

SCR

15

# HOUSE COMMITTEE REPORT

(9)

Date referred: 4/24/87

FURTHER REFERRALS:

DATE: 5/9/87

The Resources Committee has considered SCR 15  
Relating to the use of Alaska wood products.

**RECOMMENDS:**

- replace with \_\_\_\_\_  the same title
- attached amendment(s)  a new title
- do pass
- do not pass
- no recommendation
- individual recommendations
- additional referral to the \_\_\_\_\_ Committee

**ADOPTS:**  \_\_\_\_\_ letter of intent

**ATTACHES NEW FISCAL NOTE(S):**

- fiscal impact
- zero fiscal note
- zero with analysis
- same as previous fiscal note published 3/10/87
- same as previous zero fiscal note published \_\_\_\_\_

**SIGNING DO PASS:**

Jan Cuts

Mike Hawane

John High

Cliff Davidson

Dick Shultz

Heinrich Lunde

Adelheid Herrmann

**SIGNING OTHER RECOMMENDATIONS:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Jan Cuts  
Chairman's signature

STATE OF ALASKA 1987 LEGISLATIVE SESSION  
FISCAL NOTE

Bill Version: SCR 15  
Publish Date: \_\_\_\_\_

REQUEST \_\_\_\_\_

Revision Date: \_\_\_\_\_ Agency Affected: Department of Administration  
Title: A resolution relating to the BRU: General Services & Supply  
use of Alaska wood products.  
Sponsor: Josephson, Eliason, Jones, Zharoff Components: \_\_\_\_\_  
Requestor: \_\_\_\_\_ and Faiks \_\_\_\_\_

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92
OPERATING						
PERSONAL SERVICES	0	0	0	0	0	0
TRAVEL	0	0	0	0	0	0
CONTRACTUAL	0	0	0	0	0	0
SUPPLIES	0	0	0	0	0	0
EQUIPMENT	0	0	0	0	0	0
LAND & STRUCTURES	0	0	0	0	0	0
GRANTS, CLAIMS	0	0	0	0	0	0
MISCELLANEOUS	0	0	0	0	0	0
TOTAL OPERATING	0	0	0	0	0	0
CAPITAL	0	0	0	0	0	0
REVENUE	0	0	0	0	0	0

FUNDING: (Thousands of Dollars)

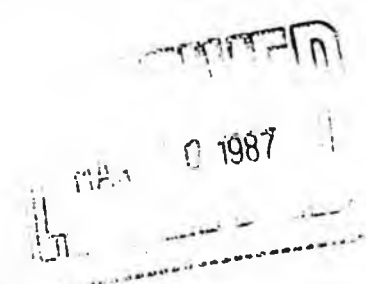
GENERAL FUND	0	0	0	0	0	0
FEDERAL FUNDS	0	0	0	0	0	0
OTHER	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0

POSITIONS:

FULL-TIME	0	0	0	0	0	0
PART-TIME	0	0	0	0	0	0
TEMPORARY	0	0	0	0	0	0

ANALYSIS: Attach a separate page if necessary

N/A



Prepared By: Robert J. Link Phone: 465-2250  
Division: General Services & Supply Date: March 6, 1987  
Approved by Commissioner: Garrey Peska Date: 3/10/87  
Agency: Department of Administration

- Distribution (by preparer):
- Legislative Finance
  - Legislative Sponsor
  - Requestor
  - Office of Management and Budget
  - Impacted Agency(ies)
  - Senate Secretary

## valley sawmill

March 19, 1987

Dear Legislator,

I appreciate the time and attention given my recent presentation on the issue of Alaska wood products. As a member of the Alaska Logger's Association, I found it encouraging to sit before a receptive group of lawmakers and was glad to be able to answer your questions.

As an update, I am enclosing a memorandum I received upon my return to Anchorage. Many of the points made by Mr. Simpson of the state Department of Transportation and Public Facilities are indicative of the "no can do" attitude I've encountered over the past few years while lobbying state and local entities in an attempt to convince them to purchase local wood.

Contained in Mr. Simpson's memo are several blatant inaccuracies DOTPF is using to justify its practice of rarely specifying Alaska wood in state contracts.

In the third paragraph of his memo, Mr. Simpson says there is not an active grading system among Alaska producers. In fact, Reid Oswald of Kodiak does have a grade stamp and another major supplier, United Lumber, formerly had such a system in place. They stopped using it, however, because state and local contracts excluded local wood, eliminating the need for a grade system.

