

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

PROPOSED WASTE DISCHARGE PERMIT NO. WA-002465-1

PORT OF SEATTLE

SEA-TAC INTERNATIONAL AIRPORT

RESPONSE TO COMMENTS

Public Meeting Held:
Des Moines, WA - March 30, 1994

Public Hearing Held:
Normandy Park, WA - May 24, 1994

Prepared by Deborah North and Lisa Zinner, P.E.

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AR 026741

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AR 026742

INTRODUCTION

Sea-Tac International Airport is a major international airport which serves the Pacific Northwest. The airport was built in 1944 and is owned and operated by the Port of Seattle. The Port provides facilities for approximately 44 tenants engaged in passenger and cargo air transportation. In addition to the main terminal, which has four concourses, there are two satellite terminals providing a total of 73 loading gates. Industrial activities at the airport include aircraft and ground vehicle maintenance, fueling, washing, and de-icing.

The Department of Ecology has issued National Pollutant Discharge Elimination System (NPDES) Permit No. WA-002465-1 to the Port of Seattle for discharge of treated industrial wastewater, non-contact cooling water and storm water from Sea-Tac International Airport.

Public notice of application was published on October 27, 1993 and November 3, 1993 in The Seattle Times to inform the public that an application had been submitted and to invite comment on the reissuance of the permit.

The Department of Ecology published a Public Notice of Draft (PNOD) on February 23, 1994 in the Seattle Times south edition, the Morning News Tribune/South King County, and the Highline Times/Des Moines News to inform the public that a draft permit and fact sheet were available for review.

A Public Meeting was held at the Des Moines Public Library on Wednesday, March 30, 1994 for the public to ask questions and find out more about the permit. A Public Hearing was held at the Normandy Park Community Center on Tuesday, May 24, 1994 to receive formal testimony regarding the draft permit. Public Notice of the public hearing was published in the Highline Times/Des Moines News on April 20, 1994. The written comment period on the permit closed on June 23, 1994, 30 days after the public hearing.

As a result of questions and concerns raised in the public meeting, public hearing and written comment, the draft permit was re-examined and some revisions were made to the permit and fact sheet. This responsiveness summary is intended to reflect substantive comments, concerns and recommendations on the proposed permit raised during the public hearing and written comment period and to state Ecology's response to those same substantive comments, concerns, and recommendations.

ORGANIZATION OF THE RESPONSIVENESS SUMMARY

Letters in response to the draft permit and comments made in the public hearing often contained similar questions or addressed similar issues with the draft permit. To reduce needless repetition and to avoid confusion in the response summary, similar questions have been grouped into a single question or comment category, each category has then been individually numbered and answered once. The categories follow the organization of the draft permit and fact sheet.

Each letter received during the written comment period has been reproduced in its entirety in Appendix A. A transcript of the comments made during the Public Hearing is also attached as Appendix B. These documents have been marked to show where the Department's response to a particular comment or question can be found in this response summary.

RESPONSE TO QUESTIONS AND COMMENTS

1. Interim Effluent Limitations

- A. The Midway Sewer District has grave concerns regarding the current discharge quantities from the SeaTac Airport's Industrial Treatment Plant. Consideration should be given to installing a continuous on line flow recorder and perhaps a flow restrictor somewhere in the discharge line to ensure that flows never exceed the allocated 3.6 mgd.

Department Response: Comment noted. The permit language in Special Condition S3.A has been changed to indicate that continuous flow monitoring is required. The Port of Seattle has purchased a continuous flow recorder for the IWS and will be using it to report flow measurements in the monthly discharge monitoring reports. A flow restrictor is more appropriately addressed in an agreement between the Port and the Sewer District.

- B. The Port objects to the inclusion of its agreement with the Midway Sewer District. The agreement should not be used as a condition of the NPDES permit. DOE should set the limit in the permit equal to the capacity of the treatment plant. The Port is then constrained by both the permit and the agreement with the district. As long as the volume allowed in the district agreement is less than in the permit the Port must set its flow to the lower value. It is therefore not necessary for DOE to base the permit limit on the district agreement. If the DOE is concerned about the capacity of the outfall being exceeded, the DOE should

discuss this matter with the district. The issue of concern to DOE is not whether the Port exceeds the allocated discharge but whether the combined discharges of the District and the Port exceeds the capacity of the outfall.

Department Response: In light of the comments submitted by the Midway Sewer District (Comment 1A, above), the language in the permit regarding the agreement between the Port and the Midway Sewer District will not change.

The flow limitation in Special Conditions S1 and S2 has been re-stated as 2,500 gallons per minute to clarify that this is the maximum peak flow rate allowed in the Port/Sewer District agreement. (3,600,000 gal/day = 2,500 gal/min)

- C. Also, under the explanatory paragraph it is stated "this limit shall be set at the new allocation." Does this new limit occur automatically upon agreement between the District and the Port or does it require further administrative action by DOE?

Department Response: Any new allocations agreed upon with the Midway Sewer District will become the new permit limit when the Department receives written notification from the Port of Seattle and confirms the change with the Midway Sewer District. No further administrative action is required.

- D. Does the criterion of 5.0 gpm/ft² become effective on the date of the final permit or will the DOE allow the Port time to complete a study? The Port is concerned about the near-term implication of restricting the allowable plant loading to 3,500 GPM, and the new effluent requirement for TSS. It is not known by either the Port or DOE that the existing IWS plant can meet the new stipulation for TSS. The implication of DOE requiring immediate adoption of the new restrictions on flow and TSS may be to increase the probability of Lagoon No. 3 overflowing into Des Moines Creek. The Port proposes that the DOE modify the permit to allow the Port to prepare a study of the relationship between plant flow, plant operation, and effluent TSS before establishing the interim effluent limit. This study could be submitted within 12 months of permit issuance which allows testing during the next wet season.

Department Response: The Department's intent in setting the 3500 gpm flow limitation in Special Condition S1 was to cause the Port to comply with the interim TSS effluent limitations by operating the DAF unit properly. The TSS

interim limit was set based on EPA effluent guidelines for storm water in the Petroleum Refining Point Source Category. The Department does not know at what loading rate the TSS effluent limitation will be achievable. Therefore, the 3500 gpm flow limitation has been deleted from the permit and the TSS effluent limitation effective date has been delayed until February 1, 1995. Special Condition S5.B has been added to require the submittal of a TSS Treatability Study by January 15, 1995. The effluent limitation may be adjusted by the Department to reflect the findings of the study at that time.

- E. With regard to the treatability study, it is not clear what constitutes "full-scale." The verbiage also suggests the Port is to produce two studies, a treatability study and an engineering report. The Port would appreciate clarification of the verbiage and an explanation of what constitutes "full-scale".

Department Response: The intent of the term "full-scale" is that the Port use the existing DAF system for the study, as opposed to a smaller scale model (pilot scale or bench scale). This verbiage is not included in Special Condition S5.B, but the Department's intent remains the same. Special Condition S5.B requires the Permittee to submit an engineering report to the Department, on or before January 15, 1995, which determines the relationship between the dissolved air flotation (DAF) hydraulic loading rate, other DAF operating parameters, and effluent TSS.

- F. Why shouldn't the interim effluent standards be more stringent than those in the expired permit? Why can't the permitted pH range be smaller? Can't the pH range be reduced by adding more lime or other chemicals in the treatment process?

Department Response: As described in the fact sheet accompanying the draft permit, the interim effluent limits are technology-based. This means that the Department determines what the existing treatment system is capable of achieving. The oil and grease limitation is more stringent than the previous permit and a total suspended solids limit has been added.

Although the pH limit is a technology-based limit, the Department has determined that a discharge with a pH between 6 and 9 standard units will be protective of water quality and not cause adverse effects in the receiving environment. A narrower pH range would not contribute any additional

protection of water quality. In addition, the receiving water for the IWS is a marine water. Marine water has inherent buffering capacity that can easily accommodate pH discharges in this range.

- G. Are the Oil and Grease standards appropriate standards for an airport if they are based on federal Petroleum Refining Stormwater Standards?

Department Response: The oil and grease interim effluent limitation was set using effluent guidelines for storm water in the Petroleum Refining Point Source Category (40 CFR Part 419). Although the Petroleum Refining category does not apply to this facility, the treatment technology used for industrial wastewater treatment at the airport is the same as was used to develop the effluent limits for storm water runoff in this category. Also, the character of the industrial wastewater from the airport is similar to the storm water runoff from a petroleum refinery.

2. Final Effluent Limitations

- A. We are concerned about the discharge of ethylene glycol.

Department Response: The Department shares the concern about ethylene glycol discharges and wrote this permit to address the discharge of de-icing and anti-icing agents in the industrial wastewater and storm water effluents. The permit the Port has been operating under since 1987 does not address the discharge of glycols or other hazardous and toxic substances. Therefore, the new permit represents a giant step forward in the control of these discharges.

Ethylene glycol is not included in the final effluent limitations for the IWS because the effluent limitation for biochemical oxygen demand (BOD) will limit the discharge of glycols. Glycols exert a large BOD as the compounds break down. The BOD limitation will provide an effective means of controlling the glycol discharges and protecting Puget Sound.

Due to the large BOD associated with glycols, the Department requires all storm water contaminated with glycols to be treated prior to discharge. The Port of Seattle will address the discharge of deicing and anti-icing agents in the Storm Water Pollution Prevention Plan. This plan will be implemented over a three year compliance schedule.

The Port is required to monitor total glycols in the storm

water discharges from each storm drain outfall in any quarter when de-icing occurs. The sampling is required to coincide with de-icing events. The Port is also required to report all de-icing and anti-icing events of either aircraft or runways. This information will help to determine the extent of the problem with glycols at the airport.

- B. Can a separate measurement be made of jet fuel contamination?

