, do you recall when you were trying to -- I think you said I might add to that when you were answering a question and you weren't able to complete your answer. Could you please now complete your answer that was to follow or that you had intended to follow the words "I might add to that"?
A. Well, the thing that came to mind was -- I think this may have been applicable to the question --

is the PCHB's ruling on Battle Mountain at one point said that the 401 certification cannot be conditioned upon future issuance of an NPDES permit, and so in that sense, that may be analagous to this different structure and level of review for 401 and 402, the difference between something immediate and something that has future iterations.
Q. Remind us again if you would when approximately you first started working on the third runway in one iteration or another.
A. I don't know precisely. The mid '90s, '96 plus or minus a year. It was about the time that the supplemental draft EIS came out and probably a little bit before the Port's initial application to the corps and Ecology.
Q. Now, to your knowledge, up until the time that you left Ecology, was there anyone at Ecology who had worked as much on the third runway application as a whole as you had?
A. No. I don't think so. I think I was the single longest participant.
Q. And as part of your work, then, you're saying mid '90s, and you left Ecology -- or when were you as Mr. Reavis said reassigned from the Third Runway Project?

A. That was, I believe, mid October 2000.
Q. So we're talking about a space of at least four or five years that you worked on the third runway applications?
A. Roughly four years, I think.
Q. In that time, do you care to or could you estimate how many various documents, reports, memos, e-mails, any communication media you reviewed concerning the third runway application?
A. Hundreds including everything, yeah.
Q. So when you're asked, for example, how many hours did you spend reviewing the latest iteration of the stormwater management plan or when you were asked that, did your answer include all the hours that you spent reviewing, for example, earlier iterations of that same plan?
A. No. That was -- my answer was -- I believe the question was how much time I had spent either during the past year or since the appeal occurred in September, so that's just over the past several months.
Q. Well, let's -- would it be accurate, then, to say that in the four years plus that you worked on the third runway applications you spent hundreds of hours on it?
A. I'm calculating in my head.

Q. Take your time.
A. Well, in total, I would say over a thousand in that at times it was -- the majority of my work time was focused on the third runway review, and over the course of four years, I'm sure it added up to at least a thousand hours.
Q. Would you say that from your experience review of an earlier iteration of a plan from one aspect of the Third Runway Project would or would not have any relation to review of a later iteration?
A. I believe so.
Q. Which way?
A. Excuse me. I think it would help me. If I could remember key points from previous versions, I could focus in on those points in later versions, plus this is kind of what I've done for a living for years and years is review project plans of various sorts, and I'm still doing that today.
Q. Could you look at Exhibit 202 for a moment, please? Just to make sure I've got the same version of 202 as you, what I'm interested in is something called a personnel action form, which in my version of 202 is -- maybe this is a document -- is that part of 202 that you have?
A. (Nodding head).

Q. What exactly -- for those of us who haven't been educated in Ecology forms, what exactly is a personnel action form if you know?
A. I believe this is necessary to either reallocate someone's position at Ecology, to fill a vacancy, to establish a new or a different position for someone, and it has a chain of signature blocks by various people involved in that decision.
Q. What's the document behind -- in your packet of Exhibit 202, what's the document behind that personnel action form? Can you tell me what that is?
A. I believe this is a form generated by Ecology's personnel department that provides a place to describe the reasons why someone should be given a different position or an upgrade or whatever the action is being taken.
Q. And is this the form that was used to justify I think you referred earlier in your testimony to your upgrade for environmental specialist 5?
A. This is one of those forms, yes.
Q. This form is handwritten, isn't it, how it's filled in?
A. Right.
Q. Looking down at the bottom of the form, who is it signed by?

A. Gordon White.
Q. Have you seen his signature before?
A. Yes.
Q. Do you recognize this to be his signature?
A. I believe so.
Q. Now, could you read me under -- do you see the section that says "justification"?
A. Right.
Q. Could you read me the first sentence in that section?
A. "The position is the statewide expert on 401/CZM regulatory issues."
Q. Now, from your understanding of how these Ecology forms -- how long did you work at Ecology?
A. I started in January 1989 and left January 2001.
Q. So from your understanding of how these Ecology forms work, what's the significance of this description that you just read into the record in terms of your job position that you were assuming?
A. This form includes a section on justifying in this case an upgrade from an environmental specialist 4 to an environmental specialist 5. The environmental specialist series is or was numbered 1 through 5 with each step being increasing levels of independent work

and complexity, and the ES 5 position is generally provided to people that have statewide responsibilities and generally have a policy -- some sort of policy emphasis.
Q. You have a next page in this same exhibit, Exhibit 202. Is yours headed at the top "comments and signatures"? Do you see that?
A. Yes.
Q. Now, again, do you see the signature from Gordon White?
A. Yes.
Q. And you recognize that as his signature?
A. I believe so, yes.
Q. Could you read his handwriting by the way?
A. Most of the time, yes.
Q. Well, since you probably have more practice at it than I do, can you read into the record what's on this form under his signature, the handwritten material? Is that his handwriting by the way?
A. I believe so, yes.
Q. And at the end of the three handwritten lines, do you see where I am? Are those his initials?
A. I believe so.
Q. Could you read into the record his handwritten comment, then, please?

A. It says, "Tom has helped me understand 401 - no small accomplishment! and provides a good example to other staff for his diligence and work ethic for the citizens of the state. GW."
Q. Were you ever told that whether or not you would stay on the 401 team for the third runway was a matter of discussion with the Port of Seattle in the fall of 2000 while you were working at Ecology?
A. I don't think so, no.
Q. When did you first learn, if you ever did, that whether or not you would stay on the 401 team for Ecology's review of the third runway was a matter of discussion with the Port in the fall of 2000?
MR. REAVIS: Objection; lack of foundation.
A. There were comments about that at the time I was reassigned, but I didn't have any certainty about that until I read, I believe, some of the depositions that I've seen over the last several weeks.
Q. (BY MR. EGLICK) So in other words, you only saw whatever information you have on this topic of your reassignment being discussed with the Port within the last few weeks; is that correct?
A. That's the first, I guess, confirmation I had of it. As I said, there were comments at the staff level wondering if that was an issue.

Q. Did anyone -- for example, Mr. Hellwig -- let you know it had been a topic of discussion with the Port?
A. Whether I should stay on the team or not?
Q. Yes.
A. No.
Q. Mr. Fitzsimmons, the director, did he let you know?
A. No.
Q. Can you give some estimate of the number of -- strike that. We'll save some time here.
Looking at Exhibit 201 if you would for a moment. Do you recall this packet of documents? The top one is from Tom Fitzsimmons about delegation of signature authority.
A. Correct.
Q. You got it there?
A. Yes.
Q. Now, Mr. Reavis asked you a question, and I think he asked you whether or not the first page of Exhibit 201 mentioned you personally. Do you recall that?
A. Right.
Q. And I think you agreed it did not mention you personally?

A. Correct.
Q. Is there anything on the first page of Exhibit 201 that refers to your signature authority from your understanding of it?
A. It includes a general reaffirmation of delegated authorities that were previously approved by Director Riveland.
Q. Was that Mr. Fitzsimmons' predecessor?
A. I believe so, yes.
Q. And I think we've already established, haven't we, through questioning from Mr. Reavis, I believe, that pages 2 and 3 of Exhibit 201 is delegation of authority -- of signature authority from Director Riveland; is that correct?
A. Yes, it is.
Q. You were referring, I think, to something in Mr. Fitzsimmons' letter on the first page of Exhibit 201. You called it a reaffirmation. Could you read the sentence you're referring to?
A. It says, "Through this memorandum, I reaffirm the delegated authorities approved by Ms. Riveland."
Q. Could you look at Exhibit 202 again for a moment, please?
A. I've got it.
Q. Does the third page of Exhibit 202 represent

a description of your job duties at the Department of Ecology as the -- well, just leave it at that -- a description of your job duties at the Department of Ecology?
A. Yes.
Q. Did you have the duties described here in this third page of Exhibit 202 when you were working on the Port's third runway application up through when you were, as Mr. Reavis said, reassigned, I believe, in the fall of 2000?
A. Yes. I think this is my or was my most current job description.
Q. If you'd look on the first page of Exhibit 202. Now, it's a memo, isn't it, from Paula Ehlers?
A. Correct.
Q. And who was she again?
A. She was my immediate supervisor at the time.
Q. And it's through, it says, Gordon White. Who was he?
A. The program manager for the SEA program.
Q. And then too, who is Al Jacobs?
A. Al Jacobs is in Ecology's personnel office, I believe.
Q. And could you look at the paragraph that starts, "Tom has been assuming ES 5 level duties"? Do

you see that?
A. Yes.
Q. Could you look at the third sentence in that paragraph and the fourth sentence and read them for me, please?
A. The third and fourth?
Q. Yes, please.
A. "Tom is the lead 401 project specialist for the state's most contraversial and significant projects, and he serves as the coordinating and training lead for the 401 staff statewide. Tom now routinely performs these higher level duties with a high degree of skill and confidence."
Q. Now, did there ever come a time when you were ever advised that you were not living up to that -- by anyone in Ecology that you were not living up to that description that you just read of how you were performing your higher level duties as they were called?
A. Not really.
Q. Was the manual that you referred to with Mr. Reavis in Exhibit 207 a final version?
A. I believe this is the most current version. I don't know if it's been updated. I know there was at least one version before this, and the intent of this

desk manual was that it be updated as necessary. It was meant to serve as a living document essentially. I think it states that somewhere in the introductory comments.
Q. Was the manual updated after the Battle Mountain Gold decisions came out to reflect what those decisions had to say?
MR. REAVIS: Objection; vague.
Q. (BY MR. EGLICK) When I say Battle Mountain Gold decisions, I'm referring to the PCHB decision, Mr. Luster. Are you familiar with those?
A. I am.
Q. I think you referred earlier to you had given a deposition in that case, the Okanogan Highlands Alliance case?
A. Correct. I know that the Battle Mountain decision came out shortly before the date on this desk manual, and I'm not certain whether or not the desk manual was updated. It may have been. My question is about I believe the board's decision in that case was earlier that same month, so it may have just been a matter of a week or two apart, so I can't really remember right now whether this was updated in response immediately or not.
Q. Well, you might take a quick look and see if

you -- can you find any reference to the decision in this Exhibit 207 version that Mr. Reavis gave you?
A. I haven't yet. Would you like me to look through the whole --
Q. I think we can do that later. Let me ask you another question that may be helpful. Were there appeals to your knowledge by Ecology of the PCHB's Battle Mountain Gold decision or by other parties?
A. I believe the project proponent appealed that decision and that Ecology chose not to join in that appeal.
Q. So at the time the manual was issued, then, as far as you know or this version of the manual was issued in Exhibit 207, there was apparently an appeal to your knowledge pending of Battle Mountain Gold?
A. Well, there may have been if the decision came out earlier that month. I'm not sure that the appeal would have been filed by the date of this desk manual. I don't know if there's a 30-day or a 60-day period that the proponent would have had.
Q. Thank you very much. That's a good point.
You were talking with Mr. Reavis about the October -- was it October or July '98 401 decision that Ecology issued?
A. Right.

Q. I believe you said that you were someone who had an opinion about whether or not the 401 approval should be issued in the course of Ecology discussions prior to issuance of the July '98 401; is that correct?
A. Could you repeat that?
Q. Sure. Did you have an opinion prior to the July '98 issuance of the 401 as to whether a 401 on the state of knowledge then should be granted to the Port for its third runway application?
A. I believe I had some doubt about the decision and had been involved in discussions about the pros and cons of issuing a 401 versus denying it or having the Port withdraw. I think much of my concern was about how this fit into our previous 401 review requirements and what sort of precedence it might set and had some doubt that we should go this direction, but I think the overall decision of Ecology was to go ahead and issue.
Q. That was ultimately a decision made by Gordon White, was it not?
A. Correct.
Q. Had he had a long time tenure in his position at Ecology when he made that decision?
A. I'm trying to remember exact dates. I think Gordon had come to Ecology within a year of that decision, several months previous anyway.

Q. Was there -- you may have mentioned this, but was there another decision that you drafted for Ecology where Gordon White made a decision to issue it that you didn't necessarily agree with that you can recall?
A. Oh, yes.
Q. And what other decision would that be?
A. That was the Battle Mountain Gold 401 certification.
Q. So, again, with Battle Mountain Gold, was it then your job to draft the 401 after Mr. White had decided that it should issued?
A. I believe the scenario was I was asked to write the certification and explained that I didn't yet have reasonable assurance, and I thought it would be best if someone else were to write it at that point if that was the decision, but I was asked if regardless of my not having reasonable assurance could I write a certification to the best of my ability given that situation, and so I agreed to do that.
Q. Now, once the 401 was issued in July of 1998, I believe you said the Port appealed it; isn't that correct?
A. Yes.
Q. And then I believe you said the Port submitted -- subsequently withdrew the appeal and

submitted a new application?
A. I think they withdrew their application to the corps, which resulted in the 401 essentially becoming moot, and then resubmitted an application.
Q. When the application was resubmitted, I take it then you worked on review of the resubmitted application; is that correct?
A. Yes.
Q. Were there aspects of the project that you had not been fully aware of before that came to the fore as you reviewed the new application?
A. Well, there were changes between the original proposal and the resubmitted application. The two main ones that come to mind are the wetland mitigation impacts increased by something like ten acres or so over the previous proposal, the direct impacts.
Also, the Port had realized that as part of its initial mitigation proposal, the water they were proposing to use for low flow augmentation, there was some question as to the ownership or the legality of the water right, and that water supply, I guess, wasn't available or there was uncertainty about whether that would be available for mitigation purposes, and so the Port needed to come up with a different low flow augmentation proposal.

Q. Let's look at wetlands, for example, for a moment. I think you said there was a ten-acre increase in direct wetland impacts when the new application came in?
A. Roughly. It may have been just under ten acres, I think.
Q. What would that represent as a percentage increase if you know over the direct wetland impact on the application that had been withdrawn?
A. The original proposal was approximately ten acres of direct impact or perhaps 11.87 comes to mind for some reason, and that may have been direct and indirect. The subsequent proposal was, I believe, 18 or 19, and then I think it's gone up a little bit since then.
Q. So is the percentage then -- I'm no mathematician, but is that about a hundred percent increase give or take?
A. 75 to a hundred percent or so.
Q. I believe you were asked some questions about whether or not you'd worked with criteria for fill in other 401 applications. Do you recall that?
A. Yes.
Q. And you were asked a question, I think, also or maybe in particular about whether you had worked

with numeric criteria for fill in other applications. Do you recall that as well?
A. Not specifically.
Q. And I could be wrong. Let me ask you this question, then. Have you ever worked with in your experience at Ecology an application for as much fill as the Port proposed?
A. I don't believe so. The closest would be -- and I don't remember the numbers, and they're very different situations. The Battle Mountain proposal would have resulted in some fairly large amount of fill due to tailings pile. Some of the dredging projects I worked on had up to, well, I guess several hundred thousand cubic yards of material, but I don't think any of those were in the millions.
Q. And what's your understanding of the range we're in here of fill from the Port's proposal?
A. I don't understand.
Q. In other words, in terms of million cubic yards of fill.
A. I believe it's 17 million roughly.
Q. Cubic yards of fill?
A. Yes.
Q. Would it be accurate to say from your experience, then, at Ecology that would be an

unprecedented amount of fill in terms of your experience?
A. I believe so.
Q. I believe at some point Mr. Reavis asked you with regard to Exhibit 216 -- do you want to take a look at that?
A. I've got it.
Q. -- whether you had given the input represented in exhibit -- the attachment to Exhibit 216, whether you had given that to Ms. Snider. Do you recall that line of questioning?
A. Yes.
Q. Who was the attachment to Exhibit 216 addressed to? It's a memorandum from you, isn't it?
A. Yes.
Q. Dated October 17?
A. October 17, 2000.
Q. And who is it to?
A. Joan Marchioro.
Q. And who is she?
A. She's the Attorney General's office. She was helping with our review on this proposal.
Q. So did you have clearance to send memoranda that you were sending to Ecology's lawyer to anyone outside of Ecology?