Second, Mr. Simpson said his "sources" indicated only a limited amount of Alaska wood is planed or dressed. According to the Department of Commerce and Economic Development's 1987 guide to lumber producers, there are 22 planers in the state, all capable of planing local wood to meet industry standards.

The third point raised concerning the use of kilns to dry local wood is also partly-false. In 1969, United Lumber put in a dry kiln, only to discontinue its use, again due to lack of activity. More interesting, however, is the fact that a good portion of the wood the state of Alaska imports from Outside is air-dried, not kiln-dried.

While the final point is true concerning use of a pressure treatment facility to treat the wood, based on the numerous, erroneous points raised earlier in the memo, Alaska producers have had no incentive to invest in a pressure treatment facility.

3/19/87

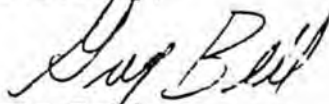
Given the lack of encouragement from government regarding the purchase of local wood, the state's suppliers have no reason to sink even more money into pressure treatment facilities. Also, should a state contract specify treated Alaska wood, local contractors could have their wood pressure-treated for minimal additional cost.

On page 2 of the memo, Mr. Simpson says federal aid requirements prohibit the preferential consideration of Alaska wood. We're not asking for preferential treatment. If the state can specify Outside wood in a contract, surely it can specify wood that grows here in the state of Alaska.

Mr. Simpson says the state will continue to encourage the use of Alaska wood. While that is a commendable sentiment, we in the timber industry have yet to see any major action in that direction.

I appreciate your time and will look forward to your response and any appropriate action.

Sincerely,



Greg Bell  
Valley Sawmill

CC: Senate President Jan Faiks  
House Speaker Ben Grussendorf  
House & Senate Resource members  
House & Senate Finance members

# MEMORANDUM

State of Alaska  
Department of Transportation & Public Facilities

TO: Rocky Gutierrez, Commissioner  
Alaska Dept. of Transportation  
and Public Facilities

DATE: February 9, 1987

THRU: Mark Hickey, Deputy Commissioner  
Operations

FILE NO:

TELEPHONE NO: 465-2951

FROM: John J. Simpson, Director  
Engineering & Operations Stds.  
Headquarters

SUBJECT: Alaska Forest Products

There seems to be a long standing misconception that DOT&PF's construction contracts have some exclusionary clause or prejudice against Alaska wood products. This is simply not true.

Any constraints on Alaska lumber and timber products appear to be related to ancillary factors rather than the quality of the wood. Some of these factors are perhaps of greater significant value to the users and specifiers than the characteristics of the material itself. Specifically:

- Although applicable grading rules exist, there is no continuously active lumber inspection agency presently functioning within the State. Historically, few mills in Alaska have ever subscribed to such quality assurance programs, making product acceptability somewhat tenuous.
- Most Alaska mills produce rough sawn material, but our sources indicate only limited amounts of lumber are dressed to the standard dimensions favored by the building industry. This factor is of greater concern in building construction than on transportation projects.
- We are not aware of any facilities in the State producing kiln dried lumber with its reduced shrinkage, checking and warping characteristics; also a building related concern.
- There is not, to our knowledge, any established laminators within the State capable of producing glued-laminated structural timber for heavy construction applications.
- And perhaps the single most significant reason for underutilization of Alaska wood products on transportation projects is the fact that no facilities exist in Alaska to pressure treat timber with preservatives. By our recollections only one such facility ever existed in Alaska; an Anchorage plant that treated ties for the railroad. This plant is no longer in operation.

Our contract specifications generally accept most commercial Alaska species. For building applications, Uniform Building Code Standards No. 25-1, 25-2, 25-3 and 25-4 apply; for transportation applications the American Association of State Highway and Transportation Officials (AASHTO) specification M168 applies. Copies of these specifications and appropriate sections showing acceptance of Alaska species are attached.

For bridge construction, Alaska species will gain greater acceptability under the Department's revised Standard Specifications that are scheduled to be published later this year. Alaska species have always been encouraged whenever untreated timber was suitable for bridge applications, such as for running planks, temporary construction and the like.

Rocky Gutierrez, Commissioner  
February 9, 1987  
Page -2-

The Western Wood Products Association, West Coast Lumber Inspection Bureau and the Pacific Lumber Inspection Bureau advise us that they have, over the years, maintained quality assurance and certification programs for mills in Alaska. The Kodiak Mill, according to our inquiries, was the only Alaska sawmill operating under a lumber certification program. We understand the Kodiak sawmill suffered fire damage recently and may not be in production at this time.

