



Fact Sheet

NPDES Permit Numbers: AKG-G70-0000 and AK-G70-1000
Public Notice Issuance Date: July 27, 2007
Public Notice Expiration Date: September 25, 2007

The U.S. Environmental Protection Agency (EPA) plans to issue general National Pollutant Discharge Elimination System (NPDES) permits to discharge pollutants pursuant to the provisions of the Clean Water Act, 33 U.S.C. § 1251 et seq. for

Log Transfer Facilities In Alaska

and

The State of Alaska Proposes to Certify the Permits

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EPA Proposes NPDES Permit Reissuance.

EPA proposes to reissue National Pollutant Discharge Elimination System (NPDES) general permit Nos. AK-G70-0000 and AK-G70-1000 to establish conditions for the discharge of bark, and wood debris from log handling and storage operations from log transfer facilities (LTFs) that discharge to marine waters of the United States within the State of Alaska. Discharges of bark and wood debris are currently covered by one of two LTF General Permits issued by EPA Region 10 in March 2000. LTFs which received a dredge and fill permit from the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act (CWA) before October 22, 1985, and have not been authorized under an individual NPDES permit are currently regulated by General Permit No. AK-G70-0000 (the Pre-1985 general permit). LTFs which did not receive a dredge and fill permit under CWA Section 404 before October 22, 1985, and were authorized under an individual NPDES permit or never authorized are regulated by general permit No. AK-G70-1000 (the Post-1985 general permit). The two permits collectively will be referred to as the LTF general permits.

Discharges of storm water associated with shore-based log LTF activity in Alaska are currently regulated by the 2000 NPDES Multi-Sector General Permit for Storm Water Discharges

Associated with Industrial Activities for the State of Alaska (MSGP-2000) which is effective through October 30, 2005. The MSGP-2000 has been administratively extended by EPA while the Agency completes the re-issuance process for the Multi-Sector General Permits for Storm Water Discharges Associated with Industrial Activities (i.e., MSGP-2007). This process is currently underway. The LTF general permits (GPs) provide Clean Water Act (CWA) authorization for the discharge of bark and wood debris resulting from the in-water transfer of logs. LTFs with storm water discharges must seek additional permit coverage under the MSGP-2007 once issued. LTFs with any other type of discharge (such as sanitary waste) from a point source, must apply for a permit for such a discharge.

In order to ensure protection of water quality and human health, the draft LTF GPs place limits on the types and amounts of pollutants that can be discharged from LTFs and places other conditions on such activity.

This fact sheet includes:

- information on public comment, public hearing, and appeal procedures
- a description of the industry and the types of facilities covered
- a description of proposed permit conditions
- technical discussion supporting the conditions in the draft LTF GPs

Alaska State Certification

The Alaska Department of Environmental Conservation (ADEC) proposes to certify the LTF general permits under Section 401 of the Clean Water Act. The state has submitted preliminary Section 401 certifications prior to the public notice (Appendix D).

Alaska Coastal Management Program (ACMP) Review

EPA has made a preliminary determination that discharges authorized by the proposed LTF General Permits are consistent with the Coastal Zone Management Act, 16 USC § 1451 et seq., and is requesting that the Alaska Department of Natural Resources (ADNR), Office of Project Management and Permitting (OPMP) review the draft GPs and render a consistency determination. EPA anticipates concurrence from ADNR OPMP regarding its determination for consistency with the statewide standards of the ACMP and the enforceable policies of the all coastal districts with LTFs within their boundaries. The State's consistency determination will occur concurrent with the public notice period.

Summary of Proposed Changes

The draft LTF general permits propose the following significant changes to the existing permits. These changes are described in detail in the body of this fact sheet and in Appendix A.

1. All shore-based LTFs must prepare and implement a Pollution Prevention Plan (PPP) before submitting a Notice of Intent or Notification for permit coverage.
2. EPA may issue new general permit discharge authorizations to LTFs located on residue impaired waters classified as Category 4b if an ADEC approved Remediation Plan is in place. New LTFs located impaired waters that are included in the CWA section 303(d) list (i.e., Category 5 waters) must apply for an individual NPDES permit.

3. Provides discretion for Pre-1985 LTFs to operate in waters less than -40 feet Mean Lower Low Water (MLLW). This change to Best Management Practices (BMPs) does not affect Post-1985 LTFs.
4. The presence of continuous bark and/or wood debris within the project area Zone of Deposit (ZOD) in amounts equal or greater than 0.75 acres triggers implementation changes to BMPs and pollution prevention planning as a proactive approach towards preventing greater than 1.0 acres of continuous bark and wood debris from accumulating.
5. When submitting an Notice of Intent (NOI) for coverage under the Post-1985 GP, or Notification for coverage under the Pre-1985 GP, operators must certify that BMPs will be implemented at the time when in-water log storage or transfer begins.
6. Requires the use of a GPS receiver with Wide Area Augmentation System (WAAS) capabilities for locating the discharge point and permanent monitoring shore markers.
7. Requires that the Pollution Prevention Plan (PPP) include a site map that shows the boundaries of the upland sort yard and the location of industrial activities that occur within the sort yard.
8. Changed the depth requirement for required annual dive surveys for LTFs transferring more than 15 million board feet over the life of the permit from -60 feet MLLW to -100 feet MLLW.

EPA Invites Public Comment

Persons wishing to provide comments on the draft general permits or request a public hearing for the draft permits may do so in writing before the expiration date of the public notice. A written request for public hearing must state the nature of the issues to be raised as well as the requester's name, address and telephone number. All written comments should be submitted to EPA as described in the public comments section of the attached public notice. After the public notice expires and all significant comments have been considered, EPA's Regional Director for the Office of Water and Watersheds will make a final decision regarding permit issuance.

Persons wishing to comment on state certification should submit written comments by the public notice expiration date to:

Chris Foley
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PO Box 111800
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(907) 465-5257

Within 120 days of EPA's final permit decision under 40 CFR 124.15, any interested person may appeal the LTF general permits in the Ninth Circuit Court of Appeals in accordance with Section 509(b)(1) of the Clean Water Act. Persons affected by a general permit may not challenge the conditions of the permit in further EPA proceedings (see 40 CFR 124.19). Instead, they may either challenge the permit in court or apply for an individual NPDES permit.

Documents Are Available for Review.

The draft LTF General Permits, fact sheet, and related documents can be reviewed at EPA's regional office in Seattle between 8:30 a.m. and 4:00 p.m., Monday through Friday (see address below). Copies and other information may be requested by writing to EPA at the address below to the attention of the NPDES Permits Unit, or by calling (800) 424-4EPA.

United States Environmental Protection Agency, Region 10
1200 Sixth Avenue, OWW-130
Seattle, Washington 98101
206-553-0523 or 1-800-4244372 (within Alaska, Idaho, Oregon, and Washington)

The fact sheet and draft general permit are also available at:

U.S. Environmental Protection Agency, Region 10
Alaska Operations Office
222 West 7th Avenue, #19
Anchorage, AK 99513
907-271-6561

United States Environmental Protection Agency, Juneau Office
709 W 9th Street, Room 223A
PO Box 20370
Juneau, AK 99802-0370
1-907-586-7604

Alaska Department of Environmental Conservation
Anchorage Office
555 Cordova
Anchorage, AK 99501
907-269-7500

Alaska Department of Environmental Conservation
Juneau Office
410 Willoughby Avenue, Suite 303
PO box 111800
Juneau, AK 99811-1800
907-465-5010

The draft permit and fact sheet can also be found by visiting the EPA Region 10 website at www.epa.gov/r10earth/watrpermits.htm.

For technical questions regarding the permit or fact sheet, contact Kai Shum at the phone number or e-mail at the top of this fact sheet. Services can also be arranged for persons with disabilities by contacting Audrey Washington at (206) 553-0523, or at washington.audrey@epa.gov.

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LIST OF ACRONYMS

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
ATTF	Alaska Timber Task Force
APA	Administrative Procedures Act
BAT	Best Available Technology Economically Achievable
BCT	Best Conventional Pollutant Control Technology
BPT	Best Practicable Control Technology Currently Available
BMP	Best Management Practices
BPJ	Best Professional Judgment
CFR	Code of Federal Regulations
CWA	Clean Water Act (or the “Act”)
EFH	Essential Fish Habitat
ELGs	Effluent Limitations Guidelines
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FR	Federal Register
GP	General Permit
LTF	Log Transfer Facility
LRS	Log Raft Storage Facility
MLLW	Mean Lower Low Water
MSGP	Multi-Sector General Permits for Storm Water Discharges Associated with Industrial Activities
NOAA Fisheries	National Oceanic and Atmospheric Administration, Marine Fisheries Service
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standard
PPP	Pollution Prevention Plan
RHA	Rivers and Harbors Act of 1899
TMDL	Total Maximum Daily Load

USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency (EPA)
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WET	Whole Effluent Toxicity
WLA	Waste Load Allocation
WQBEL	Water Quality Based Effluent Limitation
ZOD	Zone of Deposit

I. INTRODUCTION

Section 301(a) of the Clean Water Act (CWA) provides that the discharge of pollutants is unlawful except in accordance with an NPDES permit unless such a discharge is otherwise authorized by the CWA. The EPA's implementing regulations found under Title 40 of the Code of Federal Regulations (CFR), Part 122, Section 28 (40 CFR 122.28) authorize the issuance of general permits to categories of discharges. The EPA may issue a general permit (GP) to a category of point sources located within the same geographic area whose permits warrant similar pollution control measures.

The Director is authorized to issue a general NPDES permit if there are a number of point sources operating in a geographic area that: 1) involve the same or substantially similar types of operations; 2) discharge the same types of waste; and, 3) require the same or similar treatment technologies or monitoring requirements. In the opinion of the Director, log transfer facilities (LTF) are more appropriately controlled under a general permit than under individual NPDES permits.

A. Permit History

In 1984, EPA determined that log transfer into marine waters created a point source discharge of bark and woody debris, and would require a NPDES permit. On October 22, 1985, EPA and the U.S. Army Corps of Engineers (USACE) signed a Memorandum of Agreement (MOA) regarding coordination of permitting for LTFs. Section IV of the MOA outlined procedures for existing LTFs which had previously received a permit under Section 404 of the CWA or Section 10 of the Rivers and Harbors Act (RHA) of 1899.

In 1985 representatives from various State of Alaska resource agencies, the timber industry, and federal agencies involved in LTF permitting developed the *Log Transfer Facility Siting, Construction, Operation and Monitoring / Reporting Guidelines* (Alaska Timber Task Force Guidelines (ATTF Guidelines) (Appendix B). The Guidelines establish siting, construction and operation practices and identify the physical features, practices, and measures considered needed to safely and efficiently transport logs from LTFs. Many of the ATTF Guidelines are the basis for the requirements of the LTF GPs. The siting guidelines have been applied to facilities seeking permit coverage since 1985 and are incorporated into the the Post-85 GP. Since the Pre-85 facilities were in existence at the time that NPDES permitting began, the siting guidelines were not applied to those facilities.

The ATTF Guidelines identified an interim threshold for bark and wood debris accumulation of one acre of 100% coverage greater than 10 cm at any point on the sea floor (both intertidal & subtidal). The 1.0 acre, 10 cm threshold became the fixed 1-acre Zone of Deposit (ZOD) contained in individual NPDES permits issued to LTFs prior to the adoption of the 2000 LTF GPs as well as individual NPDES or general NPDES permits issued to seafood processors. The ATTF Guidelines address cleanup in Section C6 of Appendix B, "Bark Accumulation". This section states that where accumulation exceeds the threshold level, cleanup (if any) will occur at the discretion of the permitting agency(ies). Section C6 is the basis of the Remediation Planning requirements in the 2000 LTF General Permits.

In 1987, Congress passed a stand-alone provision to the CWA, Public Law 100-4, which reiterated the procedures outlined in the MOA for these LTFs authorized under Section 404 prior to October 22, 1985. Under the provisions of Public Law 100-4, those permittees “shall not be required to submit a new application for a permit under section 402.” However, “in any case where the Administrator demonstrates, after an opportunity for a hearing, that the terms of a permit do not satisfy the applicable requirements of sections 301, 302, 306, and 403 of such Act,” EPA has the authority to modify the existing Section 404 permits “to incorporate such applicable requirements.”

Following establishment of the ATTF Guidelines and the authority to coordinate permitting activities between the EPA and the USACE, in March 2000, EPA Region 10 adopted two general NPDES permits for LTFs. Permit No. AK-G70-0000 was referred to as the Pre-1985 GP and modified the USACE Section 404 permits that had been issued to Alaskan LTFs prior to October 22, 1985.

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 Public Law 100-4 and the MOA regarding coordination of permitting LTFs, EPA modified all USACE permits issued to LTFs prior to October 22, 1985, to incorporate the provisions of the 2000 LTF GPs. These actions resulted in what is known as the Pre-85 LTF GP (i.e., AK-G70-0000).

The 2000 Pre-85 LTF general permit added terms to the Section 404 dredge and fill permits to control the discharge of bark and wood debris to satisfy the applicable requirements of the CWA. Permit No. AK-G70-1000, the Post-1985 general NPDES permit, became applicable to LTFs discharging to marine waters of Alaska (extending from the Alexander Archipelago west through central Gulf of Alaska and Prince William Sound to Kodiak Island) from new LTFs, those with individual NPDES permits that had expired or been administratively extended, those with individual NPDES permits that chose to seek coverage under the general permit, and to all offshore LTFs or log storage facilities that wished to continue or resume operation.

The 2000 LTF GPs authorize the discharge of bark and wood debris, under specified terms, to both near shore and offshore marine waters in Alaska. LTFs authorized by the 2000 LTF GPs are required to develop and implement Pollution Prevention Plans and to restrict their

discharges to inside the perimeter of a project area ZOD. The permits also require annual underwater bark monitoring for facilities located in waters less than -60 feet Mean Lower Low Water (MLLW) that will transfer more than 15 million board feet (mmbf) during the five-year period of the LTF GPs. If this monitoring shows more than one acre of continuous coverage by bark and wood debris deeper than 10 cm at any point, additional measures must be taken to minimize further bark accumulation.

The Alaska Department of Environmental Conservation (ADEC) certified the 2000 LTF General Permits under Section 401 of the CWA on August 24, 1999. ADEC's certification included a new ZOD provision allowing for a project area ZOD. Project area means the entire marine operating area of an LTF, either shore-based or off-shore, including the following components: shore-based log transfer devices; shore-based log transfer, rafting, and storage areas; helicopter drop areas; vessel and barge loading and unloading areas; off-shore log storage areas not adjacent to a shore-based LTF; bulkheads, ramps, floating walkways, docks, pilings, dolphins, anchors, buoys and other marine appurtenances; and the marine water and ocean bottom underlying and connecting these features. The project area ZOD established a 1.0 acre threshold (not a fixed limit) for continuous cover bark greater than 10 cm deep. If the 1.0 acre threshold was exceeded, the state certification triggered requirements for remediation planning. The new ZOD for the 2000 permit issuance also allowed for the presence of discontinuous and trace cover bark without limits within the project area.

ADEC's decision to allow this new ZOD provision was based on two primary considerations. The first consideration was that the fixed 1.0 acre limit failed to recognize that bark other than continuous cover is likely to be found outside of the fixed 1.0 acre ZOD. This ZOD was fixed in size, not location. ADEC recognized that trace and discontinuous amounts of bark were likely to be discharged within what was defined because the project area as log bundles were transferred to water, moved to raft building areas, and stored at log storage areas within the operational footprint of the facility. Potentially bark found outside the fixed 1.0 acre ZOD could have been a violation of the Alaska Water Quality Standards (WQS). By adopting a project area ZOD, ADEC could allow for the presence of discontinuous and trace cover bark through a variance to the WQS.

The second consideration was that NPDES permits usually establish limits on prospective discharges. In other words, limits typically apply only to discharges that occur after the permit is issued. In the case of the 2000 LTF GPs, ADEC decided to regulate both historic and prospective bark accumulations. This was of particular concern to Pre-85 LTF operators who had operated without state and federal discharge permits and monitoring requirements, and were concerned that they would be in immediate permit violation once a Notification was submitted to EPA if the first dive survey found more than 1.0 acre of continuous cover bark greater than 10 cm deep at any point.

ADEC's certification of the 2000 LTF GPs was administratively challenged (under 18 AAC 15.195 200, request for an adjudicatory hearing) by the Natural Resource Defense Council (NRDC) on September 23, 1999. The primary issues were:

- Without a one acre limit on continuous cover bark the project area ZOD had no “limit” as ADEC’s ZOD regulations require;
- ADEC did not adequately consider all the factors required by the WQS in allowing a project area ZOD;
- Alaska’s antidegradation regulations require a site specific determination that the ZOD will not impair existing uses, and that ADEC cannot make that determination through a general permit;
- 18 AAC 70.900 prohibits the issuance of state general permits that “threaten” water quality, and that the project area ZOD will threaten water quality;
- Limiting bark accumulation monitoring to 60 feet is arbitrary, as continuous cover bark may extend beyond 60 feet into deeper but still productive habitats;
- The expansion of the ZOD from one acre to a LTF’s project area fundamentally relaxes the regulatory requirements applicable to LTFs in Alaska; and
- The remediation plan process adopted by ADEC would not protect water quality to the same extent as a 1.0 acre limit on continuous cover bark.

On May 2, 2002 the Hearing Officer in the adjudicatory proceedings issued his Final Decision. He concluded that:

1. “There is reasonable assurance that discharges authorized by ADEC pursuant to the terms of the general permits, the certifications and review of NOI’s (Notice of Intent) will comply with Alaska’s water quality standards’; and
2. “There is reasonable assurance that the discharges authorized by ADEC pursuant to the terms of the general permits, the certifications and review of NOI’s will comply with Alaska’s antidegradation policy.”

The Hearing Officer upheld most of the provisions contained within the 401 certifications but did impose some new requirements on ADEC’s certification and/or ZOD authorization process. ADEC was required to:

1. Provide public notice for new, previously unpermitted LTFs to gather information on existing uses of the waterbody;
2. Provide public notice for LTFs reporting more than 1.0 acre of continuous cover bark;
3. Mail copies of the public notice to the environmental plaintiffs in the adjudication proceedings;
4. Conduct a site specific ZOD authorization and develop a Decision Document that provides the basis for each ZOD authorization issued;
5. Conduct site specific reviews of NOIs; and
6. Provide parties to the adjudication appeal rights for individual authorizations.

The Hearing Officers final decision also contained a prohibition against ADEC issuing LTF general permit authorizations under state law to facilities located on impaired waterbodies (Section 303(d) of the CWA) regardless of the source of the impairment.

EPA's LTF GPs were appealed to the United States Court of Appeals for the Ninth Circuit Court (9th Circuit Court). The 9th Circuit Court ruled on February 13, 2002 that EPA had not provided adequate notice of and an opportunity to comment on the project area ZOD provision in ADEC's final 401 certification of the LTF GPs. The public review drafts of the LTF general permits and ADEC's draft 401 certification retained the fixed 1.0 acre ZOD provision. ADEC adopted the project area ZOD after the completion of the public review period, and the 9th Circuit Court found that the public had not been afforded an opportunity to comment on this change. The 9th Circuit Court remanded the LTF GPs to EPA to take further comment on this change. During the public comment period, EPA also proposed other modifications to certain permit conditions.

Following the completion of the additional public review period, the LTF GPs were modified on April 27, 2004 to clarify procedures for authorization of project area ZODs consistent with the Hearing Officers decision, as well as monitoring requirements for bark deposition below minus 60 ft mean lower low water MLLW. The Federal Register notice dated April 13, 2004 (<http://www.epa.gov/fedrgstr/EPA-WATER/2004/April/Day-13/w8314.htm>) provides more detailed information on modifications made to the LTF general permits.

B. Industry Description

The majority of the timber harvested within coastal Alaska originates from areas that lack road access to established domestic mills or market destinations. For this reason most timber is transported either in or on marine waters. A portion of the timber volume harvested is placed directly onto a barge from a shore-based facility and the barge is towed to a domestic mill for unloading directly to the uplands for processing. This method of transport does not require a LTF GP since log bundles are not placed in marine waters. Timber that is not barged is transferred from shore-based LTFs to marine waters for transport to a domestic mill or loaded onto a log ship for export. These shore-based LTFs, also known as log dumps, are subject to NPDES permitting.

Once log bundles are transferred to marine waters, individual log bundles are consolidated into log rafts in the log raft makeup area. This area is located adjacent to the actual transfer device. Once a log raft has been assembled they are either stored within the authorized project area ZOD or are towed to a permitted log raft storage area (LSA).

Operations of all in-water LTFs and LSAs result in some degree of bark loss and wood debris which can accumulate in extensive benthic deposits. Currently there is only one permitted facility (East Port Fredrick) reporting an exceedance of the 1.0 acre continuous cover threshold. This facility is operating under an ADEC-approved Remediation Plan.

ADEC records (April 2005) identify 91 LTFs authorized to discharge under the LTF GPs. Fifty four (54) LTFs are authorized under the Pre-85 GP (59 percent) and the remaining 37 facilities are authorized under the Post-85 GP. All authorized, Pre-85 facilities are onshore LTFs. Of the authorized Post-85 facilities, 30 are onshore facilities, and 7 are offshore facilities. The United States Forest Service (USFS) is the permittee/authorized discharger for 75 percent of the Pre-85 LTFs. Sealaska Timber Corporation and the USFS are the permittee/authorized discharger for 40 and 25 percent of the Post-85 LTFs, respectively.

C. Discharge Characterization

The LTF GPs authorize the discharge of bark and wood debris to marine waters of the United States within the project area ZOD. In addition to this material falling from floating logs to the sea floor, several other types of pollutants may potentially be discharged into the marine environment as a result of LTF operations, including:

- Petroleum products
- Leachates from sunken wood debris
- Sediment

While discharges of petroleum products are not allowed under the LTF GPs, accidental releases occasionally occur as a consequence of LTF related activities. Petroleum products may be conveyed into the marine environment via stormwater runoff. The source of the petroleum products are leaks or accidental spills from heavy equipment used to unload log trucks and transport individual logs or bundles during the various processing steps that occur within the upland log yard. Typical petroleum products include gasoline, diesel fuel, hydraulic oil, motor oil, and grease. Additionally, releases of oil from leaking equipment and vessels can occur in the water.

During the last permit cycle, four LTFs reported a total of seven (7) visible oil sheens on the Annual Reports submitted for these facilities. Estimates of the size of the spills ranged from one cup to 425 gallons when a vessel sank. Based upon the frequency and magnitude of reported spills, it appears that relatively small and infrequent amounts of petroleum products enter marine waters from stormwater runoff or spills.

Log yards in Alaska are not paved. The surfacing consists of native shot rock developed by drilling and blasting of local rock outcrops. The hardness of the rock determines how rapidly it breaks down as heavy equipment travels across it. Regardless of how hard the rock is, between weathering and heavy equipment travel, some of the rock will be pulverized over time becoming fine textured and easily transported in surface runoff resulting from rain or snow melt events. This is the one of the sources of sediment that may be transported into marine or fresh waters. The other source is mud brought into the sort yard on log trucks. LTFs with stormwater discharges are required to obtain coverage under the 2007 MSGP.

Wood waste, like any organic waste, creates a biological oxygen demand in sediments as it decomposes, and excessive amounts can reduce or eliminate available oxygen within the interstitial pore spaces of the wood waste deposit. A lack of oxygen (i.e., anaerobic conditions) in sediments limits the survival of benthic organisms. In addition, compounds such as sulfides, ammonia, and methane can build up in anaerobic sediments due to natural biological decomposition processes to levels that are toxic to many benthic organisms. Wood waste may also leach and/or degrade into some compounds such as phenols and methylated phenols, benzoic acid and benzyl alcohol, terpenes, and tropolones that can be toxic to aquatic life. Different types of wood and bark leach different chemicals and show varying degrees of toxicity in laboratory tests. Large masses of wood waste may provide an

inappropriate physical substrate for benthic colonization, spawning, and other habitat needs, and may smother aquatic plants and benthic organisms. Large accumulations of wood waste are also slow to degrade and may persist in the aquatic environment for decades. The severity of wood waste effects in sediments depends directly on its physical form, its degree of incorporation into sediments, the amount of wood waste present, the amount of flushing in the area, the habitat (fresh or marine), and the type of wood from which the waste was derived. The adverse impacts of wood waste are, therefore, largely site-specific and may vary considerably even within a small area.

Overall, the quantities and composition of bark and wood debris that may enter the marine environment as a result of LTF operations in southeast Alaska is dependent upon the following factors:

- Quantity of logs transferred
- Transfer method
- Species of logs transferred
- Operational practices

Log transfer methods include the use of cranes, A-frames, slides, chain conveyors, and direct dumping. The timber species also affects factors such as bark loss and the composition and quantities of leachates released to receiving waters. The operating practices (e.g., length of time logs or log bundles are in the water before being moved by tug, and effectiveness of bark removal from the sort yard) used at an LTF also influence the quantity and composition of pollutants discharged. However, in order to reduce teredo damage to the logs, LTF operators generally try to minimize the length of time that log bundles are in the water.

Table 1 provides information on transfer methods commonly employed at some Alaskan LTFs. The table includes all methods used, but does not include all facilities that are authorized to discharge under the 2000 LTF GPs. It is intended to be representative, not all inclusive.

Table 1: TRANSFER METHODS USED AT ALASKA LTFs			
(2000 – 2004)			
Transfer Type		Facility	Map ID ^a
Crane		Hydaburg Ship Moorage	69
		Kake Ship Moorage	70
		Rose Inlet Ship Moorage ^b	73, 74
		Klawock Island Dock ^b	56
		Shrimp Bay ^b	17
		View Cove ^b	60
A-Frame	Single or Not Described	Grace Harbor	55

Table 1: TRANSFER METHODS USED AT ALASKA LTFs				
(2000 – 2004)				
Transfer Type	Facility	Map ID ^a		
	West Arm Cholmondeley	53		
	Double	Carroll	45	
		East Twelve Mile South	46	
		Hassler	7	
		Klu Bay	8	
		Pats Creek	10	
		Shrimp Bay ^b	17	
		View Cove ^b	60	
		Salt Lake Bay ^b	15	
Low Angle Ramp	With Rails	View Cove ^b	60	
		Port Caldera	64	
		Sulzer	76	
		Coco Harbor	67	
		Sawmill Cove	39	
		West Port Frederick	61	
	Drive Down	Copper Mountain	68	
		Kina Cove	63	
		Sandy Point	62	
		Tolstoi Bay (Sealaska)	77	
		Tolstoi Bay (AMHT)	79	
		Klawock Island Dock ^b	56	
		Point Macartney	58	
		Saltery Point	82	
		Port Alice	12	
		East Port Frederick	57	
		Chain Conveyor	Klawock Island Dock ^b	56
			Portage Bay	13
Helicopter to Barge, dump bundles to salt water	Deer Island	4		
a = map identification number for log transfer facility (see Figures 2 through 7).				
b = facility water depth greater than 60 feet.				

