

EPA Responses to Comments
Concerning the
Draft NPDES General Permits:

THE PROPOSED PERMIT FOR LOG TRANSFER FACILITIES IN ALASKA THAT
RECEIVED A SECTION 404 PERMIT PRIOR TO OCTOBER 22, 1985.
PERMIT NUMBER AK-G70-0000

AND

THE PROPOSED PERMIT FOR LOG TRANSFER FACILITIES IN ALASKA,
PERMIT NUMBER AK-G70-1000

Public Comment Period from July 27, 2007 to September 25, 2007
Responses include both Written and Oral comments that were collected during the Public
Comment Period.

Oral comments were received from the Public Meeting on September 6th, 2007 at
Centennial Hall and Convention Center in Juneau, Alaska. All other comments were in
written form.

Table of Comments

Comments below were consolidated into topics and edited for greater clarity. In several comments, more than one interested party made comments about the same subject matter. Similar comments were edited and consolidated to reflect the general topic, which are numbered below.

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Comments below were consolidated into topics and edited for greater clarity. The list of interested parties below that made comments. Some of their comments were grouped, edited and consolidated to reflect the similar subject matter.

<u>Interested Party</u>	<u>Comment Number</u>
Alaska Forest Association	#1, #5, #7, #8, #9, #10, #11
Alaska Mental Health Trust Land Office	#5
Chilkoot Indian Association	#1
Sealaska Corporation	#1, #3, #6, #8, #11, #12, #13, #14, #15
Southeast Alaska Conservation Council	#2, #4, #19, #20, #21, #22, #23, #24
U.S. Forest Service	#5, #7, #8, #16, #17, #18

**Response to Comments on the
Log Transfer Facilities General Permits (LTF GPs)
AK-G70-0000 and AK-G70-1000**

Comment 1: Agreement with Permit Conditions

Comment: The Log Transfer Facility (LTF) General Permits (GPs) had a difficult birth. Numerous years of interagency development, two years of litigation, significant public participation, and there has been a bark monitoring program in place. The hearings officer determined that bark accumulation does not violate water quality standards, bark does not leach toxics to the water column, and bark does not eat up oxygen. The results show that the permits are working. If it ain't broke, don't fix it.

The existing permits have been working fine and many of the proposed changes are reasonable.

- 1) The requirement to prepare and implement a Pollution Prevention Plan (PPP) prior to submitting a Notice Of Intent (NOI) is reasonable.
- 2) It is reasonable to allow EPA the ability to authorize log transfer in waters classed as "impaired" if the operator has a State approved Remediation Plan.
- 3) Allowing Pre-1985 LTFs to continue operations in waters less than 40 feet is reasonable.
- 4) Requiring certification that the Best Management Plans (BMPs) in the PPP will be implemented at the time when in-water log storage or transfer begins is reasonable.
- 5) Requiring greater accuracy for GPS coordinates for the discharge point and permanent monitoring shore markers is reasonable.
- 6) Including the uplands sort yard facilities in the PPP site-map makes sense.

One commenter noted that they had no objections to EPA re-issuing the GPs.

EPA Response: As a result of the previous efforts to develop the general permits, the majority of the contents of these draft general permits were derived from the LTF general permits issued in 2000. The rationale for any changes in the draft permits are described in the Fact Sheet and summarized in Appendix A of the Fact Sheet.

Comment 2: Alternative methods to Log Transport and Storage

Comment: The GPs should require operators to demonstrate why in-water dumping of logs is necessary. EPA's Fact Sheet lists a variety of log transfer methods used in coastal Alaska, including the use of cranes, A-frames, slides, chain conveyors, and direct dumping. *See* EPA Fact Sheet at 7. Missing from this list is any reference to the increasingly common practice in Alaska of constructing or reconfiguring existing dumps to accommodate the transfer of logs directly from shore to barges. Such a method of transfer avoids any discharge of bark and woody debris into marine waters. Such a method of transfer would avoid any harmful effect to marine habitat and resources from the discharge of bark and woody debris and the need for a Zone of Deposit (ZOD).

Both GPs require an applicant to prepare and implement a Pollution Prevention Plan (PPP) prior to submitting a Notice of Intent for coverage under one of the GPs. The purpose of the PPP is to identify and employ all reasonable practices to avoid the discharge of bark, wood debris, and other pollutants to water of the U.S. The direct transfer of logs from shore to barge accomplishes the stated purpose of the PPP.

Therefore, both GPs should require applicants to demonstrate why they are not using this economically reasonable and increasingly current industry practice to avoid, eliminate, or reduce pollutants from entering waters of the United States.

EPA Response: EPA believes that the terms and conditions of the LTF GPs adequately protect Alaska water quality from facilities found eligible to discharge in accordance with their terms. Wherever possible, alternatives to discharging bark and wood debris should be encouraged (e.g., barging of logs, debarking). However, most if not all of the existing LTFs previously authorized under the 2000 GPs have been in existence for decades and previously received a Section 404 permit to place fill to create an LTF and also received other state permits and authorizations for siting and operating a LTF. EPA recognizes that for some timber harvest operations in Alaska, on-site debarking and/or elimination of in-water log storage is not always feasible. For instance, barging or debarking of logs requires additional upland areas for log storage and/or processing. Space for upland development may not be available at all sites. In addition, there may be substantial distance separating the timber harvest area from its marketing destination. The lack of infrastructure in remote harvest areas increases the expense of transporting products (logs, bark and wood debris for recycling) and specialized equipment (barges, debarkers). The investment needed to develop this infrastructure may not always be supported by the scale of operations. Existing information supports that the siting criteria, Best Management Practices (BMPs), and monitoring required by prior NPDES permits have in large measure reduced the environmental impacts from the discharge of bark and wood debris from LTFs.

New LTFs will be reviewed for their eligibility to discharge under the post-1985 GP, thus, it may be determined that a new LTF needs more site-specific review or that it would be more appropriately regulated under an individual permit. Additionally, ADEC prior to authorizing a ZOD for any LTF will consider specific factors, including but not limited to, the feasibility of onshore log storage and barging and whether it has been demonstrated that the operation of the LTF constitutes important social or economic development and a ZOD is necessary to accommodate operation of the LTF. See 18 AAC 70.210, the ZOD regulation, and Sections V.D. and IV.D. of the LTF GPs indicating what information must be contained in an NOI or Notification under the GPs. Based on the foregoing, no change to the permits will be made.

Comment 3: Barging of Logs

One commenter objected to the National Marine Fisheries Service's conservation recommendation that LTF operators should be required to use barging to transfer logs. But the comment did not point to any condition or provision of either permit that should be revised or changed.

EPA Response: The Magnuson-Stevens Act, 16 U.S.C. § 1801 and its implementing regulations require federal agencies to consult with the National Marine Fisheries Service (NMFS) on proposed actions that may adversely affect Essential Fish Habitat (EFH). See 50 CFR § 305(b)(2). EPA conducted the consultation and received conservation recommendations from NMFS. EPA did not include the recommendation that operators be required to barge logs in either draft LTF GP. EPA provided a response to NMFS in writing about its conservation recommendations. The permit authorizes the discharge of bark and wood debris only under the prescribed terms and conditions. As a consequence, EPA did not incorporate the recommendation because no NPDES Permit would be required if there is zero discharge. It is also anticipated that the majority of existing LTFs will seek coverage under the GPs once finalized.

Comment 4: Log Storage

A commenter stated that clarification is necessary as to whether Log Storage Areas (LSAs) are subject to proposed GP requirements, and indicated that “[a]ccording to EPA’s Fact Sheet (at p.5, emphasis added), the ’[o]peration of all LTFs and LSAs result in some degree of bark loss and wood debris which can accumulate in extensive benthic deposits.’ No information is provided, however, as to the number or location of LSAs currently authorized to discharge under the GPs. Likewise, it is unclear whether those LSAs not specifically incorporated into a log dump’s ’project area’ are specifically subject to the GPs. Please clarify.”

EPA Response: The LTF General Permits cover log storage areas as well as shore-based LTFs. There were 7 off-shore facilities authorized under the 2000 Post-1985 GP. See page 5 of the Fact Sheet. Section I.D. of the post-1985 GP states that both shore-based and off-shore LTFs may seek authorization to discharge under the general permit, including off-shore storage areas. Section II. of the pre-1985 GP provides that the general permit authorizes the marine discharge of bark and wood debris associated with in-water transfer and storage within the project area, in accordance with the conditions set forth herein. Log storage within an ADEC approved project-area zone of deposit (ZOD) is a regulated activity under both the Pre-1985 and Post-1985 LTF GPs. The Best Management Practices (BMPs) included in the permits must be implemented whenever log storage activities occur. (See Pre-1985 GP section III. B and Post-1985 GP section IV.B.) In addition, the Pollution Prevention Plan (PPP) would include the possibility of potential discharges of pollutants from the entire log transfer operation, including storage and handling areas. (See Pre-1985 GP section VI. E. and Post-1985 section GP VII. E.) For log storage outside an ADEC approved project-area ZOD associated with a shore-based facility, an operator would be required to apply for and obtain EPA and ADEC authorizations to discharge under the Post-1985 LTF GP, including an approved ZOD from ADEC. No revision to the GPs will be made.