Design professionals rely on established standards for the engineering properties of wood (Uniform Building Code, National Design Specification, AASHTO, etc.). A few of the commercial species found in Alaska are individually stress rated. Others are grouped and stress rated as combinations of similar species. Birch is used in millwork, but we are not aware of any standard that stress rates birch for structural lumber applications. Alaska species that are not presently stress rated and those that are stress rated in species combinations will continue to suffer some engineering prejudice until individually recognized by acceptable stress rating standards.

Cost effective considerations rule out the use of untreated wood for most transportation projects.

Federal-aid requirements prohibit preferential considerations for Alaska wood products.

The Department can and will continue to encourage the use of Alaska timber resources in its projects, but the timber industry must also respond to the factors within their control that will improve and enhance consumer acceptance of their products, both public and private. Specific and constructive recommendations toward improving our contractual procedures in a competitive atmosphere are always welcome.

attachments

# valley sawmill

March 3, 1987

Honorable Steve Cowper  
Governor of Alaska  
Third Floor, State Capitol  
Pouch A  
Juneau, Alaska 99811

SUBJECT: State Support of Local Timber Products

Dear Governor Cowper:

I am writing this letter to summarize many of the frustrations and lack of progress that I have encountered during my efforts over the last year to encourage the use of locally produced and manufactured wood products on various state, municipal and other agency projects.

While the concept of supporting local hire and the use of local products is touted by the politicians as being an economically sound policy; and worthy of support, in practice, it is far from a reality. While most other states actively support their state's resources, the purchasing agents within this state seem firmly entrenched in the use of outside products.

Local suppliers have gone to great lengths and costs to prove the quality and competitiveness of local wood products to these agencies, and while we have been many times encouraged by the lip service of these officials, the contracts always end up going to the outside supplier. Rarely, if ever, have we seen a contract issued by a governmental entity that specifies Alaska wood products, despite repeated efforts by the producers to educate officials on the subject.

Keeping Alaskan dollars within our own economy can only strengthen our economic base. The local timber industry estimates that six jobs are created for every one million board feet of lumber sold. The railbelt network consumes approximately 100 million board feet annually. This translates to approximately 600 jobs that are being lost to outside suppliers each year. The bureaucratic lack of support and roadblocking of local manufacturer's efforts to join the marketplace, has created a situation where it is easier to lay off workers, than to fight city hall for access to the market.

Steve Cowper, Governor  
March 3, 1987  
Page 2

Tables currently in use in the forest products industry were developed in the 1940's based on tests conducted on old growth Douglas Fir, the predominant timber utilized at that time. At present, timber products from the Lower 48 are primarily manufactured from second and third growth Douglas Fir, while our locally manufactured wood products utilize structurally superior old growth Alaskan Spruce timber. Old growth timber is stronger than the faster growing second and third growth timber, and therefore, more dense. With no recent published data available, the Anchorage Wastewater and Utility, and the Municipality of Anchorage chose to accept the hypothesis of an outside supplier, that Alaskan wood products are inferior. (See attached Exhibit B).

In response to the lack of published data, I requested a nationally certified test lab, Alaska Test Lab, to conduct testing on some of the local woods. As you can see by the attached (Exhibit C), some local woods exceed the strengths of outside wood, now being used extensively in local projects. The false and negative assumptions regarding local forest products are not based on scientific fact or economics, but based solely on the traditional use of outside wood products.

I have encountered numerous examples of prejudices against using Alaskan produced wood. Almost every invitation to bid issued by state and other agencies, includes specifications for wood that is not produced in Alaska. This exclusion of Alaskan wood products must be addressed at the top, during the planning process. Three specific examples of this prejudice can be seen in the following examples:

- 1) In 1986, the Municipality of Anchorage issued bid requests for 50 park projects requiring between \$2,000 and \$50,000 of rough cut timbers each. The specifications called for outside wood species.
- 2) Anchorage School District - does not include one Alaska wood species in their invitation for bid for lumber for shop purposes.
- 3) Kenai Peninsula Borough - Bid documents for Chakok and Dorothy Road Bridges specify coast region Douglas Fir. Bid date, March 16, 1987. \$25,000 lost revenues to Alaskan suppliers.