The quantity of logs transferred is dependant upon the size and level of operational activity at an LTF. This determines, in part, the quantities of log-related and other pollutants discharged. Table 2 shows actual timber volumes transferred at LTFs that were active during the period 2000 through 2004. The number in **bold** text is the highest annual volume transferred at each facility during the five-year period.

TABLE 2: VOLUME (MMBF) OF LOGS TRANSFERRED BY ALASKA LTFS (2000-2004)							
Maximum Annual Volume Category	Map ID ^a	Facility Name	2000	2001	2002	2003	2004
> 40 mmbf	69	Hydaburg Ship Moorage ^b	21.2	49.7	66.2	64.3	86
	84	Moraine Bay	51.4	40.3	27.7	0	0
	85	West Icy Bay	51.4	40.3	27.7	0	0
	75	Soda Bay	0	18.9	19.5	20.9	40.3
> 35 - 40 mmbf	67	Coco Harbor	0	0	4.9	30.3	39.3
> 15 - 35 mmbf	55	Grace Harbor	0	26.7	20.5	17.9	6.2
	46	East Twelve Mile South	26.1	0	0	0	0
	15	Salt Lake Bay	0	0	0	0	25
	57	East Port Frederick	20.8	22.5	16.1	18.1	3.8
	58	Point McCartney	22	22	5.6	4.4	0
	13	Portage Bay	22	22	7.9	12.8	0
	70	Kake Ship Moorage	22	22	13.7	17.2	0
	56	Klawock Island Dock	21.3	0	0	0	0
	64	Port Caldera	21.3	0	0	0	0
	60	View Cove	0	0	21.3	0.2	0.2
	76	Sulzer	21.2	6.6	0	0	0
	79	Tolstoi Bay (AMHT)	0	0	16.5	0	0
	68	Copper Mountain	0	16	0	0	0
< 15 mmbf	77	Tolstoi Bay (Sealaska)	0	13	0	0	0
	14	Rowan Bay	12.3	0	0	0	0
	62	Sandy Point	11.1	0.3	0	0	0
	8	Klu Bay	11	0	0	0	0
	53	West Arm- Cholmondeley	0	0	0	9.9	0
	4	Deer Island	0	9	0	0	0
	39	Sawmill Cove	0	0	0	0	8.6
	63	Kina Cove	8.2	0.3	0	0	0
	7	Hassler	7.2	0	0	0	0
	47	King George	5.4	0	0	0	0
	61	West Port Frederick	4.8	0	4.3	0	0
	87	Wadleigh Island	0	4	0	0	1
	86	Viking Lumber Mill	0	4	0	0	1
	45	Carroll	1.6	0	0	0	0
	78	Lookout Cove	0	0	1.5	0	0
17	Shrimp Bay	1.3	0	0	0.7	0	

TABLE 2: VOLUME (MMBF) OF LOGS TRANSFERRED BY ALASKA LTFS (2000-2004)							
Maximum Annual Volume Category	Map ID ^a	Facility Name	2000	2001	2002	2003	2004
	12	Port Alice	1.1	0	0	0	0
	82	Saltery Point	0	0	0	0	1
	80	Tongass Narrows Ship ^b	0	0	0.3	0	0
	10	Pats Creek	0.05	0	0	0	0
unknown	81	East Icy Bay ^c	?	?	?	0	0
Active LTFS			22	17	10	11	11
a = map identification number for log transfer facility (see Figures 2 through 7). b = Facility water depth is greater than 60 feet so no dive survey was required. c = Facility did not submit annual reports for 2000-2002. Ceased operations at the end of 2002.							

Since 1985, NPDES permits for new LTFS require that permittees that will transfer a total of 15 mmbf or more over the life of the permit (5 years), and which are located in water depths less than 60 feet at MLLW, to conduct annual bark monitoring surveys to determine the areas of continuous and discontinuous coverage by bark and wood debris and the depth of bark and wood along debris specified transect sampling points. Table 3 summarizes the extent of continuous cover at all LTFS located in waters less than 60 feet MLLW that operated during the period 2000 to 2004 that were required to conduct bark surveys.

TABLE 3: MAXIMUM BARK DEPTH AND THE AREA OF CONTINUOUS BARK COVERAGE AT ALASKA LTFS THAT OPERATED DURING 2000-2004^a				
Map ID ^b	Facility Name	Year	Maximum Bark Depth (cm)	Continuous Bark Coverage (acres)
75	Soda Bay	2004	10.0	0.2
68	Copper Mountain	2002	76.2	0.7
55	Grace Harbor	2004	76.2	0.5
61	West Port Frederick	2003	71.1	0.1
63	Kina Cove	2001	66.0	0.6
47	King George	2002	63.5	0.4
76	Sulzer	2002	61.0	0.8
67	Coco Harbor	2004	61.0	0.3
8	Klu Bay	2000	55.9	0.2
14	Rowan Bay	2002	53.3	0.8

46	East Twelve Mile South	2001	50.8	0.3
4	Deer Island	2000	50.0	0.0
10	Pats Creek	2000	50.0	0.5
39	Sawmill Cove	2001	38.1	0.0 ^c
17	Shrimp Bay	2000	38.1	0.0 ^c
78	Lookout Cove	2003	30.0	0.7
77	Tolstoi Bay (Sealaska)	2003	35.6	0.3
12	Port Alice	2001	27.9	0.0 ^c
70	Kake Ship Moorage	2001	0.1	0.0
56	Klawock Island Dock	2004	25.4	0.5
57	East Port Frederick	2004	25.4	2.1
60	View Cove	2004	25.4	0.2
75	Soda Bay	2004	25.4	0.2
7	Hassler	2001	25.4	0.1
13	Portage Bay	2004	25.4	0.1
58	Point McCartney	2004	17.8	0.0
79	Tolstoi Bay (AMHT)	2004	12.7	0.3
81	East Icy Bay	2002	10.9	0.0 ^c
15	Salt Lake Bay	2001	10.2	0.1
45	Carroll	2001	10.2	0.0
64	Port Caldera	2001	7.6	0.3
82	Saltery Point	2004	7.6	0.1
53	West Arm Cholmondeley	2000	5.1	0.0 ^c
62	Sandy Point	2001	1.3	0.0 ^c
84	Morraine Bay LSA	2003	0.0	0.0
85	West Icy Bay	2003	0.0	0.0

^a The most recent annual bark monitoring survey results are shown. Data provided by Chris Foley, Juneau office.

^b Map identification number for the log transfer facility (see Figures 2 through 7)

^c No continuous bark coverage; discontinuous bark coverage was reported.

Note: Shaded entry (East Port Fredrick) identifies the only LTF exceeding the 1.0 acre threshold for continuous cover bark cover.

Bark monitoring survey data is available for 35 LTFs that operated for at least one year during the five year period 2000 through 2004. The maximum measured bark depth and the area of continuous bark coverage at these sites are shown in Table 3 based upon the most recent survey results available from ADEC. Just a single facility (East Port Frederick, Map ID 57), exceeded the NPDES permit 1.0 acre threshold for continuous bark coverage greater than 10.0 cm at any point. By exceeding the 1.0 acre threshold, the requirement to prepare and submit a Remediation Plan to ADEC was triggered. ADEC approved the Remediation Plan in March 2005 (see Section I.A., Permit History, for more discussion on the significance of the continuous cover bark threshold).

The remaining LTFs had continuous bark coverage areas and wood thicknesses less than the 1.0 acre permit threshold. The areas of continuous bark coverage for the 32 active LTF facilities for which data was available ranged from 0.0 to 2.1 acres, with a median value of 0.23 acres; the total continuous bark coverage for all active LTFs in southeast Alaska was 11.2 acres. The maximum bark and wood thickness for active LTFs ranged from 1.3 to 121.9 cm, with a median value of 27.9 cm.

Bark surveys conducted during 2000-2002 were also examined for 29 LTFs that did not operate during the 2000-2004 period (28 Pre-85 LTFs and 1 post-85 LTF). The areas of continuous bark coverage for these facilities ranged from 0.0 to 0.8 acres, with a median value of 0.1 acres; the total continuous bark coverage for all 29 inactive LTFs reviewed for this report was 6.2 acres. The maximum bark and wood thickness for inactive LTFs ranged from 1.3 to 101.6 cm, with a median value of 38.1 cm.

II. PERMIT COVERAGE

A. General Permits

The NPDES permits program implements the CWA's prohibition on unauthorized discharges by requiring a permit for every discharge of pollutants from a point source to waters of the United States. Although NPDES permits are typically issued to individual dischargers, a general permit may be issued to cover discharges within state political boundaries, in accordance with 40 CFR §122.28(a), that:

1. Involve the same or substantially similar types of operations,
2. Discharge the same type of waste,
3. Require the same effluent limitations,
4. Require the same or similar monitoring, and
5. Are more appropriately controlled under a general permit than individual permits.

EPA's original decision to regulate LTF discharges under GPs is consistent with the requirements of 40 CFR§122.28(a). EPA intends to continue to regulate the majority of LTF discharges under a general permit by reissuing the LTF GPs at the completion of the public process.

In general, EPA has concluded that new LTFs located on residue impaired waterbodies included on the CWA section 303(d) list are more appropriately covered under an individual NPDES permit. These are Category 5 waters as identified in ADEC's *Integrated Water Quality Monitoring and Assessment Report* (ADEC 2006) as requiring TMDLs. With EPA approval, ADEC may place Category 5, 303(d) listed waterways into Category 4b which are impaired waters with "other pollution control requirements" (i.e., Remediation Plans) in place to meet water quality standards. In short, new LTFs seeking coverage in residue impaired waters may be eligible for coverage under the GP if they are located in Category 4b waterways, and if there is an ADEC approved Remediation Plan in place. This means that new LTFs seeking Post-1985 coverage in Category 4b waters must submit a Remediation Plan along with their NOI, and receive approval of the plan from ADEC prior to receiving EPA authorization to discharge. However, for an LTF to continue to operate under a Remediation Plan in residue impaired waters, progress must be demonstrated towards reducing continuous bark and wood debris coverage on the sea floor to an area of less than 1.0 acres in the project area ZOD.

B. Facilities and Discharges Covered by the LTF General Permits

1. Geographic Area.

Coverage under the Post-85 GP applies to qualifying LTFs discharging bark and wood debris into marine waters within the geographic area extending from the Alexander Archipelago west through central Gulf of Alaska and Prince William Sound to Kodiak Island. These geographic areas are retained from the 2000 permit issuance, and do not include shorelines and bays associated with Cook Inlet. In general, the large tidal ranges, currents, and intertidal mud flats present across large areas of Cook Inlet make these areas problematic for LTF siting.

The 2000 Pre-85 GP did not specify a geographic area since the intent was to modify all existing 404 permits for LTFs issued prior to October 22, 1985, therefore, there can be no "new" facilities added to this coverage. All Pre-85 LTFs are all located within the boundaries of the State of Alaska, and meet the criteria established in 40 CFR§122.28(a) hence qualify for coverage under a general permit.

2. LTFs Covered by the LTF General Permits

LTFs that transfer logs or bundles directly from land to barge (i.e., no in-water activity) need not apply for coverage under the LTF GPs since there is no discharge of bark or wood waste to waters of the United States. However, these facilities will be required to

apply for a permit for storm water discharges and/or any other point source discharge (i.e., sanitary waste) from the operation of the of the on-shore facility.

Pre-1985 General Permit

The Pre-1985 LTF GP will apply to all LTFs which received a USACE Section 404 permit prior to October 22, 1985 that discharge bark and wood debris during in-water log transfer and storage within a project area ZOD defined by ADEC. The Pre-1985 GP modifies all Section 404 permits for LTFs issued prior to October 22, 1985 where the LTF is being used for log transfer activities to incorporate the requirements and provisions contained in this permit. Because the original Section 404 permit contained no expiration date, authorization to discharge under the Pre-1985 GP does not expire either. Nonetheless, EPA will review and renew the Pre-1985 GP every five years and, if necessary and appropriate, add new requirements to assure the discharges comply with the CWA. Authorization to discharge bark and wood debris from a Pre-1985 LTF requires owners or operators of an LTF to:

- Submit a Notification as described in Section III of this fact sheet to EPA and ADEC. This applies to all Pre-1985 facilities even if they are administratively extended under the 2000 Pre-1985 GP;
- For facilities discharging bark and wood debris under the 2000 Pre-1985 GP, prepare and implement a Pollution Prevention Plan (PPP) prior to submitting a Notification;
- For facilities authorized under the current Pre-1985 GP but not currently discharging bark and wood debris, prepare a PPP. All provisions of the PPP must be fully implemented upon the resumption of log handling, log storage and log transfer activities;
- For facilities that did not submit a Notification for coverage under the 2000 Pre-1985 GP because no transfer of logs occurred between 2000 and present, but anticipate on transferring logs in the future, prepare a PPP prior to submitting a Notification;
- Receive a written project area ZOD authorization from ADEC; and,
- Receive a NPDES permit number from EPA.

Note that a written authorization to discharge from EPA is not required under the Pre-1985 GP, but all facilities must receive a written project area ZOD authorization from ADEC.

The following Pre-1985 facilities submitted Notifications under the 2000 Pre-85 GP and received a written ZOD authorization from ADEC:

Table 4: 2000 Pre-85 LTFs with Approved ZODs	
Tracking #	Facility Name
AK-G70-0001	Viking Lumber Mill LTF
AK-G70-0002	Grace Harbor LTF
AK-G70-0003	Klawock Island Dock LTF
AK-G70-0004	East Port Frederick (Long Island) LTF
AK-G70-0005	Point Macartney LTF
AK-G70-0006	Portage Bay LTF and LSA
AK-G70-0007	View Cove LTF and SA
AK-G70-0008	West Port Frederick LTF and LSA
AK-G70-0009	Long Island LTF - Klukwan
AK-G70-0014	Anita Bay South LTF
AK-G70-0015	Blind Slough LTF
AK-G70-0016	Deep Bay LTF
AK-G70-0017	Deer Island West LTF
AK-G70-0018	Eight Fathom LTF
AK-G70-0019	Hamilton Bay LTF
AK-G70-0020	Hassler LTF
AK-G70-0021	Klu Bay LTF
AK-G70-0023	Margaret Bay LTF
AK-G70-0024	Pats Creek LTF
AK-G70-0025	Polk Inlet LTF
AK-G70-0026	Port Alice LTF
AK-G70-0027	Portage Bay LTF
AK-G70-0028	Rowan Bay LTF
AK-G70-0029	Salt Lake Bay LTF
AK-G70-0030	Shoal Cove LTF
AK-G70-0031	Shrimp Bay LTF
AK-G70-0032	Thomas Bay LTF
AK-G70-0033	Tonka LTF
AK-G70-0034	Whale Pass LTF
AK-G70-0035	Winter Harbor LTF
AK-G70-0036	Woodpecker Cove LTF

Table 4: 2000 Pre-85 LTFs with Approved ZODs	
Tracking #	Facility Name
AK-G70-0038	Calder LTF
AK-G70-0039	Coffman Cove LTF
AK-G70-0040	Corner Bay LTF
AK-G70-0041	El Capitan LTF
AK-G70-0042	False Island LTF
AK-G70-0043	Fire Cove LTF
AK-G70-0044	Hanus Bay LTF
AK-G70-0045	Inbetween LTF
AK-G70-0046	Kennel Creek LTF
AK-G70-0047	Labouchere Bay LTF
AK-G70-0048	Marble Island East LTF
AK-G70-0049	Naukati LTF
AK-G70-0050	South West Neets Bay LTF
AK-G70-0051	Nichin Cove LTF
AK-G70-0052	Rynda LTF
AK-G70-0053	Saginaw Bay LTF
AK-G70-0054	Sawmill Cove LTF
AK-G70-0055	Sumez - Refugio LTF
AK-G70-0056	St. Johns LTF
AK-G70-0057	Indian River LTF
AK-G70-0059	Todd LTF
AK-G70-0060	Venus Cove LTF
AK-G70-0061	Saltery Point LTF

Notifications for the following Pre-1985 LTFs listed in Table 5 were submitted to EPA and ADEC, but for a variety of reasons ADEC did not authorize a ZOD. For this reason, the facility tracking numbers (or individual coverage numbers issued under the GP) identified in Table 4 are not in sequential order.

Table 5: Pre-85 Facilities that Submitted a Notification Under the 2000 Pre-85 General Permit but did not Receive a Written ZOD Authorization.
Port Frederick LSA
Cube Cove LTF and log storage area

Table 5: Pre-85 Facilities that Submitted a Notification Under the 2000 Pre-85 General Permit but did not Receive a Written ZOD Authorization.
Coon Cove LTF
Anita Bay North LTF
Lancaster Cove LTF
Herring Bay LTF
Thorne Bay LTF

Table 6 provides a list of other known Pre-85 facilities that may seek coverage under the draft Pre-1985 general permit if certain conditions are met as discussed below:

Table 6: Other Known Pre-85 Facilities That Did Not Seek Coverage under the 2000 Pre-85 General Permit	
Appleton Cove LTF	Polk Inlet LTF
Cape Pole LTF	Rodman Bay LTF
Crab Bay LTF	Saginaw Bay LTF
Devilfish Bay LTF	Saook Bay LTF
Eagle River LTF	Shelikof LTF
Edna Bay LTF	Shrubby Island LTF
Eight Fathom Bight LTF	Shipley Bay LTF
Hanus Bay LTF	Silver Bay LTF
Homeshore LTF	Sitkoh Bay LTF
Indian River LTF	St. John's Harbor LTF
Kidney Cove LTF	Suemez LTF
Klu Bay LTF	Todd LTF
Mud Bay LTF	Tonka LTF
Nakwasina NE LTF	Twelvemile South LTF
Naukati LTF	West Sitkoh Bay LTF
Olive Cove LTF	Whale Pass West LTF
Woronofski LTF	

EPA and ADEC want to establish a definitive list of Pre-85 LTFs. EPA and ADEC believe that to effectively regulate LTF discharges, and efficiently administer the LTF GPs, determining the universe of older facilities which are eligible as Pre-1985 LTFs is appropriate and necessary. To that end, 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-G70-0000 (see Section III.B). If a Notification for coverage under the proposed Pre-1985 LTF is not received within the 90 day deadline, it will be determined that the operator no longer exists and that the LTF is abandoned. Any future operation and discharge from the LTF will require authorization through the Post-85 LTF GP.

Post-85 General Permit

The draft Post-1985 GP applies to all other LTFs except those meeting an exclusion criteria described in Section II.C. of this fact sheet. Authorization to discharge under the draft Post-1985 GP will require owners or operators of an LTF to:

- Submit a NOI, as described in Section III of this fact sheet to EPA and ADEC. This applies to all Post-1985 facilities even if they are administratively extended under the 2000 Post-1985 GP
- For facilities currently covered under the administratively extended Post-1985 GP, review and update the PPP as necessary prior to submitting a NOI;
- For new facilities, develop a PPP prior to submitting a NOI;
- Receive a written project area ZOD authorization from ADEC; and,
- Receive written authorization to discharge and an NPDES permit number from EPA.

As previously noted, written authorization to discharge from EPA is not required for the Pre-1985 GP, but that all facilities must receive a written project area ZOD from ADEC.

3. Facility Classification

Both shore-based and off-shore LTFs may seek authorization to discharge under Permit No. AK-G70-1000. All Pre-1985 LTFs are shore-based operations. Shore-based LTFs include those facilities that move logs between land and water. Off-shore LTFs include vessels or helicopters moving logs into or out of off-shore marine waters and off-shore log storage areas not adjacent to a shore-based LTF.

The 2000 LTF GPs further classified shore-based LTFs by use descriptions based on the volume of timber transferred during a typical rotation period of 80-100 years.

There were five category types (I-V) and one narrative category in the 2000 LTF general permits. EPA has reduced the number of numeric categories from five to four (Type I-IV) in the draft LTF GPs and retained the narrative category (i.e. other). This change is the result of the analysis of annual reports from active facilities that showed only six facilities transferred more than 35 mmbf during any one year. The proposed classification system is shown below.

- Type I: Transfers over 30 million board feet per year (mmbf/yr)
10 yrs or more of continuous operations

- Type II: Transfers up to 30 mmbf/yr
Less than 10 yrs of continuous operation
May have intermittent activity at lower volumes

- Type III: Transfers up to 15 mmbf/yr
Up to 5 yrs of continuous operation
May have 1-3 similar periods of activity during rotation

- Type IV: Transfers less than 15 mmbf during the life of the permit
May have 1-2 similar periods of activity during rotation

- Other: Annual volume and duration/frequency of use to be defined in the Notification or NOI

C. LTF Discharges and Receiving Waters Not Covered

1. The 2000 LTF GPs only authorize discharges of bark or wood debris within an LTF project area ZOD.
2. General Permit No. AK-G70-1000 does not apply to LTFs that received a CWA Section 404 dredge and fill permit before October 22, 1985 that have not been authorized to discharge under an individual NPDES permit. Discharges from these LTFs are subject to the requirements of the Pre-1985 GP (No. AK G70-0000) unless authorized by an individual NPDES permit. This prohibition is retained in the draft permit.
3. The draft LTF GPs do not authorize the discharge of sanitary or domestic wastes from LTF project areas.
4. The draft LTF GPs do not apply to discharges from facilities where an individual NPDES permit has been terminated or denied.
5. The LTF GPs do not apply to discharges that will adversely affect a listed endangered or threatened species or its critical habitat.

6. Draft general permit No. AK-G70-1000 retains the prohibition against authorizing discharges from LTF sites that do not meet the ATTF siting criteria listed in the permit. An applicant must apply for and obtain a waiver from EPA and ADEC in order to discharge under the Post-1985 GP from an LTF site which fails to meet any of the guidelines listed below in Section 6. These guidelines and waiver requirements for the Post-1985 GP have been retained in the draft permit, and are identified below. The ATTF LTF siting criteria have not been applied retroactively to facilities that received an USACE Section 404 permit prior to October 22, 1985 (i.e., the Pre-1985 GP).
 - a. **Proximity to Rearing and Spawning Areas.** Siting of log transfer and log storage facilities within 300 feet of the mouths of anadromous fish streams or in areas that are important for fish spawning or rearing is prohibited.
 - b. **Bark Dispersal.** LTFs should be sited along or adjacent to straits and channels or deep bays where currents are strong enough to disperse sunken or floating wood debris. The location of LTFs in embayments with sill or other natural restrictions to tidal exchange should be avoided.
 - c. **Site Productivity.** Sites for log transfer and log storage should be located in areas with the least ecologically productive intertidal and subtidal zones.
 - d. **Sensitive Habitats.** Log transfer and storage facilities should not be sited on or adjacent to (i.e., near enough to affect) extensive tide flats, salt marshes, kelp or eelgrass beds, seaweed harvest areas or shell fish concentrations areas.
 - e. **Storage and Rafting.** Log storage and rafting areas should be located in areas where logs and log rafts will not ground at low tide. Log rafting and storage areas shall be located in waters at least 40 feet deep measured at mean lower low water (MLLW).

An owner or operator of a proposed and otherwise qualified LTF not meeting one or more of the ATTF Guidelines may request a waiver to discharge under permit No. AK-G70-1000 by submitting a timely and complete request that includes the following materials:

- A NOI to be authorized under the GP in accordance with requirements of the permit and Section III of this fact sheet;
- Identification of the specific siting guideline from Section II.C.6 a – e above from which the waiver is requested;
- A detailed description of the circumstances requiring discharges to the excluded area(s) and an evaluation of practicable alternatives to discharging within the

excluded area(s) and demonstration that the proposed discharge is more protective of the environment than the alternatives evaluated.

- A description of how and why the discharges will not cause a violation of applicable state water quality standards in the receiving water or any other condition of draft general permit No. AK-G70-1000.
7. Draft general permit No. AK-G70-1000 will not apply to discharges to the following protected water resources and special habitats. These protected water resources and special habitats are retained from the 2000 Post-1985 general permit. With the exception of Section II.C.7 g and h, below, these exclusions do not apply to private in-holdings within state and federal land. The draft permit language in Subpart g below has been expanded to include the definition of ‘critical habitat’ for Steller sea lions so that applicants do not have to look up the regulations for the definition of this term. The following receiving waters are not eligible for permit coverage under the Post-85 GP:
- a. Any State Game Sanctuary, Game Refuge, or Critical Habitat Area;
 - b. Any State Park, without written authorization from the State Park Superintendent;
 - c. Any unit of the National Park System or a National Historic or Natural Landmark without written authorization from the Park Superintendent (for National Parks) or Program Coordinator (for National Historic and Natural Landmarks);
 - d. Any National Wildlife Refuge without written permission from the Regional Director of the U.S. Fish and Wildlife Service (USFWS) or a delegated representative;
 - e. Any National Wilderness Area or National Monument ;
 - f. The Port Graham/English Bay Area which merits special attention;
 - g. Within one nautical mile of any major Steller sea lion haulout or rookery site or within any Steller sea lion critical habitat area as defined at 58 Fed. Reg. 45269 (1993), without written permission from the Regional Director of the National Marine Fisheries Services. Critical habitat includes an aquatic zone that extends 3,000 feet (0.9 km) seaward in State and Federally managed waters from the baseline or basepoint of each major rookery and major haulout in Alaska that is east of Cape Suckling (144 degrees West longitude). Critical habitat includes an aquatic zone that extends 20 nm (37 km) seaward in State and Federally managed waters from the baseline or basepoint of each major rookery and major haulout in Alaska that is west of Cape Suckling.; and
 - h. Within waters surrounding the Kodiak or Afognak Islands if, after consultation with the USFWS, it is determined that the discharge adversely affects either the

Steller's eider or the southwest Alaska distinct population segment of the northern sea otter.