Comment 5: Dive Requirements

EPA received two separate comments that opposed the proposed dive requirements described in the GPs. They stated that the final LTF GPs should not include the requirement to conduct bark monitoring dive surveys to minus (-)100 feet Mean Low Low Water (MLLW). The final permits should limit dive depths to -60 feet MLLW. The original limit on dive surveys to -60 feet depth was established in light of safety concerns and logistical difficulties. Furthermore, the range of the most productive aquatic habitat is within the -60 foot depth. Below that depth reduced light penetration and bathymetry result in greatly reduced biological productivity.

EPA Response: The requirement to conduct bark monitoring surveys to -100 feet MLLW for continuous coverage of bark or wood debris was contained in the modified 2000 GPs and is not a change. EPA has considered the challenges and hazards of conducting SCUBA assessments in remote Alaska waters. That is why the permits only require extending a survey beyond -60 ft MLLW to -100 ft when continuous bark deposit is present at the -60 ft MLLW depth. In that event, the survey need only continue as long as deposit of woody residues remains continuous, but not to exceed a -100 foot depth. In this way the monitoring of residue deposits helps to verify compliance with the ZOD, the Section 401 Certification, and the Alaskan water quality standard for residues along with the preservation of diver safety as defined by OSHA. EPA notes that alternative methods for monitoring bark and woody residues exist in the use of Remote Operated Vehicles (ROVs) with underwater video recording and transmission and various mechanical sampling techniques using grabs or cores.

No change to the GPs will be made.

Comment 6: NPDES Permit Numbers for Pre-85 LTFs

Comment: “Under Section 407, Public Law (P.L.) 100-4, LTFs that received a §404 permit prior to October 22,1985 are exempt from the NPDES permit program, and can be regulated by EPA only through EPA-initiated amendments to the LTFs’ Corps’ permit. The final drafting of permit AK-G70-0000 should consistently keep this distinction in mind. One way to honor that distinction is to remove the provision, in §IV.A of the Reissuance Draft, that operators of pre-85 LTFs will be assigned “an NPDES permit number.” Similarly, §1.B of AK-G70-0000, as well as §X.A, should be revised to make it clear that, while EPA may possess the authority to impose conditions on individual LTFs’ §404 permits, it does not have the authority to require pre-85 LTFs to obtain individual NPDES permits.”

EPA Response: EPA does not agree that Section 407 of the Water Quality Act of 1987, P.L. 100-4, exempted pre-1985 LTFs entirely from the NPDES program. Pre-1985 LTFs were exempted from applying for a Section 402 permit. But it is quite clear in the law that such facilities must comply with all the substantive requirements of the Clean Water Act and the Administrator was given the authority to modify Section 404 permits to add

any requirements and conditions necessary for such LTFs to discharge pollutants into waters of the United States and to be in compliance with the Clean Water Act. Although EPA may need to initiate the process for adding requirements on to the discharge from pre-1985 LTFs, pre-1985 LTFs have the same level of obligation and duty to comply with such requirements or risk losing its ability to discharge by the revocation of its authorization.

EPA determined that USACE Section 404 permits issued prior to October 22, 1985 failed to satisfy the requirements of Sections 301, 302, 306, 307, and 403 of the CWA. Specifically, the Section 404 permits failed to:

- Include a zone of deposit (ZOD) for underwater accumulation of bark and woody debris at LTFs;
- Include uniform monitoring and reporting requirements; and
- Provide uniform application of best management practices (BMPs) and specific effluent limitations.

Therefore, in accordance with the provisions of P.L. 100-4 EPA modified all COE permits issued to LTFs prior to October 22, 1985 to incorporate the provisions of the 2000 LTF GPs and EPA further modifies the COE permits to incorporate the terms and conditions of this pre-1985 GP. EPA has determined that it is appropriate to use the general permit issuance process to effectuate the modifications of the COE permits issued prior to October 22, 1985 and use the pre-1985 general permit to add specific regulatory requirements on discharges from pre-1985 LTFs. To effectively administer the pre-1985 GP, it is reasonable and appropriate to assign an NPDES permit number to such LTFs.

Although under P.L. 100-4, operators of LTFs permitted prior to October 22, 1985 may not have to apply for a Section 402 permit, EPA may determine that a particular pre-1985 LTF's modified Section 404 permit requires additional modification to satisfy the requirements of Sections 301, 302, 306, 307, and 403 of the CWA. In that case, EPA could determine to further modify the LTF's Section 404 permit through the process of issuing an individual NPDES permit.

Nonetheless, Section X.A and X.B. of the draft pre-1985 permit is not clear on the relationship of the pre-1985 GP to the permittee's Section 404 permit and also erroneously stated that the permittee has a duty to reapply which is not technically accurate under P.L. 100-4. Therefore, Section X.A. and X.B of the final pre-1985 will be revised as follows:

Section X.A. will be changed to state:

This permit, which modifies permittee's Section 404 permit, may be modified, revoked, and reissued, or terminated for cause as specified in 40 CFR 122.62, 122.64, or 124.5. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

Section X.B.'s title will be revised to "**Duty to Provide Notification**" and will be revised to state:

“If a permittee intends to continue an activity regulated by this general permit beyond five years from the effective date, a permittee must submit a Notification (acting as an information update) at least 180 days before the expiration date of this permit.”

Comment 7: Abandoned pre-1985 LTFs

EPA and ADEC received input from two commenters on this topic.

Section IV.C. of the draft Pre-1985 LTF GP requires operators to submit a Notification within 90 days of the effective date of the GP or seek coverage under the post-1985 GP. However, nothing in the underlying LTF special legislation authorizes EPA to impose such a requirement on the industry. Proposed Section IV.C is inconsistent with the underlying statute, has no rational basis, and there is no support in the record for its existence. Section IV.C of the Pre-1985 GP should be deleted in its entirety.

Moreover, some Pre-1985 LTFs may still not be in use at the time the GP is finalized. It is nonsensical to require a Notification and Pollution Prevention Plan for a facility that is not being used. The proposed language would divest the holders of the Pre-1985 facilities of their rights.

The fact sheet states that EPA and ADEC are requiring operators of any LTF that received a section 404 permit prior to October 22, 1985, and that never applied for or received an individual NPDES permit and/or coverage under the 2000 LTF GP, to submit Notification within 90 days of the effective date of permit No. AK-G70-000 or it will be determined that the operator no longer exists and that the LTF is abandoned and any future operation and discharge from the LTF will require authorization through the Post-85 LTF GP. The Forest Service agrees that if a Notification is not received, it means that the LTF is not currently used for log transfer; but in the future the Forest Service may wish to reactivate the LTF and apply for coverage under AK-G70-000. The Forest Service is not ready to reactivate all Pre-1985 LTFs and apply for all the required permits.

EPA Response: One issue driving the proposed change was that EPA and ADEC wish to have a complete inventory of pre-1985 LTFs. Another issue is recognition that since pre-1985 facilities are old and will not have operated for some period of time, there is a significant likelihood that to restart operations at such LTFs major reconstruction may be required in order to transfer logs to water. If the re-construction is so extensive as to require more than a minor modification to the existing Section 404 permit by the U.S. Army Corps of Engineers, the LTF may no longer be eligible as a pre-1985 LTF and this is an appropriate time to examine the feasibility of facility adherence with the ATTF Guidelines. Moreover, for operators that believe they have LTFs that meet the eligibility criteria as pre-1985 LTFs, it may be a useful exercise now to review the condition and what likely measures and/or actions would be necessary in order to begin using the LTF

again before you have the need to reopen only to then discover that you require another Section 404 permit and/or the LTF requires additional discharge limits or conditions. That said, we acknowledge the burden that some operators may have to meet a deadline for submitting Notifications and all of the other information required under the pre-1985 LTF GP when there are no plans to operator from the LTF in the near future. We also acknowledge that if a new or modified Section 404 permit is required for an older LTF to reopen and begin discharging, EPA will be notified by the Corps under the provisions of the 1985 MOU at that time and the Section 404 and Section 402 processes will be undertaken in accordance with the MOU. Furthermore, as long as EPA receives notice in advance of discharges from a pre-1985 LTF, the circumstances surrounding the LTF, its discharge, and whether it still is eligible as a pre-1985 LTF can be determined at that time. Therefore, we will revise the final pre-1985 LTF to delete the requirement that all pre-1985 LTFs must submit Notifications no later than 90 days from the effective date of the permit. A separate deadline for pre-discharge Notification for reopening pre-1985 LTFs will be inserted as provided below.

