

# **FACT SHEET**

**Draft Wastewater Disposal Permit  
for Discharge of Bark and Wood Residues  
in Kazakof Bay  
by Koncor Forest Products**

**Alaska Department of Environmental Conservation  
Division of Water  
February 2005**

## **Introduction**

Koncor Forest Products Company (KFP) has applied to the Alaska Department of Environmental Conservation (ADEC) for a State individual wastewater disposal permit to authorize the discharge of bark and wood residues into Kazakof Bay on Afognak Island at the Barefoot Beach Log Transfer Facility (LTF).

**ADEC has prepared a draft discharge permit, and now is seeking public comment. The public notice and comment period begins February 14, 2005, and ends March 15. A copy of the public notice is attached to this Fact Sheet.**

This Fact Sheet is intended to provide description of the LTF and proposed bark discharge, the nature of the draft permit, and the reason for its proposed issuance.

## **The Barefoot Beach LTF**

KFP's Barefoot Beach LTF was constructed in 1989 and 1990, and has been in use since that time. The LTF is located on the shore of Kazakof Bay. Harvested logs are stored on land at the LTF prior to loading ships for transport to markets. Logs are trimmed, sorted, and bundled at the LTF. A transfer ramp leads down to the water, with slide rails on the lower portion. A wheeled log loader carries log bundles down the ramp and places them on the slide rails until four or five bundles are lined up at the water's edge. The log loader pushes the bundles forward so that the bundle closest to the water floats off. A boom boat or the wind then pushes each bundle to an open raft just offshore. A raft is enclosed by boomsticks once it contains a certain order of logs or a maximum of 250,000 board feet. Log bundles are transferred no more than two weeks prior to the expected arrival of a log ship. Rafts are towed alongside and loaded onto a ship at a site approximately 1/4 mile offshore from the LTF site. The facility can transfer about 300,000 board feet of logs per day, depending on weather.

The designated marine "project area" of the LTF is 13.4 acres, plus the ship-loading site. The project area corresponds to the area that is under lease by KFP from the Alaska Department of Natural Resources. Discharge and accumulation of bark is allowed only within the project area.

KFP's application states that the maximum volume of log transfer and storage will be 50 million board feet per year, and expected volume will be 10 million board feet per year in the first four years, and 40 million board feet in the fifth year.

The Barefoot Beach LTF presently is in use by an operator under contract to KFP. However, it is expected that use will cease in April or May of 2005, because the contract operator will move log transfer activity to another LTF in Kazakof Bay at Lookout Cove, which is owned by Afognak Native Corporation. No further specific use of the Barefoot Beach LTF is planned in the next five years, except perhaps for "overflow" logs from the Lookout Cove LTF. Nonetheless, KFP desires to maintain necessary permits for the Barefoot Beach LTF. Need to use the LTF may change, depending on timber supply and market conditions.

Dive surveys in 2000, early 2001, late 2001, and 2004 found the following acreages of continuous coverage by bark debris on the bottom at the LTF: 1.2, 2.6, 3.0, and 0.2. The bark accumulation is rather thin, varying from one to three inches, with one point at four inches.

## **LTF Discharge Permits**

Any transfer or storage of logs in marine waters for commercial purposes requires a permit from ADEC, and a permit from the U.S. Environmental Protection Agency (EPA). The reason is that logs placed or held in water "discharge" bark, particularly when logs are first transferred to water. Bark can accumulate over substantial areas of the ocean bottom, depending on the volume of logs over time and ocean conditions. Bark accumulation on the bottom can displace and smother marine organisms and adversely affect habitat.

The discharge of bark from the transfer of logs from land to water has been regulated by the agencies since 1985. From 1985 to 1996, EPA issued NPDES individual discharge permits to LTFs, which were certified by ADEC. In 2000, two General Permits for LTFs were developed by EPA and certified by ADEC, with adoption as State permits. The General Permits expanded coverage to encompass all logs placed or held in water, including transfer from water to land, transfer to and from vessels, and storage without transfer. ADEC and EPA have issued General Permit authorizations to approximately 92 LTFs in Alaska.

Most LTFs are permitted jointly by ADEC and EPA under the LTF General Permits. Each log transfer and storage site must obtain a written authorization to discharge bark in accordance with the General Permits from both ADEC and EPA (excepting that LTFs operating before 1985 are authorized automatically by EPA, following State authorization). The Barefoot Beach LTF is a "post-1985" LTF, and so will require written authorization by EPA following State authorization.

Unfortunately, the permit situation with the Barefoot Beach LTF suffers additional complications. The Barefoot Beach site is designated as an "impaired waterbody" by ADEC and EPA. The LTF was placed on the "Section 303(d)" list of impaired waters in 1998 based on a dive survey that determined the amount of bark coverage to be greater than 1.5 acres. ADEC is prohibited from issuing a General Permit authorization for log storage in an impaired waterbody. Therefore, KFP must obtain an individual discharge permit from ADEC for the proposed log transfer and storage. EPA authorization in an impaired waterbody can occur under the General Permit.

