STATE OF ALASKA

TONY KNOWLES, GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF SPILL PREVENTION AND RESPONSE
CONTAMINATED SITES REMEDIATION PROGRAM

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September 20, 2001

Via Facsimile and Regular Mail
Ms. Barry Hogarty
Environmental Manager
Ketchikan Pulp Company
PO Box 6600
Ketchikan, Alaska 99901

Re: No Further Remedial Action Planned
Thorne Bay Logging Camp, Prince of Wales Island; Reckey # 1995130131201

Dear Ms. Hogarty:

The Thorne Bay Logging Camp is located in the City of Thorne Bay on Prince of Wales Island. The site consists of three (3) separate operable units, specifically; the sortyard, the shop facility, and the bunkhouses. Due to the differing types of operations, contamination sources, and soil types, different alternative cleanup levels for soil were set for each area. Groundwater and surface water cleanup levels were the same for all areas.

Operable Unit 1: The Sortyard

The department has reviewed the Thorne Bay Sortyard Cleanup Report, prepared by URS Corporation, and dated May 2001. This report meets the requirements of 18 Alaska Administrative Code 75.380 and is hereby approved.

Sortyard cleanup levels were approved by the department on February 28, 2001. Soil cleanup levels for the sortyard were determined using a method three modification of the department's default cleanup level equations based upon a site-specific level of fractional organic carbon of 0.00865 gram per gram for the migration to groundwater-risk based pathway. Residual-range organics cleanup levels were set at the 18 AAC 75.341, Table B2, ingestion-risk based pathway level of 8300 milligrams per kilogram (mg/kg) as the calculated migration to groundwater-risk based pathway level exceeded the ingestion-risk based pathway level. The diesel-range organics cleanup level was calculated for the migration to groundwater-risk based pathway at 1931 mg/kg. Other contaminants of concern cleanup levels were set at the 18 AAC 75. 341, Table B1 levels for the over 40" climate zone migration to groundwater-risk based pathway; specifically benzene – 0.02 mg/kg, toluene – 4.8 mg/kg, ethylbenzene – 5 mg/kg, xylenes – 69 mg/kg, and pentachlorophenol – 0.009 mg/kg.

Groundwater cleanup levels were set at the department's default levels of 18 AAC 75.345, Table C. Sample analytical results from the two (2) piezometers showed that the groundwater cleanup levels were met. All contaminants of concern were found below the approved cleanup levels.

Surface water standards were set at the Alaska Water Quality Standards of 18 AAC 70. Surface water samples from one (1) upgradient stream and (3) beach seeps were collected. No contaminants of concern were detected.

All soil containing concentrations of contaminants of concern above the approved cleanup levels was excavated, screened, and stockpiled. Forty-five (45) cubic yards of contaminated soil was disposed of at the Ketchikan Pulp Company Ward Cove Landfill. Approved cleanup levels for soil and groundwater were met in all final confirmation samples.

Operable Unit 2: The Shop Facility

In January 2001, the department reviewed *Cleanup Action Report* for the KPC Thorne Bay Camp Shop and Bunkhouse Areas in Thorne Bay, Alaska, prepared by URS Corporation, dated October 2000, as well as supplemental characterization and cleanup information submitted by letter dated January 2, 2001. The report and supplemental letter were approved by the department as meeting the regulatory requirements for a Final Report on January 30, 2001. In that letter, the department also requested the installation and sampling of a new piezometer at the former Boyer Barge building at the shop facility area. The Ketchikan Pulp Company submitted the supplemental piezometer sampling results by letter, dated August 15, 2001.

Shop facility cleanup levels were approved by the department on June 1, 2000. Soil cleanup levels were determined using a method three modification of the department's default cleanup level equations based upon a site-specific level of fractional organic carbon of 0.0254 gram per gram for the migration to groundwater-risk based pathway. Residual-range organics cleanup levels were set at the 18 AAC 75.341, Table B2, ingestion-risk based pathway level of 8300 milligrams per kilogram (mg/kg) as the calculated migration to groundwater-risk based pathway level exceeded the ingestion-risk based pathway level. The diesel-range organics cleanup level was calculated for the migration to groundwater-risk based pathway at 5700 mg/kg. Other contaminants of concern cleanup levels were set at the 18 AAC 75. 341, Table B1 levels for the over 40" climate zone migration to groundwater-risk based pathway; specifically gasoline-range organics – 260 mg/kg, benzene – 0.02 mg/kg, toluene – 4.8 mg/kg, ethylbenzene – 5 mg/kg, xylenes – 69 mg/kg, lead – 400 mg/kg, and chromium – 23 mg/kg.