The legislature expressed its support of local products by passing an Amendment to A.S. Section 36.15.010 - 020. (See attached Exhibit D). While this is a good law, the intent has not been implemented, and without enforcement, it is merely empty words.

Steve Cowper, Governor  
March 3, 1987  
Page 3

While a spirit of open cooperation between legislative intent and implementation of this intent by all agencies would serve to strengthen the state, it is apparent that the entities involved require specific direction and regulation before they will comply with state law.

All agencies, including the Municipality of Anchorage, must be accountable to the state for compliance with state law, when receiving public grant funds for projects. The regulations covering the use of local forest products must have some teeth in them, that will further enforcement. One way to ensure that grant recipients purchase Alaskan products and comply with state law would be to prepare the contracts so that grant money could be withheld if the entity did not follow contract provisions.

At this time, the intention is not clear cut in the law, and is too open to interpretation. I have enclosed a memorandum (see Exhibit E) from the Matanuska-Susitna Borough attorney, offering a legal opinion on this law, which indicates that they are not legally bound to the law. According to his opinion, once the state turns money over to a local government, the state has no further control over the funds, despite provisions in most grants that require the local governments to follow state laws. Page 3 of the 4 page Standard Agreement Form for Municipal Grants, is devoted entirely to the adherence of grant recipients with State law, yet as I have illustrated, this is not being accomplished.

I strongly urge your support of Alaskan products by whatever means necessary - be it tighter legislation to require recipients of state funds to buy Alaskan, or by giving strong direction to the government agencies charged with overseeing state funds.

Respectfully submitted,

VALLEY SAWMILL



Greg Bell  
President

cc: All Senators  
All Representatives  
Commissioner Garrey Peska  
Commissioner J. Anthony Smith  
Commissioner Judith A. Brady  
Commissioner Mark S. Hickey  
John Galea, Director, Alaska Loggers Association

EXHIBIT A

# valley sawmill

January 2, 1987

Mr. Jim Barnett  
Municipal Assembly  
P.O. Box 196650  
Anchorage, Alaska 99519-6650

Dear Jim:

Throughout the past year, the local forest products industry has been working with the Municipality of Anchorage to encourage the use of locally produced and manufactured wood products in a variety of municipal projects. Although the response has not been entirely negative, in almost every case some form of barrier has arisen/or been created that either specifically excludes or strongly discourages the use of local wood products. We have not asked for any subsidies, only that the Municipality support local industry through the purchase of products that are equal in quality, competitively priced and locally manufactured.

The Eklutna Water Project (EWP) is a prime example of the extent of our efforts. We felt that the Water Division Tunnel portion of the E.W.P. would mesh well with the present capabilities of our industry. Specifically, it called for 68,000 pieces, 4" x 6" x 4' timbers; over one half million board ft. Through various Municipal channels, we stressed the importance of keeping local dollars within our economic system to maximize their benefit, and still almost no local wood has been used.

The following reviews the key events regarding the E.W.P.:

°In December of 1985, I contacted Municipal officials, pointed out the existence of AS 36.15.010 - 020 (see attached) and requested compliance.

°M.O.A.'s response was resistive, but members of the legislature and the Governor pushed for compliance and demonstrated support by the adoption of SB 371, Executive Order 87, etc.

°These prompted the April 16, 1986 letter by Charley Bryant, Special Projects Manager at Anchorage Water and Wastewater Utility A.W.W.U. which outlined the Municipality's position of compliance with AS 36.15.010 - 020 and made special assurances that these statutes would be adhered to on all A.W.W.U. projects.

°On May 1, 1986, the tunnel contractor, Frank Colluccio Construction Company informed E.W.P. that they intended to use only select Douglas Fir and Oak as logging because, in their opinion, Alaskan wood products would not meet the structural strength requirements.

Mr. Jim Barnett  
January 2, 1987  
Page 2

- ° On June 20, 1986, the local forest products industry consulted with experts in wood strength analysis at the U.S. Forest Service Test Lab in Missola, MT. These experts noted only slight differences in the strength characteristics of Douglas Fir versus Alaskan Spruce. They also expressed confidence that Alaskan Spruce would meet or exceed the design criteria for this project.
- ° On September 12, 1986, the contractor made the value judgment that local product would not meet the design criteria and that he would use material from outside our state.
- ° On September 15, 1986, Douglas Fir logging material arrives at the construction site and is comprised of approximately 20% #1 or better, 40% #2 and 40% #3 or poorer. In effect 40% of the material on site does not meet the contractor's own design criteria.
- ° In October, Meet with A.W.W.U. officials and informed that they are powerless to enforce AS.36.15.010 - 020, and are concerned with possible delays in construction. However, assurances are made that they make every effort to incorporate Alaskan forest products in the PT. Woronzof Out Fall Extension Project tunnel.