In the final Pre-85 LTF GP, Section IV.C will be revised to state:

“If a facility timely submitted a new Notification at least 180 days prior to March 21, 2005, and unless LTF operations have materially changed since submission of that Notification, the operator of that facility is not required to submit a new Notification, but may: (i) adopt the previously filed Notification in a written adoption letter to EPA no later than 90 days after the effective date of this permit; and (ii) in that adoption letter include the information required by subparagraphs D.4.d and D.4.e of this section.

If a facility timely did not submit a Notification at least 180 days prior to March 21, 2005, written Notification must be submitted to EPA and ADEC within 90 days of the effective date of this general Permit ”

If a facility has not operated since March 7, 2000, and wishes to begin operations more than 90 days after the effective date of this Pre-85 permit, the facility must provide the Notification required by Section IV. to EPA no later than 60 days prior to beginning discharges. ”

Comment 8: Application and Notification Requirements

Two commenters wrote in concerning this topic:

The first commenter writes:

“The draft permits and the fact sheet have conflicting information from requiring new NOIs and notifications and relying on the NOIs and notifications filed at least 180 days prior to expiration date of the previously issued general permits. The intent of EPA and ADEC is to only require new NOIs or notification if changes have occurred. This needs

to be clearly stated in the permits. There should also be an addendum NOI and notification that includes the newly required information.”

A second commenter writes:

“Use of Previously-Filed NOIs and Notifications”

“EPA’s apparent intent is to allow operators to rely on NOIs and notifications timely filed at least 180 days prior to expiration of the original general permits, without the need to file new NOIs/Notifications. Because the amendments to operators’ §404 permits in AK-G70-0000 do not expire, operators were not required to submit renewal/reissuance paperwork. Many operators nonetheless submitted new notifications within the time period contemplated by 40 CFR 122.6 for expiring permits.

Sealaska supports EPA in this regard; unfortunately, the language in the Reissuance Drafts does not convey that position with sufficient clarity. To the contrary, the permits repeatedly stress the need to submit an NOI (or notification) in order to be covered by the new permit. The drafts also fail to deal clearly with the new information that is now required by the Reissuance Drafts.

Sealaska therefore recommends that:

AK-G70-1000, §V.C.2 (“Existing LTFs”) should be amended to add a new sentence between the first and third sentences of existing §V.C.2 to read:

If a facility timely submitted an NOI under 40 CFR 122.6 at least 180 days prior to expiration of the previously issued general permits, the operator of that facility is not required to submit a new NOI, but may: (i) adopt the previously filed NOI in a written adoption letter to EPA no later than 60 days after the effective date of this permit; and (ii) in that adoption letter, include the information required by subparagraphs D.4.d and D.4.e of this section.

AK-G70-0000, §IV.C (“Deadlines for Submitting Notification”) should be amended by adding a new sentence to read:

If a facility timely submitted a new Notification at least 180 days prior to March 21, 2005, and unless LTF operations have materially changed since submission of that Notification, the operator of that facility is not required to submit a new Notification, but may: (i) adopt the previously filed Notification in a written adoption letter to EPA no later than 90 days after the effective date of this permit; and (ii) in that adoption letter, include the information required by subparagraphs D.4.d and D.4.e of this section.

In the same vein, ADEC, appropriately, proposes to re-authorize a project area ZOD for all existing LTFs that were issued project area ZODs in connection with the

original general permits. Both of the sections above-referenced should be amended to conform to ADEC's certification, by reading:

If an existing LTF received written authorization for a project area ZOD in connection with the previously issued general permit, and in accordance with ADEC's certification of this permit, further written authorization from ADEC for a project area ZOD is not required under this permit."

EPA Response:

It is correct that EPA's intent is to only require new NOIs or Notifications if material changes have occurred since the renewal NOIs/Notifications were submitted prior to expirations of the permits. We agree that the suggested revised language makes our intent more clear.

In the final Post-85 LTF GP, Section V. APPLICATION / NOTICE OF INTENT (NOI) REQUIREMENTS, Section C.2 will state:

"2. Existing LTFs: If a facility timely submitted an NOI under 40 CFR 122.6 at least 180 days prior to the expiration of the previously issued general permits and unless LTF operations have materially changed since submission of that NOI, the operator of that facility is not required to submit a new NOI, but may: (i) adopt the previously filed NOI in a written adoption letter to EPA no later than 60 days after the effective date of this permit; and (ii) in that adoption letter, include the information required by subparagraphs D.4.d. and D.4.e of this section."

In the final Pre-85 LTF GP, Section IV.C, Deadlines for Submitting Notification, Section IV.C will state:

"If a facility timely submitted a new Notification at least 180 days prior to March 21, 2005, and unless LTF operations have materially changed since submission of that Notification, the operator of that facility is not required to submit a new Notification, but may: (i) adopt the previously filed Notification in a written adoption letter to EPA no later than 90 days after the effective date of this permit; and (ii) in that adoption letter include the information required by subparagraphs D.4.d and D.4.e of this section.

If a facility timely did not submit a Notification at least 180 days prior to March 21, 2005, written Notification must be submitted to EPA and ADEC within 90 days of the effective date of this general Permit

If a facility has not operated since March 7, 2000, and wishes to begin operations more than 90 days after the effective date of this Pre-85 permit, the facility must provide the Notification required by Section IV. to EPA no later than 60 days prior to beginning discharges. ”

As for the comment concerning revising the references to ADEC’s authorized ZOD in the permits, we do not believe the draft permit language requires revision.

Comment 9: The Forty Foot Requirement

“The 40-foot requirements in the Post-1985 general permit, IV. B.1. reads in absolute terms. However, Section III.D provides for a waiver of the 40-foot requirement. There should be linkage to this section to avoid an internal inconsistency.”

EPA Response:

The final language in the Post-1985 GP at Section IV.B.1 will be revised to state:

d. Rafting and/or storage must be in water at least 40 feet deep at MLLW, in an area with currents strong enough to disperse wood debris *unless a waiver has been granted from this requirement in accordance with Section III.D. Request for Waiver to Discharge Into Excluded Areas;* (emphasis added)

Comment 10: State of Alaska Remediation Plan

One commenter believed it is reasonable to prepare and implement a Pollution Prevention Plan prior to submitting an NOI; however the commenter also strongly objected that the EPA proposed GPs “mirror the State-only Remediation Plan concepts through the PP Plan”, believing that this is a case of regulatory creep.

Another commenter stated that “EPA should avoid unnecessary cross references and paraphrasing of the State Remediation Plan requirements. The State Remediation Plan requirement is not a condition of the federal permit. It is not a condition of the 401 Certification either. Rather, it has an independent legal existence as a component of the State-only wastewater discharge permit under AS 46.03.100. The GPs do not need to reference the State Remediation Plan, particularly in a manner incorrectly characterizing the Plan as part of the 401 Certification. See Post-1985 GP at IV.B.2.f and pre-1985 GP at III.B.12. These sections and others reference the Remediation Plan should be deleted or, at a minimum, reworded to ensure that they do not mischaracterize the careful legal distinctions governing the establishment of the Remediation Plan.”

EPA Response:

The State Remediation Plan is not a requirement under EPA’s NPDES GPs but is a requirement under the State-only provisions of ADEC’s Section 401 certification. The

Pollution Prevention Plan (PPP) requirements in the LTF GPs are not the same as the State Remediation Plan. The PPP is a legitimate requirement under EPA's NPDES authority and the Clean Water Act to regulate the discharge of pollutants from a point source to waters of the United States.

The State Remediation Plan is discussed in the state discharge permit section in the ADEC draft certification. The draft Pre-1985 and Post-1985 general permits reference the state required Remediation Plan. It was not intended to characterize the Remediation Plan as a condition of the §401 certification or for the federal permits. In order to clarify this distinction, reference to the State Remediation Plan will be deleted. For clarification, EPA will change the final permits as follows:

The final Pre-85 GP Section III.B.12 will state that **“If continuous coverage of bark and wood debris exceeds both 1.0 acres and a thickness of 10 centimeters at any point, the operator must submit, along with the Bark Monitoring Survey required under Part V.C of this permit, a written statement describing additional operational practices that will be used to minimize additional bark accumulation on the sea bottom, and must immediately incorporate those practices in the Pollution Prevention Plan (Part VI.) for the LTF”**.