A. I believe this fell under attorney/client privilege, and so it went to Joan, and I think as a result it was -- well, I don't know if this was held back or not for some period of time.
Q. Well, did you understand that it was your decision to make as to whether or not to send a memo to Ecology's attorney to anyone outside of Ecology?
A. I'm not clear on the question.
Q. Well, did you have authority to take a memo that you had sent to Ecology's attorney and send it to Kate Snider or the Port or anyone else?
MR. YOUNG: Object; calls for a legal conclusion.
A. My understanding was that that would have been privileged and it wouldn't be sent outside of Ecology. I believe I included it in the packet of material -- let me back up. We were getting regular requests from ACC at that time, I believe, and we had set up a system where all the documents went to one of two different public disclosure staff at Ecology, and we made -- each of the staff were to make an initial determination of what they thought was disclosable or not, and I think I had marked on this that it was -- I thought it was not disclosable.
Q. (BY MR. EGLICK) Once again, I think

Mr. Reavis asked you questions about whether you had sent input on to Kate Snider. Do you recall that?
A. Right.
Q. What was the process with regard to Ecology's interaction with Ms. Snider in terms of who was supposed to send Ecology's responses on to her concerning meeting notes, for example?
A. I don't recall precisely. I think they may have been compiled by -- I think they were compiled by someone other than myself -- but I don't remember who that was -- and then forwarded to Ms. Snider. I think in some instances I may have provided comments to her directly, but I think there was more of a structured process in place for at least part of these review meetings.
Q. Mr. Reavis also asked you a question about the chain of command in the water quality program and whether or not if a decision was made up the chain of command in the water quality program that would resolve an issue under 401, for example. Do you recall that general discussion?
A. Right.
Q. Is there anyone that you know of in the water quality program who had responsibility equivalent to yours for 401 determinations under the Clean Water Act?

A. None that I can think of, no.
MR. SMITH: Off the record for a second.
(Discussion off the record.)
(Recess taken.)
Q. (BY MR. EGLICK) Could you look at Exhibit 220 to your deposition? Do you see that, the e-mail January 3, 2000, from Ray Hellwig?
A. Right.
Q. I believe you previously testified that this doesn't represent your recollection of the outcome of the process of coming up with Ecology policies on the relationship between 401 and 402; is that correct?
A. Right. The third paragraph of this doesn't in my mind mesh with condition, I believe it was, B1 of the policy.
Q. Was Ron -- do you know who Ron Lavigne or Lavigne is?
A. Ron Lavigne?
Q. Yes.
A. Is an attorney with Ecology's AG division.
Q. L-a-v-i-g-n-e?
A. I believe so, yes.
Q. Wasn't he involved in one of the e-mail strings concerning this same question of relationship between 401 and 402?

A. I don't remember offhand. I think he may have been at some point involved in those discussions.
Q. Well, does this one e-mail represent the totality of all of the e-mail strings concerning this discussion, concerning the relationship between 401 and 402?
A. No. There were e-mails on this issue for, I think, about two years off and on.
Q. That may be it, but let me just look at my notes here. You talked with Mr. Eglick about whether or not Mr. Hellwig had advised you that no to the Port was not an acceptable option, didn't you?
A. Right.
Q. And I believe your testimony was that Mr. Hellwig said to you that no was not an acceptable option in a discussion you had with him; is that correct?
A. No was not an option, I think was the phrase.
Q. And then I think Mr. Eglick showed you an e-mail in which Mr. Hellwig appeared to be saying something different. Do you recall that?
A. Right.
Q. Then I think you said you had a later meeting with Mr. Hellwig; is that correct?
A. Correct.

Q. In which he explained his earlier statement to you; is that correct?
A. Yeah. I remember we discussed that among other things.
Q. Is there any question in your mind that Mr. Hellwig said to you the first time around that no was not an option with regard to the Port's application?
A. Is there any question?
Q. In your mind.
A. No.
Q. Thanks. I don't have any other questions.

FURTHER EXAMINATION

BY MR. REAVIS:

Q. Let me just follow up on that last point. I thought earlier when I was asking you those questions you indicated that Mr. Hellwig had explained to you what no in his first instance meant.
A. Right. I think in the e-mail response he had added some additional words there.
Q. But didn't he -- as I understand what you said earlier, Mr. Hellwig made it clear that no in fact was an option if the Port was unable to submit materials that would allow Ecology to reach reasonable assurance.

A. Right. That was the eventual resolution, I guess, of that issue or that statement.
Q. And that was something that was explained to you by Mr. Hellwig about what he meant when his initial statement said no was not an option?
A. Yes. I believe it was Ray and myself and a couple other people discussing that as part of one of our regular meetings, yes.
Q. And it was agreed among that group that in fact no was an option, correct?
A. Yes. I believe so.
Q. And, in fact, no was the option Ecology ultimately selected on the Port's application in the fall of 2000?
A. Actually, the Port withdrew that application.
Q. But I thought your testimony was the Port withdrew it because Ecology had informed the Port that the answer was going to be no.
A. Correct. However, that wasn't the final -- I think you said the final Ecology decision. At that time, yes.
Q. But in any event, before the Port withdrew its application, Ecology had reached the decision that the 401 would be denied?
A. Correct.

Q. So the statement that no was not an option turned out to be untrue because no was what Ecology decided ultimately with regard to that application in the fall of 2000?
A. Right. No turned out to be an option.
Q. That's all I have. Thank you.
MR. EGLICK: I have one more.

FURTHER EXAMINATION

BY MR. EGLICK:

Q. Mr. Luster, were you privy to the discussions among Mr. Hellwig, Mr. Fitzsimmons, and Port representatives concerning the Port's withdrawal of its application in the fall of 2000?
A. What do you mean by privy to?
Q. Well, for example, did you know there was a meeting at Port headquarters down on the pier here in Seattle?
A. I knew there had been a meeting scheduled. I knew it had something to do with coming up on the one-year deadline for 401, and I had been asked to prepare the initial form of a denial letter, and I'm not sure if that was before or after that meeting, but I wasn't at the meeting.
Q. Were you invited and declined to go?
A. No. I think the message went out for people

to make themselves available, and I told folks I would be available, but I wasn't asked to attend.
Q. So do you know then from personal knowledge what quid pro quos were discussed at that meeting, for example, concerning withdrawal of the Port application and what Ecology might do in response to that?
MR. EGLICK: Objection; lack of foundation.
MR. YOUNG: Object to the form of the question.
Q. (BY MR. EGLICK) Let me ask you another question. You said I think in response to a question from Mr. Eglick that no turned out to be an option; is that correct?
A. Correct.
Q. Do you have any information based on attendance at the meeting down at the Port office that you said you weren't asked to go to as to what went along with the possibility of no?
MR. YOUNG: Same objection.
A. What I know of the outcome of that meeting was I believe that started the facilitated review process that Ms. Snider was involved with, and I believe that started a process in which Ray or someone from Ecology was to report progress of the review to the governor's office, but I think those are the only

two understandings or arrangements that I know of personally that occurred.
Q. (BY MR. EGLICK) Let me ask you: How many weeks was it after the Port's withdrawal of its 401 application before you were as Mr. Eglick puts it reassigned away from the Port of Seattle Third Runway Project?
A. I think the meeting was late August or September sometime, and my reassignment was mid October, so anywhere from three to six weeks, I guess.
Q. And there is a letter of withdrawal from the Port, isn't there, that would help us place that date to your knowledge?
A. I believe so, yes.
Q. Thank you very much. Nothing else.
(Deposition concluded at 5:24 p.m.)
(Signature was reserved.)

CORRECTION & SIGNATURE PAGE

RE: ACC v. DOE; PCHB; 01-160
Thomas Luster; February 1, 2002

I, Thomas Luster, have read the within transcript taken February 1, 2002, and the same is true and accurate except for any changes and/or corrections, if any, as follows:

PAGE	LINE	CORRECTION

Signed at , Washington, on the day of , 2002.

Thomas Luster

CERTIFICATE

I, Mary L. Green, the undersigned Certified Court Reporter and Notary Public, do hereby certify:
That the testimony and/or proceedings, a transcript of which is attached, was given before me at the time and place stated therein; that any and/or all witness(es) were by me duly sworn to tell the truth; that the sworn testimony and/or proceedings were by me stenographically recorded and transcribed under my supervision to the best of my ability; that the foregoing transcript contains a full, true, and accurate record of all the sworn testimony and/or proceedings given and occurring at the time and place stated in the transcript; that I am in no way related to any party to the matter, nor to any counsel, nor do I have any financial interest in the event of the cause.
WITNESS MY HAND AND SEAL THIS 7TH DAY OF FEBRUARY 2002.

MARY L. GREEN, CSR #GREENML497RZ
Notary Public for the State of Washington,
residing in King County.
My appointment expires 4/4/05.

EXHIBIT D

Issuance Date: February 7, 2002
Effective Date: March 15, 2002
Expiration Date: March 15, 2007

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT No. WA0037953

State of Washington
DEPARTMENT OF ECOLOGY
Olympia, Washington 98504-8711

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.

Cascade Pole and Lumber Company
Post Office Box 1469
Tacoma, Washington 98401

Facility Location:	Receiving Water:	
1640 Marc Street Tacoma, Washington 98421	Outfall 001: Blair Waterway via Lincoln Avenue Ditch Outfall 002: Puyallup River	
Water Body I.D. No.:	Discharge Location	
Outfall 001: WA-10-0020 Outfall 002: WA-05-1003	Outfall 001:	Latitude: 47° 15' 18" N Longitude: 122° 24' 30" W
Industry Type: Wood Preserving	Outfall 002:	Latitude: 47° 15' 20" N Longitude: 122° 24' 51" W

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

This document has been formatted for PDF viewing.

Original signed by:
Kelly Susewind
Water Quality Section Manager
Southwest Regional Office
Washington State Department of Ecology

SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S1.E	Notification on Diffuser Modification	1/permit cycle	Within 3 years of the permit effective date
S3.	Discharge Monitoring Report	Monthly	30th day of the month following completed monitoring period
S4.B.3	Dioxins, Furans and 2,3,4,6-trichlorophenol testing	1/permit cycle in the fourth year of the permit term	Within 60 days of completion of the tests
S5.A.	Operations and Maintenance Manual	1/permit cycle	Within 180 days of the effective date of the permit
S5.B.1	Report on authorized storm water bypass	As necessary	Within 30 days of bypass
S6.	Modification to Solid Waste Plan	As necessary	Within 30 days of modification
S7.	Spill Plan	As necessary	Within 30 days of modification
S8.A.	Acute Toxicity Characterization Data for Outfall 001	1/2months in the second year of permit term	Within 60 days of sampling date
S8.A.	Acute Toxicity Tests Characterization Summary Report for Outfall 001	1/permit cycle	90 days following the last characterization sampling event
S8.C.	Toxicity Identification/Reduction Evaluation Plan for Outfall 001	As Necessary	Within 60 days of establishing toxicity as per Condition S8.B
S9.A.	Acute Toxicity Characterization Data for Outfall 002	1/2months in the fourth year of permit term	Within 60 days of sampling date
S9.A.	Acute Toxicity Tests Characterization Summary Report for Outfall 002	1/permit cycle	90 days following the last characterization sampling event
S9.D.	Toxicity Identification/Reduction Evaluation Plan for Outfall 002	As Necessary	Within 60 days of establishing non-compliance with acute toxicity limitation
S10.A.	Chronic Toxicity Characterization Data for Outfall 002	1/2months in the fourth year of permit term	Within 60 days of sampling date

Permit Section	Submittal	Frequency	First Submittal Date
S10A.	Chronic Toxicity Tests Characterization Summary Report for Outfall 002	1/permit cycle	90 days following the last characterization sampling event
S910D.	Toxicity Identification/Reduction Evaluation Plan for Outfall 002	As Necessary	Within 60 days of establishing non-compliance with acute toxicity limitation
S11.	Outfall Evaluation	Annually	Within 30 days of completion of the inspection
S12.A1	Letter notifying Ecology that a copy of SWPPP has been submitted to the local municipal operator	1/permit cycle	Within 180 days of the permit effective date
S12.A2 S16.A1	SWPPP Modifications	As necessary	At least 30 days prior to implementation of proposed changes
S12.B2	Notification of Unpermitted non-stormwater to *Stormwater Drainage System*	As necessary	Immediate notification and a written report within 30 days of becoming aware of the unpermitted discharge
S13.A	Letter of intent to conduct Chromium Assessment Study	1/permit cycle	within 6 months of permit effective date
S13.D	Data on Chromium Assessment Study	1/permit cycle	At least 180 days before permit renewal, as per condition S13
S14.	Sediment Sampling and Analysis Plan	1/permit cycle	within 3 years of permit effective date
S15.	Notice of Intent to Conduct Effluent Mixing Study	1/permit cycle	within 60 days of permit effective date
S15.	Effluent Mixing Study Plan	1/permit cycle	within 90 days of permit effective date
S15.	Draft Effluent Mixing Study Report	1/permit cycle	within 16 months of the permit effective date
S15.	Final Effluent Mixing Study Report	1/permit cycle	within 18 months of the permit effective date
S17.	Notice of Intent to Prepare P2 Engineering Report or Implement Additional BMPs	1/permit cycle	within 60 days of permit effective date
S17.A1.	SWPPP Update	1/permit cycle	within 3 months of the permit effective date
S17.A2	Phase I Pollution Prevention Engineering Report	1/permit cycle	within 6 months of the permit effective date

Permit Section	Submittal	Frequency	First Submittal Date
S17.A3	Phase II Pollution Prevention Engineering Report	1/permit cycle	within one year of the permit effective date
S17.C3	Phase I Pollution Prevention Engineering Report Draft Study Plan	1/permit cycle	Within 30 days of the permit effective date
S17.C3	Phase I Pollution Prevention Engineering Report Final Study Plan	1/permit cycle	within 15 days of receipt of the Department comments on Draft
S17.D	Phase II Pollution Prevention Engineering Report Draft Study Plan	1/permit cycle	within 90 days of the permit effective date
S17.D	Phase II Pollution Prevention Engineering Report Final Study Plan	1/permit cycle	within fifteen days of receipt of Department comments on Draft
S18	Compliance Progress Reports	1/year	By January 15 of each calendar year until the permittee attains compliance with the final effluent limits contained in Special Condition No. 1.
G1.	Notice of Change in Authorization	As necessary	
G4.	Permit Application for Substantive Changes to the Discharge	As necessary	at least 60 days prior to any proposed changes
G5.	Engineering Report for Construction or Modification Activities	As necessary	at least 180 days prior to planned start of construction unless approved otherwise.
G7.	Application for permit renewal	1/permit cycle	at least 180 days before permit expiration date
G8.	Notice of Permit Transfer	As necessary	
G21.	Notice of Planned Changes	As necessary	
G22.	Report Anticipating Noncompliance	As necessary	

SPECIAL CONDITIONS

S1. DISCHARGE LIMITATIONS

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any pollutants more frequently than, or at a concentration in excess of, authorized by this permit shall constitute a violation of the terms and conditions of this permit. The Storm Season for purposes of this permit is defined as September through August.

A. Process Wastewater

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee shall not discharge process wastewater to the waters of the state.

Process wastewater is defined as: all wastewater generated as a result of conditioning wood prior to or during the treatment process; any wastewater generated as a result of preservative formulation, recovery or regeneration; any wastewater generated as a result of process area cleaning operations including but not limited to, wastewater from the drip pad, retort and tank farm maintenance operations; and any storm water associated with the process area including the tank farm, retort, drip pad and any other area across which treated product is moved prior to its having ceased dripping.

B. Treated and Untreated Product Storage Area Storm Water Discharge to Lincoln Avenue Ditch via City of Tacoma Storm Sewer (Outfall 001).

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge (at Outfall 001) treated storm water collected from primarily the creosote and pentachlorophenol treated wood storage area subject to meeting the following limitations.

Parameter	Outfall 001 Maximum Daily Limit[1]	
	Final Limitations	Interim Limitations[3]
Arsenic [2], µg/L	360	
Chromium [2,3], µg/L	138	660
Copper [2,3], µg/L	159	310
Pentachlorophenol[3] µg/L	81	215
Oil and Grease, mg/L	10	
pH	6 to 9	
Polynuclear Aromatic Hydrocarbons, µg/L	100	
Total Suspended Solids (TSS), mg/L	50	

1. The maximum daily effluent limitation is defined as the highest allowable daily discharge.
2. All metals are expressed as total recoverable metals.
3. A compliance schedule of one year from the effective date of the permit is allowed for complying with the final effluent limitation for copper, chromium and pentachlorophenol. During the compliance schedule the Permittee shall comply with the interim limitations for copper, chromium and pentachlorophenol.