Department Response: Yes, TPH has been added to the testing schedule in addition to oil and grease. The total petroleum hydrocarbon (TPH) test quantifies petroleum hydrocarbons originating from gasoline, kerosene, jet fuel, diesel, and lubricating oil. The oil and grease test quantifies biological lipids and non-volatile mineral hydrocarbons. The oil and grease test does not measure light hydrocarbons or other materials that volatilize at temperatures below 70 °C.

- C. Is there a need to test for other aliphatic hydrocarbons? What about cleaning agents such as acetone, methylene chloride, mineral spirits or detergents? Should we rely on the priority pollutant scan annually alone?

Department Response: Please refer to the above response (2B) for a discussion on the compounds detected with oil and grease and TPH. Chlorinated solvents are not supposed to be discharged to the IWS. The Port has an ongoing pollution prevention program with its tenants to prevent the discharge of these cleaning agents to the IWS. These cleaning agents would be detected in the annual priority pollutant scan if they are present.

The Biochemical Oxygen Demand (BOD₅) limitation is a catch-all to limit dissolved organic contaminants. Control of effluent BOD₅ should control the majority of the organic contaminants. This issue will be addressed in more detail in the IWS Treatment System engineering report.

- D. The Port has four sources of washwater. The Port anticipates that it will be able to terminate or move three of these sources by the commencement of the permit. However, it will not be possible to achieve the DOE's condition for the fourth source which is the Taxi Yard. The proposed permanent solution requires at least six months for design, bidding, and construction. Even a temporary

solution requires several months because as a public agency the Port must proceed through the proper procurement process for the temporary equipment. The Port requests six months from the commencement of the permit to terminate the discharge of the operation at the Taxi Yard. In the interim the Port proposes to install a catch basin insert in the catch basin that receives the washwater. Although with this temporary solution it allows washwater to reach the storm drain, it will be provided some measure of treatment.

Department Response: The request to allow six months from the commencement of the permit to terminate the discharge of washwater from the Taxi Yard is denied. While the Port is pursuing a permanent solution to allow future vehicle washing in the Taxi Yard, taxi cabs should be required to utilize car wash facilities that either treat and recirculate the washwater or discharge to the sanitary sewer.

The interim solution proposed by the Port, installing catch basin inserts to provide some treatment, is not acceptable as long as there are car wash facilities located in the vicinity of the airport which can be utilized.

- E. Once the Port's effluent mixes with the district's effluent, only one combined discharge exists. There is no longer a distinct Port discharge. Therefore, the Port does not understand how it is technically possible to define two mixing zones for the same outfall. Although the Port's discharge can be modeled as if it were still a distinct discharge, the results would seem to be simply a mathematical artifact. The Port is therefore concerned that the DOE is establishing a requirement that the Port cannot demonstrate that it is within compliance, particularly with regard to the statement "pollutants in the mixing zone shall be minimized".

Department Response: The Water Quality Standards allow the use of mixing zones for discharges that meet AKART, but would otherwise exceed the water quality standards for aquatic life. Mixing zones are a regulatory recognition that the concentration and effect of most pollutants diminishes rapidly after discharge due to dilution. They are established in a manner which limits the duration of exposure for organisms passing through the effluent plume to minimize the risk from each discharge. The water quality standards for chronic protection must be met beyond the boundary of this zone and beyond. A smaller zone in which acute criteria may be exceeded can also be authorized. This zone must be small enough to limit exposure times and

therefore not cause acute mortalities or interfere with passage of aquatic organisms in the water body.

The Department will determine a mixing zone for the Sea-Tac discharge based on the information from the mixing study. The outcome of this determination is a dilution ratio. The dilution ratio is then used to determine a water quality-based effluent limitation. The Port must comply with the permit's effluent limitation.

For those contaminants which are contained in both discharges, the allowable effluent limit will have to be divided among the two dischargers in some fashion. For those contaminants that are unique to the Sea-Tac discharge, the effluent limit will be based solely on the Sea-Tac discharge.

3. Testing Schedule

- A. The storm water sampling requirements are vague and confusing.

Department Response: The storm water sampling requirements have been rewritten to be clearer.

- B. Are tests made for herbicides?

Department Response: Yes, there are tests that detect the presence of pesticides and herbicides. The annual priority pollutant scan will include those herbicides which are priority pollutants.

Form 2C of the Port of Seattle's renewal application stated that the following pesticides are believed absent from any waste stream:

Aldrin	4,4'-DDE	Endrin
BHC	4,4'-DDD	Endrin Aldehyde
Chlordane	Dieldrin	Heptachlor
4,4'-DDT	Endosulfan	

The Department has added new language in S10.B.4, to have the Port address pesticide and herbicide use in its Storm Water Pollution Prevention Plan.

- C. Should surfactants be tested for at the peak following runoff? Are detergents and emulsifiers covered?

Department Response: Condition S3.C.1 requires the Port to monitor surfactants in the runoff. Plane washwater is the primary source of surfactants and planes are washed every day. In the Storm Water Pollution Prevention Plan, the Port is required to visually monitor for dry weather flows and to eliminate these flows. These inspections should detect the discharge of plane washwater to the storm drains.

Surfactants includes detergents and emulsifiers.

- D. I understand that Sea-Tac generally has only about 4 deicing events a year, aside from the MD-80 deicing which occurs much more frequently. Would it be unreasonable to require a sample from each one so that the largest would be sampled?

Department Response: Sampling each deicing event does not make sense for discharges to the IWS system. Discharges to the IWS do not result in immediate discharges to Puget Sound. Rather, the wastewater is held in the lagoons and is metered into the treatment system. Because of the detention time, sampling once a month following a deicing event will provide a reliable estimate of the glycols discharged to the IWS system.

The purpose for testing for glycols in the storm water discharges is to detect the presence of the de-icers. It isn't necessary to sample each de-icing event to determine this.

- E. Everywhere the permit calls for sampling of oil and grease, we would have the permit also call for sampling TPH according to EPA method 418.1.

Department Response: TPH has been added. See response to comment 2B, above.

- F. The non-contact cooling water discharge occurs intermittently and may not occur for several months. The Port therefore requests that the sampling frequency be changed to "once a month in any month that a discharge occurs, when the discharge is occurring". The Port requests that the DOE state explicitly that if the discharge line for non-contact cooling water is connected to the IWS that the testing specified in the permit is no longer required. Until (and if) such connection occurs, the Port requests that it sample the flow at Manhole #SDE4-29. The use of #SDE-28 is not safe; SDE-29 is located only 50 downstream of SDE-28.

Department Response: This is new information. The requirements for non-contact cooling water in the draft permit were based on information submitted by the Port of Seattle in its permit application. The sampling location in the draft permit, manhole #SDE4-28, was likewise provided by the Port.

The Department will not change the sampling frequency. If there are any months in which no discharge occurs to the storm drain this shall be noted on the monthly discharge monitoring report. Failure to obtain a sample from an intermittent discharge is not an acceptable reason for not submitting monitoring data. The Port must make the effort to know and anticipate when non-contact cooling water will be discharged.

The sampling location has been changed from manhole SDE4-28 to manhole SDE4-29.

- G. The DOE specifies a very rigid storm water sampling structure. This is reasonable if the DOE were specifying effluent limits for the parameters, as is the case for the IWS plant. However, the DOE has not specified any limits. The Port believes that the objective of gathering storm water data during the life of this permit is to determine if (1) the Port's storm water discharges are of a nature that corrective action is necessary, and (2) what that corrective action should be. However, the DOE does not allow the Port any flexibility to modify the sampling program to reflect what is learned from previous sampling. The Port therefore requests that the DOE place in the permit the stipulation that the Port prepare an annual report to the DOE. This report would: present the results obtained during the previous 12 months, the Port's conclusions as to what is being learned from the data, and how the sampling program should be changed to reflect what has been learned. The report would be submitted by July 1 of each year. The Port would welcome public review of the report and its recommendations regarding altering the sampling program.

Department Response: The storm water sampling requirements were developed specifically to gather data the Department can use to evaluate the effectiveness of BMPs being implemented under the SWPPP. The data obtained through this monitoring program should provide both the Port and the Department with information that will enable corrective actions to be taken as needed.

The storm water monitoring program, as written, will also provide the Department with the minimum amount of sample

data required to determine a statistical basis for setting effluent limits. For these reasons, the schedule cannot be changed. The Port may conduct additional monitoring if it so desires.

The Department is willing to add an annual summary report to the permit requirements. See new Special Condition S9 for the new requirement. A summary report will make it easier for the Department, other agencies and the public to make sense of the data that will be submitted, follow the Port's implementation of BMPs and learn of any corrective actions the Port initiates.

- H. The sampling framework calls for three sets of samples for each storm: 60 minute grab, 60 minute composite, and a storm composite. The Port questions the value of three separate analyses. The requirement not only triples the laboratory costs, it also increases substantially the labor costs because of the need to be present at the site within the first 60 minutes of the storm without knowing a-priori if the storm will meet the depth/duration requirements. As a result there will be many false starts. Further, given the travel and setup time, the delay between storm commencement and the decision to respond, it is extremely unlikely that the stipulation for a grab sample within 60 minutes can be achieved, making it impossible for the Port to comply with the permit. The Port is also concerned about worker safety particularly at night. DOE fails to provide in the FACT SHEETS an explanation for tripling the samples, and the value of sampling during the first 60 minutes. The Port presumes that DOE believes that a "first flush" occurs which needs to be sampled. However, the Port questions the validity of the first flush phenomena for storm in the Puget Sound area. Although the first flush characteristic has been observed on occasion in local storm water sampling, it is likely not typical because of the highly variable, low intensity storms. The Port proposes that the 60 minute grab requirement be dropped, but that the 60 minute and total storm composites be retained for the first year of sampling. The value of continuing the 60 minute composite can be examined after the first 12 months of sampling, following the concept explained above.