The final Post-85 GP, Section IV.B.2.f. will state: **“If continuous coverage of bark and wood debris exceeds both 1.0 acres and a thickness of 10 centimeters at any point, the operator must submit, along with the Bark Monitoring Survey required under Part VI.C of this permit, a written statement describing additional operational practices that will be used to minimize additional bark accumulation on the sea bottom, and must immediately incorporate those practices in the Pollution Prevention Plan (Part VII.) for the LTF. ”**

Both GPs will be modified as described above.

Comment 11: The 0.75 Acre Pollution Prevention Plan Threshold

EPA received comments from three parties who opposed the 0.75 acre threshold for remedial practices to be added to the operator's Pollution Prevention Plan .

The proposed 0.75 acre threshold in the Pollution Prevention Plan should be deleted as it is an arbitrary number not based upon science. The final permits should retain the 1 acre threshold from the current permits.

The proposed modification is likely based upon the mistaken legal conclusion by the National Marine Fisheries Service in their Essential Fish Habitat recommendations that there is a limit of 1 acre for continuous bark coverage. The purpose of the Alaska Timber Task Force's (ATTF) 1-acre threshold was merely an “interim” threshold set arbitrarily

because there was “a lack of information” as to: (i) what bark levels actually caused arguable environmental harm; and (ii) the efficacy of various bark remediation methods. The ATTF 1-acre continuous coverage concept was a threshold where “cleanup – if any – will occur at the discretion of the permitting agenc[ies].” The 0.75 acre threshold would merely create a buffer zone to protect the buffer zone.

The draft permits require operators to amend their Pollution Prevention Plans to establish the Best Management Practices (BMPs) that they would implement if the 0.75 acre trigger were reached in the future. Requiring operators to plan now, in their Pollution Prevention Plans for the future contingency of reaching 0.75-acres imposes a costly and pointless burden on operators.

EPA Response: The proposed change in the PPP from 1.0 acre to 0.75 acres is the result of the Essential Fish Habitat consultation with the National Marine Fisheries Service (NMFS) as well as EPA’s concern that measures should be taken prior to the point at which a remediation plan is required.

However, the dive surveys submitted for the period 2000 through 2007 showed that only 7 facilities reported more than 0.75 acres of continuous cover bark at one point in time. Two of these facilities reported a single occurrence of more than 0.75 acres of continuous cover bark. By 2007, a single facility (East Port Frederick) was reporting more than 0.75 acres of continuous cover bark, and this facility is operating under an ADEC approved Remediation Plan. From the existing data, very few LTFs have bark accumulations close to .75 or 1.0 of an acre.

One acre of continuous coverage has been the regulatory standard since the development of the ATTF Guidelines. The original intent for the one acre threshold was for agencies to conduct additional studies on bark removal options, water quality studies, and benthic assessments.

ADEC’s Section 401 Certifications establish a threshold of one acre of continuous coverage and 10 centimeters of thickness at any point as the point of further regulatory review and information development. EPA believes that it is appropriate at this point for EPA to require operators to take additional measures to minimize additional bark and wood debris accumulating on the ocean bottom at the one acre threshold. EPA believes that state water quality standards will be adequately protected through the combination of the state ZOD authorization process, the monitoring requirements of the GPs, the State’s Remediation Plan requirements, and the permit requirement that operators revise their Pollution Prevention Plan when monitoring indicates that the LTF or LSA has continuous bark accumulation of one acre and 10 centimeters at any point.

Therefore, in consideration of the comments made, the change from 1 acre to 0.75 acre as recommended by NMFS is not required, and all references to 0.75 acre will be changed back to 1 acre. The NPDES General Permits require that additional measures and/or operational practices be taken once continuous coverage reaches one acre which are consistent with the Section 401 Certifications.

In re-reading this proposed language in the draft permits EPA can understand the concern expressed by some comments that LTF operators would have to include a prospective response to an assumed triggering of the 0.75 acre threshold in the PPP. EPA's intent for the proposed change would have required operators to submit a written statement describing remedial practices that would be used to minimize additional bark accumulation and incorporate those practices into the Pollution Prevention plan *only when and if* bark and wood debris exceed both 0.75 acres and a thickness of 10 centimeters.

The Pre-85 GP, Section V.A.3.e. shall be revised to state:

“e. Practices that will be used to minimize additional bark accumulation if continuous coverage of bark and wood debris exceeds both 1.0 acre and a thickness of 10 centimeters at any point.”

In the Pre-85 GP, Section VI.F.6 shall be revised to state:

“6. Practices that will be used to minimize additional bark accumulation if continuous coverage of bark and wood debris exceeds both 1.0 acre and a thickness of 10 centimeters at any point.”

In the Post-85 GP, Section VI.A.3.e shall be revised to state:

“e. Practices that will be used to minimize additional bark accumulation if continuous coverage of bark and wood debris exceeds both 1.0 acre and a thickness of 10 centimeters at any point.”

In the Post-85 GP, Section VII.F.6 shall be revised to state:

“6. Practices that will be used to minimize additional bark accumulation if continuous coverage of bark and wood debris exceeds both 1.0 acres and a thickness of 10 centimeters at any point.”

Comment 12: “Aggregating Discontinuous Areas of Bark Accumulation”

One commenter stated that “[t]he interim bark accumulation threshold created by the ATTF is one acre of “continuous” coverage.” “Continuous” means “going on or extending without interruption or break.” Under the Reissuance Draft, EPA would “aggregate” distinct piles of bark that do not “go on without interruption,” but which are “broken” by intervening areas of discontinuous, trace or no bark coverage whatsoever. It would then sum the total areal extent of these interrupted, broken areas of coverage, and call that sum “continuous.”

The proposal not only defies the definition of “continuous”; it knows no end to its potential absurdity. Nothing would prevent EPA from “aggregating” 10, or even 100 spots of coverage within a project area, and claiming from the resultant total that the operator had exceeded the one-acre threshold. How reasonable or unreasonable the

agency chooses to be in enforcing the “aggregation” rule is left entirely to individual caprice, there being no textual sideboards on how many small areas of bark can be “aggregated.” There is no size limit to these individual piles of bark—they need only be “discernible.” *Fact Sheet* at 82.

The proposal also lacks any scientific support. There is no evidence whatsoever that small, disconnected fragments of bark accumulation, interrupted from each other by areas of partial or no coverage, cause any material damage to even the immediately-affected area. To the contrary, “discontinuous coverage”—that is, coverage that is broken or interrupted--“may...increase species variety in the area as a whole, which is a mark of a healthy benthic community.” *Synopsis* at 12.

Having been:

- ✓ turned (by some) into a definition of “harm” (*see subsection II(A), ante*);
- ✓ re-written (by the permits’ definition of “at any point”) to require 10 centimeters of depth in only one small area, rather than over the entire acre; and
- ✓ now recast as a limit on broken and interrupted coverage,

The original ATTF guideline bears virtually no relationship to either its original purpose or the plain meaning of its own words. It is a textbook case of regulatory creep, and Sealaska respectfully requests EPA to call an end to it.”

EPA Response: The approach the draft GPs propose for calculating continuous and discontinuous bark accumulations is no different than the 2000 GPs required and which has been in place since that time. The proposed permits include the same definition of continuous coverage as the previous 2000 General Permits, i.e., “*Continuous coverage* means areas of bark and wood debris that are estimated to cover 100 % of the ocean bottom, as measured within a three-foot-square sample plot and may include boulders, rock outcrops, ridges, and other protrusions within an area of continuous coverage that are not covered by bark.” [See page 88 of Fact Sheet]

Section V.C.5.d. of the Pre-85 GP and Section VI.C.5.d of the Post-85 GP require that “The areas of continuous or discontinuous coverage must be calculated as the area in acres enclosed by a line connecting the outermost measured points of continuous or discontinuous coverage, respectively, for that area on the transect array, or by another method approved by EPA and ADEC.” The language in these sections remains unchanged from the 2000 General Permits.

In order to assist LTF operators plan and conduct bark survey and calculate bark coverage, ADEC developed a guidance document for use (**Required Method for Bark Surveys and Bark Area Calculation under the LTF General Permits, ADEC, June 9, 2000.**) This document contains the following language in item 16:

“Each discrete area of continuous or discontinuous cover must be calculated as the area enclosed by a line connecting the outermost measured points of that continuous or discontinuous cover, respectively, unless another method is approved by EPA and ADEC. In a typical survey, the measured boundary of continuous cover also is the boundary of the adjacent discontinuous cover. *The total area of continuous cover and the total area of discontinuous cover are cumulative and may include more than one discrete area of cover* (emphasis added.) Area should be reported in acres to the nearest tenth, and need not be reported in square meters.”