C. Treated and Untreated Product Storage Area Storm Water Discharge to Puyallup River (Outfall 002)

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge storm water (at Outfall 002) collected from primarily the CCA treated wood and white wood storage areas subject to meeting the following limitations.

Parameter	Outfall 002 Maximum Daily Limit[1]	
	Final Limit	Interim Limit[3]
Arsenic [2,3], µg/L	360	650
Chromium [2,3], µg/L	137	1030
Copper [2,3], µg/L	156	390
Pentachlorophenol[3], µg/L	20	63
Oil and Grease, mg/L	10	
pH	6 to 9	
Polynuclear Aromatic Hydrocarbons[3], µg/L	100	
Total Suspended Solids (TSS) [3], mg/L	50	
Toxicity	No acute or chronic toxity[4]	

1. The maximum daily effluent limitation is defined as the highest allowable daily discharge.
2. All metals are expressed as total recoverable metals.
3. A compliance schedule of twelve months from the effective date of the permit is allowed for complying with the final effluent limitation for polynuclear aromatic hydrocarbons, arsenic, pentachlorophenol and total suspended solids. A compliance schedule of three years from the effective date of the permit is allowed for copper, and chromium. During the compliance schedules the Permittee shall comply with the interim limitations for arsenic, copper, chromium, and pentachlorophenol.
4. As described in Special Provisions S9B and S10B.

Ecology may propose alternative final effluent limits based upon the results of the effluent mixing study required under Special Condition 17 (S17) and other factors. The critical conditions Ecology is specifying in S17 are equivalent to the conditions Ecology used to calculate final effluent limits. Had the results of such a study been available, Ecology would have used the results to set final effluent limits in this permit. Ecology will seek public comment on any proposal to set alternative final effluent limits.

D. Dilution Factor and Mixing Zone Description

i. For discharge at Outfall 001, the Permittee is allowed a 1 to 9 dilution factor in the City of Tacoma storm sewer prior to discharging to the Lincoln Avenue Ditch via the City of Tacoma Outfall.

ii. For discharges to the Puyallup River from Outfall 002 in the fourth year of the permit and thereafter, the Permittee is allowed a 1 to 10 dilution factor in the Puyallup River. The maximum boundaries of the mixing zone is defined as follows:
(a) In any horizontal direction from the discharge port(s), the mixing zone will extend a distance not greater than $1/10^{th}$ of the sum of two hundred feet plus the depth of water over the discharge port(s) as measured or calculated during mean lower low water with river flow at the 7Q10 or equivalent seasonal flows as determined by the Department; and
(b) In the direction transverse to river flow, the mixing zone will not extend a distance that exceeds twenty-five percent of the width of the water body as measured or calculated

during mean lower low water with river flow at the 7Q10 or equivalent seasonal flows as determined by the Department.

E. Diffuser Modification Notification

Within three years of the effective date of the permit, the Permittee shall modify the diffuser for Outfall 002 in the Puyallup River if necessary to meet water quality standards outside of the mixing zone described in D.ii above and notify the Department of any such modification.

S2. MONITORING REQUIREMENTS

A. Monitoring Schedule

1. The Permittee shall monitor the storm water discharge according to the following schedule.

Category	Parameter	Units	Sample Point*	Minimum Sampling Frequency[1]	Sample Type[2]
Storm water Effluent	Arsenic[3,4]	µg/L	Outfall 001& 002	1/month	Grab
	Chromium[3,4]	µg/L	Outfall 001& 002	1/month	Grab
	Copper[3,4]	µg/L	Outfall 001& 002	1/month	Grab
	Pentachlorophenol[3,4]	µg/L	Outfall 001& 002, treatment system influent	1/month	Grab
	Total PAH[5]	µg/L	Outfall 001& 002	1/month	Grab
	TSS[4]	mg/L	Outfall 001& 002	1/month	Grab
	Oil & Grease[4]	mg/L	Outfall 001& 002	1/month	Grab
	pH	s.u.	Outfall 001& 002	1/month	Grab
	Flow[6]	GPM	Outfall 001& 002	1/month	Estimate
City Outfall[7] (At Lincoln Avenue Ditch)	Arsenic[3,4]	µg/L	City Outfall	1/month[8]	Grab
	Chromium[3,4]	µg/L	City Outfall	1/month[8]	Grab
	Copper[3,4]	µg/L	City Outfall	1/month[8]	Grab
	Pentachlorophenol[3,4]	µg/L	City Outfall	1/month[8]	Grab

Category	Parameter	Units	Sample Point*	Minimum Sampling Frequency[1]	Sample Type[2]
	Flow[6]	GPM	City Outfall	1/month[8]	Estimate
Puyallup River	Salinity	ppt.	20 ft downstream of Outfall 002	1/month[9]	grab
WET Testing	As specified in Condition S8, S9 and S10				

* Samples from Outfalls 001 and 002 are to be tested separately, not combined.

1. The monitoring frequency for Outfall 001 (discharge to Lincoln Avenue Ditch) and 002 (discharge to Puyallup River) shall be once a month for the months of September through August for a total of twelve samples per sampling season.

   All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inch in magnitude and that occurs at least 48 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab sample shall be taken during the first 60 minutes of discharge. If the collection of a grab sample is impractical within the first 60 minutes of a rainfall event, a grab sample can be taken during the first two hours of discharge, and the Permittee shall submit with the monitoring report a description of why a grab sample was not possible during the first hour.

   If the Permittee is unable to collect a sample due to insufficient rainfall, lack of a qualifying rain event, or due to adverse climatic conditions, the Permittee shall submit in lieu of sampling data an explanation of why samples were not collected. Adverse climatic conditions which may prohibit the collection of samples includes weather conditions that create dangerous conditions for personnel or otherwise make collection of a sample impracticable.

2. A grab sample is an individual discreet sample.

3. The method detection level (MDL) for arsenic is 1 µg/L using graphite furnace atomic absorption spectrometry (GFAA) and EPA method number 206.2 from 40 CFR Part 136. The quantification level (QL) for arsenic is 5 µg/L (5 x MDL). EPA method number 206.3 or 200.7 may be used if the effluent arsenic concentration is five times above the method detection limit of the method.

   The method detection level (MDL) for chromium is 1 µg/L using graphite furnace atomic absorption spectrometry (GFAA) and EPA method number 218.2 from 40 CFR Part 136. The quantification level (QL) for chromium is 5 µg/L (5 x MDL). EPA method number 218.1 or 200.7 may be used if the effluent chromium concentration is five times above the method detection limit of the method.

   The method detection level (MDL) for copper is 1 µg/L using graphite furnace atomic absorption spectrometry (GFAA) and EPA method number 220.2 from 40 CFR Part 136. The quantification level (QL) for copper is 5 µg/L (5 x MDL). EPA method number 220.1 or 200.7 may be used if the effluent copper concentration is five times above the method detection limit of the method.

   The method detection level (MDL) for pentachlorophenol is 1 µg/L using EPA method 604 (GC/ECD method). However, other equivalent approved methods (40 CFR Part 136) may be used.

   Oil & Grease and TSS shall be measured using approved methods (40 CFR Part 136).

4. If the measured effluent concentration is below the QL, the Permittee shall report less than QL and include the QL for the method used.

Category	Parameter	Units	Sample Point*	Minimum Sampling Frequency[1]	Sample Type[2]

5. Total polynuclear aromatic hydrocarbons (PAH) are defined as the summation of the 16 following PAHs:

Naphthalene	Acenaphthylene
Acenaphthene	Fluorene
Phenanthrene	Anthracene
Fluoranthene	Pyrene
Benzo(a)anthracene	Chrysene
Benzo(b)fluoranthene	Benzo(k)fluoranthene
Benzo(a)pyrene	Dibenzo(a,h)anthracene
Benzo(ghi)perylene	Indeno(1,2,3-cd)pyrene

Each of the 16 priority pollutant PAHs identified above, shall be quantified and reported separately using EPA Method 610, HPLC option with UV and fluorescence detection or other equivalent approved method. The 16 individual PAHs shall be summed to arrive at a Total PAH value. A non-detect value may be reported as zero for the purposes of determining compliance with the Total PAH limit.

6. Flow shall be estimated for each outfall and storm event sampled based upon rainfall measurements or estimates, storm water collection area for each outfall and an estimate of the runoff coefficient of the drainage area.

7. Sampling from the City of Tacoma storm sewer outfall to the Lincoln Avenue Ditch shall be conducted on the same date **but following** the Permittee's sampling of Outfall 001.

8. The first sampling event for a year for the City of Tacoma storm sewer fall shall coincide with the "first flush" of the season in September. The sampling frequency shall be once **every month** for the first year of the permit term, for a total of **twelve** samples. The number of samples collected thereafter would be three each year (the first to coincide with the first flush in September, the second in January, and the third in May of each year).

9. Salinity measurement of the receiving water at outfall 002 (in Puyallup River) shall be done for the months of September through August for the first year of the permit term for a total of twelve samples. At each sampling event, three depths (surface, middle, and bottom) shall be sampled for each of the four tidal stages (low tide, mid tide, high tide, and mid ebb). At the end of the first year of permit term, vertical average salinity would be determined and effluent limitations may be changed , if necessary, through a permit modification.

2. The Permittee shall monitor any bypass of storm water discharge to the Puyallup River via Outfall 002 according to the following schedule. The reporting shall be in accordance with Condition S5.B.1.

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency[1]	Sample Type[2]
Bypass	Arsenic[3,4]	µg/L	Outfall 002	each bypass	Grab
	Chromium[3,4]	µg/L	Outfall 002	each bypass	Grab
	Copper[3,4]	µg/L	Outfall 002	each bypass	Grab
	Pentachlorophenol[3,4]	µg/L	Outfall 002	each bypass	Grab
	Total PAH[5]	µg/L	Outfall 002	each bypass	Grab
	TSS[4]	mg/L	Outfall 002	each bypass	Grab
	Oil & Grease[4]	mg/L	Outfall 002	each bypass	Grab
	pH	s.u.	Outfall 002	each bypass	Grab
	Flow and Duration[6]	GPM, Hours	Outfall 002	each bypass	Estimate

1. Samples shall be collected upon release of bypass at outfalls 002.
2. A grab sample is an individual discreet sample.
3. The analytical methods and detection levels are defined as above in footnote 3 of Condition S2.A.1
4. If the measured effluent concentration is below the QL, the Permittee shall report less than QL and include the QL for the method used.
5. Total polynuclear aromatic hydrocarbons (PAH) are defined as in footnote 5 of Condition S2.A.1
6. Flow shall be estimated or measured for each bypass

B. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the water and wastewater monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department of Ecology (Department).

C. Laboratory Accreditation

All monitoring data required by the Department shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, conductivity,

pH, and internal process control parameters are exempt from this requirement. Conductivity and pH shall be accredited if the laboratory must otherwise be registered or accredited. Crops, soils and hazardous waste data are exempted from this requirement pending accreditation of laboratories for analysis of these media by the Department.

S3. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to the Department shall constitute a violation of the terms and conditions of this permit.

A. Reporting

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring data obtained during the previous month shall be summarized and reported on a form provided, or otherwise approved, by the Department, and be received no later than the 30th day of the month following the completed monitoring period, unless otherwise specified in this permit. The report(s) shall be sent to the Department of Ecology, Southwest Regional Office, P.O. Box 47775, Olympia, Washington 98504-7775

Discharge Monitoring Report forms must be submitted monthly whether or not the facility was discharging. If there was **no flow at the outfalls** during a given monitoring period, submit the form as required with the words **"no flow"** entered in place of the monitoring results.

B. Records Retention

The Permittee shall retain records of all monitoring information for a minimum of three years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place, method, and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2 or S4 of this permit, then the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Permittee's self-monitoring reports.

E. Noncompliance Notification

In the event the Permittee is unable to comply with any of the permit terms and conditions due to any cause, the Permittee shall:

1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the violation, correct the problem and, if applicable, repeat sampling and analysis of any violation immediately and submit the results to the Department within 30 days after becoming aware of the violation;

2. Immediately notify the Department of the failure to comply; and

3. Submit a detailed written report to the Department within thirty days (5 days for upsets and bypasses), unless requested earlier by the Department. The report should describe the nature of the violation, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of the resampling, and any other pertinent information.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

S4. DIOXIN, FURAN AND 2,3,4,6-TRICHLOROPHENOL TESTING

A. Testing Requirements

The Permittee shall conduct chemical analyses of representative samples of storm water at Outfalls 001 and 002. The Permittee shall conduct chemical analyses in accordance with protocols, monitoring requirements, and QA/QC procedures specified in this section.

Storm water samples shall be analyzed for:

2,3,4,6-Tetrachlorophenol

Dioxins:
2,3,7,8-Tetrachlorodibenzo-p-dioxin
Tetrachlorodibenzo-p-dioxins
Pentachlorodibenzo-p-dioxins
Hexachlorodibenzo-p-dioxins
Heptachlorodibenzo-p-dioxins
Octachlorodibenzo-p-dioxins

Furans:
Tetrachlorodibenzofurans
Pentachlorodibenzofurans
Hexachlorodibenzofurans
Heptachlorodibenzofurans
Octachlorodibenzofurans

B. Monitoring Requirements

1. Samples shall be collected in the fourth year of the permit term.

2. Grab samples of storm water runoff shall be collected from the treated wood storage yard Outfall No. 001, and Outfall 002, from the first measurable storm event (greater than 0.1 inches of rainfall) of the season. The storm season is

defined for the purposes of this permit as September through August. In the event that the first storm event of the season does not produce sufficient runoff to sample, the first storm event of the season producing sufficient runoff shall be sampled. Sample collection, storage and analysis shall follow the protocols in S4.C below.

3. The results of the study shall be submitted to the Department within 60 days of completion of all tests. The report shall include: quality assurance and quality control procedures for sample collection, transport and analysis dates, the magnitude and duration of the storm event sampled, the time since the last storm event and the magnitude of the last storm event.

C. Protocols

1. Sampling for dioxins and furans shall be in accordance with appendix B of the USEPA/Paper Industry Cooperative Dioxin Screening Study (EPA 440/1-88-025, March 1988).

2. In accordance with 40 CFR 122.41(j)(4), Dioxins and furans shall be analyzed using either:

EPA Method 1613: Tetra- through Octa- chlorinated Dioxins and Furans by Isotope Dilution;

or

NCASI Procedures for the Preparation and Isomer Specific Analysis of Pulp and Paper Industry Samples for 2,3,7,8-TCDD and 2,3,7,8-TCDF: Technical Bulletin No 551;

or

An equivalent approved in writing in advance by the Department.

S5. OPERATION AND MAINTENANCE

The Permittee shall, at all times, properly operate and maintain all facilities or systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

A. Operations and Maintenance Manual

An Operations and Maintenance (O&M) Manual shall be prepared by the Permittee in accordance with WAC 173-240-150 and be submitted to the Department for approval within 180 days after permit effective date. The O&M Manual shall be reviewed by the Permittee at least annually and the Permittee shall confirm this review by letter to the Department. Substantial changes or updates to the O&M Manual shall be submitted to the Department whenever they are incorporated into the manual.

The approved Operations and Maintenance Manual shall be kept available at the permitted facility and all operators shall follow the instructions and procedures of this manual.

The following information shall be summarized in the O&M Manual.

1. Maintenance procedures and schedules for all oil/water separators on site.

2. Maintenance procedures and schedules for any catch basin inserts.

3. Maintenance procedure for the mixed media filters and granulated activated carbon filters including procedures for filter media replacement and disposal.

4. Maintenance procedure and operation of the pH sensor/controller system including frequency and procedure for regular calibration.

5. The procedure for allowing a bypass, resulting from a severe storm shall be described in the plan.

6. A description of any regularly scheduled maintenance or repair activities at the facility which would affect the volume or character of storm water discharge and a plan for monitoring and treating/controlling the discharge of maintenance-related materials (such as cleaners, degreasers, solvents, etc.).

B. Bypass Procedures

The bypass of stormwater from any portion of the collection and/or treatment system prohibited unless one of the following conditions applies:

1. Bypass of storm water is authorized only under severe storm events that causes an exceedence of the design capacity of the diffuser and the capacity of the onsite collection and storage system. The permittee shall submit a report to the Department within 30 days of the bypass indicating the magnitude of the storm event(s) that caused the bypass, how long the bypass lasted, and the quality of the bypass (as per Condition S2.A.2).

2. Unavoidable Bypass -- Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

   If the resulting bypass from any portion of the treatment system results in noncompliance with this permit the Permittee shall notify the Department in accordance with condition S3.E "Noncompliance Notification."