Department Response: The draft permit does not call for three separate samples, only two (a grab and a composite). The Department agrees with the Port that the first flush grab sample is not necessary. The permit requirement has been rewritten to reflect this change and to clarify the sampling requirement. The final permit requires one

composite sample to be taken over the first three hours of the storm (or the duration of the storm if it is less than three hours).

- I. The airlines do not inventory their chemical stocks each month. The Port requests that one report be submitted annually on or about May 1, following the winter season. The Port believes that this is reasonable and should provide the information the DOE needs in a timely manner.

Department Response: Condition S3.C.1 provides that all de-icing and anti-icing events of either aircraft or runways shall be reported, including the volumes of each type of de-icing and anti-icing material used each day by the Port and each tenant. This data shall be submitted to the Department annually by May 1.

- J. The Port objects to the inclusion of the Taxi Yard, the Engineering Yard, and the Doug Fox Area in the sampling program. The activity of concern in these three areas is the washing of vehicles. Yet the DOE has specified elsewhere in the permit that all such discharges be terminated. Then why is the DOE requiring testing? The only activity of consequence once the termination of washing occurs is parking. According to the USEPA regulations parking lots are not included in the General Industrial Stormwater NPDES permits. Also, with regard to airfields these same regulations specify that for airfields the activities subject to regulation are fueling, washing, maintenance, and deicing. Inspections as required by the SWPPP can check to make sure that the requirement regarding wash waters is being followed.

Department Response: The permit requires testing in order to verify that the SWPPP and the permit are being implemented and that vehicle washing is not occurring. This is why, for these areas, the monitoring is limited to pH, oil and grease, total suspended solids, and surfactants.

The final permit requires that these areas be monitored for one year on a quarterly basis. At the end of one year, the Port may request that the Department remove this testing requirement from the permit.

4. Monitoring and Reporting

- A. Section S4.I.1: None of these positions applies to the Port of Seattle. The Port requests that this verbiage be changed

to "Managing Director, Airport Division or its duly authorized representative".

Department Response: Comment noted. Permit condition S4.I.1. has been amended to reflect the Department's determination that it will accept applications and reports signed by the Managing Director of the Airport Division, Port of Seattle.

- B. Section S4.J Reporting Bypasses: The requirement that the Port report all bypasses to the Department of Health does not seem relevant. The Port's treatment plant is not a significant source of fecal coliform bacteria or any related microbiological organism. The Port suggests that the reporting protocol be relevant to the nature of the type and/or location of bypass that might occur with the Port's treatment plant.

Department Response: Bypasses of the treatment system at Lagoon 3 would enter Des Moines Creek and eventually flow into Puget Sound. Such bypasses could contaminate shell fish beds with contaminants other than microbial pollutants, and are a concern for both the Department of Ecology and the Department of Health. Therefore, this requirement remains in the permit.

5. Compliance Schedule

- A. Economic Achievability Test: The "Cost of Goods Sold" could be clarified to specify what operations are included. This language does not apply to Port operations.

Department Response: The Department received several comments on the inapplicability of the Economic Achievability language to Port operations. In response to these comments, the Economic Achievability language has been removed from the permit. If the Port disagrees with the Department's AKART determination and decides to pursue an Economic Achievability Test, this information will be provided to the Port as facility-specific guidance. (See also comment 5F).

- B. S5.3.a. "tax."

Department Response: Thank you for catching the typo. However, the section of S5.A, in which this typo appeared, has been removed from the permit. See response to comment 5A above.

- C. A schedule which encourages the Port to implement treatment improvements sooner is preferable. The Port has already studied its wastewater problems and alternatives, and should be ready to begin putting some of its information to work now. This isn't the Port's first permit, nor its first notice that the IWS is badly out of date already.

Department Response: The previous permit did not require the Port to upgrade the IWS. The Department feels this schedule is reasonable. See the response to comment 5D below. There is nothing in the permit to prevent the Port from implementing the IWS improvements ahead of schedule.

- D. S5.A: The ability of the Port to complete the Engineering Report within 18 months is directly dependent upon the gathering of data during deicing events. Unfortunately, this winter has been very mild. As a result the Port has not been able to obtain the necessary data; there have been no snow or prolonged cold weather events. The Port must therefore wait for the 1994-1995 cold season, which by extension prolongs the period of report completion. The Port therefore requests 30 months to complete the report.

Department Response: The request is denied. Recognizing that there does not have to be snow or a prolonged cold

weather period for deicing to occur, there should be many opportunities to sample. The Port will have to work more closely with its airport tenants to determine when these events actually occur. Additionally, the Port already has some data on deicing discharges from the IWS. Given these factors, 18 months should be sufficient time to collect and incorporate deicing data from 1994-1995 into the Engineering Report.

- E. S5.A: While the Port concurs that "all possible treatment technologies" be reviewed, the Port is concerned about the following verbiage: "shall quantify....., shall detail the cost...and shall list all environmental factors...with each treatment method". Certainly DOE knows that "all" covers a very large array of systems, many of which are eliminated in the early stage of the analysis as either clearly too costly or inappropriate for an airfield. This first step of elimination is done without a detailed cost estimate. WAC 173-240 does not require the analysis as DOE describes in Section S5.A.

The Port also wonders what is meant by "environmental factors". This is a very broad topic covering both the immediate environs of the plant and the area of outfall discharge. The Port believes that such an analysis is appropriately part of the SEPA process. Inasmuch as WAC 173-240 requires the Port to comply with the requirements of the SEPA, the verbiage in the draft permit as described above is inappropriate, duplicative, and inconsistent with WAC 173-240 and SEPA requirements. As currently written the Port believes that compliance is not possible.

The Port proposes that permit need only state that the Port is to produce an engineering report that complies with WAC 173-240 and provides the information necessary for the DOE to conduct an AKART analysis.

Department Response: The intent of this section is that the Port include a screening of all possible treatment technologies and identify the likely candidates. Then the Port should quantify the expected effluent concentration of pollutants from each identified treatment, should detail the cost of each identified treatment, and shall list all other environmental factors associated with each identified treatment method. Environmental factors means non-water quality environmental impacts such as energy requirements, air pollution, hazardous waste generation, solid waste generation, etc. The environmental factors will be used along with the cost and the effluent quality to compare the

treatment alternatives for the AKART determination. This comparison is similar to the comparisons made in an EIS, but is not duplicative of SEPA.

- F. As the purpose of AKART analysis is to determine what is economically reasonable, the Port believes that a "plant level economic achievability test" is a redundant stipulation and need not be placed in the permit. In addition, the verbiage at the bottom of page 25 and the top of page 26, beginning with "Revenue" and ending with "State excise tax returns" is not applicable to an airfield operation, making compliance by the Port impossible. The Port believes that placing such specifics in the permit is both redundant and inappropriate. The DOE need only specify that the Port provide the information necessary for the DOE to conduct an AKART analysis.

Department Response: The Department agrees with this assessment and the comments of others that the language in this section is inappropriate to a Port authority. (see also comment 5-A). In response to these comments, the Economic Achievability language has been removed from the permit. If the Port disagrees with the Department's AKART determination and decides to pursue an Economic Achievability Test, this information will be provided to the Port as facility-specific guidance.

- G. Why can't the Port start implementing some improvements sooner?

Department Response: The permit does not prevent the Port from implementing any improvements sooner than the permit deadlines.

6. Effluent Mixing Study

- A. Knowing public reaction when mysterious dyes turn up, the Port should publish prior notice in the Highline Times.

Department Response: The permit has been modified to require notification of the Department prior to dye studies. Citizens should contact the Department at 649-7000 to report a spill or to ask for information regarding dye studies.

7. Sediment Monitoring (Marine)

- A. The Midway Sewer District permit already contains the requirement that the sediments be tested. Therefore the stipulation that the Port submit a study plan is duplicative. The Port suggests that all the verbiage in this section be replaced with the statement that the "Port shall cooperate with the Midway Sewer District in conducting a sediment study that recognizes the likely pollutant discharges from both the sewer district and Port discharges".

Department Response: The Port is responsible for the impact on the sediments adjacent to the Midway outfall which is due to their discharge. The language in the permit allows the Port to cooperate with the Sewer District to conduct the Sediment Study or the Port may conduct its own study. The Sewer District and the Port may submit the Sediment Baseline Study Plan together if they so desire.

- B. The draft permit states that chemical sampling is to occur in the period of March/April 1995. However, the Puget Sound Protocol requires this sampling period for biological, not chemical, sampling. If our interpretation is correct we would like the flexibility to obtain samples for chemical testing at any time of the year. Our concern is that if we must wait to do the chemical sampling until March/April 1995, we will not be able to effectively use this information in the preparation of the IWS Engineering Report if we are to complete the report within 18 months.

Department Response: The sediment monitoring special condition language was written by the Department's Sediment Management Unit and remains the same. This schedule allows at least eight months between the monitoring and the due date of the IWS Engineering Report. This should be adequate.

8. Storm Water Receiving Water Environment Monitoring

- A. Vegetation management along streams should be addressed because temperature, suspended solids, and other pollutants will be affected.

Department Response: Comment noted. See S8.A.5 for the additional requirement.

- B. The Port believes such a study is very worthwhile. However, the Port suggests that DOE not place specifications regarding the study structure in the permit. As neither the

DOE nor the Port has a complete understanding of the physical description of the stream system and its relationship to the outfalls, it is possible that the DOE is placing requirements in the permit that may not be appropriate for the study, and/or cannot be met. Rather the DOE should make its views known during the development of the Monitoring Plan. Since the DOE approves the Port's monitoring plan, it is not necessary to place specifications in the permit.

Department Response: S8.A has been modified to read: "The Monitoring Plan shall address at minimum the following issues". This new language allows the Port to identify any other areas to study and present them in the monitoring plan that the Department reviews and approves. Should the Port determine that one of these issues affecting the creeks are not appropriate for the study, that argument may be presented in the monitoring plan.

Developing a monitoring plan is not expected to take an extended period of time. The Department believes that removing the framework specifications and allowing the Port to define its own study could extend the planning portion of the project so that the study could not be completed by the permit expiration date.