ADEC’s draft 401 certifications of the draft Pre-85 LTF GP and Post-85 LTF GP contain the following language: “**Part A: Conditions Applicable to both the NPDES General Permit and the State Wastewater Disposal General Permit Section 6 of the Pre-85 GP and Section 8 of the Post-85 GP.**

Bark Monitoring Surveys. (a) A bark monitoring survey conducted under Section VI.C of the NPDES General Permit must determine the **total area** of continuous coverage by bark and wood debris in water depths to -100 feet Mean Lower Low Water (MLLW), and the **total area** of discontinuous coverage by bark and wood debris, within the project area in water depths to -60 feet MLLW. If continuous coverage extends more than 15 feet beyond and perpendicular to the lateral transects that bound the two sides of the survey area, then additional transects must be established to determine the extent of continuous coverage beyond the lateral transects. An area of continuous or discontinuous coverage must be calculated as the area in acres enclosed by a line connecting the outermost measured points of continuous or discontinuous coverage, respectively, for that area on the transect array, or by another method approved by the Department.

EPA and ADEC have determined that it is appropriate and reasonable to calculate the total area of continuous and discontinuous coverage within the project-area ZOD to evaluate the complete impact of bark deposits from LTFs. Calculating the total coverage will help assure beneficial uses of the waterbody are not being affected and to evaluate that the findings made in authorizing the project-area ZOD remain valid. Although the commenter may view numerous small continuous deposits as having no affect; under the commenter’s interpretation EPA should not also aggregate if there are a several large continuous deposits reaching just under 1 acre that may be broken up only by small areas of discontinuous but which in fact are covering a significant portion of the ZOD. From past dive surveys, the reality generally is that continuous cover bark is found in a single polygon (usually beneath the transfer location), not multiple polygons that are aggregated together for purposes of areal extent calculations. Without conducting an exhaustive review EPA identified only a single facility (2006 survey at Klawock Island Dock, AK-G70-003) where multiple polygons were aggregated together. EPA would also point out that this facility has an unusual configuration in that the working face is atypically long (1,575 feet surveyed by parallel transects in 2006) because ship loading occurs along the working face instead at an off-shore ship loading location which is more typical. It is reasonable and protective to aggregate the continuous and discontinuous bark deposits in conducting the bark monitoring surveys.

Comment 13: Erroneous Characterization of “Effluent Limitations”

“In a sharp break with the original general permits, the Reissuance Drafts refer to Alaska’s water quality criterion for residues, and the project area ZOD, as “effluent limitations.” See *AK G70-1000* at §IV. Neither of these water quality criteria are “effluent limitations.”

Congress defined an “effluent limitation” as a limitation on the “quantit[y], rate[] or concentration[]” of the end-of-the-pipe discharge (*i.e.*, the “effluent”). 33 U.S.C. §1362(11). Federal effluent limitations were first authorized in the Federal Water Pollution Control Act of 1972, and setting those limits was primarily EPA’s responsibility. 33 U.S.C. §1311. This reflected Congress’ judgment that end-of-the-pipe standards should be federally-driven, because: (i) individual states should not be allowed to outbid each other for new industry by imposing laxer treatment standards; and (ii) industrial treatment standards usually did not require local expertise, since industrial processes are relatively uniform nationwide.

There is, however, a second way of regulating water pollution, and that is by setting limits on the quality of the receiving waters. These are so-called “water quality standards,” and they are usually established based upon: (i) uses that are being made (or could be made) of the waters; and (ii) the level of change that these waters can tolerate without impairing those uses. Both of these issues demand local knowledge about water uses and use-sensitivity. Therefore, Congress left it to the states to set and enforce their own water quality standards, subject to limited federal oversight. 33 U.S.C. §1313.

The residue criterion is a general water quality criterion, and the ZOD is a site-specific water quality criterion. Sealaska would request that the permits be corrected accordingly.”

EPA Response: AK-G70-0000 at Section III will be renamed from “Effluent Limitations and Permit Requirements” to **“Limitations and Permit Requirements.”**

Subsection A of AK-G70-0000 at Section III will be renamed from “Effluent Limitations” to **“Limitations.”**

AK-G70-1000 at Section IV. will be renamed from “Effluent Limitations and Permit Requirements” to **“Limitations and Permit Requirements.”**

Subsection A. of AK-G70-1000 at Section IV will be renamed from “Effluent Limitations” to **“Limitations.”**

Comment 14: Mischaracterizing Prior ADEC Zones of Deposits

“The *Fact Sheet* states that, prior to creation of the project area ZOD in the original permits, ADEC imposed a “fixed” one-acre ZOD. *Id.* at 1. That is not accurate. Through the 1990’s, ADEC broadly authorized a ZOD “at the log transfer facility” (a geographic area as broad as the “project area”), “within which” operators were subject to ADEC’s *discretionary* power to require remediation if continuous coverage exceeded one acre. Throughout the litigation over the original general permits, ADEC was forced to consistently correct advocates claiming that a one-acre ZOD was “fixed” by pointing out that ADEC has always considered the one-acre threshold only as a trigger for a closer look—just as the ATTF had originally intended. *Id.*”

EPA Response: Previous NPDES individual permits to LTFs incorporated the one-acre ZODs as a limit on bark accumulation. Nonetheless, the comment did not seek a change to a permit term or condition and EPA does not make changes to Fact Sheets after the public comment period.

Comment 15: Comments Relating to Environmental Impacts of Bark Accumulation

“The environmental impacts of LTF bark accumulation were the subject of an adjudication of the Alaska Department of Environmental Conservation’s certification of the original general permits under §401 of the Clean Water Act. That adjudication produced a record containing the most complete compendium of scientific study on this issue available from any source. In addition to collecting all available scientific research, the adjudication adduced extensive expert testimony from some of the most qualified experts in the field, all of whom drew from their considerable exposure to this issue in the Pacific Northwest. This record, as a whole, is a critical component of a complete record on the water quality issues presented by LTF operations in Alaska. That record (the “*LTF Adjudication Record*”), with its user-friendly indexing system, has been provided to EPA under separate cover.

Enclosed as *Attachment 1* to this letter is a synopsis of that record (hereinafter “*Synopsis*”), which is incorporated as an integral part of Sealaska’s comments.^{2/} As the *Synopsis* explains, the volume of scientific literature and testimony adduced at the LTF adjudication led to the following conclusions regarding LTFs sited and operated in accordance with the general permits:

A. Extent of Bark Burial

The adjudication concluded that “the only significant impact of bark and woody debris on the benthic environment is the burial of organisms on the marine bottom.” *Synopsis* at 5; *emphasis added*. That impact, moreover, was “limited and localized,” due in part to the facts that: (i) only continuous bark coverage had been proven to significantly alter benthic populations; and (ii) there was a sharp demarcation line between continuous bark coverage and trace coverage. *Id.* at 12. And these findings, in turn, were validated by Tetra Tech’s finding that continuous bark accumulations at active LTFs averaged only .2 acres per LTF.

Equally significant was Tetra Tech's finding that continuous bark accumulations at inactive LTF sites had a median value of only .1 acres per LTF. *2005 Tetra Tech* at 2-8. One would expect these LTFs to be older facilities—some undoubtedly not sited in accordance with the 1985 ATTF guidelines. Yet even here, bark accumulations were *de minimus*. Data was insufficient for the LTF Adjudication to make any meaningful findings on the persistence of bark; however, the subsequent monitoring results reported by Tetra Tech indicate that bark does disperse quickly, leaving little continuous coverage behind. With those results, it was disappointing to see Tetra Tech's comments that bark deposits "can be extremely long lived." *Id.* at 3-3. That comment is supported only by a single, 1976 study (when there were no standards governing LTF siting), and a decay-rate study that makes no allowance for the dispersal of bark in the marine environment by tides and currents. The results of five years of comprehensive monitoring belie Tetra Tech's comment - both generally, and even more so for LTFs sited in accordance with the ATTF guidelines, which, since 1985, require LTFs to be sited in areas "where currents may be strong enough to disperse sunken or floating wood debris." *Fact Sheet* at 64.

EPA Response: Although the comment does not request a change to the proposed LTF GPs, we will respond to the comment that there is no evidence to support that bark accumulations can be persistent. First, it is important to note that EPA was not a party to the state adjudication of ADEC's Section 401 certifications issued May 10, 2002. That being the case, EPA was not involved in presenting data or evidence on the environmental impacts of bark and wood debris accumulations in the aquatic environment as part of that process.