3. Anticipated Bypass That Has the Potential to Violate Permit Limits or Conditions -- Bypass is authorized by an administrative order issued by the Department. The Permittee shall notify the Department at least 30 days before the planned date of bypass. The notice shall contain (1) a description of the bypass and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) the minimum and maximum duration of bypass under each alternative; (5) a recommendation as to the preferred alternative for conducting the bypass; (6) the projected date of bypass initiation; (7) a statement of compliance with SEPA; (8) if a water quality criteria exceedence is unavoidable, a request for modification of water quality standards as provided for in WAC 173-201A-110, and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

   For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above shall be considered during preparation of the engineering report or facilities plan and plans and specifications and shall be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

   The Department will consider the following prior to issuing an administrative order:

   a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of the permit.

   b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.

   c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

   After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, the Department will approve or deny the request. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by the Department under RCW 90.48.120.

4. Bypass For Essential Maintenance Without the Potential to Cause Violation of Permit Limits or Conditions -- Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of the permit, or adversely impact public health as determined by the Department prior to the bypass.

S6. SOLID WASTE DISPOSAL

A. Solid Waste Handling

The Permittee shall handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

B. Leachate

The Permittee shall not allow leachate from its solid waste material to enter state waters without providing all known, available and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, Chapter 173-201A WAC, or the State Ground Water Quality Standards, Chapter 173-200 WAC. The Permittee shall apply for a permit or permit modification as may be required for such discharges to state ground or surface waters.

C. Solid Waste Control Plan

The Permittee shall review its solid waste control plan on an annual basis and submit all proposed revisions or modifications to the solid waste control plan to the Department within 30 days of the proposed changes. The Permittee shall comply with any plan modifications.

S7. SPILL PLAN

The Permittee shall review the existing Spill Plan at least annually and update the Spill Plan as needed. Changes to the plan shall be sent to the Department within 30 days of the modification. The plan and any supplements shall be followed throughout the term of the permit.

Plans and manuals required by 40 CFR Part 112, contingency plans required by Chapter 173-303 WAC, or other plans required by other agencies which meet the intent of this section may be submitted.

S8. ACUTE TOXICITY (OUTFALL 001)

A. Effluent Characterization

The Permittee shall conduct acute toxicity testing on the final effluent at Outfall 001 to determine the presence and amount of acute (lethal) toxicity. The two acute toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

Effluent characterization for acute toxicity shall be conducted every other month, beginning in September and continuing through May of the following year or until five samples have been collected and tested. Test shall begin at the first measurable rainfall event (a rainfall event with at least 0.1-inch of rain) in September of the second year of the permit term. Acute toxicity testing shall follow protocols, monitoring requirements, and quality assurance/quality control procedures specified in this Section.

A written report shall be submitted to the Department within 60 days after the sample date. A final effluent characterization summary report shall be submitted to the Department within 90 days after the last monitoring test results are final. This summary report shall include a tabulated summary of the individual test results and any information on sources of toxicity, toxicity source control, correlation with effluent data, and toxicity treatability which is developed during the period of testing.

Acute toxicity tests shall be conducted with the following species and protocols:

1) Fathead minnow, *Pimephales promelas* (96 hour static-renewal test, method: EPA/600/4-90/027F)

2) Daphnid, *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (48 hour static test, method: EPA/600/4-90/027F).

A dilution series consisting of a minimum of five concentrations and a control shall be used to estimate the concentration lethal to 50% of the organisms (LC_{50}). The percent survival in 100% effluent shall also be reported. One of the dilution series must be at and one of the dilution series below *the critical sample concentration* defined below:

A *critical sample concentration* is defined as a sample dilution equivalent to the proportion of Cascade Pole's discharge in the combined flow at the City outfall as defined in Condition S1.D for Outfall 001. This is equivalent to approximately 11% effluent. This shall be prepared using laboratory dilution water.

The lab shall be instructed to use its standard dilution water to prepare the concentration series and to test with at least four replicates per concentration. The results of a single comparison hypothesis test comparing survival in *the critical sample concentration* to control survival shall be reported for each test. These tests are not being required to determine compliance with an effluent limit. This permit contains no effluent limit for acute whole effluent toxicity.

The Permittee shall immediately implement subsection B if any acute toxicity test determines a statistically significant difference in survival between the control and the *critical sample concentration* using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in survival between the control and the *critical sample concentration* is less than 10%, the hypothesis test shall be conducted at the 0.01 level of significance.

B. Response to Significant Toxicity in critical sample concentration

The Permittee shall begin additional compliance monitoring within one week from the time of receiving test results showing a statistically significant difference in survival between the control and the *critical sample concentration* as described in subsection A above. This additional monitoring shall be conducted weekly for the next four weeks having sufficient rainfall to provide a sample and using the same test and species that showed a statistically significant reduction in survival in the *critical sample concentration*. The additional monitoring shall be conducted using a series of at least five effluent concentrations of which one concentration must be at and one less than the *critical sample concentration*. The lab shall be instructed to use its standard dilution

water to prepare the concentration series and to test with at least four replicates per concentration. The results of a single comparison hypothesis test comparing survival in *critical sample concentration* to control survival shall be reported for each test.

The Permittee shall immediately implement subsection C. if any of the additional monitoring tests shows a statistically significant difference in survival between the control and *critical sample concentration* using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in survival between the control and *critical sample concentration* is less than 10%, the hypothesis test shall be conducted at the 0.01 level of significance. These tests are not being required to determine compliance with an effluent limit. This permit contains no effluent limit for acute whole effluent toxicity.

C. Toxicity Identification/Reduction Evaluation (TI/RE)

The Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department within 60 days from the time of receiving test results showing a statistically significant difference in survival between the control and *critical sample concentration* during the additional monitoring described in subsection B above. The TI/RE plan shall be based on WAC 173-205-100(2) and shall be implemented in accordance with WAC 173-205-100(3). In addition, the TI/RE plan for this discharge may consider factors not applicable to other TI/RE plans. These factors are explained in the permit Fact Sheet.

D. Requirements if No Significant Toxicity is Found in the Effluent Characterization

If none of the effluent characterization tests required in subsection A above shows a statistically significant reduction in survival in *critical sample concentration* relative to the control, then the Permittee shall be considered to have no regulatorily important acute whole effluent toxicity. No further acute WET testing will be required during this permit term unless significant changes occur in facility operations, which might, in the Department's opinion, increase effluent toxicity.

E. Sampling and Reporting Requirements

1. All reports for effluent characterization or additional monitoring shall be submitted 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* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.

2. Testing shall be conducted on grab samples. The samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended.

3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.

4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A. and the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.

5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.

6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.

7. All whole effluent toxicity tests that involve hypothesis testing and do not comply with the acute statistical power standard of 29% as defined in WAC 173-205-020 must be repeated on a fresh sample with an increased number of replicates to increase the power.

S9. ACUTE TOXICITY (OUTFALL 002)

A. Effluent Characterization

The Permittee shall conduct acute toxicity testing on the final effluent at Outfall 002 to determine the presence and amount of acute (lethal) toxicity. The two acute toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

Effluent characterization for acute toxicity shall be conducted every other month, beginning in September and continuing through May of the following year or until five samples have been collected and tested. Test shall begin at the first measurable rainfall event (a storm event with at least 0.1-inch of rain) in September of the fourth year of the permit term. Acute toxicity testing shall follow protocols, monitoring requirements, and quality assurance/quality control procedures specified in this Section. A dilution series consisting of a minimum of five concentrations and a control shall be used to estimate the concentration lethal to 50% of the organisms (LC_{50}). The percent survival in 100% effluent shall also be reported.

A written report shall be submitted to the Department within 60 days after the sample date. A final effluent characterization summary report shall be submitted to the Department within 90 days after the last monitoring test results are final. This summary report shall include a tabulated summary of the individual test results and any information on sources of toxicity, toxicity source control, correlation with effluent data, and toxicity treatability which is developed during the period of testing.

Acute toxicity tests shall be conducted with the following species and protocols:

1) Rainbow Trout, *Oncorhynchus mykiss,* (96 hour static-renewal test, method: EPA/600/4-90/027F)

2) Daphnid, *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (48 hour static test, method: EPA/600/4-90/027F). The Permittee shall choose one of the three species and use it consistently throughout effluent characterization.

B. Effluent Limit for Acute Toxicity

The Permittee has an effluent limit for acute toxicity if, after completing one year of effluent characterization, either:

(1) The median survival of any species in 100% effluent is below 80%, or

(2) Any one test of any species exhibits less than 65% survival in 100% effluent.

If an effluent limit for acute toxicity is required by subsection B at the end of one year of effluent characterization, the Permittee shall immediately complete all applicable requirements in subsections C, D, and F.

If no effluent limit is required by subsection B at the end of one year of effluent characterization, then the Permittee shall complete all applicable requirements in subsections E and F.

The effluent limit for acute toxicity is no acute toxicity detected in a test concentration representing the acute critical effluent concentration (ACEC).

In the event of failure to pass the test described in subsection C. of this section for compliance with the effluent limit for acute toxicity, the Permittee is considered to be in compliance with all permit requirements for acute whole effluent toxicity as long as the requirements in subsection D. are being met to the satisfaction of the Department.

The ACEC means the maximum concentration of effluent during critical conditions at the boundary of the zone of acute criteria exceedance assigned pursuant to WAC 173-201A-100. The zone of acute criteria exceedance is authorized in Section S1.D of this permit. The ACEC equals 10% effluent.

C. Monitoring for Compliance With an Effluent Limit for Acute Toxicity

Monitoring to determine compliance with the effluent limit shall be conducted once every three months between September through May for the remainder of the permit term using each of the species listed in subsection A above on a rotating basis and performed using at a minimum 100% effluent, the ACEC, and a control. The Permittee shall schedule the toxicity tests in the order listed in the permit unless the Department notifies the Permittee in writing of another species rotation schedule. The percent survival in 100% effluent shall be reported for all compliance monitoring.

Compliance with the effluent limit for acute toxicity means no statistically significant difference in survival between the control and the test concentration representing the ACEC. The Permittee shall immediately implement subsection D. if any acute toxicity test conducted for compliance monitoring determines a statistically significant difference in survival between the control and the ACEC using hypothesis testing 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 hypothesis test shall be conducted at the 0.01 level of significance.

D. Response to Noncompliance With an Effluent Limit for Acute Toxicity

If the Permittee violates the acute toxicity limit in subsection B, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted on the next four discharge events using the same test and species as the failed compliance test. Testing shall determine the LC_{50} and effluent limit compliance. The discharger shall return to the original monitoring frequency in subsection C. after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from the Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for acute toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by the Department that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to the Department on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the acute toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department-within 60 days after test results are final. The TI/RE plan shall be based on WAC 173-205-100(2) and shall be implemented in accordance with WAC 173-205-100(3).

E. Monitoring When There Is No Permit Limit for Acute Toxicity

The Permittee shall test final effluent once in the last winter prior to submission of the application for permit renewal. All species used in the initial acute effluent characterization or substitutes approved by the Department shall be used and results submitted to the Department as a part of the permit renewal application process.

F. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted 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* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.

2. Testing shall be conducted on grab samples. Samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended.

3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.

4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A. and the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.

5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.

6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.

7. The Permittee may choose to conduct a full dilution series test during compliance monitoring 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 ACEC.

8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing and do not comply with the acute statistical power standard of 29% as defined in WAC 173-205-020 must be repeated on a fresh sample with an increased number of replicates to increase the power.

S10. CHRONIC TOXICITY (OUTFALL 002)

The Permittee may propose and the Department may approve an alternative to items A. through E. below for sub-lethal effects testing using a species within the genus *Oncorhynchus* instead of Fathead Minnow and the Daphnid.

A. Effluent Characterization

The Permittee shall conduct chronic toxicity testing on the final effluent at Outfall 002 to determine the presence and amount of sub-acute (sub-lethal) toxicity. The two chronic toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

Effluent characterization for chronic toxicity shall be conducted every other month, beginning in September and continuing through May of the following year or until five samples have been collected and tested. Test shall begin at the first measurable rainfall event (a rainfall event with at least 0.1-inch of rain) in September of the fourth year of the permit term. Chronic toxicity testing shall follow protocols, monitoring requirements, and quality assurance/quality control procedures specified in this Section.

A written report shall be submitted to the Department within 60 days after the sample date. A final effluent characterization summary report shall be submitted to the Department within 90 days after the last monitoring test results are final. This summary report shall include a tabulated summary of the individual test results and any information on sources of toxicity, toxicity source control, correlation with effluent data, and toxicity treatability which is developed during the period of testing.

The Permittee shall conduct chronic toxicity testing during effluent characterization on a series of at least five concentrations of effluent in order to determine appropriate point estimates. This series of dilutions shall include the ACEC. The Permittee shall compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.

Chronic toxicity tests shall be conducted with the following species and protocols:

1) Fathead Minnow, *Pimephales promelas,* (EPA/600/4-91/002)

2) Water flea, *Ceriodaphnia dubia*, (EPA/600/4-91/002).

B. Effluent Limit for Chronic Toxicity

After completion of effluent characterization, the Permittee has an effluent limit for chronic toxicity if any test conducted for effluent characterization shows a significant difference between the control and the ACEC at the 0.05 level of significance using

hypothesis testing (Appendix H, EPA/600/4-89/001) and shall complete all applicable requirements in subsections C, D, and F.

If no significant difference is shown between the ACEC and the control in any of the chronic toxicity tests, the Permittee has no effluent limit for chronic toxicity and only subsections E and F apply.

In the event of failure to pass the test described in subsection C, of this section, for compliance with the effluent limit for chronic toxicity, the Permittee is considered to be in compliance with all permit requirements for chronic whole effluent toxicity as long as the requirements in subsection D are being met to the satisfaction of the Department.

The effluent limit for chronic toxicity is no toxicity detected in a test concentration representing the chronic critical effluent concentration (CCEC).

The CCEC means the maximum concentration of effluent allowable at the boundary of the mixing zone determined pursuant to WAC 173-201A-100. The CCEC for chronic toxicity testing is 1.1% effluent.

C. Monitoring for Compliance With an Effluent Limit for Chronic Toxicity

Monitoring to determine compliance with the effluent limit shall be conducted once every three months between September and May for the remainder of the permit term using each of the species listed in subsection A above on a rotating basis and performed using at a minimum the CCEC, the ACEC, and a control. The Permittee shall schedule the toxicity tests in the order listed in the permit unless the Department notifies the Permittee in writing of another species rotation schedule.

Compliance with the effluent limit for chronic toxicity means no statistically significant difference in response between the control and the test concentration representing the CCEC. The Permittee shall immediately implement subsection D if any chronic toxicity test conducted for compliance monitoring determines a statistically significant difference in response between the control and the CCEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in response between the control and the CCEC is less than 20%, the hypothesis test shall be conducted at the 0.01 level of significance.

In order to establish whether the chronic toxicity limit is eligible for removal from future permits, the Permittee shall also conduct this same hypothesis test (Appendix H, EPA/600/4-89/001) to determine if a statistically significant difference in response exists between the ACEC and the control.

D. Response to Noncompliance With an Effluent Limit for Chronic Toxicity

If a toxicity test conducted for compliance monitoring under subsection C determines a statistically significant difference in response between the CCEC and the control, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted on the next three discharge events using the same test and species as the failed compliance test. Testing shall be conducted using a series of at least five effluent concentrations and a control in

order to be able to determine appropriate point estimates. One of these effluent concentrations shall equal the CCEC and be compared statistically to the nontoxic control in order to determine compliance with the effluent limit for chronic toxicity as described in subsection C. The Permittee shall return to the original monitoring frequency in subsection C after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from the Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for chronic toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by the Department that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to the Department on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the chronic toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department. The TI/RE plan submittal shall be within 60 days after the sample date for the third additional compliance monitoring test. If the Permittee decides to forgo the rest of the additional compliance monitoring tests required in this subsection because one of the first two additional compliance monitoring tests failed to meet the chronic toxicity limit, then the Permittee shall submit the TI/RE plan within 60 days after the sample date for the first additional monitoring test to violate the chronic toxicity limit. The TI/RE plan shall be based on WAC 173-205-100(2) and shall be implemented in accordance with WAC 173-205-100(3).

E. Monitoring When There Is No Permit Limit for Acute Toxicity

The Permittee shall test final effluent once in the last winter prior to submission of the application for permit renewal. All species used in the initial acute effluent characterization or substitutes approved by the Department shall be used and results submitted to the Department as a part of the permit renewal application process.

F. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted 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* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.

2. Testing shall be conducted on grab samples. Composite samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. Grab samples must be shipped on ice to the lab immediately upon collection. If a grab sample is received at the testing lab within one hour after collection, it must have a temperature below 20° C at receipt. If a grab sample is received at the testing lab within 4 hours after collection, it must be below 12° C at receipt. All other samples must be below 8° C at receipt. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended. The lab shall store all samples at 4° C in the dark from receipt until completion of the test.

3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.

4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A. and the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.

5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.

6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.

7. The Permittee may choose to conduct a full dilution series test during compliance monitoring 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 ACEC and the CCEC.

8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing, and do not comply with the chronic statistical power standard of 39% as defined in WAC 173-205-020, must be repeated on a fresh sample with an increased number of replicates to increase the power.

S11. OUTFALL EVALUATION

The Permittee shall inspect, on an annual basis, the submerged portion of Outfall 002 line and diffuser to document its integrity and continued function. If conditions allow for a photographic verification, it shall be included in the report. The inspection shall be done during the period of July through September of each year. The inspection report shall be submitted to the Department within 30 days of completion of the inspection.

S12. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

The definitions of terms used in this section are provided in the guidance document entitled *Stormwater Pollution Prevention Planning for Industrial Facilities*, which is published by the Department of Ecology.

The Permittee shall implement all the elements of the existing SWPPP including all operational, treatment and source control BMPs, as well as any erosion and sediment control BMPs determined necessary.

A. General Requirements

1. Submission, Retention and Availability:

The Permittee shall retain the SWPPP on-site or within reasonable access to the site and submit a copy of the SWPPP to Ecology and to the municipal operator of the storm sewer system whenever the Permittee modifies the SWPPP. In the submittal to Ecology, the permittee shall indicate that a copy of the SWPPP has been submitted to the local municipal operator. The SWPPP and all of its modifications shall be signed in accordance with General Condition G1.

2. Modifications:

The Permittee shall modify the SWPPP whenever there is a change in design, construction, operation or maintenance, which causes the SWPPP to be less effective in controlling the pollutants. Whenever the description of potential pollutant sources or the pollution prevention measures and controls identified in the SWPPP are inadequate, the SWPPP shall be modified, as appropriate, within two (2) weeks of such determination. The proposed modifications to the SWPPP shall be submitted to the Department at least 30 days in advance of implementing the proposed changes in the plan unless Ecology approves immediate implementation. The Permittee shall provide for implementation of any modifications to the SWPPP in a timely manner.

3. The Permittee may incorporate applicable portions of plans prepared for other purposes. Plans or portions of plans incorporated into a SWPPP become enforceable requirements of this permit.

4. The Permittee shall prepare the SWPPP and all modifications in accordance with the guidance provided in the *Stormwater Pollution Prevention Planning for Industrial Facilities*. The plan shall contain the following elements
   a. Assessment and description of existing and potential pollutant sources,
   b. A description of the operational BMPs,
   c. A description of selected source-control BMPs,
   d. When necessary, a description of the erosion and sediment control BMPs,
   e. When necessary, a description of the treatment BMPs, and
   f. An implementation schedule.

B. Implementation

The Permittee shall conduct two inspections per year; one during the wet season (September 1 - May 31) and the other during the dry season (June 1 - August 31).

1. The wet season inspection shall be conducted during a rainfall event by personnel named in the Stormwater Pollution Prevention Plan (SWPPP) to verify that the description of potential pollutant sources required under this permit is accurate; the site map as required in the SWPPP has been updated or otherwise modified to reflect current conditions; and the controls to reduce pollutants in stormwater discharges associated with industrial activity identified in the SWPPP are being implemented and are adequate. The wet-weather inspection shall include observations of the presence of floating materials, suspended solids, oil and grease, discolorations, turbidity, odor, etc. in the stormwater discharge(s).

2. The dry season inspection shall be conducted by personnel named in the SWPPP. The dry season inspection shall determine the presence of unpermitted non-stormwater discharges such as domestic wastewater, noncontact cooling water, or process wastewater (including *leachate*) to the *stormwater drainage system*. If an unpermitted, non-stormwater discharge is discovered, the Permittee shall immediately notify the Department and follow up with a written report on the characteristics of the discharge within 30 days of the discovery.

C. Plan Evaluation

The Permittee shall evaluate whether measures to reduce pollutant loadings identified in the SWPPP are adequate and properly implemented in accordance with the terms of the permit or whether additional controls are needed. A record shall be maintained summarizing the results of inspections and a certification, in accordance with General Condition G1, that the facility is in compliance with the plan and this permit and identifying any incidents of noncompliance.

S13. CHROMIUM ASSESSMENT STUDY

A. The Permittee may elect to study the various species (hexavalent and trivalent forms) of chromium potentially present at Outfalls 001 and 002. Before commencing such a study, a letter of intent must be submitted to Ecology no later then 6 months from the effective date of the permit.

B. If this study is undertaken, all sampling protocols contained in Condition S2 of this permit shall be followed. Analytical methods consistent with those listed in 40 CFR Part 136, or other methods approved by Ecology shall be followed.

C. For this study, the Permittee shall monitor both the hexavalent and trivalent forms of chromium at both Outfalls 001 and 002 on a monthly basis for at least 2 winter seasons prior to the expiration date of the permit.

D. All data collected for this study shall be submitted to Ecology along with application for permit renewal, at least 180 days prior to the expiration date of the permit or at least 180 days prior to a permit modification.

E. Based on an evaluation of the data, Ecology may include separate effluent limitations for hexavalent and trivalent chromium in the next permit cycle or as a permit modification.

S14. SEDIMENT MONITORING

A. Sediment Sampling and Analysis Plan

Within three years of the effective date of this permit, the Permittee shall submit to the Department for review and approval a Sediment Sampling and Analysis Plan and implementation schedule for sediment monitoring. The purpose of the plan is to characterize sediment quality in the vicinity of the Permittee's bypass. The Permittee shall follow the guidance provided in the Sediment Source Control Standards User Manual, Appendix B: Sediment Sampling and Analysis Plan (Ecology, 1995).

The discharger need not submit or implement this plan if the Department has approved an implementation schedule to remove the bypass discharge from the Puyallup River.

B. Sediment Data Report

Following Department approval of the Sediment Sampling and Analysis Plan, sediments will be collected and analyzed. The Permittee shall submit to the Department a Sediment Data Report containing the results of the sediment sampling and analysis no later than 90 days after Department approval of the sediment sampling and analysis plan. The Sediment Data Report shall conform with the approved Sampling and Analysis Plan.

S15. EFFLUENT MIXING STUDY

Within 60 days of the effective date of this permit, the permittee will notify the Department of its intent to conduct the mixing zone study described under this condition. If the permittee does not so notify the Department, then it need not comply with this special condition and the Department

will not consider setting revised final effluent limits. If the permittee does so notify the Department, the Permittee will comply with this special condition and the Department may propose revised final effluent limits if it approves the Study Plan and Final Effluent Mixing Zone Report described below.

A. General Requirements

The Permittee shall determine the degree of effluent and receiving water mixing which occurs within the mixing zone defined in permit condition S1.Dii. The degree of mixing shall be determined during critical conditions, as defined in WAC 173-201A-020 Definitions-"Critical Condition," or as close to critical conditions as reasonably possible.

The degree of mixing shall be determined during critical receiving water conditions by using the stormwater flow rate generated by the two-year, 72-hour storm event. For the acute analysis, the permittee shall use the peak one-hour flow rate. For the chronic analysis, the permittee shall use an estimate of the average run-off rate.

The critical condition scenarios shall be established in accordance with *Guidance for Conducting Mixing Zone Analyses* (Ecology, 1996). The dilution ratio shall be measured in the field with dye using study protocols specified in the *Guidance,* section 5.0 "Conducting a Dye Study," as well as other protocols listed in subpart C. Protocols. The use of mixing models is an acceptable alternative or adjunct to a dye study if the critical ambient conditions necessary for model input are known or will be established with field studies; and if the diffuser is visually inspected for integrity or has been recently tested for performance by the use of tracers. The *Guidance* mentioned above shall be consulted when choosing the appropriate model. The use of models is also required if critical condition scenarios that need to be examined are quite different from the set of conditions present during the dye study.

Validation (and possibly calibration) of a model may be necessary and shall be done in accordance with the *Guidance* mentioned above - in particular subsection 5.2 "Quantify Dilution." The resultant dilution ratios for acute and chronic boundaries shall be applied in accordance with directions found in Ecology's *Permit Writer's Manual* (Ecology publication 92-109, most current version) - in particular Chapter VI.

A Plan of Study shall be submitted to the Department for review and approval 30 days prior to the initiation of the effluent mixing study.

B. Specific Requirements

The purpose of the effluent mixing study is to establish a dilution factor so that Ecology can calculate alternative, final effluent limits to meet water quality standards.

The effluent mixing study will conform to Ecology guidance for establishing mixing zones in estuaries. Critical conditions will be as described in Ecology Guidance. The critical river flow for the effluent mixing study will be the 7Q10 or seasonal critical river flows. The seasonal, semi-annual critical river flow will be the 7Q20 and the seasonal, quarterly critical river flow will be the 7Q40 as described in draft EPA guidance and the 1994 Puyallup River TMDL addendum.[1]

[1] USEPA. 1984. Technical Guidance Manual for Performing Waste Load Allocations, Book IX, Innovative Waste Load Allocations (Draft).

In calculating seasonal critical river flows, Cascade Pole will reduce all average daily discharge data by the mean seasonal discharge from the Puget Sound Energy Lake Tapps Diversion at Dieringer to account for the effects of hydropower operations. Cascade Pole will calculate river flow statistics using data from the USGS Puyallup River at Puyallup gage for the period of record 1928-1998.

The Effluent Mixing Study will utilize existing data (USGS data, City of Tacoma Puyallup River outfall study data) and salinity data collected under this permit. Cascade Pole will use existing data, the effluent mixing model and supplemental hydraulic models to evaluate the extent to which the effluent mixing analysis will benefit from additional data collection.

As part of the effluent mixing study, the permittee shall examine the combined effect of Outfall 002 and the bypass. The purpose of this part of the study is to ensure that the combined discharge does not result in a violation of receiving water quality standards more frequently than once every three years or occupy a mixing zone larger than that allowed under WAC 173-201A-100.

The mixing zone study report shall describe the diffuser siting requirements needed to meet receiving water standards outside of the mixing zone.

Cascade Pole will complete a dye study as part of the effluent mixing evaluation and will present results from the dye study in the final report. . In general, dye studies are useful to evaluate far-field effects of discharges and compliance with chronic compliance boundaries. Use of a dye study is appropriate in this instance to estimate reflux concentrations at the design condition, to confirm the dilution credit granted for whole effluent testing, and to evaluate potential impacts to waters under the jurisdiction of the Puyallup Tribe of Indians upstream of the Lincoln Avenue Bridge.

The permittee shall comply with all conditions in the attendant Agreed Order.

C. Reporting Requirements

If the Permittee has information on the background physical conditions or background concentration of chemical substances (for which there are criteria in Chapter 173-201A WAC) in the receiving water, this information shall be submitted to the Department as part of the Effluent Mixing Report.

The results of the effluent mixing study shall be included in a Final Effluent Mixing Report, which shall be submitted to the Department for approval no later than 18 months following the effective date of the permit. The permittee shall submit a draft report within 16 months of the permit effective date and will address any comments from the Department in the final report provided such comments are made at least 30 days prior to the final report due date. If Ecology submits comments on the draft report later than 30 days before the due date for the final report, the permittee may delay issuance of the final report with the approval of the Department. If Ecology does not grant an extension to the due date, the permittee will issue the final report and address Ecology's comments in an addendum due 30 days following receipt of comments.

Pelletier, G. 1994. Addendum to the 1993 Puyallup River TMDL Report. Washington State Department of Ecology.

If the results of the mixing study, toxicity tests, and chemical analysis indicate that the concentration of any pollutant(s) exceeds or has a reasonable potential to exceed the State Water Quality Standards, Chapter 173-201A WAC, the Department may issue a regulatory order to require a reduction of pollutants or modify this permit to impose effluent limitations to meet the Water Quality Standards.

The Permittee shall use some method of fixing and reporting the location of the outfall and mixing zone boundaries (i.e., triangulation off the shore, microwave navigation system, or using Loran or Global Positioning System (GPS) coordinates). The method of fixing station location and the actual station locations shall be identified in the report.

D. Protocols

The Permittee shall determine the dilution ratio using protocols outlined in the following references, approved modifications thereof, or by another method approved by the Department:

-Akar, P.J. and G.H. Jirka, *Cormix2: An Expert System for Hydrodynamic Mixing Zone Analysis of Conventional and Toxic Multiport Diffuser Discharges*, USEPA Environmental Research Laboratory, Athens, GA, Draft, July 1990.
-Baumgartner, D.J., W.E. Frick, P.J.W. Roberts, and C.A. Bodeen, *Dilution Models for Effluent Discharges,* USEPA, Pacific Ecosystems Branch, Newport, OR, 1993.
-Doneker, R.L. and G.H. Jirka, *Cormix1: An Expert System for Hydrodynamic Mixing Zone Analysis of Conventional and Toxic Submerged Single Port Discharges,* USEPA, Environmental Research Laboratory, Athens, GA. EPA/600-3-90/012, 1990.
-Ecology, *Permit Writer's Manual*, Water Quality Program, Department of Ecology, Olympia WA 98504, July 1994, including most current addenda.
-Ecology, *Guidance for Conducting Mixing Zone Analyses*, Permit Writer's Manual, (Appendix 6.1), Water Quality Program, Department of Ecology, Olympia WA 98504, October, 1996.
-Kilpatrick, F.A., and E.D. Cobb, Measurement of Discharge Using Tracers, Chapter A16, *Techniques of Water-Resources Investigations of the USGS, Book 3, Application of Hydraulics,* USGS, U.S. Department of the Interior, Reston, VA, 1985.
-Wilson, J.F., E.D. Cobb, and F.A. Kilpatrick, Fluorometric Procedures for Dye Tracing, Chapter A12, *Techniques of Water-Resources Investigations of the USGS, Book 3, Application of Hydraulics,* USGS, U.S. Department of the Interior. Reston, VA, 1986.

S16. COMPLIANCE WITH ECOLOGY STORMWATER MANUAL; ADDITIONAL OPERATIONAL BMPS

Within 60 days of the effective date of the permit for operational BMPs, and with 180 days of the permit effective date for structural BMPs, the permittee will comply with all Applicable Operational BMPS and Applicable Structural Source Control BMPs for Wood Treatment Areas in the Department of Ecology's Stormwater Management Manual for Western Washington , Volume IV, (Source Control BMPS) page 2-67 and 2-68. Those Applicable requirements are:

A. Applicable Operational BMPs

- Dedicate equipment that is used for treatment activities to prevent the tracking of treatment chemicals to other areas of the site.

- Eliminate non-process traffic on the drip pad. Scrub down non-dedicated lift trucks on the drip pad.
- Immediately remove and properly dispose of soils with visible surface contamination (green soil) to prevent the spread of chemicals to ground water and/or surface water via stormwater runoff.
- If any wood is observed to be contributing chemicals to the environment in the treated wood storage area, relocate it on a concrete chemical containment structure until the surface is clean and until it is drip free and surface dry.

B. Applicable Structural Source Control BMPs

- Dedicate equipment that is used for treatment activities to prevent the tracking of treatment chemicals to other areas of the site.
- Cover and/or enclose, and contain with impervious surfaces, all wood treatment areas. Slope and drain areas around dip tanks, spray boots, retorts, and any other process equipment in a manner that allows return of treatment chemicals to the wood treatment process.
- Cover storage areas for freshly treated wood to prevent contact of treated wood products with stormwater. Segregate clean stormwater from process water. Ensure that all process water is conveyed to an approved treatment system.
- Seal any holes or cracks in the asphalt areas that are subject to wood treatment chemical contamination.
- Elevate stored, treated wood products to prevent contact with stormwater run-on and runoff.
- Place dipped lumber over the dip tank, or on an inclined ramp for a minimum of 30 minutes to allow excess chemical to drip back to the dip tank.
- Place treated lumber with from dip tanks or retorts in a covered paved storage area for at least 24 hours before placement in outside storage. Use a longer storage period during cold weather unless the temporary storage building is heated. The wood shall be drip free and surface dry before it is moved outside.