- C. The sampling specifications in Section S3.C are not necessarily best for what the Port and DOE wishes to achieve in Section S8. The two sections should be related. Adopting the Port's recommendations for Section S3.C provides this flexibility.

Department Response: Conditions S3.C and S8 are related, but their requirements serve different purposes. Condition S3.C is designed to characterize the storm water effluent entering Miller and Des Moines Creeks. Condition S8 asks what the effects of those discharges are in the creeks. The Port can use the monitoring data generated from Condition S3.C to improve the study design for Condition S8.

Once the airport storm water discharges are fully characterized and the impacts of those discharges on the creeks are better understood, site-specific effluent limits and a sampling program can be developed for the airport's storm water discharges.

- D. The stipulation that two WET tests be performed every year (i.e. a rigid structure) is appropriate for a compliance requirement, but not necessarily for a study.

Department Response: Comment noted. The language in S8.A.1 has been modified to read: "The Permittee shall conduct whole effluent toxicity (WET) testing in Miller and Des Moines Creeks upstream and downstream of the storm water discharges at least two times per year, when there is a storm event and discharge is occurring, for each year of the permit".

- E. Regarding the identification of pollutant sources: It is reasonable for the Port to identify its effect, and therefore its fraction, of the loading to the creek at and upstream of its discharges. It is not the responsibility of the Port to identify the sources, although it may be in its interest to do so. This section should therefore be deleted. Further, the verbiage is too vague. What is meant by "vicinity"? By "sources" does DOE mean every distinct pollutant source or the general area of pollutant origin (e.g. location of each septic tank, or in general, the presence of septic tanks)? The Port does not offer alternate verbiage for this section as it does not believe that it can be written in such a way that is satisfactory as a permit stipulation. This section should be deleted from the permit.

Department Response: The request to delete S8.A.3 is denied. The specifics of this section will be worked out through the monitoring plan approval process.

- F. Early testing for metals may indicate that the total concentration for one or more metals is less than the detection limit, making speciation a useless exercise for those metals. Also is the requirement for 90% confidence relevant if early testing suggests that the total recoverable and/or dissolved values are likely to be far less or far more than the receiving water standard. The confidence limit should vary as a function of the expected concentration relative to the receiving water standard.

Department Response: The permit language has been modified to allow those metals which are not detected with ultra-clean sampling methods and the most sensitive analytical methods to be excluded from the speciation study. The information that any metals were not detected, and the speciation not determined, must be documented in the final study.

The specific language on the speciation study requirements has been removed from the permit. The Port should contact the Department for up-to-date guidance on speciation studies

and ultra-clean sampling when preparing the sampling plan.

- G. It may not be possible to do tests "upstream" from the Port's outfalls in the Miller Creek watershed for sediments and metals. The Port's outfalls do not discharge directly to Miller Creek. They discharge to ditches which proceed to a regional detention/treatment pond (Lake Reba). This facility also handles runoff from SR 518, developed areas east of the airfield, and at flood stage, upper Miller Creek. This geography may prevent a clear analysis of "upstream" and "downstream" differences caused by the Port. A similar situation exists in the Des Moines Creek watershed. The DOE needs to allow the Port the flexibility to determine what is the most appropriate approach to the study which reflects the reality of stream geography and drainage systems.

Department Response: The Port does have flexibility in designing the storm water receiving environment monitoring plan and is welcome to submit any variations necessary to properly address the impacts to Miller and Des Moines Creeks. The language in the permit states that, "The Port shall at minimum address the following issues". It would be appropriate to address the issue raised in this comment and provide alternate sampling designs in the Monitoring Plan submitted by the Port of Seattle to the Department for approval. As long as the reason for the variations and alternatives are explained in the draft plan the Department does not foresee a problem.

- H. The Port would assume that DOE is referring to evaluating the chemical quality of the sediment, but the draft permit does not make this clear.

Department Response: The Port assumes correctly. Permit condition S8.A.2 has been edited to reflect the Department's concern with sediment quality.

9. Pond Sludge Waste Characterization and Treatment/ Disposal Plan

No comments were received on this permit condition.

Note: this Special Condition was moved to S14 and the additional storm water report requirement was added as S9.

10. Storm Water Pollution Prevention Plan

- A. The Port would understand that the SWPPP is to cover only the storm drainage areas, and not the areas draining to the IWS (page 34, Section S8B.4.a.1). The DOE needs to so clearly state. The Port would object to the inclusion of the IWS areas in the SWPPP given its redundancy with the IWS engineering report.

Department Response: The section referred to is actually S10B.4.a.1. in the draft permit and S11.4.a.1 in the final permit. The Department expects that there will be some redundancy as long as there remains overlap between the IWS and SDS drainage basins and cross-connections between the two systems. For purposes of the SWPPP, the Port should delineate the areas which discharge each system, including the known cross-connections. Similar information was submitted with the Port's application for permit renewal.

- B. The Port cannot agree to the stipulation that all capital improvements be made within three years. It is possible that the complexity of some improvements, or the length of approval by the FAA where necessary, or the potential conflict with airfield operation safety prevents completion within three years. The Port proposes that a compliance schedule be negotiated after completion of the draft SWPPP or alternatively that all construction be stipulated in a schedule that is developed on completion of the Engineering Report.

Department Response: The Department will not change the requirement to complete all capital improvements to the storm drainage system within 3 years. The Department can not allow a compliance schedule that is less stringent than the compliance schedule in the NPDES and State Waste Discharge Baseline General Permit for Storm Water Discharges Associated with Industrial Activities.

Should there be delays in completing the implementation of capital improvements for storm water pollution prevention, the Port must notify the Department as specified in general condition G4.

- C. The evaluation of cross-connections between the IWS and SDS conveyance systems should be done as part of the Engineering Report to evaluate the impact of alternative the drainage areas to each system. The Port requests that either the permit be modified to include the analysis with the Engineering Report, or the DOE extend the completion time of the SWPPP to be the same as the completion time for the Engineering Report.

Department Response: The request is denied. The Port of Seattle informed the Department in Permit Application Form 2F that a quick evaluation of the IWS and SDS cross-connections had been completed and that a more extensive study was underway to correct the problems found. Since the Port has already been working on this matter, the Department finds absolutely no reason to extend this schedule any further.

- D. The statement "The permittee shall modify the SWPPP whenever there is a change in the design, construction, operation and maintenance...". The words "design" and "construction" are vague. The Port suggests that the verbiage be changed to "whenever there is an alteration of the airfield facilities, or their operation and maintenance..." The word significant should be added to the phrase "less effective", as in "significantly less effective". This change is necessary given the large uncertainty in the relationship between activities, BMPs and pollutant loadings.

Department Response: Comment noted. The suggested wording regarding alteration of airfield operations has been incorporated into the final permit language for condition S11.B.2. However, the Department does not find it necessary to add "significantly" to modify "less effective" and has not changed that language.

- E. In S10.B.4, include the requirement that, if the Port incorporates measures from previously prepared plans, that the measures called for by those plans be consistent with current DOE standards.

Department Response: The SWPPP will be submitted to the Department for approval. All plans submitted to the Department cannot be approved if they do not meet current policies, procedures and standards established in accordance with state regulations. This is an established practice and the Department finds it unnecessary to add this to the permit.

11. Construction Erosion and Sediment Control

- A. Construction activities should include filling.

Department Response: Comment noted. Permit condition S12 has been amended to include filling as a construction activity.

- B. Must disturbed wetlands be redeveloped to preserve their flow regulating and temperature control functions?

Department Response: A variety of federal, state, and local regulations affect construction and other activities in wetlands and adjacent areas. The types, sizes, and locations of wetlands included in the regulations vary from law to law. As a result, case by case review is needed. The agencies involved include the Department of Ecology, the U.S. Army Corps of Engineers, and local planning departments. Please contact Ann Rensberg of the Department of Ecology's Shorelands and Coastal Zone Management Program at (206) 407-7271 for information on wetlands management in King County.

- C. S11.A.1: The Port believes the requirement for a General Permit for construction be limited to construction projects on Port property outside the boundary of the Individual NPDES permit. DOE should include a graphic in the permit which identifies the boundary of the Individual NPDES permit for the benefit of the Port, DOE and the Public.

Department Response: The individual permit boundary includes those areas in which any industrial activity related to the airport occurs. The Department is relying on the Port to supply this information, as required in S10.B.4.A.1. Since the Port has volunteered to take responsibility for all the discharges on its property (see comment 11G), the permit has been modified to require the Port to prepare a CЕСSP for construction activities conducted by the tenants.

- D. S11.B.2: Due to FAA safety rules regarding open water, the Port cannot use sediment ponds in the AOA area, given their potential for retaining water for extended periods.

Department Response: Permit condition S11.B (S12.B in the final permit) does not require the use of sediment ponds. Sediment ponds are included in the language as only one of the possible options for use in erosion and sediment control.

- E. S11.E: The Port's interpretation of the state's enabling legislation for ports indicates that the Port is not subject to the requirements of adjacent local jurisdictions with regard to erosion control. This section therefore needs to be removed to avoid any confusion on the part of adjacent local jurisdictions and the public.

Department Response: Comment noted. The first sentence of S11.E (S12.E in the final permit) has been changed to read, "This permit does not relieve the Permittee of compliance with any more stringent requirements of any local government which may have duly authorized jurisdiction over the Port."

- F. DOE uses the term "CESCP". Is there a regulatory reason for using this terminology rather than "SWPPP"? The use of the word "CESCP" causes confusion in as much as the boundary of the NPDES permit, as well as at the Port's marine facilities.

Department Response: The Department does not agree that the term "Construction Erosion and Sediment Control Plan" is confusing. The purpose of this plan is to describe the stabilization and structural practices which will be implemented at a construction project to minimize erosion and the transport of sediments. The SWPPP should address pollution prevention for the ongoing activities at the airport. A CESCP should address the specific erosion and sediment control needs of a specific construction project.