Second, conclusions in the Tetra Tech report, "Ocean Discharge Criteria Evaluation of the NPDES General Permit for Southeast Alaska Log Transfer Facilities", September 2005, were based on an extensive reference list found in pages 11-1 to 11-5. In particular, the Tetra Tech report at page 3-3 cited not one, but three references to the persistence of bark and wood debris (i.e., Schultz and Berg 1976; Harmon et al. 1986; and, Tetra Tech 1996). This conclusion is also supported in the draft ADEC document, "Environmental Impacts of Residues on the Aquatic Environment", May 2004, at page 6, in which it is acknowledged that bark may take a long time to decompose. ADEC's conclusion was based upon the review of published reports. These sources support the position that submerged bark and wood debris can be long lived.

EPA agrees with the commenter that bark monitoring conducted over the past several years supports the ATTF siting criteria have led to decreased impacts on the aquatic environment due to siting LTFs better to minimize long-term bark deposition. In addition, EPA also believes that LTFs have been used less than historically; and the scale of operations has decreased in recent years. Bark monitoring from dive protocols has also enabled consistent measurement of parameters.

B. Dissolved Oxygen

The adjudication concluded that:

Violations of Alaska's water quality standards for dissolved oxygen caused by discharges of bark and wood debris at an LTF are unlikely to occur in the water column outside of an area of continuous coverage by bark and wood debris and will not occur outside the Project Area or, at any LTF sited and operated in accordance with the ATTF guidelines, outside the area of continuous coverage.

- (i) *Synopsis* at 9. That conclusion was based on a number of field studies, none of which found any dissolved oxygen violations at LTF sites—even in waters lying directly above the LTF bark pile

In light of this extensive field and interpretive work, it was disappointing to find Tetra Tech, this time around, assigning a “moderate” risk to oxygen depletion, even though Tetra Tech itself acknowledges that the field work described above all reported the same finding: *to wit*, that “there were no substantial differences in dissolved oxygen concentrations between background measurements at the water surface and in the samples collected above the bark pile.” *2005 Tetra Tech* at 5-4. Even though Tetra Tech concedes that “[i]ncreased oxygen demand arising from the degradation of leachates is not likely to adversely affect organisms in receiving waters” (*id.* at 5-8), Tetra Tech speculates, without any field study to validate that speculation, that “low dissolved oxygen levels could be of concern particularly at LTF sites where circulation and water flushing is minimal. Monitoring of dissolved oxygen would be needed to more fully evaluate potential violations of the water quality standard.” *Id.* at 9-3.

Sealaska respectfully submits that Tetra Tech’s opinion lacks any reasonable scientific basis, and is even at odds with the company’s own prior, 1996 report. Although Tetra Tech might believe that the body of scientific work that has been accomplished on this issue is not “conclusive,” it is multiple, corroborative and convincing. The absence of any scientific evidence to the contrary leaves Tetra Tech’s judgment a matter of unsubstantiated speculation.

Sealaska therefore respectfully urges EPA and ADEC to request that Tetra Tech re-evaluate its opinion of “moderate” risk based on scientific evidence that does exist, rather than on the basis of information that does not exist.

EPA Response:

Support regarding oxygen demand from the decomposition of bark and wood debris can be found from other published sources as well. In addition to Tetra Tech’s report, The National Oceanographic and Atmospheric Administration (NOAA) and ADEC also opined on the matter of reduced dissolved oxygen from wood debris.

In Appendix G, page G-37 of the NOAA Fisheries report, “Final Environmental Impact Statement for Essential Fish Habitat Identification and Conservation in Alaska”, April 2005, the report stated: “Log bark may affect groundfish habitat by significantly increasing oxygen demand within the area of accumulation (Pacific Northwest Pollution Control Council 1971). High oxygen demand can lead to an anaerobic zone within the

bark pile where toxic sulfide compounds are generated, particularly in brackish and marine waters. Reduced oxygen levels, anaerobic conditions, and the presence of toxic sulfide compounds can result in reduced localized habitat value for groundfish species and their forage base.” (http://www.fakr.noaa.gov/habitat/seis/final/Volume_II/Appendix_G.pdf)

On page 17 of the ADEC’s “Total Maximum Daily Loads (TMDLs) for Residues and Dissolved Oxygen in the Waters of Ward Cove Near Ketchikan, Alaska”(March, 2007), the report states: “The parameter of concern for residues is represented as organic residues (e.g., primarily wood waste). Dissolved gas (as dissolved oxygen) is the pollutant parameter identified on the 303(d) list. Residues on the seafloor also create oxygen demand as they decompose.”

In addition, EPA has located information that estimated the depletion of dissolved oxygen from decomposing wood wastes at Ward Cove, even though this component is small compared to the discharge of seafood wastes. On page 56 of the Alaska DEC’s “Total Maximum Daily Loads (TMDLs) for Residues and Dissolved Oxygen in the Waters of Ward Cove Near Ketchikan, Alaska” (March, 2007), the report states: “The existing log, pulp, and bark residues will remain on the bottom of the cove and are expected to decompose slowly over time. Computer modeling estimated that the oxygen demand from decomposing wood waste resulted in a maximum depression of the dissolved oxygen level of 0.5 mg/L near the bottom of the cove at peak stratification periods (August and September), but typically is much less. The degree of dissolved oxygen depression that will occur because of wood wastes as sediment deposition and biological recovery proceed is not known.” The references to the TMDL report is found in pages titled “References-1” to “References-4”. On page 1 of the Executive Summary of the TMDL report also concluded that “seafood waste discharge was the most influential source causing depletion of dissolved oxygen in the deeper waters of Ward Cove in the summer months; based on computer modeling, a small component was due to decomposing wood waste” .

The above published reports collaborate with the position there can be oxygen demand from decomposition of bark and wood debris on various scales. In the referenced Tetra Tech Report, on page 10-6, qualitative rating classifications were used to provide potential impacts to biological communities, human health and water quality. The description for potential “moderate” impact was defined in the report as: “*Data from monitoring reports or scientific literature suggest that this pollutant is likely to have an impact.*” Based on available information and corresponding to the definition of having potential moderate impacts, EPA believes that Tetra Tech’s best professional judgment is reasonable, and will not be requesting Tetra Tech to re-evaluate this conclusion.

C. Leachates

Tetra Tech concurs with the LTF Adjudication’s findings that:

- ✓ *There are no documented field studies showing toxic concentrations of ammonia, sulfides or phenols in the*

water column at an LTF with bark and wood debris solely from LTF activities; and

[T]he water column outside of a properly sited LTF bark pile footprint does not achieve elevated levels of [toxic] chemicals....

Several studies were listed in the Synopsis at 11.

Synopsis at 10. The only discordant note to this chorus of scientific consensus is found in the EPA *Fact Sheet*, which opines that chemicals such as phenols can be present in the wood waste itself; and that these chemicals have been found toxic in laboratory tests at certain elevated levels. *Fact Sheet at 6.* Never mind the fact that:

...no marine field studies have demonstrated that the high concentrations of leachate required to induce toxicity in the laboratory are present in the water column above bark and debris deposits under actual environmental conditions...

Synopsis at 9.

EPA chooses instead to focus on the chemical content of the “pores” of the bark itself. Sealaska respectfully submits that “interstitial pore spaces” of bark are not “waters of the United States.” Neither people nor fish swim in pore spaces, nor consume pore space water. The issue here is whether the chemical composition of the admittedly-wet bark affects the water column in which protected water uses occur. The scientific consensus is that it does not. **Dwelling on the content of “interstitial pore spaces” misdirects the debate on this issue, and Sealaska would respectfully request EPA to either delete the discussion, or at least make it clear that the discussion has no relevance to the water column, in its final *Fact Sheet*.**

EPA Response: Bark and wood debris are pollutants that are discharged from LTFs to waters of the United States. Pollutants deposited on the sea floor are not separate from the water column. Water quality standards in general protect beneficial uses, including the propagation of aquatic organisms that live in the water column, sediment and pore water, and specifically protect aquatic organisms which can become exposed to the bark and wood debris deposits and interstitial pore water within those deposits.

The discussion of deposition of bark impacts benthic organisms on the sea floor is supported in NOAA Fisheries report, “Final Environmental Impact Statement for essential Fish Habitat Identification and Conservation”, April 2005. In page G-36 of the above NOAA report states: “Log handling and storage in estuary and intertidal zones of rivers can result in modification of benthic habitat and water quality degradation within the area of bark deposition (Levings and Northcote 2004).”

Further, in page G-37 of the NOAA report states:

“Accumulation of bark debris in shallow and deep-water environments has resulted in locally decreased epifaunal macrobenthos richness and abundance (Kirkpatrick et al. 1998, Jackson 1986).”

“Log storage may also result in a release of soluble organic compounds within the bark pile. Log bark may affect groundfish habitat by significantly increasing oxygen demand within the area of accumulation (Pacific Northwest Pollution Control Council 1971). High oxygen demand can lead to an anaerobic zone within the bark pile where toxic sulfide compounds are generated, particularly in brackish and marine waters. Reduced oxygen levels, anerobic conditions, and the presence of toxic sulfide compounds can result in reduced localized habitat value for groundfish species and their forage base.”