C. Additional Operational BMPs

Within 60 days from the effect date of the permit, the permittee shall comply with the following BMPs at the facility as an alternative to developing the Pollution Prevention Engineering Report of Special Condition 17.

- The permittee will completely top and side wrap all treated dimensional lumber bundles with no lumber leaving covered drying or storage areas until it has been so wrapped; or completely cover or otherwise completely isolate from contact from rainfall and stormwater runoff all bundled dimensional lumber.
- The permittee will completely cover or otherwise completely isolate from contact from rainfall and stormwater runoff all other treated wood products and newly stored treated wood products. Newly stored refers to treated products that Cascade Pole brings on site for storage and/or re-sale.
- The permittee will install, inspect on a regular basis and maintain in working condition catch basin inserts in all catch basins to minimize the discharge of floating and settleable pollutants.
- The permittee will maintain outdoor areas such that they are free of treated wood debris that is exposed to rainfall and stormwater runoff.

- The permittee will adopt protocols to prevent tracking of process wastewater contaminants from process areas into storage areas. Protocols will include use of boot covers for all employees working in process areas, or a similar measure or measures, and dedicated vehicles in process areas. When vehicles other than dedicated vehicles must access process areas, the permittee will decontaminate these vehicles prior to exit to minimize tracking of pollutants out of the process area.
- The permittee will divert to recycle all stormwater from drainage basins that contain fixed process equipment.

S17. POLLUTION PREVENTION ENGINEERING REPORT FOR TOXICS

The Permittee shall develop a Pollution Prevention Engineering Report (P2 Engineering Report-Phase I and Phase II) for sources of toxic water pollutants. The report shall be prepared following the requirements of WAC 173-240. The objectives of the P2 Engineering Report are to identify pollution prevention opportunities and implement those opportunities that are technically and economically achievable to minimize discharges of pollutants in stormwater discharged to receiving waters.

As an alternative to developing the P2 Engineering Report and implementing controls that the Report or the Department determines are feasible (items A-G, below), the discharger may implement an alternative set of operational best management practices (Special Condition 16C).

Within 60 days of the effective date of this permit, the permittee will notify the Department of its intent to either a) prepare the Pollution Prevention Engineering Report described under this condition or b) implement best management practices (Special Condition 16C).

A. Plan Development and Implementation

1. Within three months of the effective date of the final permit, the Permittee shall:
   - modify its Stormwater Pollution Prevention Plan (SWPPP) to reflect current conditions and to meet the requirements of C.1 and C.2 below; and submit the revised SWPPP to the Department for review and approval.
2. Within six months of the effective date of the final permit, the Permittee shall:
   - develop a Phase I Pollution Prevention Engineering Report to meet the requirements of C.3 below and submit it the Department for review and approval
3. Within one year of the effective date of the final permit, the Permittee shall:
   - develop a Phase II P2 Engineering Report to meet the requirements of paragraph D. below and submit it to the Department for review and approval.
4. The Permittee shall implement selected pollution prevention opportunities according to the timeframes specified in the approved Phase I and Phase II P2 Engineering Reports.

B. General Requirement

The P2 Engineering Report shall be retained onsite.

C. Specific Requirements – Phase I P2 Engineering Report and SWPPP

1. Description of Current P2 Activities.

The SWPPP shall include a description of the existing P2 measures employed at the facility to prevent, reduce, eliminate, control or treat releases of pollutants to influent wastewater streams, stormwater, and/or waters of the state as required under permit condition S12.

2. Description of Potential Pollutants and Sources.

The SWPPP shall include a detailed description of the processes or activities that contribute or potentially contribute pollutants to influent wastewater streams, stormwater, groundwater, and wetlands. Minor incidental waste streams to stormwater, such as landscaping fertilizers, do not have to be included.

The SWPPP shall identify the materials and amounts processed, stored, treated, or disposed of at the facility and the pollutants that are generated or potentially generated or released. The level of detail provided in the plan should be sufficient to help identify and understand how and why materials are used and pollutants generated or released. Process flow diagrams and/or material input/output information shall be included on a process unit basis. The Permittee shall include in the SWPPP all materials which may become pollutants or cause pollution upon reaching state waters, including materials which, when spilled or otherwise released into the environment, would be designated Dangerous Waste by the procedures set forth in WAC 173-303-070.

3. Identification, Preliminary Evaluation, Prioritization and Early Implementation of Pollution Prevention Opportunities.

Within thirty (30) days of the effective date of this permit, Cascade Pole and Lumber Company submit a Draft Study Plan for the Phase I Report. The Department of Ecology will review the Phase I Draft Study Plan and submit comments to Cascade Pole and Lumber Company. Cascade Pole should revise and re-submit the study plan (Final Study Plan) within fifteen (15) days of receipt of the Department's comments. Revisions should be made and submitted to the Department such that the Department can approve Cascade Pole's Final Study Plan within ninety (90) days of the permit effective date.

The Phase I P2 Engineering Report shall identify pollution prevention opportunities and provide a preliminary evaluation of each opportunity's technical feasibility (including safety considerations), economic cost, and potential for reducing discharges of toxic pollutants. In evaluating Phase I pollution prevention opportunities, the Permittee will consider a) partial wrapping of product as now practiced; b) complete top and side wrap; c) temporary protection for treated lumber products; and other source control measures that may be used to reduce pollutant discharges.

Based upon this evaluation, the Permittee shall prioritize the P2 opportunities considering pollutant loading, toxicity and the potential to achieve the greatest reduction with respect to time and costs. The permittee shall schedule for implementation those Phase I P2 opportunities that are technically and economically feasible; and shall remove from further consideration, with concurrence from Ecology, those opportunities that are not technically or economically feasible.

D. Specific Requirements – Phase II P2 Engineering Report

Within ninety (90) days of the effective date of this permit, Cascade Pole and Lumber Company submit a Draft Study Plan for the Phase II Report. The Department of Ecology will review the Phase II Draft Study Plan and submit comments to Cascade Pole and Lumber Company. Cascade Pole should revise and re-submit the study plan (Final Study Plan) within fifteen (15) days of receipt of the Department's comments. Revisions should be made and submitted to the Department such that the Department can approve Cascade Pole's Final Study Plan within one hundred and eighty (180) days of the permit effective date.

The Phase II P2 Engineering Report shall provide a detailed analysis of technical and economical feasibility for the top ten pollution prevention opportunities (if more than ten opportunities were identified), as prioritized in the Phase I P2 Engineering Report. In evaluating and selecting pollution prevention opportunities, the Permittee shall give preference first to those that eliminate, avoid, or reduce the generation of water pollutants at the source, second to those that recycle or reuse the pollutants, and third to those that provide at-source or near-source treatment to remove pollutants or render them less toxic or harmful. Ecology will consider P2 opportunities that are technically and economically feasible to be "known, available, and reasonable."

The Phase II P2 Engineering Report will evaluate P2 measures to minimize discharges of pollutants to receiving waters. The Phase II P2 Engineering Report will consider, among other practices: a) source control practices used elsewhere in the industry; b) production techniques used elsewhere in the industry that have pollution prevention benefits; c) use of additional stormwater storage on-site to minimize volumes of bypassed stormwater; d) permanent covered product storage; e) off-site product storage for excess inventory; f) diversion of bypassed waters to the City of Tacoma storm sewer system and the Lincoln Avenue Ditch/Wetlands; and other source control measures that may be used to reduce pollutant discharges.

Based upon this evaluation, the permittee shall prioritize the P2 opportunities considering pollutant loading, toxicity and the potential to achieve the greatest reduction with respect to time and costs. The permittee shall schedule for implementation those Phase II P2 opportunities that are technically and economically feasible; and shall remove from further consideration, with concurrence from Ecology, those opportunities that are not technically or economically feasible.

The P2 Engineering Report shall include a schedule for implementation of each P2 opportunity that is technically and economically feasible. Ecology expects the Permittee to establish reasonable priorities and schedules for implementation to achieve the greatest reduction in pollutant quantity and toxicity, as well as for management and fiscal necessity.

The Department will solicit and consider public comment from the City of Tacoma, the Port of Tacoma, the Puyallup Tribe of Indians and other interested parties before approving any plan to divert waters to the City of Tacoma storm sewer and the Lincoln Avenue Ditch/Wetlands.

E. Considerations in Identifying, Evaluating, and Selecting P2 Measures

Cross-media shift of pollutants should be avoided, unless a clear net environmental benefit results, and compliance with standards applicable to other media or management programs would be maintained.

In determining if a pollution prevention measure is feasible, the permittee shall use the criteria and methods described in the Department's Permit Writer's Manual for determining Best Available Technology Economically Achievable (BAT) for toxic pollutants.

F. Incorporating Other P2 Plans

The Permittee may incorporate applicable portions of plans or reports prepared for other purposes. Plans or portions of plans incorporated into the P2 plan become enforceable requirements of this permit.

G. Plan Evaluation and Annual Reporting

The Permittee shall submit a progress report 24 months after the permit effective date and every year thereafter, that reports on P2 activities of the previous calendar year. The report shall contain the following elements:

a. A list of the estimated amounts, by weight, of each pollutant identified in C.2. released to the wastewater treatment system, stormwater, and/or waters of the state in the previous calendar year;
b. The implementation status of each pollution prevention opportunity selected for implementation;
c. The results of implementation actions performed in the previous calendar year (quantitative results shall be used whenever possible);
d. Any modifications or updates to the SWPPP.

S18. COMPLIANCE PROGRESS REPORTS

By January 15 of each year, the permittee will submit a report describing progress made in the previous calendar year towards meeting final effluent limits contained in Special Condition No. 1. For the previous calendar year, the reports will describe the structural and operational changes made at the facility that have a pollution prevention or control benefit, present in a summary table the compliance monitoring data, and summarize compliance with conditions contained in this permit.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Department shall be signed and certified.

A. All permit applications shall be signed by either a responsible corporate officer of at least the level of vice president of a corporation, a general partner of a partnership, or the proprietor of a sole proprietorship.

B. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the Department.

2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph B.2 above must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

D. Certification. Any person signing a document under this section shall make the following certification:

> I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

G2. RIGHT OF INSPECTION AND ENTRY

The Permittee shall allow an authorized representative of the Department, upon the presentation of credentials and such other documents as may be required by law:

A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.

B. To have access to and copy - at reasonable times and at reasonable cost - any records required to be kept under the terms and conditions of this permit.

C. To inspect - at reasonable times - any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.

D. To sample or monitor - at reasonable times - any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

G3. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon the Department's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:

1. Violation of any permit term or condition.

2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.

3. A material change in quantity or type of waste disposal.

4. A determination that the permitted activity endangers human health or the environment or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination [40 CFR part 122.64(3)].

5. A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit [40 CFR part 122.64(4)].

6. Nonpayment of fees assessed pursuant to RCW 90.48.465.

7. Failure or refusal of the permittee to allow entry as required in RCW 90.48.090.

B. The following are causes for modification but not revocation and reissuance except when the permittee requests or agrees:

1. A material change in the condition of the waters of the state.

2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.

3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.

4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.

5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR part 122.62.

6. The Department has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.

7. Incorporation of an approved local pretreatment program into a municipality's permit.

C. The following are causes for modification or alternatively revocation and reissuance:

1. Cause exists for termination for reasons listed in A1 through A7, of this section, and the Department determines that modification or revocation and reissuance is appropriate.

2. The Department has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G8) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new permittee.

G4. REPORTING A CAUSE FOR MODIFICATION

The Permittee shall submit a new application, or a supplement to the previous application, along with required engineering plans and reports whenever a material change to the facility or in the quantity or type of discharge is anticipated which is not specifically authorized by this permit. This application shall be submitted at least sixty (60) days prior to any proposed changes. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

G5. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications shall be submitted at least one hundred eighty (180) days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities shall be constructed and operated in accordance with the approved plans.

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations. The permittee shall comply with WAC 173-303-675.

G7. DUTY TO REAPPLY

The Permittee shall apply for permit renewal at least 180 days prior to the specified expiration date of this permit.

G8. TRANSFER OF THIS PERMIT

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Department.

A. Transfers by Modification

Except as provided in paragraph B below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

B. Automatic Transfers

This permit may be automatically transferred to a new Permittee if:

1. The Permittee notifies the Department at least 30 days in advance of the proposed transfer date.
2. The notice includes a written agreement between the existing and new Permittee's containing a specific date transfer of permit responsibility, coverage, and liability between them.
3. The Department does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under the subparagraph may also be minor modification under 40 CFR 122.63. If

this notice is not received, the transfer is effective on the date specified in the written agreement.

G9. REDUCED PRODUCTION FOR COMPLIANCE

The Permittee, in order to maintain compliance with its permit, shall control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

G10. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

G11. DUTY TO PROVIDE INFORMATION

The Permittee shall submit to the Department, within a reasonable time, all information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also submit to the Department upon request, copies of records required to be kept by this permit [40 CFR 122.41(h)].

G12. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G13. ADDITIONAL MONITORING

The Department may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G14. PAYMENT OF FEES

The Permittee shall submit payment of fees associated with this permit as assessed by the Department.

G15. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars ($10,000) and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars ($10,000) for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

G16. UPSET

Definition – "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in condition S3.E; and 4) the Permittee complied with any remedial measures required under S5 of this permit.

In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G17. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G18. DUTY TO COMPLY

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

G19. TOXIC POLLUTANTS

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G20. PENALTIES FOR TAMPERING

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment shall be a fine of not more than $20,000 per day of violation, or by imprisonment of not more than four (4) years, or by both.

G21. REPORTING PLANNED CHANGES

The Permittee shall, as soon as possible, give notice to the Department of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: 1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); 2) a significant change in the nature or an increase in quantity of pollutants discharged; or 3) a significant change in the Permittee's sludge use or disposal practices. Following such notice, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

G22. REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee shall give advance notice to the Department by submission of a new application or supplement thereto at least one hundred and eighty (180) days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during non-critical water quality periods and carried out in a manner approved by the Department.

G23. REPORTING OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

G24. REPORTING REQUIREMENTS APPLICABLE TO EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL DISCHARGERS

The Permittee belonging to the categories of existing manufacturing, commercial, mining, or silviculture must notify the Department as soon as they know or have reason to believe:

A. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels:"

1. One hundred micrograms per liter (100 µg/l).

2. Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony.

3. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).

4. The level established by the Director in accordance with 40 CFR 122.44(f).

B. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels:"

1. Five hundred micrograms per liter (500µg/L).

2. One milligram per liter (1 mg/L) for antimony.

3. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).

4. The level established by the Director in accordance with 40 CFR 122.44(f).

G25. COMPLIANCE SCHEDULES

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.

EXHIBIT E

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

July 20, 1998

CERTIFIED MAIL

Barbara Hinkle
Senior Specialist, Environmental Services
Port of Seattle
Seattle-Tacoma International Airport
Mezzanine Level, Room MT-6418
P.O. Box 68727
17801 Pacific Highway S.
Seattle, WA 98168-0727

Corps of Engineers
Regulatory Branch
P.O. Box 3755
Seattle, WA 98124-2255
ATTN: Tom Mueller, Chief

RE: Order #96-4-02325: Water Quality Certification/Coastal Zone Consistency Determination for Port of Seattle – Master Plan Improvement Projects

Dear Ms. Hinkle and Mr. Mueller:

The request for certification for proposed work in and adjacent to Miller and Des Moines Creek has been reviewed. On behalf of the State of Washington, we certify that the proposed work, as conditioned by the enclosed Order, will comply with applicable provisions of Sections 301, 302, 303, 306 and 307 of the Clean Water Act, as amended, and other appropriate requirements of State law. This letter also serves as the State response to the Corps of Engineers.

Pursuant to 16 U.S.C. 1456 et. seq. (Section 307(c)(3) of the Coastal Zone Management Act of 1972 as amended), Ecology concurs with the applicant's determination that this work will be consistent with the approved Washington State Coastal Zone Management Program. This concurrence is based upon the applicant's compliance with all applicable enforceable policies of the Coastal Zone Management Program, including Section 401 of the Federal Water Pollution Control Act.

This water quality certification and Coastal Zone Consistency Determination is subject to the conditions contained in the enclosed Order. Please note that several significant additions to the Port's proposals were added as conditions of this Order. In several instances, the Port's descriptions of proposed work or commitments to proposed mitigation were inadequate to provide Ecology with reasonable assurance that the state water quality standards and other applicable requirements would be met. Therefore, Ecology has added numerous specific conditions that will allow these requirements to be met.