8. In general, EPA has concluded that new LTFs located on residue impaired waterbodies included on the CWA section 303(d) list are more appropriately covered under an individual NPDES permit. These are Category 5 waters as identified in ADEC's *Integrated Water Quality Monitoring and Assessment Report*, also referred to as the 305(b) report (ADEC 2006), as requiring TMDLs. With EPA approval, ADEC may place Category 5, 303(d) listed waterways into Category 4b which are impaired waters with "other pollution control requirements" (i.e., Remediation Plans) in place to meet water quality standards. New LTFs seeking coverage in residue impaired waters may be eligible for coverage under the GP if they are located in Category 4b waterways, and if there is an ADEC approved Remediation Plan in place. This means that new LTFs seeking Post-1985 coverage in Category 4b waters must submit a Remediation Plan along with their NOI, and receive approval of the plan from ADEC prior to receiving EPA authorization to discharge. However, for an LTF to continue to operate under a Remediation Plan in residue impaired waters, progress must be demonstrated towards reducing continuous bark and wood debris coverage on the sea floor to an area of less than 1.0 acres in the project area ZOD. General permit coverage is not available for new facilities seeking to operate a LTF in Category 5 waters. These facilities must apply for an individual NPDES permit which will include any wasteload allocations identified in the TMDL.

D. Permit Expiration

The draft Post-1985 GP will expire five years after the permit effective date. If the Post-1985 GP is not reissued before their expiration date, the conditions of the expired permits will continue in force until the effective date of a new or reissued permit (40 CFR §122.6). Only those facilities authorized to discharge under the expired permit, and who submit a NOI at least 180 days prior to expiration of the general permit, will remain authorized to discharge under the administratively extended Post-1985 GP.

Authorization to discharge under the Pre-1985 GP does not expire in accordance with Public Law 100-4; however, EPA will review and, if necessary and appropriate amend the Pre-1985 GP every five years. Authorized Pre-1985 LTFs are requested to submit an updated NOI to EPA and ADEC at least 180 days prior to the expiration date of the Post-1985 GP so that the agencies have updated facility information.

III. APPLICATION REQUIREMENTS

A. General

In accordance with federal regulations at 40 CFR §122.28, LTFs seeking coverage under the GPs must submit a written Notification (for the Pre-1985 GP) or a NOI (for the Post-1985 GP) to EPA and ADEC to be eligible for coverage. Except as described in Section III.D below, a facility who fails to submit a Notification or NOI in accordance with

applicable provisions of the LTF GP will not be authorized to discharge under its terms. A qualified applicant will be authorized to discharge under permit No. AK-G70-1000 upon receipt of written authorization to discharge and assignment of an NPDES permit number by EPA, and after ADEC provides written authorization of a project area ZOD. No EPA written authorization is required for discharges who submitted timely Notifications to EPA to discharge under AK-G70-0000. However, to discharge bark and wood debris under the Pre-1985 GP, applicants must receive a written project area ZOD authorization from ADEC, and EPA will provide a permit number.

A suggested NOI form is contained in Appendix 1 of general permit No. AK-G70-1000. The form is intended to require submittal of all information necessary for EPA and ADEC to determine the appropriateness of coverage under the Post-1985 GP. A suggested Notification form is contained in Appendix 1 of permit No. AK-G70-0000. The form is intended to require submittal of all information necessary for ADEC to determine the appropriateness of coverage under the Pre-1985 GP.

B. Submittal Dates

New facilities meeting the criteria for coverage under the Post-1985 GP must submit a NOI to be covered at least 60 days prior to the anticipated commencement of in-water log storage or transfer operations. Facilities previously authorized under the April 2004 modifications of the general permit, but whose coverage is not administratively extended due to a failure to submit a timely NOI at least 180 days prior to the expiration date of the previously issued general permit (i.e., September 22, 2004), must also submit an NOI at least 60 days prior to the anticipated commencement of in-water log storage or transfer activities. For existing LTFs that are operating under an administratively extended permit coverage pursuant to 40 CFR 122.6, NOIs were to be submitted 180 days prior to the expiration of the permit. If changes have occurred since that time that require a revised NOI to be submitted, such revised NOIs must be submitted no later than 60 days from the effective date of the final general permit.

Pre-1985 LTFs seeking coverage or continued coverage under AK-G70-0000 must submit written Notification within 90 days of the effective date of the final Pre-1985 permit if they have not already done so. Facility operators which received a section 404 permit prior to October 22, 1985, but who did not provide Notification under the Pre-1985 GP and who fail to submit a timely written Notification in accordance with the proposed 2007 modifications, must seek coverage under the Post-1985 GP prior to commencing discharges of bark and wood debris.

C. NOI Contents for the Post-1985 General Permit

The following information requirements have been retained from the 2000 Post-1985 general permit and must be included in a NOI. Modifications or new information requirements of the draft Post-1985 GP are identified below. NOI materials should be submitted in both hard copy and electronic format (portable document file (pdf))

preferred). The use of dot shading, hatching, or similar graphic symbols may be used to clarify the drawings.

1. Permit Information. The NOI must include any NPDES number(s) currently or previously assigned to the LTF.
2. Owner Information. The NOI must include the name, complete address, telephone number, and fax number of the owner of the LTF and the name of his/her duly authorized representative. The draft Post-1985 GP requires that an email address of the owner be provided.
3. Operator Information. The NOI must include the name, complete address, telephone number, and fax number of the operator of the LTF and the name of his/her duly authorized representative. The draft Post-1985 GP requires that the operator provide an email address.
4. Facility Information. The NOI must include the following information about the LTF:
 - a. Name, complete address, general telephone number, and fax number of the LTF (to the extent this information is available);
 - b. For Post-1985 LTFs, indicate if the discharge is new or existing. Indicate whether the LTF is operating under an administrative extension of the expired GP.
 - c. USACE CWA Section 404 and Section 10 permit name, number, and date of issuance, if applicable;
 - d. The physical location, including the latitude and longitude of the proposed discharge with a precision of at least three meters on average by using a GPS receiver with WAAS (Wide Area Augmentation System) and the distance and direction to the nearest town/city. The draft Post-1985 GP added the requirement to use a WASS enabled GPS receiver so that increased facility location precision is achieved;
 - e. A nautical chart showing the location of the proposed discharge and any catalogued or known anadromous fish streams, estuaries, and mudflats within one-half mile as well as the location of the -40, -60, and -100 depth lines. The draft Post-85 GP includes the new requirement to include the depth lines. This information will make it easier for both EPA and ADEC to evaluate the proposed discharge prior to ADEC issuing a ZOD authorization. The chart must also clearly delineate the proposed project area ZOD boundary, and include project area acreage. It must include the perimeter of the sort yard and the location of any areas of continuous bark coverage located in dive surveys;

- f. A vicinity map showing the physical location of the proposed discharge and project area, the name of the waterbody receiving the proposed discharge, and the name of any larger, adjacent receiving waterbody. The draft Post-85 GP require the vicinity map to be based upon an official map or chart with a scale of resolution between 1:15,840 to 1:63,360 and shall include a north arrow and scale. The current LTF GPs specified scales between 1:20,000 and 1:65,000, neither which is readily available. A map scale of 1:15,840 is a typical USGS quad map scale. The draft Post-1985 GP retains the requirement that if the facility is located in waters surrounding Kodiak or Afognak Islands, a written concurrence of *no effect* or *not likely to adversely effect* the wintering activities of the Steller's Eider is required from the USFWS;
- g. A plan drawing showing the dimensions of the proposed LTF as viewed from above, including in-water log rafting, storage areas, and contiguous upland log storage areas. The drawing shall include the name of the waterbody, existing shorelines, mean higher high water (MHHW) and MLLW lines, average water depths around the proposed discharge, north arrow, scale, and the acres of the marine portion of the project area;
- h. An elevation and/or cross section view showing the dimensions of the proposed LTF as viewed from the side, front, or rear. Where the proposed LTF is a low-angle slide, these dimensions shall include the angle of the ramp. The drawing must include the name of the waterbody, existing shorelines, MHHW and MLLW lines, average water depths around the proposed discharge, north arrow, and scale;
- i. The facility classification and a brief description of the log transfer operations. The description must include an assessment of the feasibility of onshore log storage and barging, as well as a description of the proposed storage, handling, sorting, bundling, transfer, and rafting of logs;
- j. If applicable, copies of waivers and/or authorizations required by the Post-85 general permit for siting an LTF within or discharging to a protected water or special habitat or another area excluded from coverage under the Post-85 GP.
- k. A demonstration that operation of the LTF constitutes important social or economic development in the area, and that a ZOD is necessary to accommodate operation of the LTF (18 AAC 70.210 Zone of Deposit of Alaska's Water Quality Standards);
- l. A description of known existing uses of the receiving water where the LTF is located, and a demonstration that those uses will be fully protected by the proposed operation of the LTF; and
- m. Bark monitoring surveys not previously submitted to EPA.

- n. Identify if the receiving waterbody is listed as impaired for residue according to the most recent *Integrated Water Quality Monitoring and Assessment Report* (ADEC 2006). If the waterbody is listed as impaired for residue under Category 4b, indicate if the facility is operating under an ADEC approved Remediation Plan. New LTFs seeking permit coverage to operate in Category 4b waters must submit the Remediation Plan to ADEC with the NOI, and obtain state approval of the plan prior to obtaining EPA written authorization to discharge.
5. Facility Classification. The NOI must classify the facility as follows.
 - a. Shore based or off shore,
 - b. Method of log transfer, and
 - c. Use description (Type I, II, III, or IV; see Section II.B.3)) or an alternative use description if neither Type I through Type IV applies.
 6. Production Data. To the extent that information is available, the NOI must include the following production data.
 - a. Expected facility life span;
 - b. Maximum volume of timber expected to be transferred during the life of the permit in million board feet (mmbf);
 - c. Average and maximum volume of timber (mmbf) expected to be transferred per year; and,
 - d. Projected months of operation.
 7. Pre-Discharge Dive Survey. The draft Post-1985 GP requires that the results of a pre-discharge survey for new facilities must be submitted with the NOI by applicants, with the exception of off-shore and Type IV shore-based LTFs. The survey will be used to document the biological resources which may be affected by the discharge and any existing bark and wood debris deposits. Facilities that were authorized under the 2000 Post-85 GP are not required to submit a pre-discharge dive survey because these facilities have submitted annual dive surveys, or there is a pre-discharge dive survey on file for facilities that never transferred any volume under the current permit.

The pre-discharge survey must provide adequate site-specific information to determine whether discharges from the LTF are applicable for authorization under the draft Post-1985 GP, whether the site conforms to the 1985 ATTF siting guidelines, whether a waiver as described in Section II.C.7. is necessary for authorization under the draft Post-1985 general permit, and to document the area and depth of any existing bark and wood debris deposits.

The pre-discharge survey shall include a representative description of the numbers and species of marine organisms and depths and substrate types where the organisms are found within a 300 ft radius of the center of the discharge site to a water depth of minus 60 feet MLLW.

If bark is present, the pre-discharge survey shall also measure and report the aerial extent and thickness of bark deposits as described in the Bark Monitoring and Reporting Requirements of the draft Post-1985 GP. The survey data for biological resources shall be submitted in writing or in the form of a narrated underwater video.

The report shall provide sampling data, a summary of the survey, and an evaluation as to whether the discharge site meets each of the requirements summarized in Parts II.C.7 through Section II.C.10 of this fact sheet.

8. BMP Implementation Statement. The draft Post-1985 GP requires that facilities provide certification that the Best Management Practices identified in Section VII.A of this fact sheet have been or will be implemented at any time when in-water log storage or transfer activities occur. This statement must be certified as per the signatory requirements below.
9. Signatory Requirements. The draft Post-85 GP retains the same requirements as those in the 2000 Post-85 general permit. A NOI must be signed in accordance with federal regulations at 40 CFR 122.22:
 - a. For a corporation: by a principal corporate officer;
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;
 - c. For a municipality, state, federal, or other public agency: by either a principle executive officer or ranking elected official.

D. Notification Contents for the Pre-1985 General Permit

The following information must be included in a written Notification to be covered under the Pre-1985 GP. Appendix 1 of the Pre-1985 permit provides a suggested Notification form which may streamline the notification process. NOI materials should be submitted in both hard copy and electronic format (portable document file (pdf) preferred). The use of dot shading, hatching, or similar graphic symbols may be used to clarify the drawings.

- 1 Permit Information. The Notification must include the CWA Section 404 permit number and any NPDES permit number(s) currently or previously assigned to the LTF. If the owner or operator of the LTF has received an NPDES permit or if a permit was transferred to the current owner or operator of the LTF, discharges from that LTF must be authorized under the Post-1985 GP or an individual NPDES permit.

2. Owner Information. The Notification must include the name, complete address, telephone number and FAX number of the owner of the LTF and the name of its duly authorized representative. The draft Pre-1985 GP requires that an email address for the owner be provided.
3. Operator Information. The Notification must include the name, complete address, telephone number and FAX number of the operator of the LTF and the name of its duly authorized representative. The draft Pre-1985 GP requires that an email address for the owner be provided.
4. Facility Information. The Notification must include the following information about the LTF:
 - a. Name, address, and telephone number of the applicant; and the name, title, and telephone number of the operator for the facility.
 - b. USACE CWA Section 404 and/or Section 10 permit name, number, and date of issuance;
 - c. The physical location, including the latitude and longitude of the discharge with a precision of at least of at least three meters on average by using a GPS receiver with WAAS (Wide Area Augmentation System , and the distance and direction to the nearest town/city. The draft Pre-1985 general permit added the requirement to use a WASS enabled GPS receiver so that increased facility location precision is achieved;
 - d. A nautical chart, showing the location of the discharge and any catalogued or known anadromous fish streams, estuaries, and mudflats within one-half mile.
 - e. A vicinity map, showing the physical location of the discharge and project area, the name of the waterbody receiving the proposed discharge, and the name of any larger, adjacent receiving waterbody. The vicinity map shall be based upon an official map or chart with a scale of resolution between 1:15,840 to 1:63,360, and shall include a north arrow and scale;
 - f. A plan drawing, showing the dimensions of the LTF as viewed from above, including in-water log rafting and storage areas, contiguous upland log storage and sorting areas. The drawing shall include the name of the waterbody, existing shorelines, mean higher high water (MHHW) and mean lower low water lines, average water depths around the discharge, north arrow, scale, and acres of the marine portion of the entire facility;
 - g. An elevation and/or cross section view, showing the dimensions of the LTF as viewed from the side, front, or rear. Where the LTF is a low-angle slide, these dimensions shall include the angle of the ramp. The drawing shall include the name of the waterbody, existing shorelines, mean higher high water and mean

lower low water lines, average water depths around the discharge, north arrow, and scale;

- h. A brief description of log transfer operations at the facility. The operations description shall include an assessment of the feasibility of onshore log storage and barging, and a description of the proposed storage, handling, sorting, bundling, transfer and rafting of logs;
 - i. A demonstration that operation of the LTF constitutes important social or economic development in the area, and that a zone of deposit is necessary to accommodate operation of the LTF (18 AAC 70.210 Zone of Deposit of Alaska's water Quality Standards);
 - j. A description of known existing uses of the receiving water where the LTF is located, and a demonstration that those uses will be fully protected by the proposed operation of the LTF; and
 - k. Bark monitoring surveys not previously submitted to EPA.
5. Facility Classification. The Notification must classify the facility as follows:
- a. Shore-based or Off-Shore;
 - b. Method of log transfer; and
 - c. Use description (Type I-IV). An alternative use description may be provided if Types I-IV do not apply.
6. Production Data. To the extent that the information is available, the Notification must include the following production data:
- a. Expected facility life span;
 - b. Maximum volume of timber expected to be transferred during the next five years in million board feet (mmbf);
 - c. Average and maximum volume (mmbf) of timber expected to be transferred per year;
 - d. Projected months of operation; and
 - e. Approximate volume of timber (mmbf) previously transferred over the facility, if known. Timber volumes shall be given in board feet, Scribner scale.
7. BMP Implementation Statement. The draft Pre-85 GP requires that facilities provide certification that the Best Management Practices identified in Section VII.A of this fact

sheet have been or will be implemented at the time when in-water log storage or transfer activities begin. This statement must be certified as per the signatory requirements below.

8. Signatory Requirements. The Notification must be signed in accordance with federal regulations at 40 CFR 12.22:
 - a. For a corporation: by a principal corporate officer;
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;
 - c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.

E. Notification of Coverage

Pursuant to NPDES regulations at 40 CFR §122.28(b)(2)(vi), the Director may notify a discharger that it is covered under either LTF GP even if the discharger has not submitted a written NOI or Notification to be covered. In such cases, before discharging bark and wood debris, ADEC must also issue a written project area ZOD to accompany permit authorization. A discharger so notified may request to be authorized by an individual permit.

F. Individual Permits

Owners or operators meeting the criteria for coverage under the LTF GPs may apply to the Director for an individual permit. This request must be made by submitting an NPDES permit application and supporting documentation at least 60 days prior to the expiration of an individual NPDES permit applicable to the discharge, or 60 days prior to the commencement of operation of a new source or new discharge, or 180 days prior to the expiration of coverage under the Post-1985 GP. However, LTF operators are urged to seek coverage under the LTF general permits, if applicable. Furthermore, it is anticipated that permit requirements under an individual permit will be at least as stringent as those under the GPs.

The Director may require any owner or operator authorized by the LTF GPs, or one seeking authorization under the LTF GPs, to apply for and obtain an individual permit. Any interested person may petition the Director to require a discharger to seek coverage under an individual permit. The Director may require an individual permit:

1. When a single discharge or the cumulative effect of multiple discharges are a significant contributor of pollution in the receiving water;
2. Whenever the discharger is not in compliance with the conditions of the LTF GP;

3. Whenever a change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;
4. If effluent limitation guidelines are promulgated for point sources covered by the LTF GP,
5. If a water quality management plan containing requirements applicable to such point sources is approved;
6. If circumstances have changed since the time of request to be covered so that the discharger is no longer appropriately controlled under the LTF GP; either a temporary or permanent reduction or elimination of the authorized discharge is necessary; or, if the discharge is a significant contributor of pollutants, taking into account the location and size of the discharge and the quantity and nature of the pollutants.
7. If the facility is located on a waterbody that has been listed as “impaired” (Section 303(d) of the CWA).

G. Permit Violations

A violation of a condition contained in general permit No. AK-G70-0000 or AK-G70-1000 constitutes a violation of the CWA and subjects the owner and/or operator of the permitted facility to the penalties specified in CWA Section 309, as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note).

IV. RECEIVING WATERS

A. General

Receiving waters available for coverage under the LTF GPs are marine waters of the United States within the geographical area extending from the Alexander Archipelago west through central Gulf of Alaska and Prince William Sound to Kodiak Island. ADEC has designated uses for surface waters within the state as a means to establish water quality standards for their protection. Designated uses and water quality standards for marine waters are established in Title 18, Chapter 70 of the Alaska Administrative Code (18 AAC 70). ADEC manages all marine surface waters for all designated uses.

B. Beneficial Uses

18 AAC 70.020(a)(2), establishes the following water use classes and subclasses for marine waters:

- Water Supply
 - Aquaculture
 - Seafood Processing
 - Industrial
- Water Recreation

- Contact Recreation
- Secondary Recreation
- Growth and Propagation of Fish, Shellfish, Other Aquatic Life, and Wildlife, and
- Harvesting for Consumption of Raw Mollusks or Other Raw Aquatic Life.

By default, all marine waters of the United States within the State of Alaska are protected for all of these designated uses unless otherwise reclassified through a Use Attainability Analysis or Site Specific Criteria.

C. Water Quality Criteria

EPA has determined that discharges of bark and wood debris have the potential to cause or contribute to violations of state water quality criteria for residues. For marine waters in Alaska, the most stringent residue criteria is a narrative standard designed to be protective of the seafood processing designated use for water supply [18 AAC 70.020(b)(20)(A)(ii)]. This criteria reads as follows, residues:

May not, alone or in combination with other substances or wastes, make the water unfit or unsafe for the use; cause a film, sheen, or discoloration on the surface of the water or adjoining shorelines; cause leaching of toxic or deleterious substances; or cause a sludge, solid, or emulsion to be deposited beneath or upon the surface of the water, within the water column, on the bottom, or upon adjoining shorelines.

ADEC may issue a project area ZOD in order for in-water log storage or transfer to occur because there is a high likelihood that LTF operation will result in accumulation of debris that exceeds the residue standard despite the institution of BMPs. As such, a ZOD represents an exception or variance to water quality standards which can only be authorized by the State. Alaska's ZOD provision [18 AAC 70.210(a)] states that:

The department will, in its discretion, issue or certify a permit that allows deposit of substances on the bottom of marine waters within limits set by the department. The water quality criteria of 18 AAC 70.020(b) and the antidegradation requirement of 18 AAC 70.015 may be exceeded in a zone of deposit. However, the standards must be met at every point outside the zone of deposit. In no case may the water quality standards be violated in the water column outside the zone of deposit by any action, including leaching from, or suspension of, deposited materials. Limits of deposit will be defined in a short-term variance issued under 18 AAC 70.200 or a permit issued or certified under 18 AAC 15.

Specifics regarding the project area ZOD for individual LTFs covered or seeking coverage under either GP (including size, location and dimensions), will be provided in ADEC's written ZOD authorization. Additional information is also provide in ADEC's draft 401 certification (Appendix D). The decision whether to allow a ZOD requires

ADEC to consider: (1) alternatives that would reduce or eliminate any adverse effects of the deposit; (2) the potential direct and indirect impacts on human health; (3) the potential impacts on aquatic life and other wildlife, including the potential for bioaccumulation and persistence; (4) the potential impacts on other uses of the waterbody; (5) the expected duration of the deposit and any adverse effects; and, (6) the potential transport of pollutants by biological, physical, and chemical processes.

The draft LTF GPs do not authorize the discharge of any pollutants except for residue (i.e., bark and wood debris). However, it is recognized that incidental or accidental spills or leaks of hydraulic or lubricating oils, or petroleum fuels can and do cause violations of Alaska's petroleum hydrocarbon criteria despite the fact that such discharges are not authorized by the GPs. For this reason, the GPs implement oil sheen monitoring and reporting requirements during periods of log transfer activity. Alaska's applicable narrative petroleum hydrocarbon criteria [18 AAC 70.020(b)(17)] for recreational and water supply uses reads as follows:

May not cause a film, sheen, or discoloration on the surface or floor of the water body or adjoining shorelines. Surface waters must be virtually free from floating oils.

Sediment is a main pollutant associated with timber harvest areas, logging roads, and sort yards. As noted in Section I.C, discharges associated with upland portions of LTFs are not covered by the GPs, and operators must seek CWA authorization for these stormwater discharges under the 2007 MSGP.

D. Antidegradation

In addition to effluent limitations for pollutants that could cause or contribute to exceedances of water quality criteria, EPA must consider the state's antidegradation policy in 18 AAC 70.015 which is reflected in ADEC's 401 certification of the GPs and in the individual ZOD authorizations. The proposed 401 certification in Appendix D requires State authorization of a project area ZOD before an LTF can discharge bark or wood debris to marine waters under either of the LTF GPs. A ZOD is considered a variance to the water quality standards because water quality criteria can be exceeded within a project area ZOD for certain reasons such as to "accommodate important economic or social development in the area where the water is located" [18 AAC 70.015(a)(2)(A)]. However, in authorizing ZODs, ADEC must apply an antidegradation analysis which will be provided in the site-specific ZOD authorization.

Alaska's antidegradation policy specifically allows ADEC to issue permits that contain a project area ZOD provision for the accumulation of bark and wood waste on the seafloor [18 AAC 70.015(2)]. Under no circumstances may water quality criteria be violated outside of the project area ZOD by any action including leaching from or suspension of deposited materials. It is anticipated that the effluent limitations along with the project area ZOD provision in the draft GPs, together with the waters that are excluded from

permit coverage as described in Section II.C, are sufficient to comply with the state's antidegradation policy.

E. Impaired Waters

Waterbodies that contain pollutants in amounts that prevent attainment of designated beneficial uses are considered impaired. Section 303(d) of the CWA requires states to identify specific waterbodies where water quality standards are not expected to be met after implementation of technology-based effluent limits on point sources. In Alaska, the list of impaired waters is updated every two years in the *Integrated Water Quality Monitoring and Assessment Report* (ADEC 2006). Impaired waters fall into one of two categories: Category 4 or Category 5. Category 5 waters are those where water quality standards for one or more designated uses are not attained, and the waterbody requires the development of a TMDL recovery plan. In Alaska, only Category 5 waters are those on the 303(d) list. Category 4 are impaired waters that are further subdivided into two types: those with EPA-approved TMDLs (Category 4a), and those where "other pollution control requirements" are sufficient to achieve attainment (Category 4b). In Category 4b, "other pollution control requirements" may include such things as Superfund cleanup remedies, or as in the case of impaired LTFs, a ADEC approved Remediation Plan.

Historically, waterbodies were considered impaired for residue if continuous coverage of bark and/or wood debris on the seafloor exceeded 1.0 acres in extent, and was thicker than 10 cm at any one point. However, due to uncertainties associated with measuring bark coverage during a dive survey, along with historical observations that area coverage tends to be overestimated during dive surveys, ADEC has established a 1.5 acre threshold for LTFs to be listed as impaired. Similarly, two consecutive dive surveys showing continuous bark and wood debris coverage in excess of 1.5 acres is required to get on the impaired list (either Category 4 or 5), and two dive surveys are required to be removed from the list.

Under the Post-1985 GP, new facilities seeking to discharge into residue impaired waters may apply for permit coverage if the listing is in Category 4b, and if an ADEC approved Remediation Plan is in place. Under these circumstances, an operator must submit the Remediation Plan to ADEC along with the NOI, receive state approval of the plan, and demonstrate future progress towards delisting the waterbody as impaired through a measured reduction in the total area of continuous bark and wood debris coverage. Failure to demonstrate such progress towards delisting the waterbody may result GP coverage termination making TMDL development and application for individual permit coverage necessary. Existing LTFs whose coverage is administratively extended under the 2000 GP, and who are currently operating under an ADEC approved Remediation Plan, must also demonstrate progress towards removing the impaired designation of the waterbody. Currently, the East Port Frederick LTF is the only such facility operating in a Category 4b waterbody under an approved Remediation Plan. New LTFs seeking to operate in Category 5 impaired waterbodies are not eligible for coverage under the GP,

and must apply for an individual NPDES permit. Such a permit will incorporate any wasteload allocations included in the EPA-approved TMDL.