- G. Section S11.A.1. This section specifies that Port tenants are to submit an NOI and obtain a General Permit related to erosion control. The Port believes this is an unnecessary burden on its tenants. Inasmuch as any area of tenant activity will discharge to the Port's outfalls, the Port assumes full responsibility for effective implementation of CESCP's by tenants. The Port therefore believes that the Port's NPDES permit should cover tenant activities within the boundaries of the NPDES permit.

Department Response: Comment noted. Please see new language in S12.A.1.

12. Spill Plan

- A. It is not clear to the Port how this requirement differs from spill control and hazardous waste plans already prepared in accordance with Federal and state regulations. The Port is concerned about the duplication of existing individual plans that already protect the IWS and storm drainage systems. If it is DOE's objective that the Port assemble all of the existing individual plans into one document for submission to the DOE, the Port would appreciate that the DOE so indicate in the permit.

Department Response: The permit condition requiring the submittal of a spill plan for the airport states that, "For purposes of meeting this requirement, plans and manuals required by 40 CFR Part 112 or contingency plans required by Chapter 173-303 WAC may be submitted." Therefore, if the plans exist, compile them and submit them in one package without duplicating the effort.

- B. The spill plan should include a requirement to notify all downstream agencies that would have jurisdiction over waterways that could potentially receive spill contaminants.

Department Response: The Department will make sure that the appropriate authorities are included on the notification list when we review the spill plan.

13. Solid Waste Disposal

No comments were received on this special condition.

14. Fact Sheet

- A. Please include more information regarding ethylene and propylene glycol in the fact sheet.

Department Response: Comment noted. More information has been included in the fact sheet and more references have been cited on this subject.

- B. Are cleaning agents included in the industrial wastewater?

Department Response: Yes. The Department expects that plane washwater will contain cleaning agents.

- C. Table 1 is very misleading. It implies that all of the buildings and paved areas listed in the table discharge to the storm drain system. This is not true for basins SDE4, SDS1, SDS3, SDN1 and SDN2. With few exceptions all of the "buildings and pavement" shown in Table 1 for these five basins drain to the IWS.

Regarding SDE4: None of the "buildings and pavements" shown in Table 1 discharge to the storm drains except roof tops and parking lots, and these specific exceptions: a small area in front (south) of the Fire Department, the yard area on the south side of the Port Maintenance Shop, and a small area between this yard and the United Air Cargo building,

and an area to the northwest and north of the North Satellite.

Regarding SDS1: Only rooftops and parking lots associated with the buildings noted in Table 1 discharge to the storm drains. And a small area between concourse B and the South Satellite discharges to the storm drain system.

Regarding SDS3: In addition to rooftops, a portion of concourse C discharges to the storm drain system. However, this area will be connected to the IWS this year. The Weyerhaeuser area drains to the IWS.

Regarding SDN1: Only the rooftops of the two air cargo buildings drain to the storm drains, but the areas around the buildings drain to the IWS.

Regarding SDN2: Only the taxiway drains to SDN2.

Department Response: The Department recognizes that there is overlap between the IWS and SDS drainages and the fact sheet has been edited to make this clearer. The Department also appreciates the clarification of sources of storm water runoff subject to regulation by this NPDES permit in each SDS basin. However, the Department disagrees with the assessment that Table 1 is misleading. On the contrary, Table 1 is very useful because it lists the buildings and businesses located in each of the storm water drainage basins and indicates the type of activities which may occur in the storm water basin. Further, the table was copied from a report submitted to the Department as part of the permit renewal application, Water Quality Monitoring Report. Storm Water and Industrial Wastewater at Seattle-Tacoma International Airport. Prepared by Herrera Environmental Consultants for the Port of Seattle, October 1993.

- D. It should be made clear that water supply, stock watering, primary contact recreation, boating and commerce and navigation are not "characteristic uses" of Des Moines and Miller Creeks, but rather are potential beneficial uses stated in the water quality standards.

Department Response: Comment noted. The language has been changed to read, "potential characteristic uses include..."

- E. The Department received many lengthy comments on the description of the receiving water, particularly Des Moines and Miller Creeks. The following comment is one example:

The statement "composition of the benthos was observed to vary with spills and storm events, and the deterioration of the benthic community...inhibited the survival of resident fisheries in both creeks" is misleading in several respects. The word "spills" implies numerous spills when in fact few have occurred. In fact, the 1974 study examined Des Moines Creek after one (not numerous) spill and concluded that the spill had adversely affected certain invertebrates, not the benthos in general. Secondly, no spills have occurred to Miller Creek; your statement implies the opposite. It would be most appropriate for the DOE to quote the statement in the 1974 report on page 25: "On the whole, the benthic communities reflect the generally unstable environment that the streams exhibit following strong variations in water flow, turbidity and slight toxicity. These variations prevent a more stable colonization".

Department Response: All the comments received on the description of the receiving water, particularly Miller and Des Moines Creeks, are duly noted. Based on the length and the depth of these comments, it appears impossible to describe in a few paragraphs with any accuracy what is known about the creeks and the studies that have been conducted. Therefore, the language in the fact sheet has been abbreviated, and the reports that were extensively quoted in comments have been emphasized as reference sources for anyone interested in learning more about the creeks.

15. General Comments

- A. We would like to work with the Department of Ecology on issues at Sea-Tac Airport in the future.

Department Response: The Department acknowledges and respects the deep concern the environmental organizations and communities around the airport have regarding permit compliance and water quality/quantity issues affecting Miller and Des Moines Creeks and Puget Sound. To provide you with greater involvement opportunities, the Department offers the following:

- 1) The Department will maintain the mailing list established during this public comment period, which includes everyone who attended the public meeting and public hearing or submitted written comments. This list will be used to provide general updates to the community as needed.
- 2) The Department will work with leaders from the local communities and environmental organizations to establish a smaller citizen's technical review committee whose members

will agree to communicate with their respective "constituents". The Department proposes meeting initially with this committee 2-3 times per year to review permit compliance and the reports that are submitted according to the permit requirements.

3) The Department will require the Port to submit an additional copy of each report and plan submitted, excluding the monthly discharge monitoring reports. The Department will send one to a local library, or another location that is accessible to the public, has regular hours and will reserve shelf space for public review of Sea-Tac Airport NPDES Permit Documents.

4) All documents that the Port of Seattle submits to the Department are public records. To review or request copies of documents, please contact the Public Records Officer at the Northwest Regional Office, 649-7000.

- B. The Port understands that the permit applies to all areas that lie within the drainage areas tributary to the outfalls identified in the permit. However, an explicit statement to this effect is needed in the permit to avoid any expectations that activities on Port property outside this boundary are covered by the permit.

Department Response: The Department disagrees about the need for an explicit statement in the permit. The permit applies to all areas wherein industrial activities associated with airfield activities occur, including but not limited to aircraft and ground vehicle maintenance, fueling, washing, and de-icing.

- C. General condition G3: For the airfield, "production" means air traffic. As this section is currently written the Port could be forced however remotely to curtail use of the airfield, a serious regional impact. The verbiage in section G3 is appropriate for industrial plants where it is possible to define the relationship between production and wastewater flow and/or quality. However, it is not technically possible to develop a quantitative relationship between air traffic and stormwater quality. The Port would appreciate verbiage that is appropriate for an international airfield.

Department Response: The Department is required to place identical language for General Conditions in every permit and is unable to change the verbiage as the Port wishes.

- D. General condition G5: Does the DOE consider that an overflow of stormwater from Lagoon 3 during an extreme event constitutes an "intentional diversion of wastestreams"?

Department Response: The Department considers an overflow of process wastewater from a lagoon due to an event beyond the design capacity to be a bypass. This type of bypass would be an allowable bypass under General Condition G5. Bypass from Lagoon 3 must be reported to the Department, as required in G5.C.

- E. General condition G5: DOE needs to define bypass for two scenarios: the traditional scenario of temporarily bypassing a treatment plant while repairs are being made (to which the current language in the permit applies) and to situations in which the lagoon capacity may be exceeded by an extreme storm event. The capacity of the lagoons and therefore the event at which overflow is allowable could be identified during the AKART analysis, taking into consideration FAA stipulations regarding bird attractants and airline safety.

Department Response: See the above response (15D).

- F. General condition G5: If the Port installs a stormwater treatment device sized to treat, say, the six-month storm, and further it is an off-line facility, is the Port out of compliance with regard to bypasses? Does this section apply only to the IWS or also the SDS?

Department Response: General Condition G5 was intended for process wastewater discharges. For storm water, bypass is the intentional diversion of storm water whenever the design capacity of the treatment system is not exceeded. The Department does not want to be notified whenever the design capacity of storm water treatment BMPs is exceeded.

- G. General condition G5: The DOE needs to specify more clearly what is meant by "public notified"? It is not clear how the Port can notify the public before an overflow event from lagoon 3 given that its possible occurrence will be known only a few hours before it occurs.

Department Response: The intent of G5.D is public notification of intentional bypass, as in the case of "the traditional scenario of temporarily bypassing a treatment plant while repairs are being made."

- H. General condition G16: Does this verbiage also apply to stormwater treatment systems? Is the Port out of compliance of a storm causes the resuspension of sediments in the bottom of a stormwater treatment facility?

Department Response: The Port will not be held responsible for sediments which are resuspended in a sedimentation pond, as long as a schedule of routine maintenance for removal of sediments is adhered to.

- I. Provide, or require the Port to provide the City and other stakeholder agencies with the opportunity to review plans, data and progress reports so that we can directly assess the Port's level of compliance with the permit requirements.

Department Response: As stated in 15-A, above, the Department will require the Port to submit additional copies of all plans and reports so that one that can be kept in reserve at a local library for the community to review. Please see new language in S4.A.