Please be advised that this Order includes specific penalties for non-compliance. This is based in part on the provisional nature of this Order, in which there are several elements of either the project description or mitigation that have yet been received in approvable form by Ecology. This is also based on the strong likelihood of environmental damage should the Port not meet the

conditions of this Order in a timely and thorough manner. All penalties will be imposed in compliance with the applicable provisions of state law, including RCW 90.48 and RCW 43.21B.

Please also note that work in wetlands or other waters of the state cannot begin until the Port complies with Conditions #B4b and #G1 of this Order and obtains a Hydraulic Project Approval from the Washington Department of Fish and Wildlife.

If you have any questions, please contact Tom Luster at (360) 407-6918. Written comments can be sent to him at the Department of Ecology, P.O. Box 47703, Olympia WA 98504-7703. The enclosed Order may be appealed by following the procedures described in the Order.

Sincerely,

Paula Ehlers for

Gordon White, Program Manager
Shorelands and Environmental Assistance Program

GW:tl

Enclosure

cc: U.S. EPA – Steve Roy
Ecology, NWRO – Janet Thompson
WDFW – Phil Schneider
Cutler & Stanfield, L.L.P. – Barbara Paley

IN THE MATTER OF GRANTING A WATER QUALITY CERTIFICATION AND COASTAL ZONE CONSISTENCY DETERMINATION TO: The Port of Seattle in accordance with 33 U.S.C. § 1341, FWPCA § 401, RCW 90.48.260 and WAC 173-201A.

ORDER #96-4-02325
Construct a third runway and other improvements at Seattle-Tacoma International Airport, King County, Washington. Work will impact between 8 and 12 acres of wetlands, 980 lineal feet of Miller Creek, and 2,280 lineal feet of unnamed tributaries to Miller Creek. Mitigation includes increased stormwater management, stream riparian/buffer enhancements, stream baseflow augmentation, floodplain enhancement, a trust fund for watershed rehabilitation, and construction of between 16 and 24 acres of replacement wetlands at a site in Auburn, Washington.

TO: Barbara Hinkle
Senior Specialist, Environmental Services
Port of Seattle
Seattle-Tacoma International Airport
Mezzanine Level, Room MT-6418
P.O. Box 68727
17801 Pacific Highway S.
Seattle, WA 98168-0727

On December 19, 1997, a public notice for a proposed water quality certification from the State of Washington was distributed for the above-referenced project pursuant to the provisions of 33 U.S.C. 1341 (FWPCA§ 401). An additional notice of a public hearing and addendum/errata was distributed on March 6, 1998. The proposed project entails placing fill in approximately 8 to 12 acres of wetlands and 3000 linear feet of stream channels for construction of a third runway and other improvements at Seattle-Tacoma International Airport (STIA) pursuant to a Master Plan Update for STIA adopted by the Port of Seattle (the Port) in May 1997 and approved by the Federal Aviation Administration (FAA) in July 1997. Other improvements in the Master Plan Update include construction of a new north terminal and parking garage, a new FAA air traffic control tower, taxiways and runway safety areas, roadway improvements, and a South Aviation Support Area (SASA). Construction of the third runway and other Master Plan Update improvements will involve the placement of approximately 23.6 million cubic yards of fill material, some of which is proposed for excavation from on-site borrow sources on Port property.

Mitigation includes the following activities in the Miller Creek basin: construction of a new meandering stream bed for approximately 1,350 lineal feet of Miller Creek; creation and long-term protection of enhanced riparian buffers adjacent to Miller Creek, equal to 100 feet on the west side and an average of 100 feet on the east side; and removal of homes, businesses and farms adjacent to the creek (and elimination of fertilizers, pesticides, and other contaminated runoff). Mitigation in the Miller and Des Moines Creek basins includes: increased stormwater management to help reduce existing peak flows in addition to mitigating the impacts of the proposed project, including storm water detention, treatment and discharge to meet state water quality standards; removal of existing water withdrawals from Miller Creek; approximately 3 acres of wetland and floodplain enhancement with long-term protection at the Vacca Farms site on Miller Creek; stream flow augmentation of Des Moines Creek baseflow from a well that currently supplies irrigation water to the Tyee Golf Course; and creation of a $300,000 trust fund for watershed rehabilitation projects in both basins. Mitigation of impacts to wetland wildlife habitat will also occur through the construction of approximately 16 to 24 acres of replacement wetlands at a 69-acre site in Auburn, King County, Washington.

AUTHORITIES:

In exercising authority under 33 U.S.C. 1341, 16 U.S.C. 1456, and RCW 90.48.260, Ecology has investigated this application pursuant to the following:

1. Conformance with applicable water quality-based, technology-based, and toxic or pretreatment effluent limitations as provided under 33 U.S.C. Sections 1311, 1312, 1313, 1316, and 1317 (FWPCA Sections 301, 303, 306 and 307);

2. Conformance with the state water quality standards as provided for in Chapter 173-201A WAC authorized by 33 U.S.C. 1313 and by Chapter 90.48 RCW, and with other appropriate requirements of state law; and

3. Conformance with the provision of using all known, available and reasonable methods to prevent and control pollution of state waters as required by RCW 90.48.010.

CONDITIONS OF ORDER #96-4-02325, WATER QUALITY CERTIFICATION AND COASTAL ZONE CONSISTENCY DETERMINATION:

In view of the foregoing and in accordance with 33 U.S.C. 1341, 90.48.260 RCW and Chapter 173-201A WAC, water quality certification and Coastal Zone Consistency Determination is granted to the Port of Seattle (the Port) subject to the following conditions:

A. No Impairment of Water Quality:

A1. Des Moines Creek (WRIA #WA-09-2000) and Miller Creek (WRIA #09-2005) are Class AA waters of the state. Certification of this proposal does not authorize the Port to exceed applicable state water quality standards (173-201A WAC) or sediment quality standards (173-204 WAC). Water quality criteria contained in 173-201A-030(1) WAC and 173-201A-040 WAC shall apply to this project, unless otherwise authorized by Ecology. This Order does not authorize temporary exceedances of water quality standards beyond the limits established in 173-201A-110(3). Furthermore, nothing in this certification shall absolve the Port from liability for contamination and any subsequent cleanup of surface waters or sediments occurring as a result of project construction or operations.

Des Moines Creek has been identified on the current 303(d) list as exceeding state water quality standards for fecal coliform. This proposed project shall not result in further exceedances of this standard.

B. Wetland, Stream, and Riparian Mitigation:

B1. Impacts to aquatic resources shall be mitigated through measures described in the following documents, except as modified by this Order:

- the Port's JARPA application for the above-referenced project, dated December 18, 1996;
- the Final Environmental Impact Statement;
- the Wetland Mitigation Plan for Proposed Master Plan Update Improvements at Seattle-Tacoma International Airport, dated December, 1996 (the 1996 Wetland Plan); ←
- the Miller Creek Relocation Plan for Proposed Master Plan Update Improvements at Seattle-Tacoma International Airport, dated December 1996;
- the Des Moines Creek Basin Plan, November 1997;
- the Summary of Amended Wetland Mitigation Approach, dated May 1998; and,
- the Amended Wetland Mitigation Plan and Supporting Documents, July 15, 1998 (the Amended Plan), prepared by Parametrix, Inc. ←

Mitigation elements are more fully described in the above-referenced documents and as revised through the conditions of this Order. Mitigation elements include the following:

- Des Moines Creek: vegetation, buffers, baseflow augmentation, and restrictive covenant.
- Miller Creek Relocation: removal of water withdrawals, vegetation, buffers, and restrictive covenant.
- Miller Creek/Lora Lake Wetland and Floodplain Enhancement: new wetland and floodplain areas, vegetation, buffers, and restrictive covenant.
- Regional Detention Facility: as described in the Des Moines Creek Basin Plan.
- Trust Fund: $300,000 for watershed rehabilitation in Des Moines and Miller Creeks.
- Auburn Mitigation Site: vegetation, wildlife mitigation, buffers, and restrictive covenant.

There may be additional mitigation required by the Corps of Engineers subsequent to issuance of this Order.

B2. In addition to conditions contained in the above-referenced documents, the following requirements shall be conditions for all mitigation sites:

B2a. "As-Built" Report: an as-built report documenting the final design of each mitigation site shall be prepared when site construction and initial planting is completed. These reports shall include the elements identified in Section 4.4.1 of the 1996 Wetland Plan, as amended in the Amended Plan and the following:

- acreage totals shall be provided for wetlands existing on site and categories of each of the existing wetlands prior to the start of mitigation work;
- final site topography;
- photographs of the area taken from established permanent reference points;
- planting plan showing species, sizes, and approximate locations of plants; and,
- any changes to the mitigation site plan that occurred during construction.

Two copies of each "As-Built" report shall be sent to Ecology's Tom Luster within sixty days of completing construction and initial planting for each mitigation site.

B2b. Monitoring Period: In all cases, monitoring as described in the referenced plans and reports and as modified by this Order shall be done annually for no less than ten years.

B2c. Monitoring Reports: Reports shall be completed to summarize the monitoring information as defined in Section 4.4.2 of the 1996 Wetland Plan, as amended in the Amended Plan, and as revised by this Order. The monitoring reports shall also include the elements listed in Condition #B2a above. Two copies of the monitoring reports shall be sent each monitoring year to Ecology's Tom Luster.

B2d. Contingency Plan: If Ecology determines that the results of monitoring show that the success criteria established in the 1996 Wetland Plan are not being met, Ecology may require additional monitoring and mitigation. Any changes to the plans, monitoring methods, or additional mitigation measures are subject to review and written approval by Ecology.

B2e. Plant Inspection: Frequent inspections of plants shall occur during the summer months to ensure water levels are adequate for plant survival.

B3. Restrictive Covenants: The Port has proposed deed restriction language (Appendix A of the Amended Plan); however this proposed language is inadequate to protect aquatic resource functions and values.

Within 30 days of issuance of this Order, the Port shall provide for Ecology's review and approval revised restrictive covenant language that includes the specific requirements and prohibitions in Conditions #B3a and B3b below. If the proposed language is not adequate, Ecology will respond within fifteen (15) days. Within fifteen (15) additional days, the Port shall submit final language acceptable to Ecology or will be considered in violation of this Order and subject to penalties as described in Condition G of this Order.

B3a. All mitigation sites: restrictive covenants containing the following requirements and prohibitions shall apply to all the mitigation sites listed in Condition #B1 above:

- The covenants shall prohibit, in perpetuity, future development on these sites that is inconsistent with their use as mitigation sites to provide natural vegetative buffers, floodplain wetlands, flood storage, and riparian corridors. The covenants shall also prohibit development activity in the buffers including clearing, grading, filling, and the construction of any building, structure, or other improvement, except as specified in Condition #B3b below.

- The covenants shall permit the removal of exotic, non-native, invasive vegetation from the buffers in order to meet the mitigation performance standards. Any native woody vegetation that is modified for air safety reasons (e.g., cut or topped) shall be retained on site as downed woody material.

- In all cases, the restrictive covenants shall run with the land constituting the buffer areas and shall be binding on the Port and its successors and assigns. The covenants shall be prepared and executed in a manner that permits their recording with the real property records of King County.

B3b. Restrictive covenant conditions for specific mitigation sites: In addition to those identified in Condition B3a above, the following requirements and prohibitions shall apply to the mitigation sites as described below:

- Miller Creek buffer: There shall be no structures or development activities within fifth (50) feet of either side of the Miller Creek channel. No structures or development (e.g., stormwater facilities, trails, etc.) proposed for the outer areas of the buffers (outside of the interior 50 feet) shall be placed or constructed without review and approval by Ecology.

  Existing roads across the Miller Creek buffer (i.e., S 170th St., S. 160th St., 8th Ave. S., and S. 154th St. may be retained at their current configuration. Any changes to their current configuration that may affect the functions and values of the buffers (e.g., changes in road width, placement of structures in or adjacent to the roads or within the rights-of-way, etc.) are subject to review and approval by Ecology and may require additional mitigation to replace any lost functions and values of the buffers.

- Miller Creek/Lake Lora Wetland and Floodplain Enhancement: restrictive covenant conditions will be established through Ecology's review and approval of the mitigation plan required in Condition #B4b below.

- Des Moines Creek Buffer: the restrictive covenant for this mitigation site will allow development of the flow augmentation mitigation element and the RDF as described in Conditions #B4a and #B5 below.

B3c. Within thirty (30) days of the Port completing the construction and initial planting of each mitigation site, the Port shall execute the restrictive covenants, as approved by Ecology, file them with the real property records of King County, and provide two copies of each to Ecology's SEA Program.

B3d. Any changes to the restrictive covenants shall require the written approval of Ecology's SEA Program.

B3a. Violation of any term of the restrictive covenant shall be considered a violation of this Order. Ecology may require corrective action sufficient to cure the violation, including, without limitation, restoration or remediation of the covenant areas, or removal of any structure, development, or improvement not permitted by the covenant. In addition, Ecology may bring an action to specifically enforce the covenant, to enjoin the violation of the covenant, to require restoration or remediation of the covenant area, or to levy a penalty against the Port or any other party for the violation.

B4. Additional Conditions of Specific Mitigation Elements:

B4a. Des Moines Creek Flow Augmentation: The Port shall comply with Section 2.1 of the Amended Wetland Mitigation Plan and Supporting Documents, July 15, 1998, with the following additions and clarifications:

- The Port shall provide documentation to Ecology's Tom Luster of any necessary transfer or change of water rights needed to implement this proposed flow augmentation within one year of issuance of this Order.
- Flow augmentation shall be implemented whenever stream flows in Des Moines Creek immediately below the confluence of the East and West Branches drops below 1.0 cubic feet per second, or whenever the water temperature at that location is above 16° Celsius.
- Within 30 days of issuance of this Order, the Port shall provide for Ecology's review and approval, an operations plan describing how the flow augmentation will be implemented. This operations plan shall include the following:
  - Locations of the groundwater well, pumping equipment, and monitoring stations;
  - An implementation and monitoring plan that includes a description of how threshold exceedance will be determined, how augmentation will occur, how to determine when a specific augmentation event may end, and monitoring of downstream conditions necessary to determine compliance with this mitigation element;
  - Maintenance requirements to ensure long-term feasibility of this mitigation measure;
  - Establishment of a trust fund or other financial mechanism adequate to ensure that the operations and maintenance of this flow augmentation mitigation element will occur in perpetuity.

- The Port may propose at some future date an alternative flow augmentation method such as retirement of other water rights in Des Moines Creek. Any alternative flow augmentation must meet the performance standards above (i.e., provide 1.0 cfs of stream flow and provide temperature controls above 16° Celsius), and is subject to review and written approval by Ecology.

B4b. Miller Creek: Within thirty (30) days of the issuance of this Order, the Port shall submit for Ecology's review and approval final wetland mitigation plans for the Miller Creek Buffers and Miller Creek/Lora Lake Wetland and Floodplain Enhancement sites. Ecology will provide necessary corrections within fifteen (15) days. The Port shall then provide the final plans for Ecology's review and approval within an additional fifteen (15) days.

The Port shall not do any work in wetlands or other waters of the state until Ecology has provided written approval of this mitigation plan. Violation of this condition may result in revocation of this water quality certification.

The Port shall use the interagency Guidelines for Developing Freshwater Wetlands Mitigation Plans and Proposals (Ecology Publication #94-29; available on Ecology's Internet site) for guidance on preparing and submitting final mitigation plan detail requirements.

This plan shall integrate the mitigation elements of the Miller Creek relocation plan with the elements of the Miller Creek Wetland & Floodplain Enhancement plan. Currently, the creek relocation and the wetland/floodplain enhancement proposal are treated as distinct and separate projects. Because they occur in the same location, and clearly influence each other, the final plan shall incorporate the elements of both sites.

The plan shall provide specific details with respect to:

- Restoration goals and objectives;
- Water regime, including any available hydrologic data, and predicted hydrology after excavation;
- Soils data (before and after excavation);
- Final contour details
- Planting plan details, esp. related to expected water regime;
- Section drawings showing relationship of topography to vegetation;
- A 10-year
- Performance standards;
- Contingencies;

E7b. Documentation: For materials derived from state-certified borrow pits, the Port and/or its contractors shall provide documentation of state certification to Ecology. For materials derived from contractor-certified construction sites or from Port-owned property, the Port and/or its contractors shall provide documentation to Ecology showing that the materials do not contain toxic materials in toxic amounts.