V. EFFLUENT LIMITATIONS

A. Statutory Approach for Determining Effluent Limitations

The CWA prohibits the discharge of pollutants to waters of the United States without an NPDES permit unless such a discharge is otherwise authorized by the CWA. The NPDES permit is the mechanism used to implement technology and water quality-based effluent limitations and other requirements including monitoring and reporting. NPDES permits are developed in accordance with various statutory and regulatory authorities established pursuant to the CWA. The regulations governing the EPA NPDES permit program are generally found at 40 CFR parts 122, 124, 125, and 136.

Sections 101, 301(b), 304, 308, 401, 402, and 403 of the CWA provide the process and statutory basis for the effluent limitations and other conditions in the permit. EPA evaluates discharges with respect to these sections of the CWA and the relevant NPDES regulations in determining which conditions to include in the permit.

In general, EPA first determines which technology-based limits apply to the discharges in accordance with applicable national effluent guidelines and standards. EPA further determines which water quality-based limits apply to the discharges based upon an assessment of the pollutants discharged and a review of state water quality standards. Monitoring requirements must also be included in the permit to determine compliance with effluent limitations. The basis for the permit conditions are described in more detail in this section of the fact sheet.

In general, the CWA requires effluent limits that are the more stringent of either technology-based or water quality-based limitations. Technology-based effluent limits are based on a minimum level of treatment for point sources provided by currently available treatment technologies. Water quality-based effluent limits (WQBELs) are developed to ensure that applicable water quality standards for receiving waters are met.

B. Evaluation of Technology-Based Effluent Limitations

Section 301 of the CWA requires particular categories of industrial dischargers to meet technology-based effluent limitation guidelines (ELGs). The intent of the ELGs is to require a minimum level of treatment for industrial point sources based on currently available treatment technologies while allowing a discharger to choose and use any available pollution control technique to meet the limitations. EPA has been developing ELGs for existing industrial and commercial activities since 1972 as directed in the original Federal Water Pollution Control Act (40 CFR § 403 through 471 inclusive). Although EPA has promulgated ELGs for timber products processing operations, manufacturing facilities, and wood preservation systems at 40 CFR Part 429, these ELGs

are not applicable to LTFs. Since there are no ELGs for LTFs, EPA has not established new source performance standards for these facilities and the National Environmental policy Act (NEPA) does not apply to new dischargers.

Where EPA has not yet developed effluent guidelines for a particular industry, technology-based permit limits may be established on a case-by-case basis using Best Professional Judgment (BPJ) where BPJ meets the requirements of Best Conventional Technology and Best Available Technology Economically Achievable (BCT/BAT) [CWA Section 402(a)(1)]. The 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 the application of Best Management Practices (BMPs). However, the 1.0 acre threshold for continuous bark and wood debris coverage within the project area ZOD is adopted as a BPJ technology limit for implementing remediation planning and/or TMDL development. Similarly, 0.75 acres of continuous coverage has been adopted as a technology-based BPJ condition to trigger changes to BMPs and pollution prevention planning as a proactive approach towards preventing greater than 1.0 acres of continuous bark and wood debris from accumulating. As further described in Section VII, these BPJs are incorporated into the permit not directly as an effluent limits, but rather as an additional or special permit conditions resulting from recommendations of the 1985 ATTF Guidelines (Appendix B).

C. Evaluation of Water Quality-Based Effluent Limitations

Section 301(b)(1)(C) of the CWA requires the development of water quality-based effluent limitations (WQBELs) in permits necessary to meet state water quality standards (by July 1, 1977) when technology-based effluent limitations are not protective of such standards. Discharges to state waters must also comply with limitations imposed by ADEC as part of its certification of NPDES permits under section 401 of the CWA, including compliance with their antidegradation policy (18 AAC 70.015).

NPDES regulations at 40 CFR 122.44(d)(1) require that permits include limits on all pollutants or parameters which "are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard, including state narrative criteria for water quality." NPDES regulations require the permitting authority to make this evaluation using procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant in the effluent, species sensitivity (for toxicity), and where appropriate, dilution in the receiving water. Effluent limitations must be stringent enough to ensure that Alaska Water Quality Standards (18 AAC 70) are met, and must be consistent with any wasteload allocation available.

EPA has determined that discharges from LTFs have the potential to contribute to excursions above applicable narrative water quality criteria for residues, and therefore, is

retaining WQBELs for residues from the expired 2000 LTF general permits. As described in Section IV.C, the residue standard for the protection of the seafood processing water supply designated use limits the accumulation of residue (i.e., bark and wood debris) on the seafloor to that which maintains the use. Consequently, and in order to accommodate the in-water storage and transfer of logs that may result in accumulation of debris that exceeds the WQS, ADEC has authorized a project area ZOD subject the specific conditions in their authorization and their 401 certification of the GPs (Appendix D).

Although EPA has determined that there is no reasonable potential for pollutants other than residue to cause or contribute to a water quality excursion, it is recognized incidental or accidental spills or leaks of petroleum products can occur. Although discharges of petroleum hydrocarbons are not authorized by the GPs, such accidental releases can and do cause violations of ADEC petroleum hydrocarbon criteria which prohibit the development of any sheens or films on the water surface, sea bottom, or shoreline. For this reason, the GPs restate the narrative criteria for petroleum hydrocarbons as an effluent limitation applied at “end-of-pipe”, and implement visual oil sheen monitoring and reporting requirements during log transfer activities. This requirement is unchanged from the 2000 issuance of the LTF GPs.

As noted in Section IV.C, LTFs with stormwater discharges must apply for coverage under the 2007 MSGP. For these discharges, sediment is the main pollutant of concern.

D. Summary of Effluent Limitations

The LTF GPs include the following effluent limitations:

1. Petroleum Hydrocarbons/Oil and Grease. There shall be no discharge of hydrocarbons, oil or grease that causes a film, sheen, or discoloration on the surface or floor of the water body or adjoining shorelines [18 AAC 70.020(b)(17)].
2. Residues. Except as authorized by a ZOD issued by ADEC pursuant to 18 AAC 70.210, there shall be no discharge of bark or wood debris, slash, limbs, scum, floating solids, foam, or other residues which alone, or in combination with other substances [18 AAC 70.020(b)(20)]:
 - a. makes the water unfit or unsafe for use in aquaculture, water supply, recreation, growth and propagation of fish, shellfish, aquatic life, and wildlife, or the harvesting and consumption of raw mollusks or other aquatic life;
 - b. causes a film, sheen, or discoloration on the surface of the water or adjoining shorelines;
 - c. causes leaching of toxic or deleterious substances; or

- d. causes a sludge, solid, or emulsion to be deposited beneath or upon the surface of the water, within the water column, on the bottom, or upon adjoining shorelines.

The project area ZOD in ADEC's draft 401 Certification of the LTF GPs authorize the accumulation of up to 1 acre of continuous cover bark and wood debris less than 10 cm deep at any one point (Appendix D). In addition, project area ZODs authorize the accumulation of discontinuous and trace cover bark and wood debris without depth limit within the project area ZOD. ADEC's ZOD regulations allow the department to set limits on residue deposition on the sea bottom, and in the case of discontinuous and trace cover bark, ADEC has elected to not establish numeric limits. To the extent practicable, the primary area of continuous coverage must be collocated with the primary area of continuous coverage existing prior to discharge under the general permit, unless a different area is authorized by ADEC.

The limitations regarding the volume of timber transferred is retained from the 2000 issuance of the GPs, and establish that the operator must declare the maximum volume that will be transferred in the NOI or Notification, and this becomes the permit volume limit. The annual reporting requirement allows a LTF operator to increase the volume limit by notifying EPA and ADEC that a planned or actual, increase in timber volume will occur from the figures provided in the NOI or Notification.

3. State Water Quality Standards. The discharge of wastes from LTFs shall not cause or contribute to violations of applicable Alaska Water Quality Standards (18 AAC Chapter 70) in receiving waters. The draft LTF GPs require that if at any time the EPA or ADEC determine that a permittees discharge of bark or wood debris causes or contributes to an exceedance of applicable water quality standards, the permittee must take corrective actions and conduct follow-up monitoring.

VI. MONITORING AND REPORTING REQUIREMENTS

In accordance with Section 308 of the CWA, and EPA regulations at 40 CFR §122.44(i), monitoring requirements are included in NPDES permits to determine compliance with effluent limitations, to gather data for the development of future effluent limitations (if necessary), and/or to monitor impacts on the receiving water. Monitoring and reporting requirements from the 2000 GPs pertaining are retained in the draft permits proposed for reissuance, and include:

1. Oil Sheen Monitoring and Reporting. During periods of log transfer activity, receiving waters at the LTF must be visually monitored daily for the presence of an oil sheen. The presence (or absence) of any oil sheen must be recorded, with the date, name of observer, cause or source of oil sheen, and corrective measures taken. Monitoring results shall be reported to EPA and within 24 hours in

accordance with permit requirements. Oil spills must also be reported to the U.S. Coast Guard National Response Center, and the SE Alaska Oil Spill Response Team, as specified in the GPs.

2. Bark Monitoring and Reporting. The draft LTF GPs require annual bark monitoring for all permittees which transfer a total of 15 mmbf or more during the life of the GPs, and which are located in water depths less than 100 feet at MLLW. In the modified 2000 LTF GPs, facilities located in waters up to a depth of 100 feet were required to monitor for bark monitoring of continuous cover. Permittees classified as Type IV LTFs are not required to conduct bark monitoring. Bark monitoring results are used to determine compliance with applicable water quality standards for residues, and the provisions of ADEC's ZOD authorization.

Results of a pre-discharge bark monitoring survey for new facilities must be submitted with the NOI to be covered by the Post-1985 GP. An annual bark monitoring survey is required thereafter during years when the LTF is operating; and must determine depths, total areas, and the outer boundaries of continuous and discontinuous coverage by bark and wood debris in water depths to 60 feet MLLW.

The method for conducting bark monitoring surveys is outlined in the LTF GPs; however, other methods are acceptable if they meet the purpose of the Bark Monitoring Program to determine compliance with applicable state water quality standards for residues. Facilities required to conduct bark monitoring and reporting must also develop a Quality Assurance Plan (QAP) within six months of authorization to discharge. The purpose of the QAP is to ensure that adequate documentation is available to allow for reconstruction of dive surveys from field records, notes, dive plans and underwater photography. Bark monitoring surveys must be thoroughly documented and recorded, and submitted in report form to ADEC and EPA within 60 days following completion of the survey.

3. Annual Report. During the term of the LTF GPs, and by January 31 of each year, permittees must prepare and submit to ADEC and EPA an Annual Report of log transfer activities, discharges, periods of noncompliance, and facility changes. The Annual Report must include the following information:
 - NPDES permit number; facility owner and operator; facility name, mailing and email addresses, telephone, and fax number;
 - A summary of periods of noncompliance with any of the requirements of the GP, the reasons for such noncompliance, and the corrective steps taken;

- Summary information from oil sheen monitoring observed during operating periods, including the date, name of observer, cause or source of oil sheen, and corrective measures taken;
- A summary of log transfer activity during the previous year, including the volume of timber transferred (mmbf) and the method of log transfer; and,
- A statement of changes in facility information from information provided in the NOI or Notification.
- BMP and pollution prevention practices that will be implemented to minimize additional bark accumulation if continuous cover bark exceeded both 0.75 acres and a thickness of 10 cm at any point.

VII. OTHER PERMIT CONDITIONS

A. Best Management Practices

Pursuant to CWA § 301(b)(1)(C) and 402(p)(3)(A), as well as 40 CFR 122.44(d), the LTF GPs includes provisions to ensure that discharges do not cause or contribute to exceedances of water quality standards. Best Management Practices (BMPs) are defined by NPDES regulations at 40 CFR §122.2 as schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce pollutants from entering waters of the United States. The inclusion of BMPs as requirements in discharge permits is authorized by CWA Section 304(e); and, in accordance with NPDES regulations at 40 CFR §122.44(k), BMPs can be used to control or abate the discharge of pollutants in several circumstances, including, when numeric effluent limitations are infeasible or inappropriate. The BMPs described in this section are recommendations resulting from the 1985 ATTF Guidelines (Appendix B).

The LTF GPs retain the following required BMPs from the 2000 LTF permit issuances for shore-based and off-shore LTFs. LTFs newly authorized to discharge under the draft LTF GPs shall implement these BMPs with the commencement of log handling or log transfer activities from the date of authorization to discharge. New LTFs, and LTFs continuing coverage under the reissued LTF GPs shall provide a BMP implementation statement as part of the NOI/Notification form stating that the BMPs identified in this Section will be implemented by the time in-water log storage or transfer activities begin.

1. Shore Based and Off Shore LTFs

The following BMP requirements apply to all LTFs authorized to discharge under the draft LTF GPs with the exception of Part VII.E.1.d below (40' dept minimum) for the draft Pre-1985 general permit. This BMP has been removed from those listed in Part

III.B of draft permit AK-G70-0000. This BMP comes from the ATTF Guidelines which were intended to be applied to future siting decisions for facilities applying for a NPDES permit. The Pre-1985 facilities were sited prior to the adoption and use of the ATTF Guidelines, and it is inappropriate to require them to comply with this standard retroactively for the use of surface waters above the project area ZOD.

- a. Log bundles must be placed into the receiving waters at a single discharge point specified in the NOI or Notification;
- b. No in-water bundling of logs shall occur;
- c. Log rafts, logs, and log bundles, which have been transferred to the receiving water, shall remain floating at all times and must not be allowed to rest on or touch the bottom;
- 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. This BMP reflects an ATTF Guideline, and is not being applied retroactively to Pre-1985 facilities.
- e. Logs, log bundles, and log rafts must be moved out of the log raft make-up and storage areas at the earliest possible time to minimize the retention time of logs in the water;
- f. The log transfer device must be operated to eliminate or minimize the discharge of petroleum and lubricating products into receiving waters; and,
- g. Solid waste must not be deposited in or adjacent to waters of the United States, including wetlands and marine tidelands. Solid waste includes cables, metal bands, used equipment, machinery, vehicle or boat parts, metal drums, appliances, trash, and other debris.

2. Shore Based LTFs

In addition to the requirements listed above, shore based LTFs authorized under the LTF general permits must implement the following BMPs. All of the Pre-1985 LTFs are shore based facilities.

- a. The speed of log bundles entering receiving waters must not exceed 3 feet per second;
- b. No in-water sorting of logs shall occur;
- c. All logs deposited on the tidelands during float-off log transfer operations must be removed on a daily basis;

- d. Bark and wood debris that accumulate at the log transfer device and on adjacent tidelands must be removed daily, to the maximum extent achievable;
- e. Bark and wood debris that accumulates in upland traffic flow areas must not be allowed to enter fresh waters, wetlands, marine waters, or tidelands. This debris must be removed and disposed of on a regular basis so that the debris and its leachate do not enter receiving waters; and,
- f. If continuous coverage of bark and wood debris exceeds both 0.75 acre and a thickness of 10 cm at any point, the operator shall submit, along with the Bark Monitoring Survey required under Part VI.C of draft general permit AK-G70-1000, and Part V.5 of draft general permit AK-G70-0000, a written statement describing remedial practices that will be used to minimize additional bark accumulation on the sea bottom, and must immediately incorporate those practices into the Pollution Prevention Plan. As described in the ADEC's draft CWA section 401 certification of the GPs, the State also requires the preparation and implementation of an approved Remediation Plan for facilities where continuous bark coverage exceeds 1.0 acres and 10 cm in thickness at any point (see Appendix D). The trigger for BMP and PPP revisions is set at 0.75 acres to provide a more proactive response in order to manage bark pile size before it hits the remediation planning threshold of 1.0 acre.

3. Off Shore LTFs

In addition to the requirements listed in Part V.G.1 of this fact sheet, the following requirements apply to all off shore LTFs authorized to discharge under general permit AK-G70-1000.

- a. The speed of logs or log bundles entering receiving waters shall not exceed 10 feet per second for self-dumping barges and must not exceed 3 feet per second for all other off-shore log transfer devices;
- b. Log transfer must occur in waters at least minus 60 feet deep at MLLW, except that log transfer may occur in waters minus 40-60 feet deep at MLLW if the permittee demonstrates, and ADEC agrees, that no practicable alternatives are available in deeper water;
- c. No in-water disposal of limbs and other debris removed from logs shall occur; and,
- d. All logs must be limbed, to the maximum extent practicable, prior to their discharge into the receiving waters.

B. Pollution Prevention Plan

The requirements of the Pollution Prevention Plan (PPP) from the 2000 LTF GPs have been retained in the draft permits. The draft LTF GPs requires that all shore-based LTFs that are currently discharging must develop and implement a PPP prior to submitting a NOI or Notification for coverage under the draft GPs. All shore-based LTFs that are authorized under the current permit, but are not actively discharging, must also develop a PPP prior to submitting a NOI or Notification. New LTFs seeking coverage under the GPs must implement the PPP upon commencement of log transfer or storage activities. Within one (1) month of implementing the PPP, each facility must submit a written statement to EPA and ADEC notifying the agencies that the PPP has been implemented. The PPP must be prepared and implemented in accordance with good engineering practices. Off shore-based LTFs are not required to prepare a PPP.

The PPP must evaluate potential discharges of pollutants from the entire log transfer operation, including the following elements:

- Log transfer, processing, storage, handling areas, and sawmill activities and all other aspects of normal operations;
- Operation and maintenance of tools and equipment;
- Storage and management of petroleum products, fuels, lubricants, oils, and other substances. Evaluation of potential discharges associated with fuel storage and management may be incorporated by reference to an existing Spill Prevention Control and Countermeasure (SPCC) Plan;
- Disposal of sludge and sanitary waste. Evaluation of potential discharges associated with sludge and sanitary waste may be incorporated by reference to an existing Wastewater Disposal Permit; and,
- Any aspect of the LTF which may result in spills or leaks in areas adjacent to or draining into surface waters.

The draft GPs require that all shore-based permittees develop and implement a PPP prior to submitting a Notification or NOI seeking authorization to discharge under this general NPDES permits.

The PPP must be reviewed periodically and modified prior to any change in the LTF or its operation that increases the generation of pollutants, or their release or potential release to receiving waters. The PPP must also be modified to include practices to implement to minimize additional bark accumulation if a bark monitoring survey shows that continuous coverage of bark and wood debris exceeds both 0.75 acres (as a trigger to prevent the occurrence of the 1.0 acre threshold) and a thickness of 10 centimeters at any point. The PPP must include the following elements.

- Name and location of the LTF and a description of the activities taking place;
- A site description that includes the following:
 - A general location map;

- A site map that identifies the boundaries of the entire upland tract where industrial activities occur,
 - The boundaries of the entire upland area used for log handling, storage and transfer activities and the size of this area in acres;
 - Location of the following activities:
 - Access roads,
 - Log transfer ramp,
 - Truck unloading area,
 - Log processing and bundle make up area,
 - Log deck storage areas,
 - Locations used for 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 all buildings (scale shack, etc.) if applicable.
- Information on receiving waters and wetlands;
- All required BMPs;
- An employee training program on pollution prevention;
- Specific management practices and standard operating procedures to achieve the objectives of the plan, including, but not limited to:
 - Proper operation and maintenance of the facility, including good housekeeping practices and preventative maintenance,
 - Regular examination of equipment for potential failure,
 - Provisions for emergency measures to be taken in the event of equipment failure, and
 - Any modification of equipment, facilities, technology, or procedures;
- Inspections and records related to implementation of the PPP; and,
- Practices that will be used to minimize additional bark accumulation if continuous coverage of bark and wood debris exceeds both 0.75 acres and a thickness of 10 centimeters at any point.

The PPP must identify and implement BMPs to control bark and wood debris discharges, and BMPs must be maintained in effective operating condition.

C. Standard Permit Provisions

The GPs contain standard regulatory language required in all NPDES permits. The permit provisions are based largely upon 40 CFR §122, Subpart C and include requirements pertaining to monitoring, recording, reporting, and compliance responsibilities.

- Duty to Comply: 40 CFR § 122.41(a)
- Proper Operation and Maintenance: 40 CFR §122.41(e)
- Duty to Mitigate: 40 CFR §122.41(d)
- Need to Halt or Reduce Activity not a Defense: 40 CFR §122.41(c)
- Inspection and Entry: 40 CFR §122.41(i)
- Penalties for Violations of Permit Conditions: 40 CFR §122.41(a)(2-3)
- Duty to Provide Information: 40 CFR §122.41(h)
- Records Contents: 40 CFR §122.41(j)(3)
- Submittal of Reports: 40 CFR §122.41(h, j, and l)
- Retention of Records and Reports: 40 CFR §122.41(j)(2)
- On-Site Availability of Records and Reports: 40 CFR §122.41(i)(2)
- Availability of Reports for Public Review: 40 CFR §122.1(e) and §122.7(1) and 40 CFR §2.101
- Planned Changes: 40 CFR §122.41(l)(1)
- Anticipated Noncompliance: 40 CFR §122.41(l)(2)
- Reporting of Noncompliance: 40 CFR §122.41(l)(6-7) and §122.44(g)
- Permit Actions: 40 CFR §122.44(c) and 40 CFR §122.61 - 122.64
- Duty to Reapply: 40 CFR §122.41(b)
- Incorrect Information and Omissions: 40 CFR §122.41(l)(8)
- Signatory Requirements: 40 CFR §122.41(k)
- Property Rights: 40 CFR §122.41(g)
- Severability: 40 CFR §124.16
- Transfers: 40 CFR §122.41(l)(3)
- Oil and Hazardous Substance Liability: 40 CFR §125.3, 40 CFR § 300, 33 CFR §153.10(e), and Section 311 of the CWA
- State Laws: 40 CFR §122.1(f) and section 510 of the CWA, and
- Reopening of the Permit: 40 CFR §122.41(f) and §122.44(c).

VIII. OTHER LEGAL REQUIREMENTS

A. Endangered Species Act

Section 7 of the Endangered Species Act requires EPA to consult with the USFWS and NOAA Fisheries (collectively referred to as the Services) regarding the potential effects (either adverse or beneficial) that an action may have on listed endangered or threatened species or their critical habitat. To address these ESA requirements, and in support of

EPA’s informal consultation with the Services, a Biological Evaluation (BE) was prepared to analyze these potential effects (Tetra Tech 2005). During the development of the draft GPs, information provided by the Services was used to identify 12 species of interest for consideration in the BE. This fact sheet, the draft permits and the BE will be reviewed by the Services for consistency with those programs established for the conservation of endangered and threatened species. Any comments or conservation recommendations received from the Services regarding threatened or endangered species will be considered prior to issuance of the GPs.

The analysis of effects in the BE assumed that the species of interest are exposed to conditions that will exist if the NPDES permit conditions are met. Potential effects arising from violations of permit conditions were not evaluated. A summary of the effects determinations for the 12 species of interest evaluated in the BE are shown below in Table 8. The results of the BE concluded that discharges from LTFs will either have *no effect* or are *not likely to adversely affect* threatened or endangered species in the vicinity of the discharge.

Species	Population	Effects Determination
Chinook Salmon	Snake River fall run Snake River spring/summer run	NLA A NLAA
Sockeye Salmon	Snake River	NLAA
Short-tailed Albatross	U.S. Waters	NE
Steller’s Eider	Alaska	NLAA
Northern Right Whale	North Pacific	NLAA
Sei Whale	North Pacific	NE
Blue Whale	North Pacific	NE
Fin Whale	Northeast Pacific	NE
Humpback Whale	North Pacific	NLAA
Sperm Whale	North Pacific	NE
Steller Sea Lion	Western (West of 144E W longitude) Eastern (East of 144E W longitude)	NLAA NLAA
Northern Sea Otter	Southwest Alaska	NLAA
NE = No Effect NLAA = Not Likely to Adversely Affect		

B. Magnuson-Stevens Fishery Conservation and Management Act

Section 305(b) of the Magnuson-Stevens Act [16 USC 1855(b)] requires federal agencies to consult with NOAA Fisheries when any activity proposed to be permitted, funded, or

undertaken by a federal agency may have an adverse effect on designated Essential Fish Habitat (EFH) as defined by the Act. The EFH regulations define an adverse effect as any impact that reduces quality and/or quantity of EFH. These may include direct (e.g. contamination or physical disruption) or indirect (e.g., loss of prey or reduction in species' fecundity) effects, and site-specific or habitat wide impacts (including individual, cumulative, or synergistic consequences of the action).

To address the requirements of the Magnuson-Stevens Act, EPA prepared an EFH Assessment (Tetra Tech 2005a). This report identified 14 species of fish within the LTF permitting boundaries that have EFH (Table 9).

TABLE 9. GROUND FISH SPECIES AND LIFE STAGES WITH EFH WITHIN THE PROJECT ACTION AREA				
Species	Eggs	Larvae	Late Juvenile	Adult
Alaska plaice	•	•	•	•
Arrowtooth flounder		•	•	•
Atka mackerel		•		
Dover sole	•	•	•	•
Flathead sole	•	•	•	•
Pacific cod	•	•	•	•
Pacific perch		•	•	
Rex sole	•	•	•	•
Rockfish		•		
Rock sole		•	•	•
Sculpins			•	•
Skate				•
Walleye pollock	•	•	•	•
Yellowfin sole	•	•	•	•

Overall, the EFH Assessment concluded that LTF operations are *not likely to have an adverse effect* on EFH as the total area likely to be adversely impacted is a very small proportion of the total available habitat. State-wide, an estimated 16.8 acres of sea bottom have continuous coverage of bark and/or wood debris as a result of LTF activities (Tetra Tech 2005b). As with ESA, any comments or conservation recommendations

received from NOAA Fisheries regarding EFH will be considered prior to issuance of the general permits.

C. National Environmental Policy Act (NEPA)

The National Environmental Policy Act (NEPA) at 42 U.S.C. § 4322, requires federal agencies to conduct an environmental review of their actions (including permitting activity) that may significantly affect the quality of the human environment. EPA regulations which implement NEPA (40 CFR 6) clarify this requirement as it pertains to NPDES permitting actions as requiring NEPA environmental review for the issuance of an NPDES permit for new sources only with promulgated ELGs.

A new source is defined at 40 CFR §122.2 as any building, structure, facility, or installation from which there is or may be a discharge of pollutants the construction of which commenced:

1. After promulgation of standards of performance under CWA Section 306, which are applicable to such source, or
2. After proposal of standards of performance in accordance with CWA Section 306, which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal.