ADEC is in the process of revising the Section 303(d) impaired water list. The most current dive survey in March 2004 indicates that the Barefoot Beach LTF has just 0.2 acre of continuous coverage by bark debris, well under the listing threshold of 1.5 acres. Therefore, the site is expected to be removed from the impaired list later in 2005.

The LTF General Permits expire on March 21, 2005. They will be "administratively extended" by EPA and ADEC until such time as they are reissued, expected in 2006. But EPA cannot issue new General Permit authorizations during administrative extensions. Therefore, to be permitted in 2005 and 2006 through an EPA General Permit authorization, the Barefoot Beach LTF must receive an ADEC individual permit and the EPA authorization prior to March 21, 2005. In sum, EPA can authorize under the post-1985 General Permit; ADEC must issue an individual permit.

The Barefoot Beach LTF would be eligible for coverage under the General Permit if it were removed from the impaired list. The LTF would be expected to qualify easily for approval under the General Permit, given its 15-year history of use, with just 0.2 acre of continuous bark cover and little expected future use. However, the circumstances described above require that ADEC issue an individual permit for this LTF.

The draft individual permit has been written primarily to incorporate the applicable terms of the General Permit, in order to be compatible with the General Permit authorization that EPA is expected to issue before March 21, 2005.

### **Water Quality Standards**

The Alaska Water Quality Standards (AWQS) are regulations under the Alaska Administrative Code at 18 AAC 70. The standards establish allowable pollution limits for all fresh, marine, and groundwaters of the state. The standards may be viewed on the ADEC website at [http://www.legis.state.ak.us/cgi-bin/folioisa.dll/aac/query=%5Bgroup%2Btitle18chap70!3A%5D/doc/%7B@1%7D/hits\\_only?](http://www.legis.state.ak.us/cgi-bin/folioisa.dll/aac/query=%5Bgroup%2Btitle18chap70!3A%5D/doc/%7B@1%7D/hits_only?)

The AWQS set limits for 12 "pollutant parameters" in waters, regardless of pollutant sources. The pollutant parameters are color, fecal coliform bacteria, dissolved gases, dissolved inorganic substances, petroleum hydrocarbons, pH, radioactivity, residues, sediment, temperature, toxic substances, and turbidity. The AWQS also specify various "designated uses" of waters, both human and biological, that must be protected. The standards are expressed as numeric and narrative limits called "criteria." The purpose of the standards is to maintain the ecological health of aquatic life, and the health of humans who use waters.

The AWQS include several additional provisions, notably the antidegradation policy and a number of exception provisions--Short-term Variances, Mixing Zones, Reclassification, Site-specific Criteria, and Zones of Deposit (ZODs).

Under the AWQS, bark and wood debris is regarded as "Residues" and is regulated as a pollutant. The narrative criteria for the "Residues" parameter state that Residues may not make the water unfit or unsafe for designated uses; may not cause leaching of toxic or deleterious substances; and may not cause a sludge, solid, or emulsion to be deposited on or in the water, on the bottom, or on adjoining shorelines. Residues are defined as "floating solids, debris, sludge, deposits, foam, scum, or any other material or substance remaining in a waterbody as a result of direct or nearby human activity." Thus, the Residues criteria prohibit deposit of residues in the water or on the bottom, unless a Zone of Deposit is authorized.

The Zones of Deposit (ZOD) provision is associated with the Residues parameter. The ZOD provision authorizes ADEC, in a permit, to "allow deposit of substances on the bottom of marine waters within limits set by the department." A ZOD is authorized at DEC's discretion. DEC must "consider" impacts on human health, impacts on aquatic life, impacts on uses of the waterbody, alternative methods, and other factors.

ADEC traditionally has granted ZODs to log transfer facilities and to seafood processors. Under the LTF General Permits governing most LTFs, the authorized Zone of Deposit is the "project area," the entire marine operating area of the LTF. However, the General Permits establish a "threshold" of one acre of continuous coverage by bark and wood debris. If the one-acre threshold is exceeded, the operator must prepare and submit a "remediation plan" to reduce continuous coverage to less than one acre.

In the proposed Barefoot Beach individual permit, the Zone of Deposit, remediation plan requirements, and monitoring requirements are the same as in the General Permit.

## **The Draft Permit**

An individual discharge permit, if issued by ADEC, would have a life of five years. Following is a brief description of the main provisions of the draft permit.