This documentation shall be provided as described in the memo and shall be delivered to Ecology no later than thirty (30) days after identifying the source or fill and/or use of the fill in the Master Plan Improvement projects.

The Port shall also provide copies of the quarterly updates described in the Final Third Runway Soil Fill Quality Criteria listing the sources, quantities, and placement of fill on Port property.

E7c. Additional conditions or corrective actions may be required based on Ecology's review of the documentation.

E7d. Any changes to the criteria or process described in the Final Third Runway Soil Fill Quality Criteria or in the above conditions is subject to review and written approval by Ecology.

F. Emergency/Contingency Measures:

F1. In the event the Port is unable to comply with any of the permit terms and conditions due to any cause, the Port shall:

- Immediately take action to stop, , contain, and clean up unauthorized discharges or otherwise stop the violation and correct the problem.
- Notify Ecology of the failure to comply. Spill events shall be reported immediately to Ecology's 24-Hour Spill Response Team at (425) 649-7000, and within 24 hours to Ecology's Tom Luster at (360) 407-6918.
- Submit a detailed written report to Ecology within five days that describes the nature of the violation, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of any samples taken, and any other pertinent information.

Compliance with these requirements does not relieve the Port from responsibility to maintain continuous compliance with the terms and conditions of this Order or the resulting liability from failure to comply.

- Site protection measures (restrictive covenant language); and,
- "As-built" drawings.

In addition, a minimum fifty-foot (50') vegetated buffer shall be provided at the Miller Creek Wetland and Floodplain Enhancement Site on uplands adjacent to Des Moines Memorial Drive.

B4c. Auburn Mitigation Site: Within thirty (30) days of issuance of this Order, the Port shall provide an updated mitigation plan showing the total amount of wetland impacts from the Master Plan Improvement projects (including the Vacca Farms area and surrounding areas in the northwest corner of the STIA), and the resulting wetland mitigation area to be created at the Auburn Mitigation Site. This updated plan shall include a minimum 2:1 ratio of created wetlands and is subject to Ecology's review and written approval.

B5. Regional Detention Facility (RDF): The Port shall continue its involvement in the Des Moines Creek Basin Planning Committee and its RDF development as described below. Des Moines Creek is experiencing high storm flows due to development and inadequate stormwater detention facilities within the watershed. It is unlikely that the characteristic uses of Class AA waters of the state (per 173-201A-030(1) WAC) will be met unless new stormwater detention facilities are constructed and operated in a manner that reduces the high storm flows. Additionally, mitigation measures and habitat improvement projects in downstream reaches of Des Moines Creek are likely to have little utility unless the extremely high storm flows are reduced.

B5a. The Des Moines Creek Basin planning committee has described a preferred alternative for a RDF (Section 6-1 and Figure 6-1 of the Final Des Moines Creek Basin Plan, November 1997).

As a condition of this Order, the Port will continue in its role as an active participant in the Des Moines Creek basin planning effort to develop the Basin Plan's preferred alternative RDF. In addition, the Port shall make all reasonable efforts to assure that this RDF will be under construction within three years of issuance of this Order. If this RDF is not under construction by that time, Ecology may, through supplemental Order, seek further means to assure timely construction of necessary peak-flow controls.

B5b. As a condition of this Order, the Port will also proposed to reserve the site of the Port-preferred RDF alternative. However, Ecology believes that the Port's preferred alternative will result in greater adverse environmental impact to wetlands, will likely cause additional bird strike hazards, will be more costly, and will not resolve detention issues on the East Branch of Des Moines Creek. Therefore, as an additional condition of this Order, the Port shall reserve the site of the Basin Plan-preferred RDF alternative until either the RDF is constructed or

until regional peak flow controls equivalent to those controls provided by the Basin Plan-preferred RDF alternative (i.e., approximately 240 acre-feet of detention storage, peak flow control of both branches of Des Moines Creek, etc.) are provided at another site and the proposed RDF site is no longer needed for this purpose. Any additional wetland impacts of the proposed RDF or of other regional peak flow controls may require additional review and approval by Ecology.

C. Stormwater Management:

C1. The Port shall comply with a final comprehensive stormwater management plan approved by Ecology.

Within sixty (60) days of issuance of this Order, the Port shall submit to Ecology for review and written approval a Final Comprehensive Stormwater Management Plan for Sea-Tac International Airport Master Plan Improvements. This Final Plan shall contain a comprehensive plan for managing stormwater from the Master Plan projects in compliance with the stormwater source control, detention, treatment, and monitoring requirements in Condition #C4 below. It shall also identify the stormwater detention storage necessary for each major element of the Master Plan Improvements.

C2. Within ninety (90) days of issuance of this Order, the Port shall submit to Ecology a schedule for construction of all major elements of the Master Plan Development Project, and the stormwater detention storage necessary to meet the requirements of Condition #C4 of this Order. Subsequent changes to this construction schedule shall be submitted to Ecology.

C3. Within six (6) years of issuance of this certification, the Port shall complete construction of all facilities in compliance with the approved Final Comprehensive Stormwater Management Plan for Sea-Tac International Airport Master Plan Improvements referenced in Condition #C1 of this Order.

C4. Both Des Moines Creek and Miller Creek have been identified as having excessively high storm flows and levels of contaminants above state water quality criteria. These high storm flows and contaminant levels prevent some characteristic uses of Class AA waterbodies from being met. In order for the operation of the proposed project to meet water quality standards, the following requirements related to stormwater detention and treatment shall be implemented:

C4a. Stormwater Detention: The Port shall design, construct, operate, and maintain stormwater facilities that control stream erosion by matching developed discharge durations for the range of predeveloped discharge rates from 50% of the 2-year peak flow up to the full 50-year peak flow and by matching the peak discharge

rates for 2- and 10-year return periods for all stormwater discharges from Sea-Tac International Airport (STIA). For the purpose of calculating runoff characteristics, predeveloped conditions shall be as follows:

- For expansion areas, the 1994 land use condition shall be the predeveloped condition.
- For the existing facility, predeveloped conditions shall be 100% till-pasture, unless the Port can provide documentation that shows other predeveloped conditions were present before the development of STIA.

C4b. Stormwater Treatment: All stormwater discharges from Sea-Tac International Airport shall be in compliance with state of Washington surface water quality standards (Chapter 173-201A WAC), sediment management standards (Chapter 173-204 WAC), ground water quality standards (Chapter 173-200 WAC), and human health based criteria in the National Toxics Rule (Federal Register, Vol. 57, No. 246, Dec. 22, 1992, pages 60848-60923).

The Port shall design, construct, operate, and maintain stormwater treatment facilities that will not result in exceedances of state water quality criteria in receiving waters. All runoff from pollution-generating surfaces shall be treated using water quality treatment BMPs. Pollution-generating surfaces include, but are not limited to: surfaces that are exposed to and/or are subject to aircraft use, vehicular use, or leachable materials, wastes, or chemicals.

Water quality treatment BMPs for each stormwater treatment facility shall consist of no less than any one of the following:

- a large sand filter, a large sand filter vault, or a large linear sand filter.
- a biofiltration swale, followed by a basic sand filter, sand filter vault, or leaf compost filter.
- a filter strip, followed by a linear sand filter with no presettling cell needed.
- a basic wetpond, followed by a basic sand filter, sand filter vault, or leaf compost filter.
- a wetvault, followed by a basic sand filter, sand filter vault, or leaf compost filter.
- A combined detention and wetpool facility, followed by a basic sand filter, sand filter vault, or leaf compost filter.
- a basic sand filter or sand filter vault (preceded by a presettling cell if the sand filter is not preceded by a detention facility), followed by a leaf compost filter.

Data collected will be used to determine the level of treatment provided by the Port's stormwater facilities and whether the Port is in compliance with state water quality standards. Violation of the standards are subject to penalties under RCW 90.48.

C5. Hydraulic design reports for each proposed facility shall be submitted to Ecology for review at least ninety (90) days prior to the proposed start of construction of each facility.

C6. Within thirty (30) days following acceptance by the Port of Seattle of each facility, or portions thereof, a Declaration of Construction shall be completed and signed by the responsible professional engineer for the project and submitted to Ecology.

C7. Extensions of, or changes to, any of the compliance schedules in Conditions #C1 – C6 above shall only be through written approval of Ecology.

D. Groundwater Evaluation:

D1. The Port shall implement the Schedule for Groundwater Studies (Appendix C of the Amended Wetland Mitigation Plan and Supporting Documents, July 15, 1998) with the following addition:

- The modified Agreed Order shall be signed by the Port and Ecology no later than December 15, 1998. Penalties described in Condition #G8b of this Order shall be imposed by January 1, 1999 if the above date is not met due to any delay by the Port in delivering necessary interim documents or review.

E. Construction:

E1. Construction Stormwater and Erosion Control:

E1a. Work in or near waters of the state shall be done so as to minimize turbidity, erosion, and other water quality impacts. Construction stormwater, sediment and erosion control Best Management Practices suitable to prevent exceedances of state water quality standards (e.g., hay bales, detention areas, filter fences, etc.), shall be in place before starting clearing, filling, and grading work at the impact sites, and shall also comply with all requirements within NPDES Permit No. WA-002465-1.

E1b. Prior to clearing and grading in wetlands, the adjacent wetlands shall be protected from construction impacts. Construction fencing or flagging (using brightly colored tape at no less than twenty-five foot (25') intervals) of the existing

E7b. Documentation: For materials derived from state-certified borrow pits, the Port and/or its contractors shall provide documentation of state certification to Ecology. For materials derived from contractor-certified construction sites or from Port-owned property, the Port and/or its contractors shall provide documentation to Ecology showing that the materials do not contain toxic materials in toxic amounts.

This documentation shall be provided as described in the memo and shall be delivered to Ecology no later than thirty (30) days after identifying the source or fill and/or use of the fill in the Master Plan Improvement projects.

The Port shall also provide copies of the quarterly updates described in the Final Third Runway Soil Fill Quality Criteria listing the sources, quantities, and placement of fill on Port property.

E7c. Additional conditions or corrective actions may be required based on Ecology's review of the documentation.

E7d. Any changes to the criteria or process described in the Final Third Runway Soil Fill Quality Criteria or in the above conditions is subject to review and written approval by Ecology.

F. Emergency/Contingency Measures:

F1. In the event the Port is unable to comply with any of the permit terms and conditions due to any cause, the Port shall:

- Immediately take action to stop, , contain, and clean up unauthorized discharges or otherwise stop the violation and correct the problem.
- Notify Ecology of the failure to comply. Spill events shall be reported immediately to Ecology's 24-Hour Spill Response Team at (425) 649-7000, and within 24 hours to Ecology's Tom Luster at (360) 407-6918.
- Submit a detailed written report to Ecology within five days that describes the nature of the violation, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of any samples taken, and any other pertinent information.

Compliance with these requirements does not relieve the Port from responsibility to maintain continuous compliance with the terms and conditions of this Order or the resulting liability from failure to comply.

F2. Fuel hoses oil drums, oil or fuel transfer valves and fittings, etc., shall be checked regularly for drips or leaks, and shall be maintained and stored properly to prevent spills into state waters. No refueling of equipment shall occur over, or within 50 feet of creeks or wetlands.

G. General Conditions:

G1. This certificate does not exempt and is provisional upon compliance with other statutes and codes administered by federal, state, and local agencies.

All conditions in the following permits, approvals, and documents are incorporated herein and are specific conditions of this Order:

- the Final Environmental Impact Statement (under the State Environmental Policy Act) issued for this proposed project;
- the National Pollution Discharge Elimination System (NPDES) Waste Discharge Permit No. WA-002465-1, issued by the Department of Ecology on February 20, 1998 (currently on appeal to the state Pollution Control Hearings Board);
- the Governor's Certification Letter, issued June 30, 1997; and,
- the Hydraulic Project Approval (HPA) to be issued for this project by the Washington Department of Fish and Wildlife (WDFW).

The Port shall not do any work in wetlands or other waters of the state until an HPA has been issued by WDFW. Violation of this condition may result in revocation of this water quality certification.

G2. The Port will be out of compliance with this certification if the project is constructed and/or operated in a manner not consistent with the project description contained in the Public Notice for certification, or as otherwise approved by Ecology. Additional mitigation measures may be required through other local, state, or federal requirements.

G3. The Port will be out of compliance with this certification and must reapply with an updated application if five years elapse between the date of the issuance of this certification and the beginning of construction and/or discharge for which the federal license or permit is being sought.

G4. The Port will be out of compliance with this certification and must reapply with an updated application if the information contained in the Public Notice is voided by subsequent submittals to the federal agency. Any future action at this project location, emergency or otherwise, that is not defined in the public notice, or has not been approved by Ecology, is not authorized by this Order. All future actions shall be coordinated with Ecology for approval prior to implementation of such action.

G5. Copies of this Order shall be kept on the job site and readily available for reference by Ecology personnel, the construction superintendent, construction managers and foremen, and state and local government inspectors.

To avoid violations or non-compliance with this Order, the Port shall ensure that project managers, construction superintendents, and any necessary staff for the various Master Plan Improvement Projects and mitigation projects have read and understand relevant aspects of this Order, the HPA, the NPDES permit, and any subsequent revisions or Ecology-approved plans.

The Port shall provide to Ecology a signed statement from each project manager and construction superintendent for the various Master Plan Improvement Projects and mitigation projects that they have read and understand the conditions of the above-referenced permits, plans, and approvals. These statements shall be provided to Ecology no less than seven (7) days before construction begins at each project or mitigation site.

G6. Nothing in this Order waives Ecology's authority to issue additional orders if Ecology determines further actions are necessary to implement the water quality laws of the state. Further, Ecology retains continuing jurisdiction to make modifications hereto through supplemental order, if additional impacts due to project construction or operation are identified (*e.g.*, violations of water quality standards, downstream erosion, etc.), or if additional conditions are necessary to further protect the public interest.

G7. Liability: Any person who fails to comply with any provision of this Order shall be liable for a penalty of up to ten thousand dollars $10,000) per violation for each day of continuing noncompliance.

G8. Violations of this Order: Violations of this Order shall be addressed in accordance with the requirements of RCW 90.48 and RCW 43.21B. Upon Ecology's determination that the Port is violating any condition of this Order, it shall serve notice of the violation to the Port by registered mail.

G8a. Violation or non-compliance of Conditions #E1 – E4, #E7, #F1 – F2 of this Order are considered to be significant and egregious, and shall result in the following penalties:

- for the first 30 days of violation or non-compliance, no less than one thousand dollars ($1000) per day per violation.
- If the Port remains out of compliance for more than 30 days, the penalty shall be increased to no less than five thousand dollars ($5000) per day per violation for each day of continued non-compliance.

Ecology has the discretion to set the penalty amount up to the maximum allowed under RCW 90.48.

G8b. Violation or non-compliance of any other condition of this Order shall result in the following penalties:

- for the first 30 days of violation or non-compliance, no less than five hundred dollars ($500) per day per violation.
- If the Port remains out of compliance for more than 30 days, the penalty shall be increased to no less than one thousand dollars ($1000) per day per violation for each day of continued non-compliance.

Ecology has the discretion to set the penalty amount up to the maximum allowed under RCW 90.48.

G8c. If Ecology determines that the Aviation Division of the Port is out of compliance with any conditions of this Order, no additional applications from the Aviation Division of the Port for water quality certifications will be reviewed until the existing non-compliance is resolved to the satisfaction of Ecology.

G8d. Ecology reserves the right to revoke this certification if the Port fails to meet the compliance schedule requirements of Conditions B, C, and/or D of this Order. Compliance with this schedule is necessary for Ecology to have reasonable assurance that the proposed project will be constructed and operated so as to meet state water quality standards and other appropriate requirements of state law.

Appeal Process:

Any person aggrieved by this Order may obtain review thereof by appeal, within thirty (30) days of receipt of this Order, to the Washington Pollution Control Hearings Board, P.O. Box 40903, Olympia, WA 98504-0903. Concurrently, a copy of the appeal must be sent to the Department of Ecology, Enforcement Section, P.O. Box 47600, Olympia, WA 98504-7600. These procedures are consistent with the provisions of Chapter 43.21B RCW and the rules and regulations adopted thereunder.

Dated July 20th, 1998 at Lacey, Washington.

Gordon White

Gordon White, Program Manager
Shorelands and Environmental Assistance Program
Department of Ecology
State of Washington

EXHIBIT F