Site groundwater cleanup levels were set at the department's default levels of 18 AAC 75.345, Table C. Sample analytical results from the six (6) piezometers showed that the groundwater cleanup levels were met in all but the piezometer at the former Boyer Barge building where residual-range organics slightly exceeded the cleanup level. During the demolition of the Boyer Barge building, the piezometer was inadvertently destroyed as well. A second piezometer was installed, but did not yield any water. A third piezometer was installed in February 2001 and sampled in June 2001. These sampling analytical results showed that all contaminants of concern met the approved cleanup level.

Site surface water standards were set at the Alaska Water Quality Standards of 18 AAC 70. Surface water samples from one (1) seep location were collected. No contaminants of concern were detected.

All soil containing concentrations of contaminants of concern above the approved cleanup levels was excavated, screened, and stockpiled For most of the stockpiles, sampling showed that the contaminant concentrations met the respective cleanup levels due to volatilization during screening and natural attenuation in the stockpiles. These soils were used as backfill material and spread at the shop facility in locations mutually agreed upon by Ketchikan Pulp Company and the United States Forest Service. Fifty (50) cubic yards of soil exceeding the cleanup levels was disposed of at the Ketchikan Pulp Company Ward Cove Landfill.

Soil confirmation samples showed that the approved cleanup levels were met in all areas, with the exception of one area on the southeast part of the facility designated as the KTP-10 area. Diesel-range organic and residual-range organic concentrations exceeding these soil cleanup levels are present under the foundations of the maintenance building, parts of the storage building, and around a buried vault housing water and power lines. Because the soils are in an area that prohibits further removal at this time, no further remedial action is planned in this area. The presence of inaccessible soils exceeding the cleanup level will be noted on the department's contaminated sites database to provide notice to future owners and/or operators of its presence and the possibility of needing to address it in the future, if it becomes accessible.

Approved cleanup levels for groundwater and surface water were met in all final confirmation samples.

Operable Unit 3: The Bunkhouses

The bunkhouse area was a series of trailers used for housing as well as a cookhouse and laundry facility. Contamination at the bunkhouses was associated with the aboveground storage tanks at each location. In the department's June 1, 2000 letter, it states that "contamination at the bunkhouse area consists of surface staining, which is subject to complete excavation". As the bunkhouses were located directly across the street from the shop facility and site characteristics were similar, the same cleanup levels were used at these operable units. Characterization sample results showed that the diesel-range organics cleanup level was exceeded at four (4) of the tank areas. All stained soil at the bunkhouse area was removed as well as the contaminated areas at the tanks.

All soil containing concentrations of contaminants of concern above the approved cleanup levels was excavated and stockpiled Forty-five (45) cubic yards of soil was disposed of at the Ketchikan Pulp Company Ward Cove Landfill.

All Operable Units

The department has determined that there is No Further Remedial Action Planned at the Thorne Bay Camp. At all operable units, soil is present at the site which contains concentrations of contaminants of concern exceeding the department's most stringent cleanup levels of 18 AAC 75.341, Tables B1 and B2. At Operable Unit 2 (Shop Facilities), inaccessible soil contamination remains on-site which exceeds approved cleanup levels.

Operable Unit 1 (Sortyard) is under the management of the United States Forest Service. Therefore, prior department notification for disposal, movement, or relocation of this soil off-site is not required as long as the conditions set forth in the department's waiver letter of 18 AAC 75.325(i), dated April 25,

2001, granted to the United States Forest Service, are met.

Operable Units 2 and 3 (Shop Facility and Bunkhouse area) have been transferred from the United States Forest Service to the City of Thorne Bay. As these properties are no longer under the management of the United States Forest Service, they are not covered by the department's waiver letter of 18 AAC 75.325(i). Prior department notification will be required for the disposal, movement, or relocation of this soil off-site. This soil must be managed in accordance with department regulations and guidances. Inaccessible contaminated soils may subject to future cleanup action in the event it becomes accessible.

This determination is subject to a future department determination that the cleanup is not protective of human health, safety, or welfare, or of the environment. If, in the future, additional contamination is found to be present that was not addressed in this action, it must be reported and additional cleanup may be required.

If you have any questions about this site, please do not hesitate to contact me at 269-7691, or Anne Marie Palmieri, of my staff, at 766-3184.

Sincerely,

Anne Marie Palmieri

for David A. Verbrugge
Section Manager (Acting)

cc: Ken Vaughan, United States Forest Service
Paul Grabau, Farallon Consulting
The Honorable Lynda Brown, City of Thorne Bay