The criteria for “new sources” is not met by any LTF in the State of Alaska eligible for coverage under the GPs because such standards of performance applicable to discharges from LTFs have not been promulgated or proposed pursuant to CWA Section 306 (i.e., there are no ELGs for LTFs). Therefore, a NEPA environmental review is not required for the GPs.

D. State Certification

CWA Section 401 requires EPA to seek certification from the state that the permit is adequate to meet state water quality standards (including the antidegradation policy) before issuing a final permit. NPDES regulations allow for the state to stipulate more stringent conditions in the permit if the certification cites the CWA or state law upon which that condition is based. In addition, regulations require a certification to include statements as to the extent to which each condition of the permit can be made less stringent without violating the requirements of state law.

A draft CWA section 401 certification has been provided by ADEC for the reissuance of the LTF GPs (Appendix D). If the state authorizes different or additional conditions as part of the certification, the GPs may be changed to reflect these conditions.

E. Alaska Coastal Management Program

The State of Alaska, Department of Natural Resources (ADNR), Office of Project Management and Permitting (OPMP), will review this permitting action for consistency

as provided in Section 307(c)(3) of the Coastal Zone Management Act of 1972, as amended [16 U.S.C. 1456(c)(3)].

The consistency certification is a statement of assurance that the federally permitted activity, which will affect the coastal zone, will be conducted in a manner consistent with the enforceable policies and standards of the Alaska Coastal Management Program (ACMP). EPA has determined that the activities authorized by the proposed GPs are consistent to the maximum extent practicable with the state's Coastal Zone management Plan. EPA anticipates concurrence from ADNR OPMP regarding its determination of consistency with the statewide standards. For more information on the ACMP consistency review, contact Joe Donohue at (907) 465-4664.

F. Ocean Discharge Criteria

The Ocean Discharge Criteria establish guidelines for permitting discharges into territorial seas, the contiguous zone and the ocean. EPA conducts an Ocean Discharge Criteria Evaluation (ODCE) using criteria established in accordance with section 403 of the CWA. Based on available information, EPA decides whether or not the discharge will cause unreasonable degradation of the marine environment. 40 CFR 125.121(e) defines "unreasonable degradation of the marine environment" as:

1. Significant adverse changes in ecosystem diversity, productivity, and stability of the biological community within the area of discharge and surrounding biological communities;
2. Threat to human health through direct exposure to pollutants or through consumption of exposed aquatic organisms; or,
3. Loss of aesthetic, recreational, scientific or economic values which is unreasonable in relation to the benefit derived from the discharge.

CWA section 403(c) guidelines, and federal regulations at 40 CFR 125.122 require that a number of factors be considered in the determination of unreasonable degradation or irreparable harm. These factors include the amount and nature of the pollutants, the potential transport of the pollutants, the character and uses of the receiving water and its biological communities, the existence of special aquatic sites, any applicable requirements of an approved Coastal Zone Management Plan, and potential impacts on water quality and ecological and human health.

To evaluate these factors, and to assess the potential for LTFs to cause environmental degradation as defined by the regulations, an Ocean Discharge Criteria Evaluation (ODCE) was prepared, the results of which are summarized below in Table 10 (Tetra Tech 2005b). Although some significant or moderate impacts were identified resulting from LTF operation, EPA has determined that, overall, the discharges authorized by the LTF general permits will not cause unreasonable degradation of the receiving waters.

This is due to the very small size of the area to be affected by LTFs relative to shoreline in southeast and southcentral Alaska. Based on data compiled for the ODCE, a total of 16.8 acres of sediment in nearshore areas have continuous bark coverage at LTF facilities in Alaska (Tetra Tech 2005b).

Table 10. Qualitative Evaluation of Potential Impacts Resulting From Operation of LTFs in Alaska

Discharge	Effect	Impact to		
		Biota	Humans	Water Quality
Bark & Wood Debris	Burial	Significant	None	Moderate
	Alteration of substrate	Significant	None	Moderate
	Reduction of dissolved oxygen	Moderate	None	Moderate
Leachates	Increased water coloration	None	None	None
	Reduction of dissolved oxygen	Moderate	None	Moderate
	Reduction in pH	None	None	None
	Direct toxicity	Minimal	None	Minimal
Petroleum products	Habitat alteration	Minimal	None	Minimal
	Direct toxicity	Minimal	None	Minimal
	Toxics bioaccumulation	Minimal	Minimal	Minimal
Stormwater	Direct toxicity	Minimal	None	Minimal
	Toxics bioaccumulation	Minimal	Minimal	Minimal
Miscellaneous Minor pollutants	Alteration of substrate	Minimal	None	Minimal
	Direct toxicity	Minimal	None	Minimal
	Toxics bioaccumulation	Minimal	Minimal	Minimal

G. Permit Expiration

The Post-1985 GP will expire five years from the effective date of the permit. The Pre-1985 GP has no expiration date as it modifies Section 404 permits which had no expiration. However, EPA and ADEC will require operators of Pre-1985 to submit a Notification at least 180 days before the expiration of the Post-1985 GP so the agencies have updated information on each facility.

H. Presidential Oversight of Federal Regulations [Executive Order 12866]

The Office of Management and Budget (OMB) has exempted this action from the review requirements of Executive Order 12866 providing for presidential oversight of the regulatory process pursuant to Section 6 of that order.

I. Economic Impact [Executive Order 12291]

EPA has reviewed the effect of Executive Order 12291 on the draft LTF general permits and has determined that they are not a major rule under that order. This regulation was submitted previously to the OMB for review as required by Executive Order 12291. The OMB has exempted this action from the review requirements pursuant to section 8(b) of that Order.

J. Paperwork Reduction Act [44 U.S.C. § 3501 et seq.]

EPA has reviewed the requirements imposed on regulated facilities in the draft LTF GPs under the Paperwork Reduction Act of 1980. The information collection requirements have been approved by the OMB under submissions made for the NPDES permit program and the draft LTF GPs.

K. The Regulatory Flexibility Act [5 U.S.C. § 601 et seq.]

EPA has concluded that general NPDES permits are permits under the Administrative Procedure Act (APA), 5 U.S.C. § 551 et seq., and thus not subject to APA rulemaking requirements or the Regulatory Flexibility Act.

L. General Provisions

Specific regulatory management requirements for NPDES permits are contained in 40 CFR 122.41. These conditions are included in the draft LTF GPs as monitoring and reporting requirements (Part V), compliance responsibilities (Part VI), and other legal requirements (Part VIII). Since these conditions are federal regulations, they cannot be challenged in the context of an NPDES permit action.

IX. REFERENCES

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- U.S. EPA. 1996. NPDES Permit Writers' Manual. Office of Wastewater Management, Washington, D.C. EPA/833/B-96-003.
- U.S. EPA Region 10. 2000. NPDES Permit No. AK-G70-1000, Authorization to Discharge under the National Discharge Elimination System for Log Transfer Facilities in Alaska.
- U.S. EPA Region 10. 2000. Storm Water Multi-Sector General Permit for Industrial Activities (MSGP-2000), re-issued in the Federal Register on October 30, 2000 for industrial facilities in Idaho, Washington, and Oregon (65 FR 64746–64880) and corrected on January 9, 2001 (66 FR 1675-1678) and March 23, 2001 (66 FR 16233-16237). MSGP-2000, as corrected, became effective in Alaska on April 16, 2001 (66 FR 19483-19485).

Appendix A: Table Summarizing Permit Language Changes Reflected in Draft General Permits

Section of Permit	Changes in Draft Pre-1985 GP	Changes in Draft Post-1985 GP	Rational for Change
I. Authorized Facilities			
B. Authorization to discharge	Requires applicants to develop and implement a prevention pollution plan (PPP).	Requires applicants to develop and implement a prevention pollution plan (PPP) prior to obtaining a discharge authorization.	2000 LTF GPs allowed operators up to three months to develop and implement the PPP after receiving discharge authorization. Most facilities are existing, so PPPs are already in place. New facilities should control pollution discharges immediately without any grace period.
C. LTFs which have received a Section 404 permit prior to October 22, 1985	Not in permit	No changes.	
D. LTF Classification	(Section C. in permit) Reduced number of categories. Combined Category I (>40 mmbf), Category II (up to 40 mmbf) and the upper end of Category III (up to 35 mmbf) into a new Category I (. 30 mmbf). Type II changed to up to 30 mmbf.	Reduced number of categories. Combined Category I (>40 mmbf), Category II (up to 40 mmbf) and the upper end of Category III (up to 35 mmbf) into a new Category I (. 30 mmbf). Type II changed to up to 30 mmbf.	Based upon annual reports for the operating years 2000 – 2004, only six facilities transferred more than 35 mmbf in any one year (See Table 2).
II. Authorized Discharges	No changes	No changes	
III. Areas Excluded From Authorization Under This General NPDES Permit	No section in this permit.	No changes	
A. Protected Waters and Special Habitats	No section in this permit.	Modified Part 7 to include definition of Critical Habitats for Steller sea lions.	Provides definition in permit so applicants would not have to look up 50 CFR 226.202

Section of Permit	Changes in Draft Pre-1985 GP	Changes in Draft Post-1985 GP	Rational for Change
B. Areas Not Meeting the Alaska Timber Task Force Guidelines	No section in this permit.	No changes. This is one of the fundamental defining differences between the two permits as these have been used in siting decision for the LTFs since October 1985.	
C. Impaired Waterbodies	No section in this permit.	Allows authorization to a new discharger where continuous coverage may be more than 1 acre and the waterbody is listed as impaired for residue under Category 4b provided an ADEC approved Remediation Plan is in place.	Allows EPA the flexibility to utilize the GP even if ADEC requires a individual state permit.
D. Request for Waiver to Discharge into Excluded Areas	No section in the permit since there are no excluded areas.	No changes.	
IV. Effluent Limitations and Permit Requirements	Section III. in permit.		
IV.A.3 Residues	III.A.3 in this permit Deleted the term “Decision Document”.	Deleted the term “Decision Document”	Decision Document is the term ADEC previously used to describe the evaluation of site specific factors leading to a ZOD authorization.
A.4. State Water Quality Standards	No change	No change	
IV. B. Best Management Practices	(III.B in permit) Reduced BMP implementation time from “within 6 months of authorization” to with the commencement of activities. Eliminated BMP (III.B.4) requiring log storage in waters greater than 40 feet deep at MLLW.	Reduced BMP implementation time from “within 6 months of authorization” to with the commencement of activities. If continuous bark and/or wood debris coverage within the Project Area ZOD is equal to or greater than 0.75 acres, changes to the BMP are	Most facilities are existing,, not new. New facilities should control pollution discharges by immediately implementing BMPs without any grace period. This requirement originated from the From ATTF Guidelines which were intended to be applied in future siting decisions, not applied

Section of Permit	Changes in Draft Pre-1985 GP	Changes in Draft Post-1985 GP	Rational for Change
	If continuous bark and/or wood debris coverage within the Project Area ZOD is equal to or greater than 0.75 acres, changes to the BMP are triggered.	triggered.	retroactively to existing facilities. The 0.75 acre trigger provides for a proactive approach towards preventing greater than 1.0 acres of continuous coverage in the ZOD.
IV.E. Bark Monitoring Plan	Changed dive exemption depth to -100 feet MLLW (from -60 feet MLLW) for permittees who transfer more than 15 mmbf over the life of the permit.	Changed dive exemption depth to -100 feet (from -60 feet MLLW) for permittees who transfer more than 15 mmbf over the life of the permit. .	The April 2004 modifications to both permits require monitoring of continuous cover bark to -100 feet MLLW. Part VI.C.1 of Post 85 LTF GP & Part .V.C.1 of pre) did not require bark monitoring if the facility was located on waters deeper than -60 feet MLW.
V. Application Requirements.	Section IV. Notification Requirements		
	Part D.4.d: Modified latitude / longitude precision requirements by requiring the use of a GPS receiver with WASS capabilities.	Modified latitude / longitude precision requirements by requiring the use of a GPS receiver with WASS capabilities.	Readily available technology that will give increased precision in location.
	Part D.4.e: Added requirement to provide the -40, -60, and -100 foot depth contours to the nautical chart.	Added requirement to provide the -40, -60, and -100 foot depth contours to the nautical chart.	ADEC required the -40 and -60 foot contours for purposes of evaluating the discharge of bark and wood debris. The -100 foot contour establishes the outer extent of possible bark survey area.
VI. Monitoring, Reporting, and Recording Requirements	Section V. Monitoring, Reporting, and Recording Requirements		
Part A.3 Contents of Report	Subpart e: added new language specifically adding requirement to include information on additional practices that will be / were implemented when dive survey found more than 1.0 acre of	Subpart e: added new language specifically adding requirement to include information on additional practices that will be / were implemented when dive survey found more than 1.0 acre of	Part A.6.F and A.8.f (pre-85 and post-85 respectively) of the 401 certification required that this information be contained in the bark survey monitoring report only. This addition clarifies the responsibility

Section of Permit	Changes in Draft Pre-1985 GP	Changes in Draft Post-1985 GP	Rational for Change
	continuous cover bark and wood debris greater than 10 cm at any point was found. Subpart 3.b was more generic and included any permit noncompliance.	continuous cover bark and wood debris greater than 10 cm at any point was found. Subpart 3.b was more generic and included any permit noncompliance.	of the permittee to include the information in the annual report, along with any other permit noncompliance and remedial steps taken.
VI.C. Bark Monitoring and Reporting	V.C in this permit.		
	Part C.5.c: Requires facilities that transfer more than 15 mmbf and are located in waters less than -100 feet MLLW (previously -60 feet MLLW) to conduct bark survey dives.	Part C.5: Requires facilities that transfer more than 15 mmbf and are located in waters less than -100 feet MLLW (previously -60 feet MLLW) to conduct bark survey dives.	The April 2004 modification required permittees to conduct dive surveys to -100 feet MLLW. Facilities located in waters deeper than -100 feet MLLW do not have to conduct bark dive surveys.
	Part C.5.d: Added the term 'aggregate' so the first sentence read 'Determine the total aggregate area....'	Part C.5.d: Added the term 'aggregate' so the first sentence read 'Determine the total aggregate area....'	Makes clear that the total area of continuous cover bark should include any and all discernable piles, not just a pile in excess of 1.0 acres.
	Part 5.C.d (ii): Requires that digital photographs be taken so that future manipulation is possible in cases where quality is poor plus allows for electronic distribution.	Part 5.C.d (ii): Requires that digital photographs be taken so that future manipulation is possible in cases where quality is poor plus allows for electronic distribution.	Some reports have included photo copies of still photography that are difficult to interpret.
	Part C.7.c: Added language requiring that the QAP include information on qualifications and training of personnel responsible for conducting monitoring.	Part C.7.c: Added language requiring that the QAP include information on qualifications and training of personnel responsible for conducting monitoring.	Provides assurance that monitoring is being performed by qualified personnel.
VII. Pollution Prevention Plan Requirements	Section VI. in this permit.		
A. Applicability	Added requirement to develop and implement a PPP prior to submitting Notification. Requires PPP to include BMPs; requires updating any	Added requirement to develop and implement a PPP prior to submitting NOI. Requires PPP to include BMPs; requires updating any PPP	Most facilities are existing,, not new. New facilities should control pollution discharges by immediately implementing PPP without any grace

Section of Permit	Changes in Draft Pre-1985 GP	Changes in Draft Post-1985 GP	Rational for Change
	PPP prepared under previous LTF GP.	prepared under previous LTF GP.	period.
B. Implementation	<p>Changed timeframe from within 6 months of effective date of 2000 LTF GP to prior to submitting Notification.</p> <p>Parts 1 (Facilities That Are Discharging) and Part 2 (Facilities that Are Not Currently Discharging) are new to the permit. Part 1 requires applicants of active facilities to prepare and implement a PPP prior to submitting the Notification. Part 2 requires applicants of inactive facilities to prepare a PPP prior to submitting a Notification.</p>	<p>Changed timeframe from within 3 months of effective date of 2000 LTF GP to prior to submitting NOI.</p> <p>Parts 1 (Facilities That Are Discharging) and Part 2 (Facilities that Are Not Currently Discharging) are new to the permit. Part 1 requires applicants of active facilities to prepare and implement a PPP prior to submitting the NOI. Part 2 requires applicants of inactive facilities to prepare a PPP prior to submitting a NOI.</p>	<p>Most facilities are existing,, not new. New facilities should control pollution discharges by immediately implementing PPP without any grace period.</p> <p>Part 2 is new language developed in recognition that not all facilities will be active when applications are due to EPA but still requires that the PPP be developed and ready for immediate implementation once log transfer activity begins .</p>
F. PPP Contents	<p>New Part 7: Requires that a site map be included in the PPP.</p> <p>If continuous bark and/or wood debris coverage within the Project Area ZOD is equal to or greater than 0.75 acres, changes to the BMP are triggered.</p>	<p>New Part 7: Requires that a site map be included in the PPP.</p> <p>If continuous bark and/or wood debris coverage within the Project Area ZOD is equal to or greater than 0.75 acres, changes to the BMP are triggered.</p>	<p>Provides operators an opportunity to evaluate overall site development including potential pollution generating activities and sources when developing the PPP.</p> <p>The 0.75 acre trigger provides for a proactive approach towards preventing greater than 1.0 acres of continuous coverage in the ZOD.</p>
X. Compliance Responsibilities	<p>Section IX in this permit.</p> <p>Updated the standard permit conditions in this section with the most current R10 language.</p>	<p>Updated the standard permit conditions in this section with the most current R10 language.</p>	<p>Reflects current language in all current industrial wastewater permits.</p>

Section of Permit	Changes in Draft Pre-1985 GP	Changes in Draft Post-1985 GP	Rational for Change
XI. General Provisions	Section X in this permit. Updated the standard permit conditions in this section with the most current R10 language.	Updated the standard permit conditions in this section with the most current R10 language.	Reflects current language in all current industrial wastewater permits.

**APPENDIX B LOG TRANSFER FACILITY SITING, CONSTRUCTION, OPERATION,
AND MONITORING / REPORTING GUIDELINES**

October 21, 1985

APRIL 2006

Note: The following text is the original language from the October 21, 1985 LOG TRANSFER FACILITY SITING, CONSTRUCTION, OPERATION, AND MONITORING / REPORTING GUIDELINES. It contains the original regulatory citations which may be outdated. The bibliography, Appendix 1, the list of Subcommittee members, and Appendix II have been omitted from this version.

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Glossary

Introduction

Log transfer facilities (LTF's) undergo a complex and rigorous permitting process involving four state and four Federal resource management and regulatory agencies as well as comments from other interested parties. Through the permitting process, the regulatory agencies may approve or disapprove permits with stipulations which govern the construction and operation of LTF's.

In seeking clarification of permit stipulations expected to be included in LTF permits, the timber industry recommended -- through Governor Sheffield's Timber Task Force report (12/13/84) -- that: "

...the principal agency heads and industry representatives meet to agree upon a process which will result in a common set of log transfer facility guidelines..."

As a result of this request, a committee consisting of the principal agency and industry representatives met on April 15, 1985 to consider the Task Force recommendation. This committee created a Technical Subcommittee of industry, public, and resource agency personnel involved in permitting LTF's to develop LTF guidelines per the Timber Task Force recommendation that:

"...it would be beneficial for all parties involved in the permitting, construction, and operation of log transfer facilities to have a common set of criteria (guidelines) from which to work when designing facilities and reviewing permit applications for these facilities."

The LTF guidelines are in three sections:

- Siting
- Construction and Operation
- Monitoring and Reporting

The Use of Guidelines

The guidelines for planning and permitting of LTF's delineate the physical requirements necessary to construct a log transfer and associated facilities and--in context with requirements of applicable law and regulations--methods to avoid or control potential impacts from these facilities on water quality, aquatic, and other resources. The guidelines emphasize facility siting as the best means of limiting most environmental impacts from LTF's, log raft, storage areas, and adjoining collateral facilities. Additional means of limiting environmental impacts occur through application of construction and operating guidelines. Monitoring and reporting guidelines are necessary to determine if a facility is meeting the permit stipulations.

These guidelines can be used in the existing permitting process which emphasizes best professional judgment of the agencies in close cooperation with the applicants when selecting sites and imposing permit stipulations. The process is preferred because it accommodates site-specific conditions and enables all participants to collectively evaluate the practicable¹ alternatives and determine the best way to minimize impacts.

The guidelines are comprehensive and may apply to any site being evaluated for LTF permits. Since each site is different, in unusual circumstances, there may be need to develop more specific stipulations or limitations during the permit review process for a specific site.

Periodic updating of the guidelines will be necessary since changes may occur in both the timber industry and new information may become available on the effects of log transfer facilities on water quality and biotic communities.

¹Practicable means available and capable of being done after taking into consideration costs, existing technology, and logistics in light of overall project purposes (40 CFR 230.3(g)).

The guidelines apply to log transfer, log raft storage, and collateral facilities, such as log raft make-up areas, airplane and boat docks and contiguous upland log storage and sort yards immediately adjacent to the LTF.

The guidelines do not identify which permitting agency(ies) have regulatory and permitting jurisdiction for any guideline. The objective is to provide a comprehensive listing of guidelines applicable to LTF's through state and Federal resource management and regulatory programs.

The siting and construction and operation guidelines identify the physical features the timber industry needs to safely and efficiently transport logs, and minimum requirements that are needed to mitigate for changes in water quality and adverse impacts on aquatic biota. When evaluating proposals for these log transfer and associated facilities, all guidelines must be considered. The objective is to consider all guidelines and develop a "best mix" which allows the activities to proceed while meeting all applicable statutory and regulatory requirements.

Siting Guidelines

Proper siting of log transfer and log raft storage facilities is the single most important means of controlling adverse water quality and biotic impacts from the construction and operation of these facilities. The least biologically productive and sensitive area available which meets industry's physical and economic requirements is the preferred site. The need for regulatory agencies to impose additional permit stipulations above the minimum requirements to mitigate against environmental impacts is reduced to a level commensurate with the site-specific characteristics.

S1. Proximity to Rearing and Spawning Areas

Siting of log transfer and log raft storage facilities within 300 feet of the mouth of anadromous fish streams, or in areas known to be important for fish spawning or rearing is normally prohibited.

Discussion: This LTF siting guideline is derived from the Alaska Forest and Resources Practices Regulations (11 AAC 95.150 (c)). The estuarine areas adjacent to the mouths of anadromous fish streams serve as important feeding areas for salmon fry and smolts while they acclimate to saltwater. Elimination of impacts to these areas can force outmigrants into deeper waters where there is greater risk for predation. Placement of LTF's in known spawning areas results in loss of spawning habitat.

The outmigrant salmon fry are especially vulnerable and have particularly high value to the fishing industry. The concerns include the possibility of leachates entering fresh water or the possibility of sediments entering waters and affecting fish. Because of the high value of the fisheries resources, the Forest Practices Regulations of the state exclude LTF siting in these most valuable and highest risk locations.

S2. Protected Locations

Log transfer and log storage facilities should be sited in weather-protected waters with bottoms suitable for anchoring and with at least 20 acres for temporary log storage and log booming.

Discussion: Areas protected from adverse weather, tidal, and wave conditions are needed for the safety of the workers responsible for moving log bundles, building rafts, and similar water-oriented work activities. Log rafts and bag booms must be protected from adverse weather, tidal, and wave conditions that can damage the rafts and the bag booms. Protected conditions are needed for control of the log bundles being placed in the water and the requirement to retain them in the bag booms and rafts so as to avoid hazards to navigation.

At least 20 acres of available space is needed to place log bundles into the water, sort bundles into log booms, construct log rafts and hold log rafts until moved by tug to the next destination. Additional space is needed for docks and floats, and movement of boats, floatplanes and other transportation. Most of the space involved is used for the movement of vessels and log rafts.

Log bundle storage with maneuvering space for vessels and rafts requires 3.6 + or - acres per MMBF gross timber volume. Approximately 8 acres is required for storage of a typical tow of four log rafts. An additional 8 acres is needed for booming of bundles including maneuvering space.

Consolidation and concurrent use of log transfer and storage sites will increase the amount of space required. Each owner of logs will need separate log booms and storage areas to provide for log accountability. Where National Forest and privately-owned logs are stored or transferred from a consolidated site this separation is required by regulation.

While the guidelines suggest 20 acres for normal situations, it is possible to operate in less space under some situations. For small timber harvest operations, with timber volumes of less than one MMBF, the need for space will be reduced dramatically. There is, however, a practical minimum space needed for even the smaller operations. This minimum is approximately five acres.

S3. Upland Facility Requirements

Log transfer facilities generally should be sited in proximity to at least five acres of relatively flat uplands. There should also be a body of water sufficient to provide a minimum of a 60 lineal foot facility face.

Discussion: This guideline has two operative portions: 1) space needed for upland operations near the transfer point; and 2) the length of available space needed at the operating face.

Relatively flat land is required to avoid extensive excavation. The space needed for upland operations adjacent to the LTF is directly related to the type of facility (see Use Descriptions in the Glossary), volume of timber that may be handled annually, and the life of the operation. The amount of space needed may include truck unloading (0.9 acres), log scaling (1.5 acres), log storage (1.6 acres per MMBF), sorting (0.5-2.0 acres), and additional space for incidental related operations. Equipment yard and repair areas are commonly in this vicinity (1.5-2.5 acres). The five-acre minimum would service intermittent use and some occasional use sites, with up to 35 to 40 acres needed for continuous use sites.

Unobstructed width required for the transfer of logs to the water needs to be adequate for the products being moved. The constructed length of the working face can be as little as 40 feet, under special circumstances, but the operating clearance must exceed 60 feet to accommodate the longest log lengths. 110 feet available face is most desirable.

S4. Safe Access to a Facility from the Uplands

To provide safe access to the log transfer facility and adjoining log sort yard, the facility should be sited where access roads to the facility can maintain a grade of 10 percent or less and 4 percent for specialized equipment.

Discussion: Vehicle access must be provided to the point where log bundles are transferred either to the log sort yard facility or to the receiving waters. The operating layout must provide for operations within safe limits for the equipment, operators and other personnel in the area. The maximum safe grade for log stackers is 4 percent. The maximum safe grade can be increased to 6 percent with special modifications to the log stacker. Prudent consideration of safety suggests a desirable grade less than the maximum be used.