Throughout these discussions two issues have surfaced as rationale for not utilizing local forest products.

- 1) Structural suitability
- 2) Cost

Enclosed please find Attachment 1, which includes the cover letter and pertinent findings of Alaska Test lab, which conducted comprehensive tests on local wood strengths. Their findings show that two of the three Alaska species tested exceed Douglas Fir in strength and the Sitka Spruce tested at 95%.

With regards to cost competitiveness, A.W.W.U. made a recent cost comparison for the upcoming PT. Woronzof project. The contractor, again Frank Colluccio Construction Company, has a quote of \$295.00/1,000 bd. ft. from a lower forty-eight supplier. Local suppliers estimates range from \$450.00 to \$505.00 per 1,000 bd. ft. There are several reasons for the disparity in cost:

- ° Local suppliers would be required to make delivery in three to four weeks. The outside supplier had an approximate 6 month lead time.

Mr. Jim Barnett  
January 2, 1987  
Page 3

- °This short lead time required the local industry to commit to a barge load shipment of logs from Afognak Island in order to insure the necessary volume and avoid delays in supplying a project of this size. Barge operations involving logs have not been attempted through the Port of Anchorage, so initial start up costs and the short time frame added to the overall cost.
- °The prior shipment of logging material to the E.W.P. was comprised of 40% number three or poorer material. If the Pt. Woronzof shipment includes a similar proportion of substandard wood, then this is reflected in an artificially low price.
- °Manufacture cost are greater during cold-winter months. If the local industry been afforded the same production time frame these production problems and costs could have been substantially minimized.
- °Short time frame would require overtime work to meet the delivery schedule.

With Alaska's economy in a tailspin, we feel that local government should become more attentive to supporting Alaska's basic industries. Instead of creating barriers that discourage or exclude local products, the Municipality should take steps to promote their use. The level of effort and input that the E.W.P. has received, and still almost no local products were used, is ridiculous. We need to place much more emphasis on the importance of incorporation of these products and the need to foster a climate that removes barriers instead creating them.

We urge you to send a strong message to all Municipal departments that local industries need their support. The State of Alaska has adopted SB 341, which calls for a 15% preference, as a step toward developing a strong and prosperous economic base. In addition, Alaska Statute, Section 36.15.010, adopted in 1949 (See Attachment 2), was amended and clarified in 1986.

We feel that the Anchorage Assembly can take effective steps toward this state wide goal by adopting an ordinance modeled after SB 341. This will assure that jobs will be created and retained in Alaska. If forest products are purchased from outside the State, we are simply generating and retaining jobs somewhere else, such as Oregon, Washington or Canada. Let's keep the jobs here in Alaska by buying locally grown and produced forest products. That is a sound investment for the M.O.A., to assure a stable and strong economy now, and in years to come.

Respectfully submitted,

Greg Bell  
President

EXHIBIT B



**MATHEUS LUMBER COMPANY, INC.**  
Wholesale Forest Products

P.O. Box 3058  
8505-131st Avenue NE  
Kirkland, WA 98083

(206) 284-7500  
TELEX 32-1116

November 12, 1986

Mr. Wayne Moses  
Coluccio Construction Company  
9600 Martin Luther King Way S.  
Seattle, Wa. 98108

Dear Wayne:

In response to your questions concerning the feasibility of using Alaskan Paper Birch as lagging for your Eklutna tunnelling operation.

Research has moved this writer to contact the National Hardwood Lumber Association (NHLA), in Memphis, Tennessee, concerning the appropriate properties: strength, bending, modulus of elasticity, compression, etc. Mr. Allen Medlin, General Manager, advised me that the Hardwood Association has not done any engineering studies since some time in the 1940's and that any pertinent information could be found in a U.S. Department of Agriculture Forest Products Laboratory Wood Handbook #72. We have referred to this and attached for your information copies of the general description, as well as comparative properties. (See enclosure). As you can see, the comparison, based on green (specific gravity) shows a consistent lessor relationship between Douglas Fir (Coast) and Birch (Paper), except the last two columns.