- J. The water quality issues of toxic materials appears to have been strongly addressed. Somewhat less clear to us is how the impacts of elevated flows on the stream health will be assessed. ... We would like to be sure that these water quantity issues are treated with the same level of attention as the water quality issues.

Department Response: Comment noted. Section S8.A.6 has been added to require the Port to evaluate water quantity effects of the storm water discharges on streambank erosion in Miller and Des Moines Creeks.

- K. DOE may want to try to develop with the Airport a better understanding of SPC (Statistical Process Control) approaches to water quality management in order to supplement a traditional inspection and audit program. SPC would be used to address water quality end item characteristics and to control the upstream processes that affect them.

Department Response: Comment noted. Under the SWPPP, the Port is required to identify sources of pollution and take steps to control them. To accomplish this, the Port will have to work more closely with its tenants to control their upstream processes that may be causing pollution. Pollution prevention will also be addressed in the IWS Engineering Report. The Department emphasizes pollution prevention in

all program areas; water Quality staff will work with the Hazardous Waste and Toxics Reduction staff to provide any necessary assistance to the Port and its tenants to control the upstream processes affecting storm water and industrial wastewater effluent.

- L. An inspection and audit program is not clearly addressed in the draft permit and should be spelled out. We also ask that the DOE put in the permit that DOE will perform at least annual physical audit and data reviews with the airport to assure continued compliance with the NPDES full requirements. The results should be published and available to interested groups.

Department Response: Department policy is to inspect NPDES permittees at least annually. All inspection reports are public record, and as such, will be placed in an information repository, as discussed in the response to comment 15A.

- M. Why shouldn't airlines be required to recycle and reuse de-icers?

Department Response: Since the Port of Seattle, and not the airlines, is the Permittee for this permit, the Department can not require the airlines to recycle and reuse de-icers. The Port of Seattle, however, can require the airlines to take certain actions based on their need to maintain compliance with this permit. Once the Port has more definitive information about the use of de-icing and anti-icing agents at the airport, the Port will be better able to assess its options for handling spent de-icing fluid and controlling its discharge.

- N. If the Port diverts flows to Metro, will pre-treatment standards be as stringent as anticipated NPDES standards? Is there a public process associated with determination of pretreatment standards? Sea-Tac is not in the Metro service area, how can that be changed?

Department Response: METRO is a delegated pre-treatment authority that issues its own permits. Sea-Tac Airport may be able to discharge to METRO if METRO agrees to accept the pre-treated industrial wastewater into its system. Please contact METRO at (206)689-3000 for information on METRO discharge permits and pretreatment standards.

Pre-treatment standards are typically not as stringent as NPDES limits for discharge to surface water because pre-

treated wastewater receives further treatment at the POTW. Pre-treatment standards are set at levels that will protect the proper functioning of the plant, water quality, and to ensure compliance with permit limits at the treatment plant's outfall.

- O. Spills during aircraft refueling are a routine occurrence. How confident is Ecology that these are accurately reported? Aren't there technologies available in aircraft design or fueling equipment to minimize spills? Why can't Ecology mandate study of this matter?

Department Response: The prevention of fuel spills falls into the category of pollution prevention. The Port should address this issue in the Storm Water Pollution Prevention Plan and the IWS Engineering Report.

The allegation that spills frequently occur during aircraft refueling is not supported by the facts. In addition to the environmental hazard, there have always been fire and health hazards associated with jet fuel spills. As a result, OSHA, the FAA, and the National Fire Code have set strict spill prevention requirements such as check valves, overflow detectors and cutoffs, pressure testing requirements for hoses and couplings, and training requirements for airline personnel conducting refueling operations.

- P. We find glaring inadequacies not only in the hazardous materials spill control plan, but also the effluent limitations plan. We feel these subjects have not been thoroughly addressed, and further, lack the controls necessary for an applicant who has displayed a dismal record of noncompliance. This draft permit lacks the 'teeth that a watchdog have in guarding our precious resources'. For these reasons we hereby request a public hearing on this draft of the permit.

Department Response: A public hearing was held on May 24, 1994 in response to the request. The hearing transcript is attached as Appendix B.

- Q. We feel it is inappropriate for the Port of Seattle to do their own water sample collection to ensure their compliance with the State of Washington Water Pollution Control Laws. This is a serious conflict of interest and the Department of Ecology should be directly responsible for sample collections and testing controls.

Department Response: The Clean Water Act enabled the NPDES permit program recognizing that the states do not have adequate resources to conduct all the daily, weekly, monthly, quarterly, semi-annual and annual monitoring on all of the facilities that have NPDES permits. Therefore, the program requires permittees to conduct their own monitoring and requires them to report that data to the Department.

Permit Condition S4.I specifies who shall sign and certify the submittals and reports required in the permit. The person who is responsible for the permit and the documents submitted as required by the permit may be subject to civil and criminal penalties for falsifying any information. The certification, in paragraph 4 states that any person signing a document under this section, such as a Discharge Monitoring Report, must declare:

"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 willful violations."

- R. The Department of Ecology should, as quickly as possible, develop new regulations for the disposal of airport runoff waste at Seattle-Tacoma Airport. The current permit given to the airport presents an unacceptable risk to the surrounding community by polluting local waterways. Greater regulation of the airport waste runoff is needed.

Department Response: It is not clear what is meant by "current" permit. However, in this response the term "existing permit" refers to the expired permit that has been administratively extended until a new permit can be issued, and "draft" refers the new permit that has just been through an extensive public review period.

The draft NPDES permit was written according to the rules and regulations governing water quality pollution control in Washington State as of 1994. Developing new regulations for the airport runoff at Sea-Tac Airport would be time

consuming and inefficient process for a single facility.

The Department acknowledges that the existing NPDES permit for the airport, which was issued in 1987, is woefully inadequate for protecting Miller and Des Moines Creeks and Puget Sound. For just this reason the Department has been working diligently to re-write the Airport's permit using all the regulatory tools available to protect water quality in these water bodies.

- S. The process planned by the Department of Ecology for amending the airport runoff permit will take too much time. Three years is entirely too long for the damage to continue. The Department should amend the permit this year.

Department Response: The Department intends to replace the existing permit with a new permit by July 1994. The new permit issued to the Port of Seattle for Sea-Tac Airport will be the draft permit, modified to some extent by public comment received between February 24, 1994 and June 23, 1994.

A typical permit cycle for both municipal and industrial wastewater dischargers is five years. Facilities with storm water-only permits are on a three year permit cycle. The new permit for Sea-Tac Airport, which has both types of discharge is scheduled to expire three years after it is issued. This cycle is shorter than other permits for the following reasons:

- 1) It places Sea-Tac Airport on the same compliance schedule as other industrial facilities that are covered under Washington's Baseline NPDES Industrial Storm Water permit.
- 2) Three years is the amount of time necessary to generate sufficient data for the Department to determine final effluent limitations and for the Port to design and construct a new wastewater treatment plant.
- 3) According to its new watershed approach, the Department will be focusing on the Cedar/Green River basin, which includes the area around Sea-Tac Airport, in 1997, three years from now. This makes it an appropriate time to revisit the Airport's NPDES permit.

- T. What steps does the DOE's proposed permit take to immediately correct the awful conditions described in Ingrid Hansen's 1993 report Water Quality Issues Related to Sea-Tac Airport Operations? Specifically, the inadequacy of the

IWS, ethylene glycol pollution, solvent and chemical contamination, fire fighting foam emulsions, groundwater contamination by leaking fuel tanks and spills, and jet fuel spills to the creeks?

Department Response: The draft permit was written to address all of these issues. The Port is required in the permit to direct all industrial wastewater to the IWS collection system, to build a new treatment plant, and to implement BMPs for the prevention of storm water contamination. See comments 10C AND 15S on the need for a compliance schedule.

The issues of leaking fuel tanks and groundwater contamination is not addressed through the NPDES permit program. These issues are handled by Ecology's Toxic Cleanup Program. Please contact Roger Nye at (206) 649-7251 for information on cleanup issues at Sea-Tac Airport.

- U. The proposed NPDES waste discharge permit is so poorly prepared, incomplete, and lacking in procedural safeguards that it is totally inappropriate for the proposed application. Until the Port is compelled to correct problems cited I request that DOE deny the Port of Seattle's NPDES waste discharge permit request.

Department Response: To deny a permit to the Port of Seattle's Sea-Tac International Airport would equate to shutting down the airport indefinitely. The Department disagrees with the assessment of the draft permit in this comment and argues that the draft permit is an essential step in getting the Port of Seattle up to date in its environmental responsibilities. Most importantly, the draft permit would hold the Port to compliance with the most current rules and regulations in Washington, place a time limit on an IWS upgrade and require an extensive receiving water study to better understand the nature of the airport storm water discharges and their impacts on Miller and Des Moines Creeks.

- V. There are not enough monitors with the DOE. I would suggest there are plenty of volunteers who would be willing to be deputized to monitor the outflow from the airport. Please look into whether or not this is possible.

Department Response: Ecology will consider a stream monitoring program made up of citizen volunteers similar to the current "Lakes Program" of citizen monitoring coordinated by Ecology's Environmental Investigations and

Lab Services.

- W. I'm appalled at the Port's lack of compliance. Why hasn't Ecology taken enforcement action? The Department of Ecology is urged to strictly enforce any permit requirements set forth in this permit.

Department Response: When the Department identified permit violations in the September 1992 inspection report, the Department considered two options for action: expend agency resources pursuing enforcement action or expend agency resources to get the Port back on track. The application for permit renewal was due April 30, 1993 and the Department made the decision that, since the existing permit was inadequate to address the environmental concerns raised, it was critical to make sure the Port submitted a complete application in order for the Department to write a meaningful permit. The Department has been working since Spring, 1993 to obtain and compile complete application information, research the issues, draft a new permit and provide opportunities for public comment. As it is, the new permit will be issued June 30, 1994, eight months after the last permit cycle ended. Trying to renew the permit and pursue enforcement at the same time would have delayed the process even longer.