ADEC also acknowledged that there can be harmful effects from bark leachate. In page 6 of ADEC’s draft Environmental Impacts of Residues on the Aquatic Environment, May 2004, the report stated:

“Biological degradation of the organic component of the residue can release chemicals, such as ammonia or hydrogen sulfide into the water. The chemicals will be present in various levels in both the water above the sediments and in the interstitial waters within the sediments. Organisms exposed to these chemical can in some cases experience acute toxicity (death) or exhibit chronic effects, such as reduction in reproductive capacity. Acute and chronic effects have been noted for different biota, from benthic polychaete worms to salmon fry, to chemicals leached from residues.”

The sources above indicate that bark and wood accumulation has the capacity to cause leachates that adversely impact organisms in the water column, as well as to benthic organisms.

Comment 16: Correction to Fact Sheet Table 6

“Table 6 of the fact sheet lists other known Pre-1985 LTFs that did not seek coverage under the 2000 Pre-1985 General Permit. The table incorrectly includes the following 12 LTFs that did receive permits with approved ZODs: Hanus Bay LTF, AK-G70-0044; Indian River LTF, AK-G70-0057; Klu Bay LTF, AK-G70-0021; Naukati LTF, AK-G70-0049; Polk Inlet LTF, AK-G70-0025; Saginaw Bay LTF, AK-G70-0053; Saook Bay LTF, AK-G70-1010; St. John’s Harbor LTF, AK-G70-0056; Suemez LTF, AK-G70-0055; Todd LTF, AK-G70-0059; Tonka LTF, AK-G70-0033; Twelvemile South LTF, AK-G70-1004.”

EPA Response: Thank you for providing corrected information. It has been noted.

Comment 17: GPS with WAAS

“The draft permits and the fact sheet require the use of a GPS receiver with Wide Area Augmentation System (WAAS) capabilities for locating the discharge point and permanent monitoring shore markers. This would impose a significant cost to the Forest Service since we used a Trimble Pathfinder Pro-XR that receives real time correction

signals from a CORS station to locate our discharge points and permanently monitoring shore markers. The Pathfinder provides sub-meter accuracy; while WAAS provides an accuracy of only 3 meters.”

“Instead of requiring the use of a GPS receiver with WAAS capabilities the draft permits and fact sheet should require a certain level of accuracy in locating discharge points and permanently monitoring shore markers. The equipment to be used to achieve the level of accuracy desired should be determined by the permittee.”

EPA Response: The draft permits have been revised to require the operator to locate the discharge point and the permanent monitoring shore markers with an accuracy of 3 meters. The draft permits no longer dictate the type of equipment that must be used.

In the Post-85 GP, at Section V.D.4.d.; and, at Section IV.D.4.d of the Pre-85 GP, will be revised to state: “**d. The physical location, including the latitude and longitude of the proposed discharge(s) with a precision of at least three (3) meters on average by using a GPS receiver, and the distance and direction to the nearest town/city.**”

Comment 18: Submission of Site Map

“The US Forest Service is not able to submit a site map that shows the boundaries of the upland area used for log handling, storage, and transfer activities; the log deck storage areas; locations used for the treatment, storage, or disposal of wastes including residue storage; fuel storage tanks and fueling stations; vehicle and equipment maintenance and/or cleaning areas; and locations of buildings. These areas vary depending on the timber sale operator. This should be taken into account in the new permits since the Forest Service is the permittee for 75 percent of the LTFs.”

EPA Response: Neither permit requires that a copy of the site map be submitted with the Notification or NOI. The site map is a requirement of the PPP which is retained on site and available for inspection by either ADEC or EPA or at the location where the discharge authorization is maintained for inactive facilities.

If there is no current LTF operator, a site map showing the physical boundaries of the upland and marine unit will suffice. Both permits require that the operator periodically review the PPP and modify it as necessary. If there is no current operation at the time the Notification or NOI is submitted, the PPP can be modified just prior to the resumption of operations. Therefore, no modification to the draft permits is necessary.

Comment 19: Objection to Pothole LTF

One commenter stated that Section III. B of the proposed Post-1985 GP lists the 5 siting guidelines incorporated from the ATTF Guidelines into the GP. The fifth siting guideline relates to storage and rafting, but only imposes a minimum water depth.

Recent approval by ADEC of log storage at The Pothole, an important Dungeness crab fishery site near Petersburg, Alaska, suggests that ADEC chose to ignore an important habitat protection provided by the ATTF Guidelines. *See* ADEC Decision Document for Permit No. 2007-DB-0008, June 4, 2007. The guideline on “Sensitive Habitats” prohibits log transfer and log storage “adjacent to (i.e., near enough to affect)...shell fish concentration areas.” The fact that ADEC approved the permit despite this prohibition raises serious questions. Perhaps the term “concentration” should be changed to “habitat” to better ensure ADEC’s compliance with the prohibition.”

EPA Response: EPA did not receive an NOI for the Pothole prior to the expiration of the 2000 Post-85 LTF GP and EPA has not authorized a discharge from the facility.

The intent of the ATTF Guidelines was to assist applicants as well as resource agencies in permitting facilities in locations that *minimized impact* (emphasis added), such as in areas where shellfish congregate in high concentrations, as opposed to any ordinary area. EPA therefore believes that rewording of “concentration” to “habitat” would not meet the intention of this criterion. Since virtually all marine waters are classified as habitat to one organism or another, this change would act as a virtual prohibition for log transfer activities.

Comment 20: Other Available Technologies

“EPA’s Fact Sheet concedes that 35 years after enactment of the Clean Water Act the agency has not yet developed effluent limitation guidelines for log dumps under Section 301. The Fact Sheet goes on to state (at p.36): “[t]he draft LTF GPs do not directly include technology-based effluent limitations (BPJ or otherwise) since there is no minimum level of treatment for point sources provided by currently available treatment technologies other than application of Best Management Practices (BMPs).” We strongly disagree. As noted above, one treatment technology currently available is the use of shore to barge transfer systems. Such technology would virtually eliminate the discharge of bark and woody debris into marine waters. Another treatment technology is debarking of the logs. This technology may be increasingly economical given the growing interest in development of biofuel alternatives in response to global climate change.”

EPA Response: Effluent guidelines are national standards that are developed by EPA on an industry-by-industry basis, and are intended to represent the greatest pollutant reductions that are economically achievable for an industry. To develop these technology-based regulations, EPA first gathers information on the industry’s practices; characteristics of discharges (stormwater flows and pollutants); technologies or practices used to prevent or treat the discharge; and economic characteristics. EPA identifies the best available technology that is economically achievable for that industry and sets regulatory requirements based on the performance of that technology. The effluent guidelines do not require facilities to install the particular technology identified by EPA; however, the regulations do require facilities to achieve the regulatory standards which were developed based on a particular model technology. The standards are then incorporated into National Pollutant Discharge Elimination System (NPDES) permits issued by States and EPA regional offices.

When a pollutant discharged by a direct discharging industry is not specifically limited in an effluent guideline, it is up to the permit writer to utilize best professional judgment to establish technology based limits or determine other appropriate means to control its discharge. In the instance of the LTF GPs, EPA has included Best Management Practices (BMPs) as a permit condition that are used in place of effluent limitations to prevent or control the discharge of pollutants.

EPA does not consider barging a treatment technology for the discharge of bark or wood debris from an LTF into waters of the United States. If a facility elects to construct a barge loading facility to eliminate transferring logs to waters of the United States, the facility would not be discharging and is not required to apply for coverage under the Post-85 LTF GP. Debarking may be a technology that would reduce bark or wood debris discharges; however, debarking is not required by the proposed LTF GPs.

As explained in EPA's Response to Comments for the March 7, 2000 Post-85 GP, on page 4, onsite debarking is not feasible. For instance, debarking of logs require additional upland areas for log storage and/or processing. Space for upland development may not be available at all sites. In addition, there may be substantial distance separating the timber harvest area from its marketing destination. The lack of infrastructure in remote harvest areas increases the expense of transporting products (logs, bark and wood debris for recycling) and specialized equipment such as debarkers. The investment needed to develop this infrastructure may not always be supported by the scale of operations. Therefore, EPA does not require debarking in the final LTF GPs.

There is no change to the Final GP as a result of this comment.