1. Project Description: Describes the LTF activity, as noted at the beginning of this Fact Sheet.
2. Authorized Discharges: Authorizes discharge of bark and wood debris within the project area; prohibits discharge of other pollutants.
3. Log Volume Limitations: Limits the maximum volume of logs transferred and stored at the Barefoot Beach LTF to 50 million board feet annually. Notes the actual expected annual volume of logs is 10 million board feet in each of the first four years, and 40 million board feet in the fifth year.
4. Operating Practices: Sets out 10 operating practices that must be followed pertaining to log handling, transfer, and storage.
5. Zone of Deposit. Authorizes a Zone of Deposit within the project area for the accumulation of bark and wood debris on the ocean bottom.
6. Bark Monitoring Program: Requires the permittee to conduct a dive survey of bark and wood debris on the ocean bottom within the project area for each year in which log transfer and storage occur.
7. Remediation Plan. If bark accumulation is determined to exceed both 1.0 acre and 10 centimeters thickness at any point, requires the permittee to submit a proposed Remediation Plan that identifies measures to reduce bark to less than 1.0 acre and 10 centimeters; the approved plan becomes a condition of the permit.
8. Petroleum Discharge Monitoring and Reporting: Requires reporting a discharge or release of oil or a hazardous substance to ADEC and the U.S. Coast Guard.
9. Pollution Prevention Plan: Requires the permittee to prepare a Pollution Prevention Plan that describes specific operational practices that will be used to avoid and minimize the discharge of pollutants, particularly bark discharge.
10. Annual Report: Requires the permittee to submit an annual report describing log volume transferred and noncompliance incidents.
11. Other Conditions: Includes a number of administrative provisions.

## **Conclusion**

The requirement for an individual discharge permit stems from the peculiar circumstances at the Barefoot Beach LTF. The site is listed as an impaired waterbody; therefore; ADEC cannot issue authorization under the normal State LTF General Permit. The current dive survey shows that the site actually is no longer impaired; the site will be removed from the impaired waterbody list in 2005.

EPA can approve the LTF under the federal General Permit until its expiration on March 21, 2005. After that date, EPA also would have to issue an individual permit, a much more difficult process. ADEC proposes to issue the requested individual permit before March 21, so that EPA can issue its General Permit authorization by that date.

ADEC believes that the Barefoot Beach LTF should receive an individual discharge permit. The site has operated for many years, and is important to timber harvest on Afognak Island. Bark accumulation has been reduced to 0.2 acre. Although the permit authorizes the transfer of 50 million board feet per year, the stated expected volume is 10 million board feet per year, and actual volume likely will be less.

ADEC believes that additional adverse impact to marine water quality will be limited and acceptable.

**PUBLIC NOTICE**  
**Alaska Department of Environmental Conservation**  
**Draft Wastewater Disposal Permit**  
**for Discharge of Bark and Wood Debris in Kazakof Bay**  
**by Koncor Forest Products**

Koncor Forest Products has applied for a state wastewater disposal permit to allow discharge of bark and wood residues into Kazakof Bay (fifteen miles north of Ouzinkie) from log transfer, log storage, and ship loading activities over a five year period. The Alaska Department of Environmental Conservation (ADEC) has prepared a draft permit, and now is seeking public comment.

Koncor Forest Products requested authorization to transfer up to 50 million board feet (mmbf) of logs annually at the shore-based log transfer facility area (13.4 acres) in order to construct and tow log rafts to the ship loading site approximately ¼ mile west of the log transfer facility. However, expected annual volume is 10 mmbf for the first four years and 40 mmbf in the fifth year. The draft permit would authorize transfer, storage and ship loading of 50 mmbf annually. The draft permit includes a Zone of Deposit for accumulation of residues on the bottom within storage and transfer areas and ship loading site, with bark discharge limits and monitoring and reporting requirements.

Kazakof Bay was placed on the 1998 Section 303(d) list and remains on the 2003 Section 303(d) list for non-attainment of the Residues standard for bark and woody debris. Dive surveys submitted for this log transfer facility for the period 2000 through 2003 all document an exceedance of the 1.0 threshold for continuous cover bark accumulation in the ADEC and U.S. Environmental Protection Agency (EPA) General Permit for Log Transfer Facilities. The dive report for the 2003 operating season documented that the area of continuous cover bark had reduced to 0.2 acres.

Discharge of bark and wood residues from log storage and transfer requires a permit from ADEC and a permit from the EPA. If ADEC issues the proposed individual discharge permit, the EPA will issue a Log Transfer Facility General Permit authorization.

The draft ADEC permit and a Fact Sheet containing more information are available online at: <http://www.state.ak.us/dec/water/wnpssc/forestry/forestry.htm> , or by contacting ADEC at the addresses below.

Comments may be sent to Dave Sturdevant, ADEC/Division of Water, 410 Willoughby Ave., Suite 303, Juneau, Alaska 99801-1795, or transmitted electronically to [dave\\_sturdevant@dec.state.ak.us](mailto:dave_sturdevant@dec.state.ak.us), or sent by FAX to 907-465-5274. **Comments must be received by 5:00 p.m., March 15, 2005, or postmarked on that date.**

ADEC complies with Title II of the Americans with Disabilities Act of 1990. A person with a disability who needs a special accommodation in order to participate in this process should contact Dave Sturdevant at 907-465-5276 no later than February 28, 2005, to ensure that accommodations can be provided.

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