The Department will take enforcement action to force compliance with this permit if necessary.

- X. Runoff from the livestock quarantine area should not be allowed to discharge into Miller Creek.

Department Response: This was also a concern of the Department. According to the Port, the livestock quarantine area is not being used except as extra storage space for equipment and machinery.

- Y. Sea-Tac Airport should not be allowed to discharge de-icing, anti-icing or other hazardous materials to Miller Creek. The current draft of the permit does not protect aquatic life from these toxins and does not protect the health of humans.

Department Response: The SWPPP requires that all hazardous and toxic materials be removed from the storm water discharges. The Department believes this will adequately protect human health and the aquatic environment.

- Z. Will the Department of Ecology coordinate with other agencies, for example, the Puget Sound Air Pollution Control Agency?

Department Response: Yes. In fact, the Puget Sound Air Pollution Control Agency has requested to work with the Department on airport-related issues and the Department is very willing to do so.

- AA. What is the relationship of the airport discharges to groundwater quality? Is there some potential for the contaminated groundwater to affect drinking water aquifers?

Department Response: Currently, there are no intentional discharges of wastewater to ground water. Please contact Roger Nye of Ecology's Toxic Cleanup Program at (206) 649-7251 for information on contaminated ground water at Sea-Tac Airport.

- BB. The Port should discharge its storm water directly into Puget Sound through a pipe that runs the length of Miller Creek.

Department Response: The Port of Seattle may choose to investigate this possibility.

- CC. The airlines should be using glycerin and alcohol, or other non-toxic products, to de-ice planes.

Department Response: Only the Federal Aviation Administration can specify what agents can be used to de-ice planes. The Department is trying to convey in this permit that toxicity is only one characteristic to be considered in evaluating any discharge contaminant. Propylene glycol, for example, is non-toxic, and the Food and Drug Administration has declared it "Generally Recognized as Safe." Yet propylene glycol exerts a very high biochemical oxygen demand (BOD) as it degrades in the aquatic environment. High BOD can severely deplete oxygen in a water body to the extent that fish swimming through the discharge might suffocate.

- DD. I have learned that at least one and perhaps several current State Department of Ecology employees are on the payroll of the Port of Seattle. If true, this presents an obvious potential conflict of interest between the Port and the Department of Ecology and may explain DOE's nonfeasance in

requiring the Port to correct the problems.

Department's Response: The Department's Toxic Cleanup Program has two positions which are funded by the Port, one to work on Sea-Tac cleanup issues (Roger Nye) and one to work on the Marine Division cleanup issues (Glynis Carrosino). Roger and Glynis are employees of the State of Washington, but their positions are funded by the Port. This setup enables the Department to dedicate time to regulating the extensive Port activities, without the funding the Department would not be able to regulate the Port as thoroughly as is needed. These positions are not related to the NPDES permit management.

EE. I would like to see the immediate establishment of a detention pond for the storm water discharges into Miller Creek.

Department Response: The three northernmost drainage basins (SDN-1, SDN-2, and SDN-3) drain to Lake Reba, a detention pond. The outfall from Lake Reba flows to Miller Creek.

RESPONSIVENESS SUMMARY FOR THE PORT OF SEATTLE SEATTLE-TACOMA INTERNATIONAL AIRPORT MODIFICATION

The Department received comments from the City of Burien, Dan Caldwell, Peter J. Eglick and Kevin L. Storck of Hessel Fetterman on behalf of the five cities (Burien, Des Moines, Federal Way, Normandy Park, Tukwila) and the Highline School district that comprise the Airport Communities Coalition (ACC) Greg Wingard, Peter Willing, Water Resources Consulting, L.L.C., John A. Strand, Ph.D. with Columbia Biological Assessments on behalf of the Airport communities Coalition (ACC), Peter Willing, Ph.D. on behalf of the Airport Communities Coalition, Arlene Brown, Andrea Grad, Rick Poulin of Smith and Lowney, Al Furney, Arlene Brown, Derek Wentorf of the Puget Soundkeeper Alliance, Jim Bartlemay, JoAn E. Cox, Senator Dow Constantine, Senator Tracey Eide, Senator Julia Patterson, Representative Karen Keiser, Representative Joe McDermott, Representative Mark Miloscia, Representative Erik Poulsen and Representative Shay Schual-Berke.

1. Specific outfalls are not listed on the first page of the permit for the added construction sites as they are on page 2 for the permanent outfalls which list latitude and longitude. Only water bodies are listed not specific outfalls. Water body I.D. numbers are not listed. The exact outfalls are necessary for the public to comment on and is crucial information for commenting on understanding the impacts. The permit allows a discharge of unknown pollutant, in unknown amounts, at unspecified locations, into unspecified receiving water at unknown times in the future. Water Body (viii) Named and unnamed tributaries, storm drains and other waters of the United States tributary to the receiving water identified in (ii) - (vii) above does not allow specific comments on the outfalls or receiving waters.

Response: The receiving water bodies are listed. Water body I.D. numbers for Walker and Gilliam Creeks are added. The Department is transitioning from the water body I.D. numbering system to a numbering system based on the longitude and latitude of water courses. Geographical Information Systems support the shift to this system using what are labeled LLID numbers. Walker and Gilliam Creeks were not catalogued in the old WBID system, but now have identification numbers in the new system. The new LLID numbers are displayed on Page 1 of the final permit modification.

It is difficult to predict the exact location of stormwater discharges for projects that are in early stages of design. Further, the schedule of construction projects cannot be predicted during the 5 year term of the permit term. Special Condition S13.C.4. requires a monitoring plan for stormwater and construction dewatering discharges submitted to the Department for review and approval at least 30 days prior to the start of construction. The outfalls for construction storm water discharges will be identified at that time. The receiving water bodies for the to be determined outfalls have been identified as Des Moines Creek, Miller Creek, Gilliam Creek including tributaries and Walker Creek including tributaries. Through the standing public disclosure request the Airport Communities Coalition will be notified of the precise points of discharge.

Also, the Water Body (viii) *Named and unnamed tributaries, stormdrains and other waters of the United States tributary to the receiving water identified in (ii) - (vii) above* will be eliminated.

In most cases construction permits do not list temporary outfalls. This is the case for the National Pollutant Discharge Elimination System for Stormwater Discharges Associated with Construction Activities. This permit is the most common permit issued for sites similar to the construction activities for the Third Runway and Master Plan Updates projects.

Construction stormwater discharges are characterized for turbidity, pH and oil and grease.

2. The comment period must be extended so the public can comment on unnamed tributaries and outfalls and until the relationship with the pending 401 certification request has been clarified.

Response: Based on this request the comment period closing was extended from February 26, 2001 to March 12, 2001. The Department is amending the final modification by narrowing its application and language. Also, Water Body (viii) *Named and unnamed tributaries, stormdrain and the waters of the United States tributary to the receiving water* authorization has been eliminated.

3. The Construction Stormwater Pollution Prevention Plans are inconsistent, confusing does not allow the public to precisely and easily identify facilities and outfall locations and isn't in the standard format provided by the NPDES permit.

Response: The stormwater pollution prevention plan (SWPPP) requirements under Condition S13 for construction activities follows the standard format for large construction sites NPDES permits. Specific identifications are listed in the temporary erosion and sediment control stormwater monitoring plans. For example the discharge points and upstream and downstream points in receiving waters for the Delta Airlines Ground Service Equipment Building Seattle-Tacoma International Airport dated December 17, 1999 were listed as:

- Site Discharge: the west inflowing pipe into Manhole 4-982
- Upstream: Manhole SDE4-977
- Downstream: Manhole 4-996

These are precise and easily identified facilities and outfall locations. Maps with specific locations are included.

4. The permit does not list the construction projects.

Response: The construction projects are listed in the Master Plan Improvement Projects for development of the site. Permit conditions do not change for each project since construction stormwater and uncontaminated dewatering water will have the same characteristics regardless of the project.

5. Walker Creek has never been subject to NPDES permit related discharges from the airport. It is a largely pristine waterway with fairly intact (for an urban waterway) habitat. It joins Miller Creek shortly upstream from the estuary with Puget Sound and there will be a significant increase in pollution loading and flows in the lower reaches of Miller Creek, the focus of a number of habitat improvement related projects which are jeopardized by the proposed permit modification. TSS is at 96 milligrams per liter from Outfall 012 discharging to Gilliam Creek.

Response: Monitoring will ensure state criteria and the pristine waterway and habitat are protected from pollutant discharges of turbidity, pH and total petroleum hydrocarbons. This will include upstream downstream monitoring of each outfall for direct comparison to the criteria and monitoring for oil and grease and no visible sheen. If state criteria are attained the water bodies are protected.

6. The creation of new outfalls will vastly increase airport caused pollutant loading and will also impact Chinook salmon which have been identified in the lower reach of Gilliam Creek. The Port and Ecology have previously claimed no impact from the proposed third runway. Yet the NPDES major modification approves such projects and outfalls related to the third runway and Master Use Plan, even though there has been no consideration of the related impacts under the National Environmental Policy Act, the 401 Certification/404 Permit process or the Endangered Species Act under the FAA consultation with NWMFS. The permit does not protect habitat for salmon and salmon prey species.

Response: Threaten species under the Endangered Species Act are protected by the state criteria for aquatic life listed in WAC 173-201A. The criteria protects characteristic uses such as salmonid migration, rearing, spawning and harvesting in Gilliam, and Walker Creeks. The monitoring, recording and reporting requirements provided in the NPDES permit will ensure protection of characteristic uses. Certification under Section 401 of the Act will address the impacts from construction.

7. Low flow conditions from increase impervious surface in the water shed as a result of construction will impact Gilliam Creek a small creek with relatively low flows.