Comment 21: Incomplete Description in Fact Sheet

EPA's Fact Sheet (at p.4) summarizes most of the new requirements imposed by the Hearing Officer on ADEC's certification of the GPs. This summary, however, appears to miss a primary requirement imposed on ADEC in certifying NPDES GPs such as these two proposed GPs – the site-specific antidegradation review of impacts to existing uses within a ZOD and whether reduction of water quality within a ZOD is “necessary to accommodate important economic or social development in the area where the water is located,” as well as an assessment of whether full protection for existing uses within a waterbody as a whole is achieved, before authorizing a reduction in water quality. *See* Hearing Officer's *Final Decision* at 41-42 (May 10, 2002); *see also* 18 AAC 70.015(a)(2)(A), (C).”

EPA Response: Thank you for providing the information. EPA's Fact Sheet was intended to relate the state law requirements that directly affects how the LTF GPs would procedurally incorporate the authorized ZOD for each facility. We did not intend for the Fact Sheet to be a complete summary of the Hearings Officer's decision. EPA notes the comment but does not make changes to Fact Sheets after the public comment period.

The Final GPs are not affected, and there is no change to the Final GPs as a result of this comment.

Comment 22: Non-Compliance with Alaska's Antidegradation Policy

“The Fact Sheet (at p.33-34) notes that “EPA must consider the state’s antidegradation policy,” and that it “anticipates” that the provisions of the draft GPs “are sufficient to comply with the state’s antidegradation policy.” EPA also recognizes that ADEC is responsible for conducting an antidegradation analysis before authorizing a ZOD.

When EPA approved Alaska’s antidegradation policy in 1997 with reservation, it stated that “Alaska needs to identify implementation procedures for its antidegradation ... polic[y].” *EPA Region 10, Office of Water’s letter to ADEC* (April, 7, 1997). To date, ADEC has not adopted procedures for implementing its antidegradation policy, including procedures for conducting an Economic Impact Analysis (EIA). ADEC’s failure to adopt these procedures, or follow existing minimum federal guidance for an EIA, makes EPA’s reliance on ADEC’s putative performance of an adequate antidegradation analysis unreasonable.

ADEC’s recent approval of a log storage permit at The Pothole demonstrates the inadequacy of how ADEC implements Alaska’s antidegradation policy. *See* ADEC Decision Document for Permit No. 2007-DB-0008, 4-6 (June 4, 2007). This abbreviated analysis of economic impacts clearly did not follow EPA’s guidance for an EIA. Although SEACC specifically requested additional economic analysis and information from ADEC, the Decision Document fails to respond appropriately. *See* SEACC Comments on The Pothole (May 17, 2007)(attached). Consequently, ADEC’s Decision Document lacks substantial evidence to support its conclusion that storage of logs in this productive Dungeness crab fishery site was a situation where the benefits of economic or social development unquestionably outweighed the costs of lower water quality.”

EPA Response: The Commenter notes that ADEC conducts an antidegradation analysis for a waterbody as part of its authorization process for Zones of Deposit. The Alaska Water Quality Standards in 18 AAC 70.210(a) allows ADEC to exceed the antidegradation requirements of 18 AAC 70.015 when approving a ZOD. The Final Decision by the Hearing Officer in the Section 401 Certification adjudication on the 2000 LTF GPs noted that ADEC cannot fulfill its responsibilities in that regard without conducting some level of site-specific review. Only then can it determine whether a reduction in water quality in the ZOD is "necessary to accommodate important economic or social development in the area where the water is located." 18 AAC 70.015(a)(2)(A). The Final Decision by the Hearing Officer required that ADEC complete an individual decision document for each facility as part of the ZOD authorization process. This document includes an analysis of the five factors that ADEC must consider in authorizing a reduction in water quality. Copies of these documents are on file with ADEC at the Juneau, Alaska office. The draft 401 certifications for the draft LTF GPs incorporate the process for authorizing ZODs that has been used since the adjudication. The 401 certification complies with Alaska’s water quality standards. Additionally, it is our understanding that parties to the adjudication have standing to challenge ADEC’s ZOD decisions.

Comment #23: Adopted Changes to Alaska’s Residue Standard

“Adopted changes to Alaska’s residue standard are less stringent than preexisting criteria.”

“In discussing the Alaska water quality criteria, EPA’s Fact Sheet (at p.32) references the narrative standard for residues adopted by ADEC in 2006. To the best of our knowledge, EPA has not yet approved the changes to Alaska’s residue standard. SEACC believes these changes are less stringent than previous criteria, weaken water quality standards, and degrade water quality. *See* SEACC Comments on Changes to Residue Standard to ADEC (Dec. 22, 2005) (attached). Therefore, we question the basis for EPA’s reliance on the residue standard cited in the draft GPs.”

EPA Response: On page 32 of the Fact Sheet, EPA referenced and quoted the federally approved Alaska Water Quality Criteria for residues in marine waters (18 AAC 70.020(b)(20)(A)(ii)). ADEC did adopt a new State residue criteria in 2006 but this new standard has not been approved by EPA and only federally approved water quality criteria can be used in NPDES permits. The current federally approved residues criteria can be found in the ADEC Water Quality Standards, as amended through June 26, 2003. The Alaska Residue Standard for the GPs was not dated 2006 as suggested by the commenter.

Comment #24: “Impaired Waterbodies”

“We support the exclusion of coverage under the Post-1985 GP for new log dumps. We disagree, however, with EPA’s reliance on remediation plans adopted by ADEC as “other pollution control requirements” and thus allowing coverage of new dischargers in waters classified as Category 4b waters.

According to Section III. C. 2 of the Post-1985 GP, new log dumps seeking to discharge into Category 4b waters are covered by the GP if ADEC has approved a remediation plan and progress is demonstrated in reducing the total area of continuous bark and woody debris coverage. We do not believe that the reduction of bark cover-age is, in itself, an appropriate measure of success. Instead, we recommend that EPA rely on more generally accepted measures of benthic community health for determining whether progress towards delisting a waterbody is occurring. These measures include numerical, measurable quantities, including statistical procedures for evaluating data, such as: 1) comparing species richness as compared to pre-dump or reference conditions, 2) using the Swartz’s Dominance Index to establish an impact threshold that defines a percentage of the natural species present, or 3) using the Organism-Sediment Index to characterize a combination of the various physical, chemical, and biological attributes of the sediment.”

EPA Response:

Thank you for your comment. EPA agrees that new facilities discharging into impaired waters with the Category 4b designation has potentially different environmental impacts than other new facilities located in waters that are not classified as having been impacted

for residues. Therefore, these special facilities should be outside the coverage of a General Permit. EPA will make changes to the final GP to exclude coverage of new facilities in impaired waters having the Category 4b designation. New facilities in this category would have to apply for an individual permit and will be evaluated on a case-by-case basis.

In the Post-85 GP, **Section III. C. Impaired Waterbodies** will be re-written to state:

1. This general NPDES permit does not authorize new dischargers into any waterbody included in the Alaska Department of Environmental Conservation (ADEC) CWA Section 305(b) report or effective CWA Section 303(d) list of waters which are "impaired" or "water quality-limited" for residues.

2. This general NPDES permit does not authorize new dischargers where the existing continuous coverage by bark and wood debris exceeds both 1.0 acre and a thickness of 10 centimeters at any point.

Other Changes

Several changes were made in the Log Transfer General Permits to conform to Alaska Department of Environmental Conservation's two Section 401 Certifications, both dated October 10, 2008. These changes are located in the following Sections in the two General Permits:

Pre-85 GP: Section III.A.3, Section V.C.4.c., Section V.C.6.j., Section VI.C, and Section VI.I.

Post-85 GP: Section IV.A.3, Section IV.C.6.j, Section VI.C.4.c, Section VII.C and Section VIII.I.

In addition, Figure 6 in the Draft Post-85 GP has also been eliminated at the request of ADEC on September 12 and October 16, 2008. In ADEC's email on October 16, 2008, Figure 6, "Figure 6: Boundaries of the Port Graham / English Bay Area Meriting Special Attention." was deleted from the Post-85 GP due to statues and regulations changes relating to the Alaska Coastal Management Program (ACMP). ADEC's request on October 16, 2008 from Chris Foley (ADEC) to Kai Shum (EPA) reads:

"Please remove Figure 6 from the final Post-85 GP. When I prepared the draft §402 certification this permit I erroneously retained Stipulations 16 and 17 as carry forward stipulations from the previous final certification. Due to statutory and regulatory changes in the Alaska Coastal Management Program since 2000, issuance of authorizations by DEC under AS 46.40.040(b)(1) establishes consistency with the Alaska coastal management program (11 AAC 110.010(d)). Alaska Statutes 46.40.040(b)(1) states AS 46.14 (as well as other statutory chapters) and the regulations adopted under

that statute constitute the exclusive enforceable policies of the ACMP for those purposes. For those purposes only, the issuance of permits by DEC establishes consistency with the ACMP for those activities of a proposed project subject to those permits. These stipulations were based solely on the former ACMP regulations.”