Road grades entering the unloading facility in excess of the 10 percent will not allow the truck driver to safely stop the vehicle in emergencies.

S5. Bark Dispersal

Log transfer facilities should be sited along or adjacent to straits and channels or deep bays where currents may be strong enough to disperse sunken or floating wood debris. Siting log transfer facilities in embayments with sills or other natural restrictions to tidal exchange should be avoided.

Discussion: The Environmental Protection Agency and the Alaska Department of Environmental Conservation consider bark to be a pollutant. Problems with bark occur when it accumulates. The accumulated bark both physically smothers organisms and may create anoxic conditions or toxic gases.

In bays that have sills or natural restrictions to tidal exchange, there is a concern that bark may accumulate due to inadequate current velocities. The concern is that sufficient bark accumulation and lack of water exchange in the layer below the sill will cause anoxic conditions.

While it is possible for sufficient bark to accumulate below sills to create anoxic conditions, this effect has not been documented at any existing log transfer site in Alaska.

S6. Site Productivity

Sites for in-water storage and/or transfer of logs should be located in areas having the least productive intertidal and subtidal zones.

Discussion: One of the siting methods used to limit the impacts that log transfer and log storage facilities may have on the environment has been to site the facilities in the least productive habitats. These habitats are often found along steep shorelines, where there is little substrate for plant or animal growth. Bark, because of the steep topography, seldom accumulates in such areas. Areas with a minimum bottom substrate in the euphotic zone are to be preferred.

S7. Sensitive Habitats

Log transfer facilities and log raft storage areas should not be sited on or adjacent to extensive tideflats, salt marshes, kelp or eelgrass beds, seaweed harvest areas or shellfish concentration areas.

Discussion: Tideflats, salt marshes, and aquatic vegetation beds support numerous biological communities, i.e., nursery and rearing areas for commercial species of crab and fish. The areas are usually shallow and high producers of planktonic organisms which support the aquatic food chain.

Woody debris from log transfer and water storage can be carried by currents and deposited on these plant and animal communities. Debris may cover the area and physically smother plants and animals. There is a concern that debris accumulation may reduce dissolved oxygen concentration in the water below the minimum level required by fish and other aquatic life. Bark debris is expected to reduce dissolved oxygen concentration in the bark interstices. One study found that the dissolved oxygen, pH, oxidation reduction potential, and concentration of toxic products of decomposition in the water column at 30 centimeters (12 inches) above the bark were not significantly different than at the control sites. Reductions in dissolved oxygen below Water Quality Standards have not been documented.

S8. Safe Marine Access to Facilities

Log rafting and storage facilities should be safely accessible to tugboats with log rafts at most tides and on most winter days.

Discussion: Tugboats gather log rafts for transshipment to mills and other loading facilities. The lack of safe access to log rafting areas will result in the tug operator refusing to accept or deliver log rafts.

S9. Storage and Rafting

Logs, log bundles, or log rafts should be stored in areas where they will not ground at low tide. A minimum depth of 40 feet or deeper measured at Mean Lower Low Water (MLLW) for log raft storage is preferred.

Discussion: Grounding of logs or log rafts compacts the substrate and decreases biota living in and on the substrate. The siting and design of log transfer facilities should provide sufficient water depth to avoid grounding of log bundles at the transfer facility and at log raft make-up areas.

Log rafting in depths greater than 40 feet (MLLW) is preferred because rooted aquatic macrophytes and algae generally begin to decrease in density in Southeast Alaska below this depth. Rafting 40+ feet MLLW or more will protect these organisms and habitat (less than 40 feet MLLW) from bark accumulation and shading by log rafts. Log raft storage may occur at depths less than 40 feet (MLLW) depending on biological productivity, sensitivity to shading and potential risk of bark accumulations.

The logging industry retains the need to maintain existing sites which allow log rafts to ground or be stored in areas with low salinity, typically at the head of the bay, and in water less than 40 feet deep. The purpose is to protect logs from shipworm infestation, which can occur immediately after the logs are placed in the water.

Shipworms are an endemic problem because they cause economic loss to timber values, both from the holes they produce in sawtimber, and from the calcium deposits they leave in logs used for pulp purposes. The industry has observed that reductions in shipworms occurs in waters with low salinities and when logs are allowed to ground in cold weather. For this reason, the industry continues to seek the opportunity to have sites where logs will be allowed to ground in order to reduce shipworm damage.

The objective of regulatory agencies is to discontinue the practice of allowing logs to ground or be stored in areas less than 40 feet deep when they are biologically productive or are sensitive habitats.

There is a need for additional research into shipworms and possible ways to reduce infestation in log rafts. Research needs identified by Sedal & Duvall, if accomplished, could reduce the conflicts.

S10. Bald Eagle Nest Trees

Site log transfer facilities to avoid bald eagle nests. No project construction or operation should be closer than 330 feet to any bald eagle nest tree unless permitted by U.S. Fish and Wildlife Service. (See the Eagle MOU for details.)

Discussion: The Bald Eagle Protection Act (16 U.S.C.) protects bald and golden eagles. To provide guidance for the management and protection of bald eagles on National Forest Lands in Alaska, a Memorandum of Understanding was signed by the U.S. Forest Service (Region 10) and the U.S. Fish and Wildlife Service (Region 7). The Memorandum of Understanding states that a management zone of 5 chains (330 feet) around each eagle nest tree will be established and that all land use activity within the zone will be excluded. The Memorandum of Understanding includes provisions for variances from the requirement.

Construction and Operation Guidelines

The following guidelines apply to the construction and operation of the log transfer facilities and collateral upland facilities such as sort yards and upland log storage areas. Construction and operation guidelines have not been developed for log raft storage facilities since the only practical means of regulating raft

storage is through proper siting. The degree of application of these guidelines to individual LTF's is based on the siting of the facility.

C1. Log Transfer Facility Design

Log transfer facility design should be the least environmentally damaging, practicable alternative. Factors to be considered in selection of design alternatives include:

- 1) economic practicability;
- 2) facility requirements;
- 3) physical site constraints;
- 4) timber volumes to be transferred (site usage and duration);
- 5) total potential effects on biota and water quality, (including biological productivity and sensitivity; and
- 6) other potential uses of the site and facility.

Discussion: The preferred LTF design(s) should be those that represent the best practicable alternative and the least impact from placement of fill and associated impacts, such as bark accumulations. For example, emphasis on facility designs that minimize bark loss may result in a greater total coverage of the intertidal and subtidal areas by fill -- due to design requirements -- than would occur under another alternative which allows greater bark loss, but less fill.

C2. Fill Structures

Fill structures shall be designed and constructed to prevent erosion, pollution, and structural displacement.

Discussion: The intent is to avoid introducing fine sediments and organic matter into the water. The guideline requires design and construction practices that minimize fine sediment plumes and prevent change in the substrate's composition near the structure as a result of lost fill material.

This guideline is performance-based, by allowing the use of a range of materials within fills provided proper design, construction, and containment procedures are followed. The use of woody debris in fill structures is acceptable with containment.

It is assumed in the guideline that timbers and logs used in construction are not classified as fine organic matter.

C3. Timing of Inwater Construction

In-water construction, blasting, and/or filling associated with LTF sites should be timed to limit adverse impacts to marine and estuarine fishery resources and avoid conflicts with other user groups.

Discussion: Juvenile salmonids use shallow, near shore areas for feeding during the first few weeks after they leave freshwater. Construction activities during this outmigration period may cause direct mortality from blasting if the over pressure in the marine waters exceeds 2 psi. Increased water column turbidity related to construction or filling may decrease availability of prey organisms and cause physiological damage to fry during this critical period. Spawning herring are also susceptible to turbidity and effects of blasting.

Generally the period from mid-March to mid-June is the period when in-water turbidity and over pressure restrictions will be needed in order to protect juvenile salmon and spawning herring. The actual times will vary depending on site and the presence or absence of juvenile salmon or spawning herring.

Timing restrictions to avoid conflicts with existing user groups vary and would be evaluated on a site-by-site basis. Facility siting to avoid juvenile salmon nursery areas, herring spawning areas and areas utilized by other user groups will reduce the need for timing restrictions.

C4. Bark Accumulation Management

The siting, design, and operation of the LTF and contiguous collateral upland facilities shall utilize the best practicable procedures and methodologies to control intertidal and submarine accumulations of bark.

Discussion: Intertidal and submarine accumulations of bark impact infauna and epifauna primarily through smothering, but also through alteration of natural habitat and water quality. The extent of the impact is limited to the actual area of complete bark coverage. Through proper implementation of best practicable procedures and methodologies, such as siting, design selection, operation, and solid waste management, the level and impact of intertidal and submarine accumulations can be minimized. Selection of best practicable procedures and methodologies to limit intertidal and tidal bark accumulations for a specific site should be used.

C5. Solid Waste Management

Solid wastes, including wood and other solid waste generated from the LTF, contiguous and other collateral facilities shall be routinely removed from the log transfer facilities and adjacent facilities and disposed of at an approved upland solid waste disposal site.

Discussion: Disposal of solid wastes, cable, machine parts, and equipment, as well as wastes from logs in the sort yard, truck unloading and log transfer operations should occur in accordance with (18 AAC 60) which requires that solid wastes be properly disposed of at an approved disposal site. In order to prevent accidental introduction of materials into receiving waters, bull rails, or similar constraints to retain bark and wood waste on the upland improvements adjacent to the LTF, should be utilized. Bark and other solid waste should be periodically removed from uplands and intertidal areas around the log transfer system, depending on the site conditions.

C6. Bark Accumulation

The regulatory agency(ies) will impose an interim intertidal and submarine threshold bark accumulation level. When accumulations exceed the threshold level, cleanup -- if any -- will occur at the discretion of the permitting agency(ies). The interim threshold bark accumulation level is described as 100 percent coverage exceeding both one acre in size and a thickness greater than 10 cm (3.9 inches) at any point.

Discussion: This guideline is necessary because intertidal and submarine accumulations of bark impact infauna and epifauna primarily through smothering but also through alteration of natural habitat and water quality. The problem with bark occurs when it accumulates. Through siting, transfer system selection, and solid waste management, the amount of bark lost and accumulating in intertidal and submarine areas is prevented to significantly diminished. Bark accumulation is still expected to occur in some areas promoting the need for this guideline. This is an interim guideline developed by the Log Transfer Facility Guideline Committee. The committee developed this procedural guideline in order to be responsive to ongoing research, and at the same time raise site-specific problems to the respective decision-makers for appropriate action.

An interim guideline for threshold bark accumulation levels and cleanup when exceeding those levels is being used due to a lack of information. Technical data is needed to evaluate technical feasibility of various options for managing accumulations, such as removal or other control procedures. Water quality and biological information is needed to evaluate effects on water quality and biota from removal and disposal of bark accumulations and effects of other corrective options that may be used to manage bark accumulations.

The USDA Forest Service and the U.S. Fish and Wildlife Service have entered into a cooperative agreement to assess the practicability of bark removal. This study is planned for 1986 to evaluate bark removal at one site and the level of recolonization that will occur after removal. ADEC is scheduled to conclude studies that will provide information on factors that will result in bark accumulation occurring.

Completion of these scheduled plus design of additional studies to answer questions for threshold accumulation levels and bark removal will provide information to develop final guidelines for these issues

The interim guidelines will remain in effect pending completion of these studies. Final completion of the recolonization studies will not occur until FY 89-90. These will, however, be interim reports for these studies dealing with cost effectiveness of suction dredging removal techniques, release of toxics into the water during bark removal and preliminary recolonization of evaluations. These interim reports will provide sufficient information to develop a final guideline by the fall of 1987.

C7. Bundle Speed

The speed of the log bundles entering receiving waters should be the slowest practicable speed available. Decisions on the allowable transfer system that can be used will occur on a site-specific basis during the permitting process.

Discussion: This guideline is necessary because the amount of bark lost during transfer of log bundles into receiving waters is directly correlated with the speed of log bundles entering receiving waters. These conclusions have been confirmed by an in-progress USFWS study. The loss of bark into receiving and submarine areas can adversely effect aquatic biota through smothering and alteration of habitat.

The release of bark into receiving waters initiates a regulatory response that bark is a pollutant when discharged into receiving waters. To the extent practicable, its discharge should be eliminated.

This guideline was developed by the Log Transfer Facility Guidelines Committee. The Committee concluded that rather than pursue a uniform speed requirement for all LTF's, the guideline should emphasize the need to meet the slowest speed achievable after taking into consideration costs, existing technology, and logistics, in light of the overall project purposes (see the definition of practicable).

There is insufficient information to agree upon a guideline which defines a practicable speed for various types and sizes of transfer operations. However, based on current information about existing transfer technology, a 3 foot per entry velocity is an achievable entry speed and will serve as a reference point for discussion. Practicable speed requirements for various types of log transfer operations will be better quantified when the U.S. Fish and Wildlife Service completes its study evaluating the source and amount of bark lost from different log transfer systems operating in early fall 1985. Additionally, further evaluation of the range of velocities achievable by various transfer systems are scheduled for the 1986-1986 season.

These studies would provide better information to evaluate log transfer alternatives. The reports should address the technical and economic feasibility of meeting various speed limits for different use categories (i.e., continuous, intermittent, occasional, and incidental use sites) and analysis of the cumulative effects of construction and operation of different mechanical transfer systems on the environment. These studies to delineate practicable velocities for various categories of log transfer facilities should be completed by Fall 1987.

C8. Surface Drainage Management

The design, construction and operation of LTF's, contiguous sort yards and/or log storage yards shall utilize practicable procedures for control of surface water runoff from facilities.

Discussion: The surface water runoff from LTF's and adjacent contiguous sorting/storage areas has been observed to carry sediments, woody debris, and hydrocarbons. These pollutants can directly enter receiving waters. Surface runoff control can be accomplished with a variety of techniques. These include such practices as keeping overland flow from entering the LTF or adjacent facilities, collecting runoff from the facility in settling basins, or retaining vegetative buffer strips. The design, construction, and operation of LTF's, in conjunction with adjacent and contiguous sorting storage areas, will utilize practicable procedures for meeting Water Quality Standards for the State of Alaska and the Clean Water Act.

The Alaska Department of Environmental Conservation may require information on sort and/or storage yards contiguous to the LTF that is not routinely provided on permit applications in order to assist permittees in managing surface runoff so as to comply with Water Quality Standards.

C9. Control of Hydrocarbons

The log transfer system and adjacent sort yard handling equipment shall be operated and maintained to minimize petroleum and lubricating products from entering waters.

Discussion: The operation of certain log transfer systems and equipment used in any adjoining log unloading facility or log and sort yard storage facility, are a potential source of hydrocarbons and hydraulic fluids which can spill on the upland facilities and enter receiving waters. This equipment should be maintained and facilities managed to ensure lubricants and hydraulic fluids do not enter receiving waters. Continuous-chain log transfer systems require periodic lubrication and result in unavoidable introduction of hydrocarbons into receiving waters. Lubrication of these systems should use manufacturer's specified lubricants and lubrication should not exceed manufacturer's specifications.

C10. Onshore Log Storage

Where feasible, preference must be given to onshore storage and barging of logs.

Discussion: 11 AAC 95.150 of the Alaska State Forest Resources and Practices Regulations specifies preference to onshore storage and barging of logs where feasible.

C11. Facility Maintenance and Reclamation

The permittee shall maintain the structure or work authorized in good condition and in reasonable accordance with the approved plans and drawings. If and when the permittee desires to abandon the authorized activity herein, unless such abandonment is part of the transfer procedure by which the permittee is transferring its interests to a third party, the permittee must restore the area to a satisfactory condition.

Discussion: The authorizations from the Corps of Engineers under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act include the general conditions (h) requirements to maintain authorized work and (g) upon abandonment restoration of the area to a satisfactory condition. This guideline repeats those general conditions.

Monitoring and Reporting Guidelines

LTF's are monitored to assure permit compliance. Monitoring results are used to assess activities associated with the construction, operation, and maintenance of the facilities, and to ensure that corrective action occurs, if appropriate. The level and type of monitoring are dependent on the type of facility.

M1. Monitoring by Permittee

Monitoring for bark accumulations, oil sheen, and surface runoff associated with the construction, operation, and maintenance of facilities, and to ensure that corrective action occurs, if appropriate. The level and type of monitoring is dependent on the type of facility (see use definitions in the Glossary).

Discussion: The regulatory agencies when issuing permits can include conditions to a permit which require monitoring by the permittee. The agencies can assume some or all monitoring responsibilities.

M2. Monitoring Requirements

Monitoring should be undertaken at all continuous and intermittent use LTF sites, and at those occasional and incidental use LTF's at which total volume of logs transferred is similar to that of intermittent use sites. The level of monitoring and parameters to be monitored should be determined on a site-specific basis. Monitoring at occasional and incidental use facilities may be required on a site-specific basis. The need for monitoring of occasional or incidental use sites will be limited. Permittees will be required to submit a monitoring program to the permitting agencies prior to operation of a new continuous or intermittent use LTF. Agency approval of monitoring plans is required. Requirements for monitoring should be responsive to data obtained during prior monitoring activities.

Discussion: Monitoring is required to determine the occurrence and the extent of possible environmental impacts. The nature of monitoring activities shall be site-specific and determined by such factors as volume, site characteristics, life of project, and type of operation, since these factors may determine the extent of environmental impacts. Depending upon monitoring results, permitting agencies have sufficient flexibility to modify monitoring requirements for any LTF at any time during its operation, or after the first three years of operation of a continuous LTF. For example, monitoring requirements for a continuous LTF could be dropped if monitoring data indicates that significant deposits of bark debris are not accumulating. Permitting agencies approval is needed to determine if a monitoring plan will satisfy permit conditions.

M3. Annual Monitoring for Bark Accumulation

At continuous and intermittent use LTF's, monitoring of bark debris accumulation should occur prior to the operating season as a minimum requirement. Monitoring at intermittent LTF's would occur only during periods when the LTF is active.

Discussion: In order to determine if the bark accumulation conditions and stipulations of the permit are being met, it is necessary to measure bark and debris accumulations.

M4. Elements of Bark Accumulation Monitoring Program:

Elements that should be included in a monitoring program for continuous and intermittent use LTF's, are site-specific and may include, but not be limited to:

- a. permanent transects
- b. measurement of areal extent, thickness and percent coverage of bark debris,
- c. measurements required by M4, a and b are from MHW (Mean High Water) to depths of 60 feet MLLW (Mean Lower Low Water).

Discussion: In order to determine changes in site characteristics over time, installation of permanent transects is required. Thickness, area, and extent of bark coverage affects benthos. Sixty feet below MLLW was selected because it is a depth at which repeated dives can safely be conducted.

Permanent transects are necessary to enable collection of repetitive data. If little or no change is observed, the permit holder may be relieved of the requirement for collecting information along the transect. The requirement for dive transects, the number of transects, and the method of establishing permanence of the transects will be related to the period of usage, the amount of use intended, the resource values involved, and the expectations of effects as a result of the siting process.

M5. Monitoring for Oil Sheen

Waters in the vicinity of an LTF shall be monitored during operations for the presence of a visible sheen and recorded when observed.

Discussion: The monitoring is necessary to determine if an LTF is being operated to comply with water quality standards for petroleum hydrocarbons, oils, and grease. Authority for this guideline is provided by State Water Quality Standards (18 AAC 70), Oil Pollution Regulations (18 AAC 75), and Federal Regulations (40 CFR 110).

M6. Monitoring Upland Discharges

On a case-by-case basis, discharges of rainfall from log sorting and storage yard, and discharges from any settling pond used to treat water, may require monitoring to ensure compliance with State Water Quality Standards and the Clean Water Act.

Discussion: This monitoring is necessary to determine if measures or structures designed to concentrate and treat runoff are operating effectively.

M7. Reporting Guidelines

Routine annual reports include the following descriptive information: a. Location of the LTF (404/402 permits require latitude and longitude). Forest Service traditionally uses legal descriptions.

- b. Description of the LTF, including transfer devices and sorting and storage areas.
- c. Permit holder and/or operator of LTF.
- d. Starting and ending dates of operating season (from first to last bundle), and number of operating days per season.
- e. Gross volume in board feet (Scribner Scale) or number of bundles transferred during the operating season.
- f. Monitoring data as described in Monitoring Guidelines.

Glossary

Biological productivity: Highly diverse biological communities with many individuals.

Clean fill is defined as inorganic material, sized as sand and larger, free of organics. Current practice is to allow 0 to 15 percent material finer than sand and no organic materials in reinforced earth structures used for log transfer. Field observations indicate that the percentage of material is finer than sand from rock pits used for fill is considerably lower than the maximum percentage of fine material.

Log raft make-up area: A facility constructed in waters of the United States near or adjacent to log transfer facilities. The log raft make-up area is utilized for constructing log rafts which on completion are moved to either a log storage area or loaded on to a vessel.

Log raft storage area: A facility constructed in the waters of the United States utilized for the purpose of temporary or long-term storage of commercially harvested logs awaiting transfer to a vessel, manufacturing facility, or storage at the manufacturing facility.

Log transfer facility: A facility constructed, in whole or part, in waters of the United States which is utilized for the purpose of transferring commercially harvested logs to or from a vessel or log raft.

Practicable: Means available and capable of being done after taking into consideration costs, existing technology, and logistics in light of overall project purposes (40 CFR 230.3(q)).

Use Descriptions: There are four classifications to describe the range of use for log transfer operations. The intensity and duration of site use will vary over time and the descriptions for each use provide a benchmark description to relate to operating levels and characteristics. There is a trend away from long-term continuous sites with increased incidence of intermittent and occasional use sites.

Continuous use sites: Sites where use is expected to be continuous on a regular basis for 20 years or longer. These sites were described and analyzed by Sedlak (3-16) in his analysis of alternative log transportation systems. Volume of expected timber is approximately 20 to 50 MMBF per year. Industry practice is to try to operate at a minimum of 35 MMBF activity level if a year-round camp is to be maintained. Log sorting and scaling commonly occurs at these sites. Export shipping is expected for privately owned timber. This operation is described as having "two sides" (two full yarding and support systems) with year-round land-based camp operations normal. Sites originally developed and operated as continuous use will frequently change to intermittent use or occasional use sites subsequent to the initial harvest activities.

Incidental use sites: Sites where use for log transfer is expected to occur only once or twice over a 70-100 year period. Typically the focus is on salvage of logs as the result of blowdown, disease, or harvest of isolated stands of timber. The lands involved are generally not accessible by alternative means. Timber volumes at a site will normally not exceed 5-10 MMBF. Log sorting areas are normally not constructed and native log structures are expected. Floating camp operations are expected.

Intermittent use sites: Sites where use is expected to vary from zero to approximately 11-17 MMBF per year. This operation can be described as having a "single side" (one full yarding operation and supporting system). These sites were described and analyzed by Sedlak (3-17) in his analysis of alternative log transportation systems. Typically these sites will vary in use in a pattern of 4 MMBF for the first year, 11-17 MMBF for three years, 4 MMBF for one year, and 6-15 years with no log transfer (3-17). Timber volumes from intermittent use would be at the average annual rate of 3-5 MMBF per year over 20-50 years. Timber salvage operations may occur in the periods between major operations. Sort yards are not normally constructed if water storage sites are available.

Year-round camp operation is generally not expected. Land-based camps have been common in the past, but increased use of floating camps has been observed at these sites.

Occasional use sites: Sites where intensive log transfer is expected to occur for only 4-6 years out of a 20-30 year period. These sites have not been analyzed in the literature. The use pattern is expected to be cyclical through the life of the site. Timber volumes from major timber activities would be at the average annual rate of about 1/2 MMBF/year over 20-50 years. Small timber operations will occur during the periods when major sale activities do not occur. Sorting yards are constructed only if no other options are available. Direct shipping of export logs is not expected.

Floating camp operations are the expected normal situation unless commuting of workers from an established camp is feasible.

APPENDIX C
FIGURES

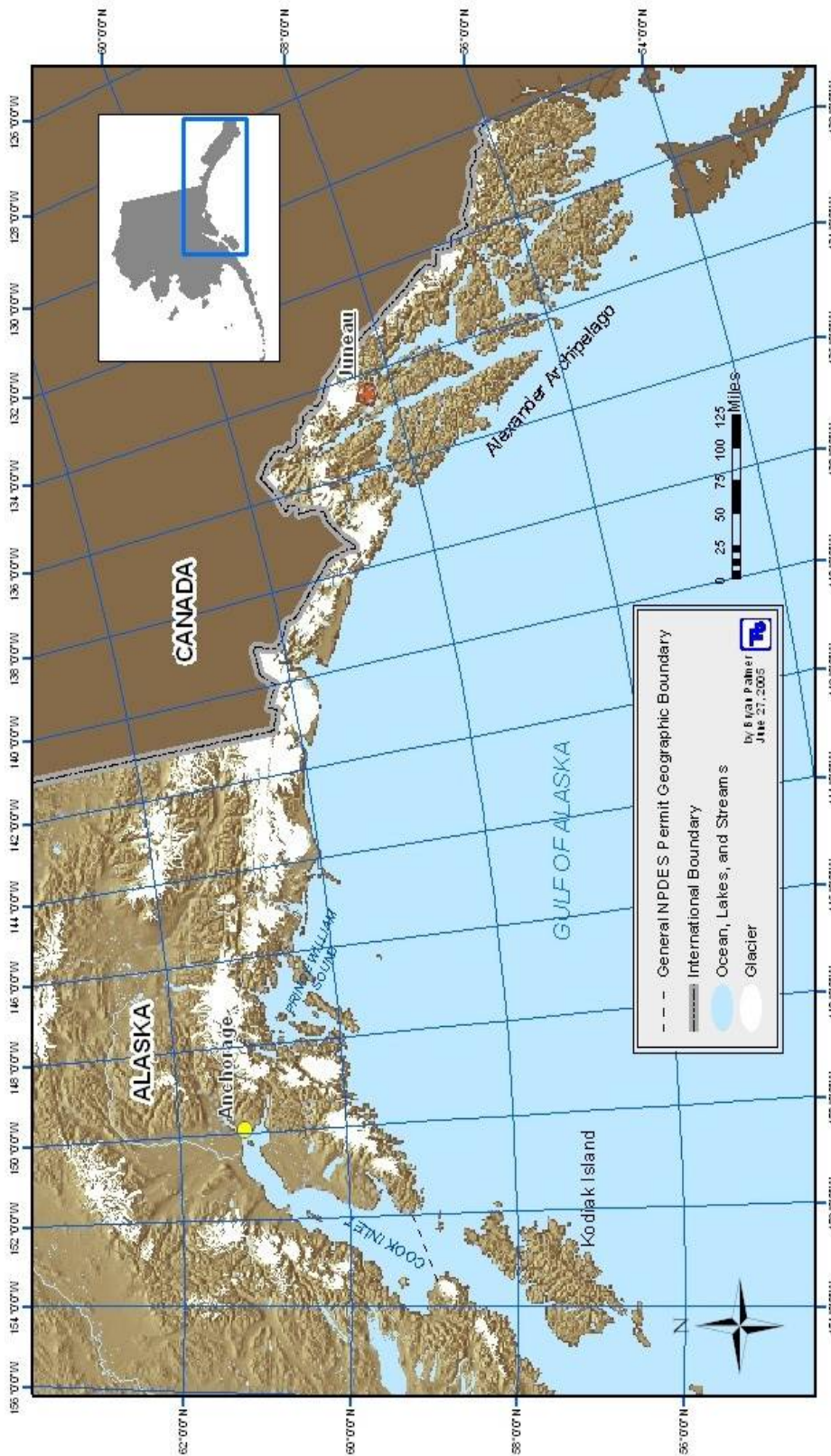


Figure 1. Geographic area of the general NPDES permit that applies to qualifying log transfer facilities (LTFs) discharging bark and wood debris into marine waters within the geographic area of southern Alaska. It extends west from the Alexander Archipelago through the central Gulf of Alaska past Prince William Sound to Kodiak Island. The general NPDES permit coverage does not include the Cook Inlet, freshwater habitats (including streams, lakes, rivers, impoundments, and wetlands), or into areas that are excluded from authorization.