Response: The low flow impacts from added impervious surfaces are addressed in the extensive analysis and extensive and complete review of the *Comprehensive Stormwater Management Plan, Master Plan Update Improvements, Seattle-Tacoma International Airport*. December, 2000.

8. The NPDES permit and the permit modifications currently under consideration for the SeaTac International Airport, fail to require the new construction related outfalls to meet the water quality standards. As such, the airport's NPDES permit itself and the proposed modifications to that permit are out of conformity with the requirements of the CWA. The language for S2.E. needs to be modified to require the data to be presented in such a fashion as to allow a determination of compliance with the water quality standards.

Response: Turbidity, pH and total petroleum hydrocarbons are the criteria characterized for construction stormwater discharges and are included in the monitoring plans for each construction activity falling under S13 discharging to surface waters of the state. These monitoring requirements have been added to Condition S2 for the added receiving water bodies of Walker and Gilliam Creeks. The permit will require turbidity, oil and grease and pH in the units of the standard for direct comparison.

9. The permanent stormwater outfalls violate toxic metals criteria and the permit itself does not require the Permittee to meet water quality standards. The permit only states the criteria as an objective.

Response: The permit modification is limited to temporary construction outfalls not the permanent stormwater outfalls. Compliance with state criteria is required for the temporary construction outfalls whether or not it is included in the permit and whether or not it is listed as an objective.

10. The Department has established the need to monitor and sample construction related discharges on a statewide basis due to the inability of BMP implementation to meet water quality standards.

Response: The monitoring requirements required under the permit go beyond the requirements at most construction sites in the state. This is the case for the NPDES General Permit for Stormwater Discharges Associated with Construction Activities, by far the most common permit for construction sites. No monitoring is required under the General Construction permit.

11. The Northwest Ponds are illegally used for treatment without Ecology enforcement.

Response: The Northwest Ponds are not used to treat construction stormwater and are outside the scope of the permit modification.

12. Imported contaminated fill soils and numerous contaminated structures and areas of contaminated soils that are disturbed during construction will cause a discharge of toxics without specific monitoring requirements.

Responsiveness Summary

Port of Seattle, Seattle-Tacoma International Airport

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Response: The Department will ensure the fill meets the requirements listed in the 1999 Airfield Project Soil Fill Acceptance Criteria prior to the application. There is no known area of contaminated soils within the footprint of the Third runway. Furthermore, the majority of the site will be paved minimizing contact between stormwater and soils.

13. The Port is out of compliance with the Model Toxic Cleanup Act Agreed Order dated May 25, 1999.

Response: This is outside the scope of the modification of the NPDES permit for construction sites.

14. Ecology is allowing discharge of metals including copper, lead and zinc and other toxics such as commercial formulation of glycols at levels known to threaten, harm or harass listed species such as the Chinook Salmon which inhabit Gilliam Creek. This is a take under the Endangered Species Act.

Response: The discharges from construction sites are not characterized for heavy metals or glycols.

15. WDOE should not adopt the proposed permit modification. Instead WDOE should require the Port to treat each of the major stormwater outfalls to Miller Creek, Des Moines Creek and Gilliam Creeks prior to final approval of another modification of the NPDES Permit. Each of the major stormwater outfalls should be tested for metals, glycols dissolved oxygen(CO), biological oxygen demand, turbidity, fecal coliforms, etc. as well as periodic toxicity testing, both above and below the sources of stormwater, should be included in the new permit. The existing outfalls violate state criteria for metals. Sediments exceed the Lower Effects Levels for lead and zinc from the Guidelines for the Protection and Management of Aquatic Sediment in Ontario Guidelines. Lead and zinc concentrations found in cutthroat trout in the upper reach.

Response: Dissolved oxygen, biochemical oxygen demand, metals, glycol and fecal coliform are not characterized for construction sites and uncontaminated construction dewatering water. The permit modification is limited to the construction areas, not the existing stormwater outfalls.

16. The Port no longer measures metals concentrations in water or sediments below its outfalls nor does it model the fate of metal in its stormwater and receiving water. Copper, lead and zinc could persist over the entire length of each creek to their outfalls to Puget Sound.

Response: It is not anticipated that the construction storm water discharges to Walker and Gilliam Creeks will contain metals. However, metals monitoring is required for non construction stormwater and industrial wastewater.

17. Although not monitored routinely turbidity in area streams traceable to construction at STIA continues to be a problem.

Response: Discharge and upstream and downstream monitoring is part of the monitoring plans submitted by the Port for each construction phase. See Condition S2. Monitoring for the added receiving waters of Walker and Gilliam Creek will include minimum monitoring requirements to determine compliance with the turbidity standards in WAC 173-201A.

18. Increased discharges of deicers will result from the increased impervious surface as a result of the deicers. These are highly toxic to aquatic life at relatively low concentrations.

Response: Deicers are not discharged from the construction sites and are not characterized for construction stormwater discharges. Permanent discharge locations are currently monitored for deicers.

19. Good science requires that monitoring occur both above and below each outfall during wet season and at all outfalls both permanent and temporary (construction-related).

Response: The Department agrees. When reviewing monitoring plans the Department considers this monitoring protocol

20. Metals reporting should not be obscured with median values and hardness should be inserted into Section S2.A.

Response: Metals reporting is outside the scope of this permit modification. Hardness is also outside the scope since the toxicity of pollutants characterized for construction sites are not hardness dependent. The pollutants that are characterized for construction sites will be reported in the units of the state criteria for direct comparison.

21. Limitations and monitoring need to be established for common pollutants from construction areas (TSS, turbidity, etc.) so as not to destroy the ecosystem for the receiving water. The permit does not impose the minimum requirement of the King County Surface Water Manual to remove 80 percent of TSS.

Response: The Department concurs. The Department will establish specific monitoring requirements for Gilliam and Walker Creeks. Turbidity is a measure of light defraction

of smaller lighter harder to control solids. Total suspended solids is a weight determination dominated by heavier particles. If turbidity is controlled than the more easily controlled solids will also be controlled. TSS will not therefore be monitored.

22. A mention should be made concerning Best Management Practices limiting the sediment and other pollutants that enter the water as a result of this work.

Response: The Department agrees. Pollutants must always be minimized in discharges. Condition S14. requires sufficient detention in accordance with the Stormwater Management Manual for the Puget Sound Basin or equivalent for all construction. S13. will be changed to increase the stringency of new facility design for discharges to Walker and Gilliam Creeks to the peak flow for the ten year 24 hour design storm.

23. Monitoring plans for construction stormwater discharges should always be approved within 5 days prior to the scheduled date of construction and not deemed approved as S2.C. allows.

Response: The Department believes the monitoring plan approval system in S2.C. is appropriate. The Department prefers to review each plan and return comments. Staffing does not allow the necessary inspections for each project and monitoring location. Also, many of the plans are similar.

24. The AKART report in S4. for the Industrial Waste Water Treatment should include milestones. The permit should require training of IWS operators. The number of tests and standards for testing should be included in S8.C. for the IWS.

Response: The IWS is outside the scope of the modification for added construction sites. They do not discharge to the IWS.

25. The Permittee should be required to have an operator-training course and the operator should be required to meet certain qualifications set forth by Ecology.

Response: Port of Seattle stormwater staff are certified by the Washington State Department of Transportation sponsored through the *Construction Site Erosion and Spill Control Certification Course*.

26. S8.C. allows the Permittee to petition for less frequent testing if "both species demonstrate low sensitivity."

Response: S8.C. Acute Toxicity - Industrial Wastewater does not apply to construction stormwater.

27. Copies of the SWPPPs should be kept by the Department and updated with inspection reports.

Response: The SWPPP listed in S12 and S13 requires the Permittee to conduct seasonal inspections and updates to the SWPPP. The Department will review SWPPPs during inspections of the construction sites. Condition S3.B. will be changed to require routine submission of monitoring reports for Gilliam and Walker Creeks to aide in determining implementation of adequate SWPPPs.

28. The embankment is unsafe and dam safety analysis is ignored, construction traffic is unknown, construction air pollution has reduced visibility, earthquakes will cause a risk of stormwater pond failure, only in-basin mitigation for wetland impacts should be considered, a new airport should be considered, the airport was caught and fined numerous times in 1999, the port made misleading comments on costs of third runway and the Port stole water.

Response: These are outside the scope of the permit modification for construction sites.

29. Stormwater ponds take 20 years to function properly.

Response: Stormwater ponds are effective immediately after construction. They fail if not maintained after startup. Maintenance is required under Special Condition S13.C.1.c. Inspection and Maintenance to prevent pond failure.

30. Condition S1.E. exempts stormwater flow from the IWS and lagoons "due to stormwater flow in excess of the design criteria". Under Condition S5.B. overflow are not considered a bypass and will not constitute a violation. The permit needs to define a design storm to be enforceable.

Response: The IWS and associated lagoons are outside the scope of the modification to expand the construction sites. This concern may be revisited during the next permit renewal.

31. Condition S14. Requires compliance of the stormwater construction actions constructed in accordance with the stormwater Manual for the Puget Sound Basin. This is less stringent than the design for the Third Runway and Master Plan Update projects. The NPDES permit should be modified to define the "updated" detention standards as part of the permit language and to require that the updated standards be met for all new and retrofit construction.

Response: The Department agrees. The temporary erosion and sediment control ponds are designed to meet at least a ten year 24 hour design storm. A permit modification will

be added to require this updated design for the new detention facilities discharging to Walker and Gilliam Creeks covered by the modification.

32. The NPDES permit should not be modified for the expanded areas if the 401 and 404 permits are not issued for the Third Runway Project.

Response: The NPDES permit is issued under Title IV Section 402 of the Clean Water Act. State Certifications are issued under Title IV Section 401. Title IV Section 404 pertains to dredging issued by the Corps of Engineers. Section 401 and 402 are issued under independent sections of the Clean Water Act and in no particular sequence. Therefore they can be issued independently. Consistency will be maintained between the permits that are issued by the Department of Ecology.