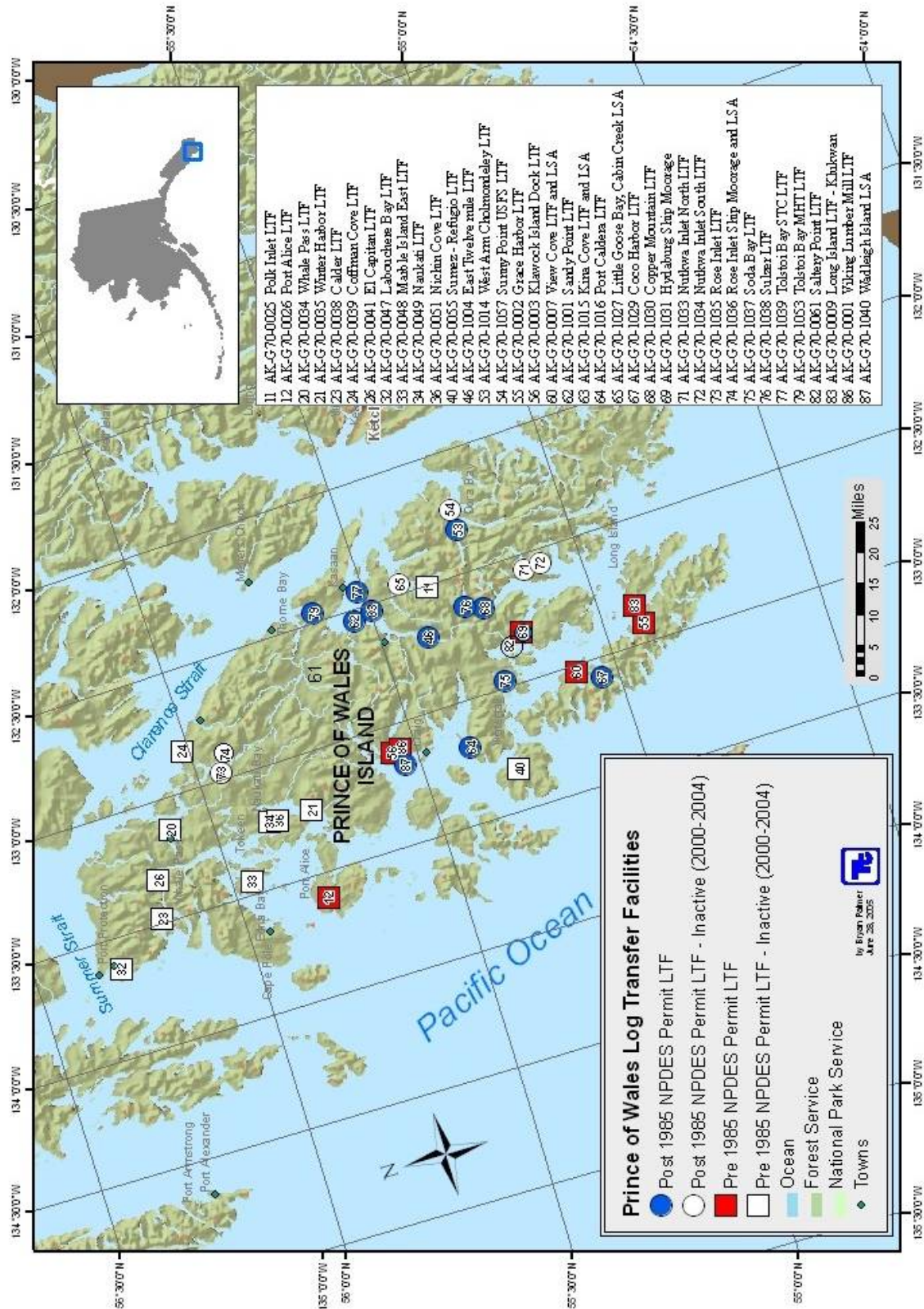


Figure 2. Log transfer facilities (LTFs) discharging bark and wood debris into marine waters located on the Prince of Wales Island located on the southern tip of the Alexander Archipelago of southern Alaska.

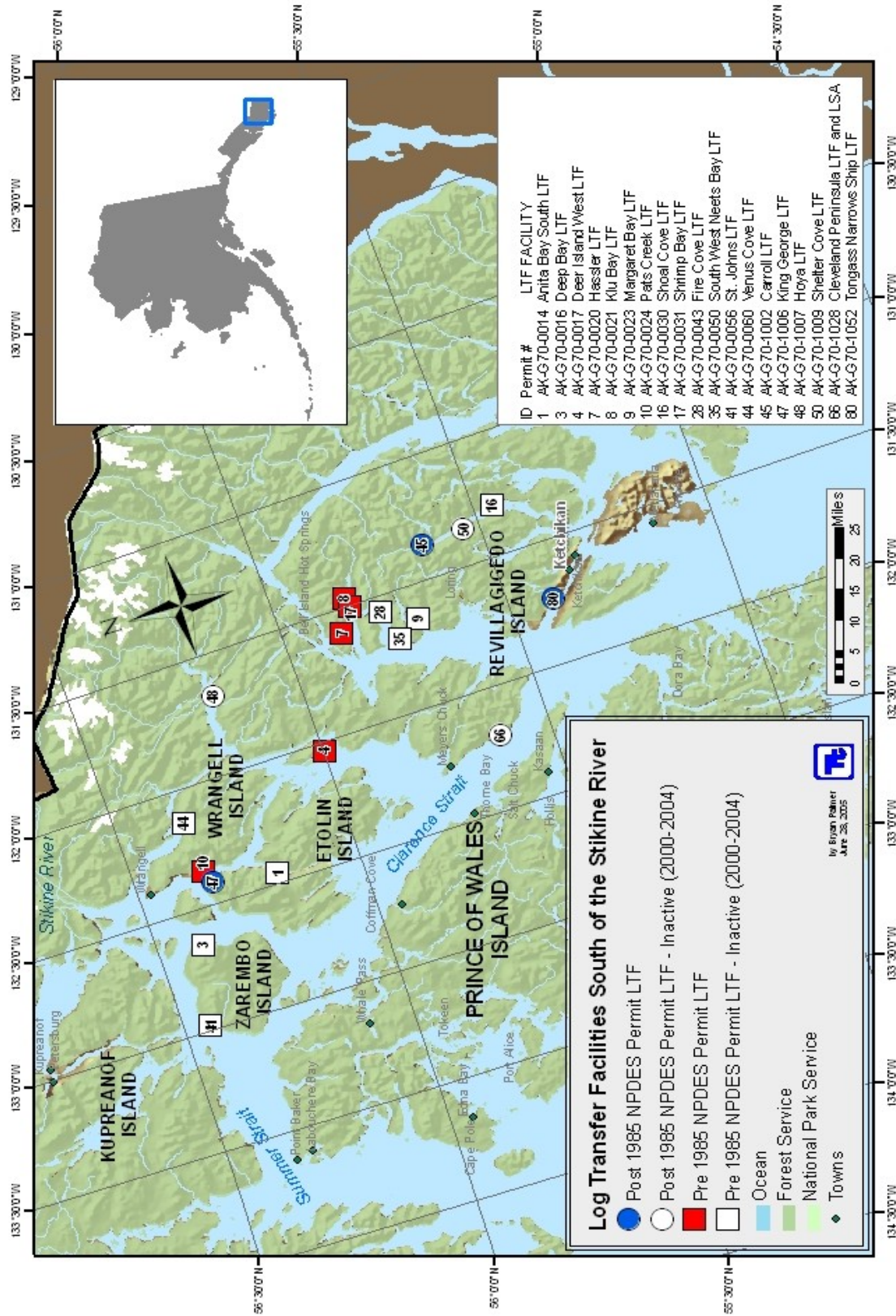


Figure 3. Log Transfer Facilities (LTFs) discharging bark and wood debris into marine waters located south of the Stikine River in southeastern Alaska.

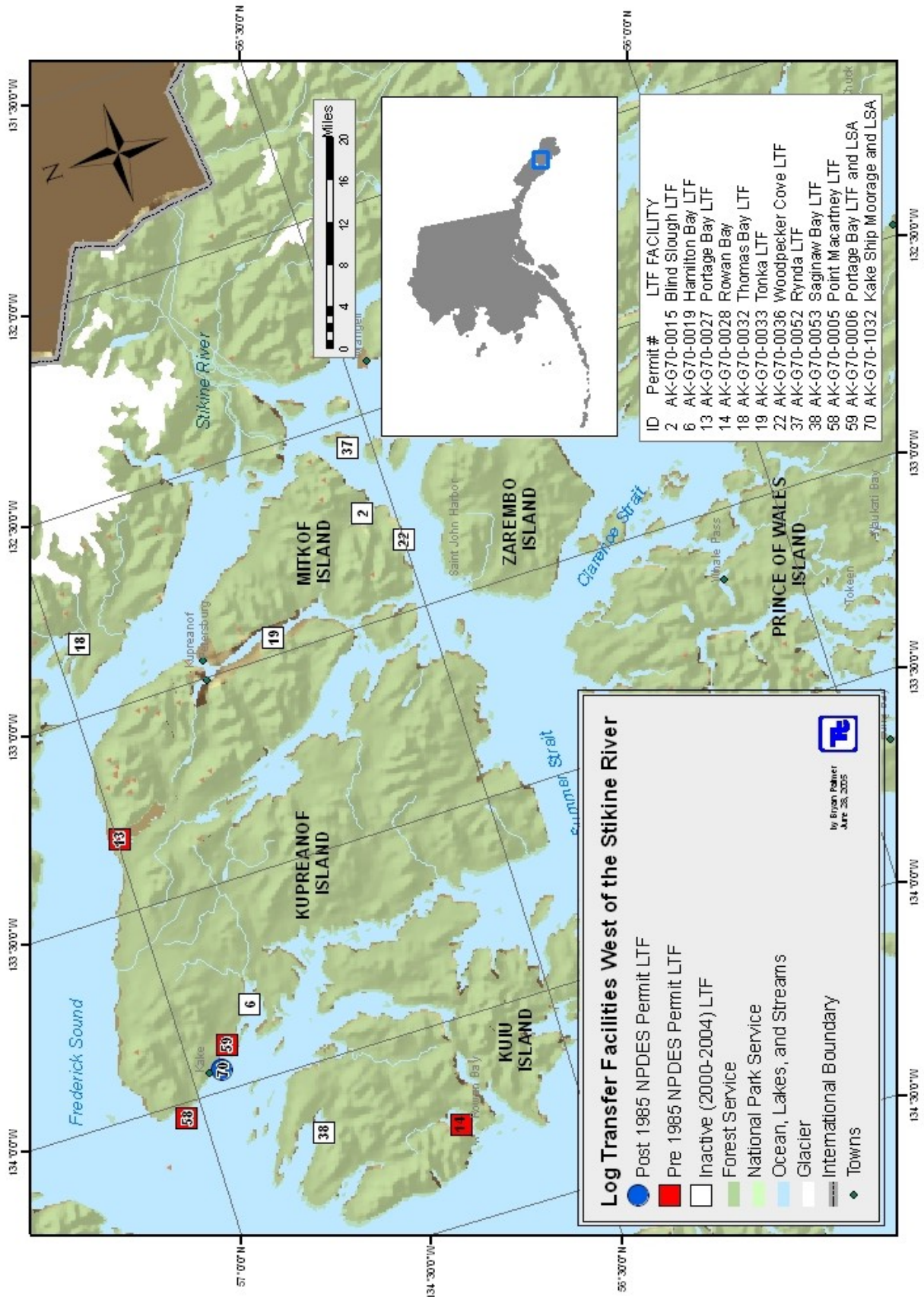


Figure 4. Log Transfer Facilities (LTFs) discharging bark and wood debris into marine waters located west of the Stikine River in southeastern Alaska.

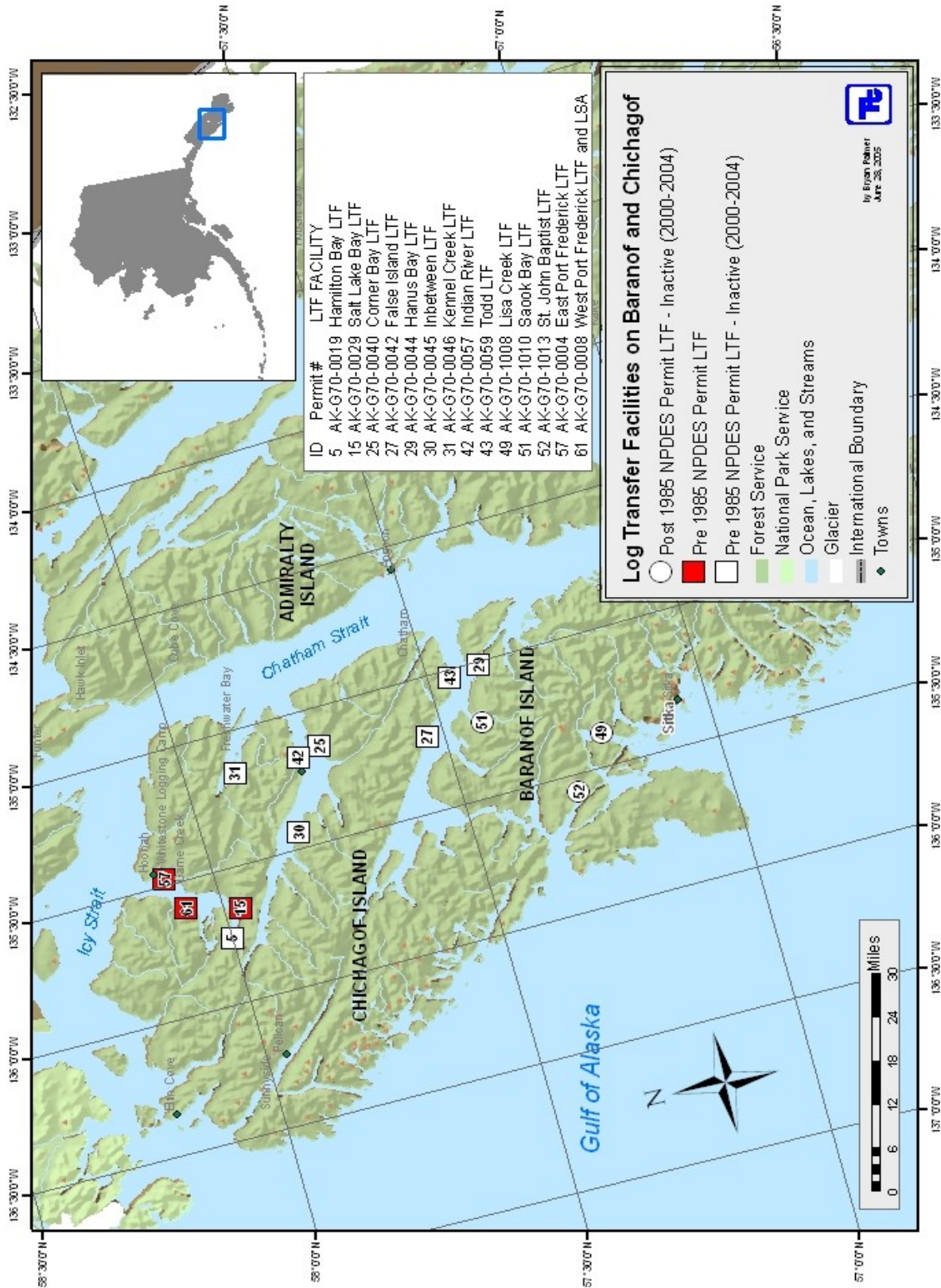


Figure 5. Log Transfer Facilities (LTFs) discharging bark and wood debris into marine waters located on Baranof and Chichagof in the Alexander Archipelago of southeastern Alaska.

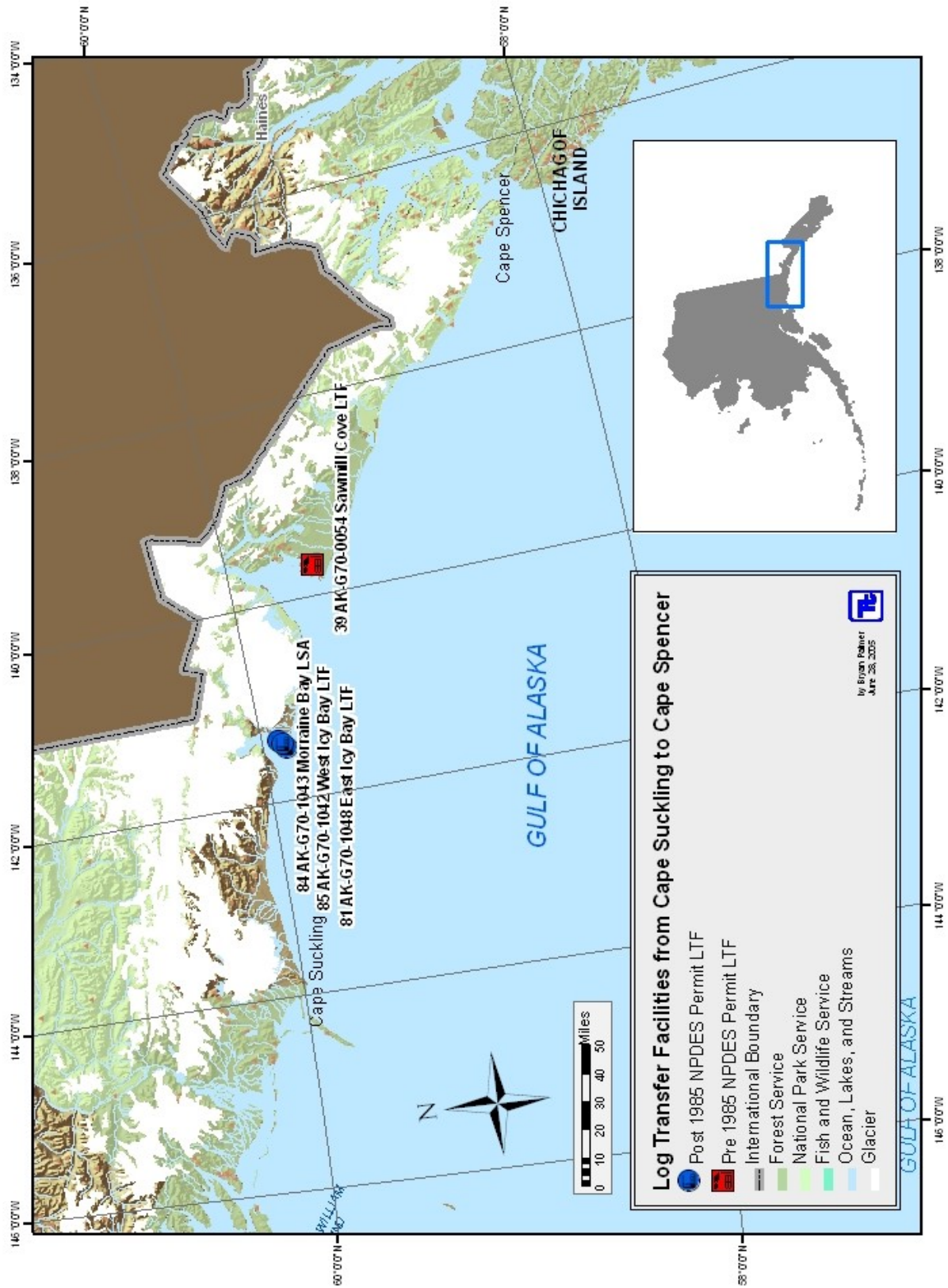


Figure 6. Log Transfer Facilities (LTFs) discharging bark and wood debris into marine waters located between Cape Suckling and Cape Spencer in southeastern Alaska.

APPENDIX D
DRAFT CWA 401 CERTIFICATIONS

STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DRAFT CERTIFICATE OF REASONABLE ASSURANCE

NPDES General Permit No. AK-G70-0000
U.S. Environmental Protection Agency

Log Transfer Facilities in Alaska
"Pre-1985"

This Certificate of Reasonable Assurance, as required by Section 401 of the Clean Water Act and the Alaska Water Quality Standards (18 AAC 70), will be issued to the U.S. Environmental Protection Agency (EPA), 1200 Sixth Avenue, Seattle, WA 98101, for NPDES¹ General Permit Number AK-G70-0000 for Section 402 Modifications of Section 404 Permits for Log Transfer Facilities Which Received a Section 404 Permit Prior to October 22, 1985, ("NPDES General Permit"), which authorizes the discharge to waters of the United States of storm water and bark and wood debris associated with certain log transfer facilities.

Public notice of the application for this certification will be made in accordance with 18 AAC 15.140.

Water Quality Certification is required for the activity because it will be authorized by an Environmental Protection Agency permit identified as NPDES Permit No. AK -G70-0000 and discharges onto State lands or into State waters will result from activities authorized under this permit.

After review of the public comments received in response to the public notice that will be issued by the Environmental Protection Agency and the Alaska Department of Environmental Conservation, the Department will certify that there is reasonable assurance that the activity and the resulting discharge is in compliance with the requirements of Section 401 of the Clean Water Act, which includes the Alaska Water Quality Standards, 18 AAC 70, provided that the terms and conditions of the final certification are adhered to.

Any person who disagrees with this decision may request an adjudicatory hearing in accordance with 18 AAC 15.195- 18 AAC 15.340 or an informal review by the Division Director in accordance with 18 AAC 15.185. Informal review requests must be delivered to the Director of Water, 555 Cordova Street, Anchorage, Alaska 99501, within 15 days of receipt of the department's decision. Adjudicatory hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, PO Box 111800, Juneau, Alaska 99811-1800, within 30 days from the date of the permit decision. If a hearing is not requested within 30 days, the right to appeal is waived.

The Department has reviewed the discharge with respect to the antidegradation policy of the Alaska Water Quality Standards and finds the reduction in water quality to be in

accordance with the requirements of 18 AAC 70.015, provided that the terms and conditions of the final certification are made part of the final NPDES permit. The Department will consider the antidegradation policy for each new Notification received, or each Notification from a previously authorized facility if changes have occurred since that time that require a revised Notification to be submitted.

Through this certification, in accordance with 18 AAC 15.120 ADOPTION OF NPDES PERMITS, the final NPDES permit will constitute the permit required under AS 46.03.100 Waste Disposal Permit, provided that the stipulations of the final certification are made part of the final modified NPDES Permit. Conditions under Part A of this certification apply to both the NPDES General Permit and the State wastewater disposal general permit. Conditions under Part B apply only to the State wastewater disposal general permit. The department is specifying the following permit stipulations under authority of AS 46.03.110(d).

PART A: Conditions Applicable to both the NPDES General Permit and the State Wastewater Disposal General Permit

1. Operational Practices. The operator of an LTF shall employ all reasonable practices to avoid the discharge of storm water and bark and wood debris from logs in marine waters, and to contain the discharge to the smallest area on the ocean surface that is practicable and is consistent with safe and orderly operation of the log transfer facility

The operator must prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) for the facility prior to submitting a Notification. The SWPPP must be prepared in accordance with good engineering practices and Part VI. The SWPPP must:

- a. Identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the facility;
 - b. Describe and ensure implementation of best management practices which will be used to reduce pollutant loading in storm water discharges from the facility
 - c. Identify specific operational practices that will be used to minimize bark and wood waste discharge. Practices addressed in the Storm Water Pollution Prevention Plan must include handling of logs out of water, method of transfer, handling of logs in water, and other operational elements, and
 - d. Assure compliance with the terms and conditions of this permit.
2. Zone of Deposit Authorization. For facilities operating under an administratively extended EPA and State authorization whose owners are not required to submit a revised Notification, the Department re-authorizes, in accordance with the Alaska Water Quality Standards, Section 18 AAC 70.210, a Zone of Deposit for the accumulation of bark and wood debris on the ocean bottom within the project area² at of a Log Transfer Facility.. Subject to Part B of this certification, the Zone of Deposit may include continuous coverage³, discontinuous coverage⁴, and trace coverage⁵ by bark and wood debris. At an LTF with an on-shore transfer device, to the extent

practicable, the primary area of continuous coverage must be collocated with the primary area of continuous coverage existing prior to discharge under the NPDES General Permit, unless a different area is authorized by the Department. For LTF that submit a new or revised Notification, the Department may approve, the Department will follow the procedures described under Part B (a).

3. Zone of Deposit Rescission. The Department, upon review of a Notification to discharge under the NPDES General Permit, may determine that a Zone of Deposit under paragraph 2 above and under Section III.A.3 of the NPDES General Permit is not appropriate at the proposed location and is not authorized under 18 AAC 70.210. The Department will inform EPA of that decision within 30 days of receipt of the Notice of Intent, except that the Department, by written notice to EPA, may extend such period for an additional time not to exceed 30 days.
4. Notice of Exceedance. The operator of an LTF shall notify the Department and EPA if bark and wood debris exceeds the one-acre continuous cover bark and wood debris accumulation threshold authorized in the Zone of Deposit.
5. Contents of the Notification. In addition to the requirements of Section IV, the Notification of discharge under the NPDES General Permit must provide the following information:
 - (a) A map clearly delineating the project area, and a statement of the project area acreage;
 - (b) A demonstration that operation of the LTF constitutes important social or economic development in the area, and that a Zone of Deposit is necessary to accommodate operation of the LTF; and
 - (c) A description of known existing uses of the marine water where the LTF is located, and a demonstration that those uses will be fully protected by the proposed operation of the LTF.

6. Bark Monitoring Surveys. (a) A bark monitoring survey conducted under Section V.C of the NPDES General Permit must determine the total area of continuous coverage by bark and wood debris, and the total area of discontinuous coverage by bark and wood debris, within the project area in water depths to -100 feet 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.

(b) If a bark monitoring survey indicates that continuous coverage by bark and wood debris is 0.9 acre or greater, and log transfer occurs in that year after that survey, an additional survey must be conducted either: (i) in that year, after cessation of log transfer; or (ii) in the following year, prior to any additional log transfer.

(c) The preferred time period for conducting an annual bark monitoring survey in a given year is March through May, or prior to operation.

(d) A bark monitoring survey must include still digital photographs that clearly depict the nature and coverage of bark and wood debris on the ocean bottom at representative sample plots along the transects, including at least half the sample plots.

(e) The operator shall submit the results of a bark monitoring survey electronically to the Department and the Alaska Department of Natural Resources (see Part D for addresses) within 60 days of completion of the survey, unless a longer time is authorized by the Department. The results of a survey must clearly state the area of continuous coverage and the area of discontinuous coverage by bark and wood debris.

(f) If a bark monitoring survey shows that continuous coverage by bark and wood debris exceeds both 1.0 acre and a thickness of 10 centimeters at any point⁶, the operator shall submit, along with the survey, a statement describing practices that will be used to minimize additional bark accumulation until such time as a Remediation Plan is approved by the Department, and shall within 14 days incorporate those practices into the Storm Water Pollution Prevention Plan for the LTF.

PART B: Conditions Applicable Only to the State Wastewater Disposal General Permit

7. Written Authorization. (a) Pursuant to this certification, to discharge under the State wastewater disposal general permit, an owner or operator of an LTF must receive

written authorization from the Department. The Department will, in its discretion, issue authorization or denial for LTFs that never received written authorization under the 2000 Pre-85 General Permit authorized after review of the Notification and consultation with the Department of Natural Resources and the Department of Fish and Game. The Department will issue authorization or denial in writing, within sixty days of its receipt of the Notice of Intent, and will provide that written decision to the LTF operator and to EPA.

- (b) Authorization or denial will be based on evaluation of the following topics:
 - (i) Conformance with the Notification requirements in Section IV of the NPDES General Permit and in this certification;
 - (ii) Conformance with the Zone of Deposit section of the Water Quality Standards (18 AAC 70.210);
 - (iii) Conformance with the Antidegradation Policy section of the Water Quality Standards (18 AAC 70.015); and
 - (iv) Conformance with other sections of the Water Quality Standards (18 AAC 70).

For LTFs that submit an updated Notification for coverage under the draft Pre-85 General Permit and have an administratively extended State wastewater disposal general permit, the Department will provide a list of these LTFs to the Department of Natural Resources and the Department of Fish and Game for an expedited consultation. The Department will issue authorization in writing, within thirty days of notifying the Department of Natural Resources and the Department of Fish and Game of these facilities. The Department will provide written decision to the LTF operator and to EPA.

- 8. Individual Permit. The Department will, in its discretion, require the operator of an LTF to obtain an individual State wastewater disposal permit as provided in 18 AAC 72.910(d).
- 9. Additional Surveys. (a) If bark monitoring surveys submitted by the operator, and other available evidence, are not sufficient to determine whether continuous coverage by bark and wood debris exceeds both 1.0 acre and a thickness of 10 centimeters at any point, the Department will, in its discretion, require the operator to conduct additional bark monitoring surveys or other monitoring for that purpose.
- 10. Proposed Remediation Plan. (a) If continuous coverage by any existing bark and wood debris, whenever deposited, exceeds both 1.0 acre and a thickness of 10 centimeters at any point, the operator shall submit a proposed Remediation Plan to the Department within 120 days, unless additional time is granted by the Department.
 - (b) A proposed Remediation Plan must:
 - (i) Describe, to the extent that information is reasonably available, the historical log transfer processes, volumes, and responsible parties at

the site, and their apparent relation to the existing deposition of bark and wood debris;

- (ii) Describe the expected future log transfer processes and volumes at the site;
- (iii) Evaluate environmental impacts caused by existing deposits of bark and wood debris, and environmental impacts of methods to reduce continuous coverage; and
- (iv) Evaluate methods to reduce continuous coverage, including:
 - (1) Alternative methods of log transfer and transport;
 - (2) Operational practices, including handling of logs out of water, handling of logs in water, movement of logs in water, and other operational elements;
 - (3) Feasible methods and costs of removing bark and wood debris from the ocean bottom; and
 - (4) Other methods.

(c) A proposed Remediation Plan must identify, as a result of the evaluation, a set of feasible, reasonable, and effective measures that the operator proposes to implement to reduce existing and future continuous coverage by bark and wood debris to less than both 1.0 acre and a thickness of 10 centimeters at any point. The proposed Remediation Plan must provide justification for the measures identified.

(d) If removal of bark and wood wastes is proposed, the Remediation Plan must specify the following:

- (i) The proposed areas, methods, and timing of removal;
- (ii) The volume and nature of material to be removed;
- (iii) The method of disposal of removed material, and management practices at the disposal site to assure meeting water quality standards and other applicable standards and to assure prevention of objectionable odors; and
- (iv) The costs of removal by the proposed methods and alternatives considered.

(e) A proposed Remediation Plan must include a performance schedule and performance measures for implementation of the plan. A proposed Remediation Plan may describe measures that will be implemented in phases, with continued bark monitoring surveys, and with future modification of the Remediation Plan based on progress in reducing continuous coverage.

11. Departmental Action. Within 90 days of receipt of a proposed Remediation Plan, the Department will approve, approve with modification, or deny the proposed Remediation Plan. In acting on a Remediation Plan, the Department will consider the extent of exceedance; environmental impacts of accumulated bark and wood debris; environmental impacts of methods to reduce continuous coverage; the feasibility,

reasonableness, effectiveness, and cost of proposed and alternative measures; the timing of recovery under various alternatives; and other pertinent factors.

12. Enforceable Condition. An approved Remediation Plan constitutes an enforceable condition of the State wastewater disposal general permit.
13. Exclusion of Port Graham/Nanwalek Area Which Merits Special Attention (AMSA). The Port Graham AMSA (see map in draft permit) is excluded from the LTF General Permit.
14. Exclusions within the Kenai Peninsula Borough. An LTF in one of the following water use areas of the Kenai Peninsula Borough Coastal District (KPB) is excluded from coverage by the NPDES General Permit, unless the KPB affirms, based on its review of the Notification submitted by the LTF operator, that the KPB does not oppose coverage of the LTF by the NPDES General Permit:
 - a. important near-shore fisheries;
 - b. areas in close proximity to existing mariculture facilities;
 - c. areas of high recreational use;
 - d. areas with high concentrations of fish and wildlife;
 - e. subsistence use areas;
 - f. archeological and historic sites; and/or
 - g. recreational sites.

PART C: Definitions

1. "NPDES" means the National Pollutant Discharge Elimination System under Section 402 of the federal Clean Water Act, 33 U.S.C. 1251 et seq.
2. "project area" means the entire marine operating area of an LTF, either shore-based or off-shore, including the following components: shore-based log transfer devices; shore-based log transfer, rafting, and storage areas; helicopter drop areas; vessel and barge loading and unloading areas; off-shore log storage areas not adjacent to a shore-based LTF; bulkheads, ramps, floating walkways, docks, pilings, dolphins, anchors, buoys and other marine appurtenances; and the marine water and ocean bottom underlying and connecting these features.
3. "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 will, at the Department's discretion, include boulders, rock outcrops, ridges, and other protrusions within an area of continuous coverage that are not covered by bark.
4. "discontinuous coverage" means areas of bark and wood debris that are estimated to cover 40 % or more of the ocean bottom, but less than 100 %, as measured within a three-foot-square sample plot.
5. "trace coverage" means areas of bark and wood debris that are estimated to cover less than 40 % of the ocean bottom, as measured within a three-foot square sample plot.

6. *"at any point" means at any single point within the area of continuous coverage; "at any point" does not mean "at all points," and does not mean a single piece of bark or wood protruding from the surface of bark and wood debris.*

PART D: Addresses

Following is the address for submittal of bark monitoring surveys, annual reports, and Remediation Plans to the Department of Environmental Conservation, and for other communications respecting the State Wastewater Disposal General Permit.

Departmental of Environmental Conservation
Division of Water
PO Box 111800
Juneau, AK 99811-1800
Attn: LTF Monitoring

Following are addresses for submittal of bark monitoring surveys to the Department of Natural Resources in Southeast and Southcentral Alaska.

Department of Natural Resources
Division of Mining, Land and Water
Southeast Regional Manager
400 Willoughby Ave., Suite 400
Juneau, AK 99801-1724

Department of Natural Resources
Division of Mining, Land and Water
Southcentral Regional Manager
555 W. 7th, 12th Floor
Anchorage, AK 99503

Date

Water Nonpoint Sources Program
Division of Water Manager

STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DRAFT CERTIFICATE OF REASONABLE ASSURANCE

NPDES General Permit No. AK-G70-1000
U.S. Environmental Protection Agency

Log Transfer Facilities in Alaska
"Post-1985"

This Certificate of Reasonable Assurance, as required by Section 401 of the Clean Water Act and the Alaska Water Quality Standards (18 AAC 70), will be issued to the U.S. Environmental Protection Agency (EPA), 1200 Sixth Avenue, Seattle, WA 98101, for NPDES¹ General Permit Number AK-G70-1000 for Log Transfer Facilities in Alaska ("NPDES General Permit"), which authorizes the discharge to waters of the United States of bark and wood debris associated with certain log transfer facilities.

Public notice of the application for this certification will be made in accordance with 18 AAC 15.140.

Water Quality Certification is required for the activity because it will be authorized by an Environmental Protection Agency permit identified as NPDES Permit No. AK-G70-1000 and discharges onto State lands or into State waters will result from activities authorized under this permit.

After review of the public comments received in response to the public notice that will be issued by the Environmental Protection Agency and the Alaska Department of Environmental Conservation, the Department will certify that there is reasonable assurance that the activity and the resulting discharge is in compliance with the requirements of Section 401 of the Clean Water Act, which includes the Alaska Water Quality Standards, 18 AAC 70, provided that the terms and conditions of the final permit and certification are adhered to.

Any person who disagrees with this decision may request an adjudicatory hearing in accordance with 18 AAC 15.195- 18 AAC 15.340 or an informal review by the Division Director in accordance with 18 AAC 15.185. Informal review requests must be delivered to the Director of Water, 555 Cordova Street, Anchorage, Alaska 99501, within 15 days of receipt of the department's decision. Adjudicatory hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, PO Box 111800, Juneau, Alaska 99811-1800, within 30 days from the date of the permit decision. If a hearing is not requested within 30 days, the right to appeal is waived.

The Department has reviewed the discharge with respect to the antidegradation policy of the Alaska Water Quality Standards and finds the reduction in water quality to be in accordance with the requirements of 18 AAC 70.015, provided that the terms and conditions of the final certification are made part of the final NPDES permit. The

Department will consider the antidegradation policy for each new NOI received, or each NOI from a previously authorized facility if changes have occurred since that time that require a revised NOI to be submitted.

Through this certification, in accordance with 18 AAC 15.120 Adoption of NPDES Permits, the final NPDES permit will constitute the permit required under AS 46.03.100 Waste Disposal Permit, provided that the stipulations of the final certification are made part of the final NPDES Permit. Conditions under Part A of this certification apply to both the NPDES General Permit and the State wastewater disposal general permit. Conditions under Part B apply only to the State wastewater disposal general permit. The department is specifying the following permit stipulations under authority of AS 46.03.110(d).

PART A: Conditions Applicable to both the NPDES General Permit and the State Wastewater Disposal General Permit

1. Operational Practices. The operator of an LTF shall employ all reasonable practices to avoid the discharge of storm water and bark and wood debris from logs in marine waters, and to contain the discharge to the smallest area on the ocean surface that is practicable and is consistent with safe and orderly operation of the log transfer facility.

The operator must prepare and implement a Pollution Prevention Plan (PPP) prior to submitting a Notice of Intent for the facility. The PPP must be prepared in accordance with good engineering practices and Part VII. The PPP must identify specific operational practices that will be used to minimize bark and wood waste discharge. Practices addressed in the Pollution Prevention Plan must include handling of logs out of water, method of transfer, handling of logs in water, and other operational elements.

2. Zone of Deposit Authorization. For facilities operating under an administratively extended EPA and State authorization whose owners are not required to submit a revised NOI, the Department re-authorizes, in accordance with the Alaska Water Quality Standards, Section 18 AAC 70.210, a Zone of Deposit for the accumulation of bark and wood debris on the ocean bottom within the project area² at of a Log Transfer Facility.. Subject to Part B of this certification, the Zone of Deposit may include continuous coverage³, discontinuous coverage⁴, and trace coverage⁵ by bark and wood debris. At an LTF with an on-shore transfer device, to the extent practicable, the primary area of continuous coverage must be collocated with the primary area of continuous coverage existing prior to discharge under the NPDES General Permit, unless a different area is authorized by the Department. For LTF that submit a new or revised NOI, the Department may approve, the Department will follow the procedures described under Part B (a).
3. Zone of Deposit Rescission. The Department, upon review of a Notice of Intent to discharge under the NPDES General Permit, may determine that a Zone of Deposit

under paragraph 2 above and under Section IV.A.3 of the NPDES General Permit is not appropriate at the proposed location and is not authorized under 18 AAC 70.210. The Department will inform EPA of that decision within 30 days of receipt of the Notice of Intent, except that the Department, by written notice to EPA, may extend such period for an additional time not to exceed 30 days.

4. Notice of Exceedance. The operator of an LTF shall notify the Department and EPA if bark and wood debris exceeds the one-acre continuous cover accumulation threshold authorized in the Zone of Deposit.
5. Contents of the Notice of Intent. In addition to the requirements of Section V, the Notice of Intent to discharge under the NPDES General Permit must provide the following information:
 - (a) A map clearly delineating the project area, and a statement of the project area acreage;
 - (b) A demonstration that operation of the LTF constitutes important social or economic development in the area, and that a Zone of Deposit is necessary to accommodate operation of the LTF; and
 - (c) A description of known existing uses of the marine water where the LTF is located, and a demonstration that those uses will be fully protected by the proposed operation of the LTF.
6. Impaired Waters. The NPDES General Permit may not authorize a "new discharger"⁶ to discharge bark and wood debris into any segment of a waterbody included in the Department's CWA Section 303(d) list of waters, that is "impaired" or "water quality limited" for residues related to log transfer or log storage activities.
7. Existing Continuous Coverage. The NPDES General Permit may not authorize a "new discharger" to discharge bark and wood debris at a location where the existing continuous coverage by bark and wood debris exceeds both 1.0 acre and a thickness of 10 centimeters at any point.⁷ The Director may authorize a new discharge if an ADEC-approved Remediation Plan or Total Maximum Daily Load (TMDL) is in place.
8. 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.

(b) If a bark monitoring survey indicates that continuous coverage by bark and wood debris is 0.9 acre or greater, and log transfer occurs in that year after that survey, an additional survey must be conducted either: (i) in that year, after cessation of log transfer; or (ii) in the following year, prior to any additional log transfer.

(c) The preferred time period for conducting an annual bark monitoring survey in a given year is March through May, or prior to operation.

(d) A bark monitoring survey must include digital still photographs that clearly depict the nature and coverage of bark and wood debris on the ocean bottom at representative sample plots along the transects, including at least half the sample plots.

(e) The operator shall submit the results of a bark monitoring survey electronically to the Department and the Alaska Department of Natural Resources (see Part D for addresses) within 60 days of completion of the survey, unless a longer time is authorized by the Department. The results of a survey must clearly state the area of continuous coverage and the area of discontinuous coverage by bark and wood debris.

(f) If a bark monitoring survey shows that continuous coverage by bark and wood debris exceeds both 1.0 acre and a thickness of 10 centimeters at any point, the operator shall submit, along with the survey, a statement describing practices that will be used to minimize additional bark accumulation until such time as a Remediation Plan is approved by the Department, and shall incorporate those practices into the Pollution Prevention Plan for the LTF within 14 days.

(g) If a bark monitoring survey shows that continuous coverage by bark and wood debris exceeds both 0.75 acre and a thickness of 10 centimeters at any point, the operator shall submit, along with the survey, a statement describing practices that will be used to minimize additional bark accumulation, and shall incorporate those practices into the Pollution Prevention Plan for the LTF within 14 days.

PART B: Conditions Applicable Only to the State Wastewater Disposal General Permit

9. Written Authorization. (a) The NPDES General Permit requires that, to discharge under the NPDES General Permit, an owner or operator of an LTF must submit a Notice of Intent to EPA and the Department, and must receive written authorization from EPA.

Pursuant to this certification, to discharge under the State wastewater disposal general permit, an owner or operator of an LTF must receive written authorization from the Department. The Department will, in its discretion, issue authorization or denial for LTFs that never received written authorization under the 2000 Post-85 General Permit

authorized after review of the Notice of Intent and consultation with the Department of Natural Resources and the Department of Fish and Game. The Department will issue authorization or denial in writing, within sixty days of its receipt of the Notice of Intent, and will provide that written decision to the LTF operator and to EPA.

- (b) Authorization or denial will be based on evaluation of the following topics:
- (i) Protected water resources and special habitats in Section III.A of the NPDES General Permit;
 - (ii) Siting guidelines in Section III.B;
 - (iii) Impaired waterbodies in Section III.C;
 - (iv) Waiver requests under Section III.D;
 - (v) Depth waivers under Section IV.B.3.b;
 - (vi) Conformance with the Notice of Intent requirements in Section V of the NPDES General Permit and in this certification;
 - (vii) Conformance with the Zone of Deposit section of the Water Quality Standards (18 AAC 70.210);
 - (viii) Conformance with the Antidegradation Policy section of the Water Quality Standards (18 AAC 70.015); and
 - (ix) Conformance with other sections of the Water Quality Standards (18 AAC 70).

For LTFs that submit an updated NOI for coverage under the draft Post-85 General Permit and have an administratively extended State wastewater disposal general permit, the Department will provide a list of these LTFs to the Department of Natural Resources and the Department of Fish and Game for an expedited consultation. The Department will issue authorization in writing, within thirty days of notifying the Department of Natural Resources and the Department of Fish and Game of these facilities. The Department will provide written decision to the LTF operator and to EPA.

10. Individual Permit. The Department will, in its discretion, require the operator of an LTF to obtain an individual State wastewater disposal permit as provided in 18 AAC 72.910(d).
11. Additional Surveys. (a) If bark monitoring surveys submitted by the operator, and other available evidence, are not sufficient to determine whether continuous coverage by bark and wood debris exceeds both 1.0 acre and a thickness of 10 centimeters at any point, the Department will, in its discretion, require the operator to conduct additional bark monitoring surveys or other monitoring for that purpose.
12. Excluded areas. The State wastewater disposal general permit does not authorize a new LTF to discharge bark and wood debris in the following areas:

- (a) A State Game Sanctuary, Game Refuge, or Critical Habitat Area; or
- (b) An area designated in a State of Alaska Area Plan developed under AS 38.04.065 as being of the highest category of importance for either habitat or harvest of fish and wildlife unless Forestry is a co-designated highest category of use. Each Area Plan has a slightly different term and alphanumeric code for this highest value category; for example: “crucial habitat/HA”; “crucial habitat/Ha1”; “H1a”; or “Hv1.”
- (c) Within 1 nautical mile of Stellar sea lion rookeries or haulouts or within any Stellar sea lion “critical habitat area” without written permission from the Regional Director of the National Marine Fisheries Service.

13. Proposed Remediation Plan. (a) If continuous coverage by any existing bark and wood debris, whenever deposited, exceeds both 1.0 acre and a thickness of 10 centimeters at any point, the operator shall submit a proposed Remediation Plan to the Department within 120 days, unless additional time is granted by the Department.

(b) A proposed Remediation Plan must:

- (i) Describe, to the extent that information is reasonably available, the historical log transfer processes, volumes, and responsible parties at the site, and their apparent relation to the existing deposition of bark and wood debris;
- (ii) Describe the expected future log transfer processes and volumes at the site;
- (iii) Evaluate environmental impacts caused by existing deposits of bark and wood debris, and environmental impacts of methods to reduce continuous coverage; and
- (iv) Evaluate methods to reduce continuous coverage, including:
 - (1) Alternative methods of log transfer and transport;
 - (2) Operational practices, including handling of logs out of water, handling of logs in water, movement of logs in water, and other operational elements;
 - (3) Feasible methods and costs of removing bark and wood debris from the ocean bottom; and
 - (4) Other methods.

(c) A proposed Remediation Plan must identify, as a result of the evaluation, a set of feasible, reasonable, and effective measures that the operator proposes to implement to reduce existing and future continuous coverage by bark and wood debris to less than both 1.0 acre and a thickness of 10 centimeters at any point. The proposed Remediation Plan must provide justification for the measures identified.

(d) If removal of bark and wood wastes is proposed, the Remediation Plan must specify the following:

- (i) The proposed areas, methods, and timing of removal;

- (ii) The volume and nature of material to be removed;
 - (iii) The method of disposal of removed material, and management practices at the disposal site to assure meeting water quality standards and other applicable standards and to assure prevention of objectionable odors; and
 - (iv) The costs of removal by the proposed methods and alternatives considered.
- (e) A proposed Remediation Plan must include a performance schedule and performance measures for implementation of the plan. A proposed Remediation Plan may describe measures that will be implemented in phases, with continued bark monitoring surveys, and with future modification of the Remediation Plan based on progress in reducing continuous coverage.
14. Departmental Action. Within 90 days of receipt of a proposed Remediation Plan, the Department will approve, approve with modification, or deny the proposed Remediation Plan. In acting on a Remediation Plan, the Department will consider the extent of exceedance; environmental impacts of accumulated bark and wood debris; environmental impacts of methods to reduce continuous coverage; the feasibility, reasonableness, effectiveness, and cost of proposed and alternative measures; the timing of recovery under various alternatives; and other pertinent factors.
15. Enforceable Condition. An approved Remediation Plan constitutes an enforceable condition of the State wastewater disposal general permit.
16. Exclusion of Port Graham/Nanwalek Area Which Merits Special Attention (AMSA). The Port Graham AMSA (See ATTACHED MAP) is excluded from the NPDES General Permit.
17. Exclusions within the Kenai Peninsula Borough. An LTF in one of the following water use areas of the Kenai Peninsula Borough Coastal District (KPB) is excluded from coverage by the NPDES General Permit, unless the KPB affirms, based on its review of the Notice of Intent submitted by the LTF operator, that the KPB does not oppose coverage of the LTF by the NPDES General Permit:
- a. important near-shore fisheries;
 - b. areas in close proximity to existing mariculture facilities;
 - c. areas of high recreational use;
 - d. areas with high concentrations of fish and wildlife;
 - e. subsistence use areas;
 - f. archeological and historic sites; and/or
 - g. recreational sites.
18. PPP Site Map. A copy of the Site Map from the PPP (Section VII.F.2) must be attached to the NOI submitted to DEC.

PART C: Definitions

1. *“NPDES” means the National Pollutant Discharge Elimination System under Section 402 of the federal Clean Water Act, 33 U.S.C. 1251 et seq.*
2. *“project area” means the entire marine operating area of an LTF, either shore-based or off-shore, including the following components: shore-based log transfer devices; shore-based log transfer, rafting, and storage areas; helicopter drop areas; vessel and barge loading and unloading areas; off-shore log storage areas not adjacent to a shore-based LTF; bulkheads, ramps, floating walkways, docks, pilings, dolphins, anchors, buoys and other marine appurtenances; and the marine water and ocean bottom underlying and connecting these features.*
3. *“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 will, at the Department’s discretion, include boulders, rock outcrops, ridges, and other protrusions within an area of continuous coverage that are not covered by bark.*
4. *“discontinuous coverage” means areas of bark and wood debris that are estimated to cover 10 % or more of the ocean bottom, but less than 100 %, as measured within a three-foot-square sample plot.*
5. *“trace coverage” means areas of bark and wood debris that are estimated to cover less than 10 % of the ocean bottom, as measured within a three-foot square sample plot.*
6. *“new discharger” is defined by EPA in 40 CFR 122.2, as “any building, structure, facility, or installation: (a) from which there is or may be a ‘discharge of pollutants;’ (b) that did not commence the ‘discharge of pollutants’ at a particular ‘site’ prior to August 13, 1979; (c) which is not a ‘new source;’ and (d) which has never received a finally effective NPDES permit for discharges at that ‘site.’”*
7. *“at any point” means at any single point within the area of continuous coverage; “at any point” does not mean “at all points,” and does not mean a single piece of bark or wood protruding from the surface of bark and wood debris.*

PART D: Addresses

Following is the address for submittal of bark monitoring surveys, annual reports, and Remediation Plans to the Department of Environmental Conservation, and for other communications respecting the State wastewater disposal general permit.

Departmental of Environmental Conservation
Division of Water
P.O. Box 111800
410 Willoughby Ave., Suite 303
Juneau, AK 998111-1800
Attn: LTF Monitoring

Following are the addresses for submittal of bark monitoring surveys to the Department of Natural Resources in Southeast and Southcentral Alaska.

Department of Natural Resources
Division of Land, Mining and Water
Southeast Regional Manager
PO Box 111020
400 Willoughby Ave., Suite 400
Juneau, AK 99801-1020

Department of Natural Resources
Division of Mining, Land and Water
Southcentral Regional Manager
555 W. 7th, 12th Floor
Anchorage, AK 99503

Date

Water Nonpoint Sources Program
Division of Water Manager