Having absorbed this I moved on to the University of Washington and talked to Dr. Ben Bryant who verified that, to the best of his knowledge, there was no national association connected with the manufacture of any of the Alaskan Hardwood species.

More importantly, Dr. Bryant reminded me that all strength property charts were assessed from computations based on a common norm, i.e., the wood piece is to be clear, dry and straight grained and that all grading rules are based on values over and above the known defects.

The two major defects of strength are angle of grain and knot configuration. As such Paper Birch is not known as a straight grained specie and size basically forbids its being cut in any quantity for use commercially in construction. There are NO stress grades established by a known association for Paper Birch as far as I know.

As suggested by Mr. Bill Tomkinson of G.W. Martin, one of Canada's premier hardwood producers, Paper Birch is only fourth from the bottom of the hardwood chain as pertains to strength characteristics.

You might want to verify from the potential suppliers if they have any proof that a known association has developed guaranteed strength properties for the use (i.e. size

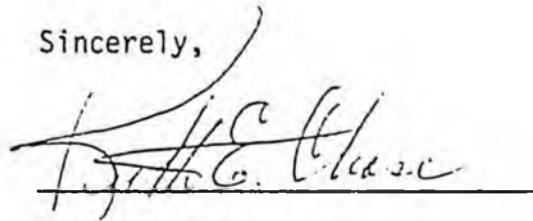
Continued Page Two....

November 12, 1986  
Mr. Wayne Moses  
Coluccio Construction Company

length) intended plus an absolute responsible contract for delivery-always to be at an acceptable price.

Please advise if I can be of any further help in this matter.

Sincerely,

A handwritten signature in cursive script, appearing to read "Keith E. Chase", written over a horizontal line.

Keith E. Chase  
Matheus Lumber Company

Enclosures



# MUNICIPALITY OF ANCHORAGE

## ASSEMBLY MEMORANDUM

No. ATM

Meeting Date:

From:  
Subject: Mayor  
Alaska Wood Preference/Point Woronzof Tunnel

Based on a request from Assemblyman, Jim Barrett, the Anchorage Water & Wastewater Utility offers the following information on why Alaska forest products were not specified in the Point Woronzof bid documents since State statutes require the use of Alaska forest products when practicable.

The Point Woronzof Expansion Project has been under way since design inception during the summer of 1983. The project is scheduled for completion in October, 1987.

The total project, comprised of six phases, has received over \$26,000,000 (million) dollars to date of Federal EPA funding. The amount equates to about 75% of the total cost. Phase V is a 2,700 foot effluent tunnel.

AWWU has been successful in obtaining EPA funding by complying with EPA grant guidelines. EPA and DEC officials have advised that AWWU could lose grant eligibility if we specified a specific product. The loss could amount to about \$262,500 which is the approximate cost given by one of the local lumber firms.

Despite this potential loss, AWWU, on October 31, 1986, requested proposals from the contractor to use 100% Alaska wood in the Point Woronzof tunnel initial support system.

The contractor requested prices from the Wrangell Forest Products LTD, one of the largest mills in Alaska. We were informed by a letter, dated November 4, 1986, that the mill could not provide the required timber within the next six months. This mill produces western-hemlock which can possibly meet the contractor's specifications for strength. Additionally, the contractor solicited proposals from The Valley Saw Mill and Trapper Creek Timber Products, Inc.

Preliminary indications are that the local available wood, spruce and/or birch, will not meet the contractor's strength requirements. The delivered cost is prohibitive. This makes the use of Alaska wood in the tunnel non-practicable.

Douglas fir which meets the contractor's specifications and is processed in the Northwest will cost \$295/1000 BF delivered to the Point Woronzof job site. Preliminary indications are that wood produced in Alaska will cost about \$525/1000 BF. The wood

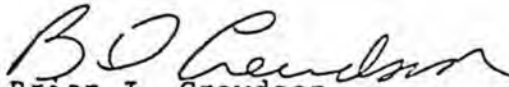
will be used for timber lagging in the initial support system for the tunnel.

These timbers must be able to withstand the surrounding earth loads and more importantly, be able to withstand the compressive force generated by the tunnel boring machine (TBM) which can produce in excess of 1.5 million pounds of thrust in order to move the TPM forward.

Our information indicates that douglas fir and oak are the only species of wood used in the northwestern United States tunnels because of the demanding strength requirements. Additionally, the contractor is solely responsible for the design and construction of the tunnel initial support system, and the safety of the tunnel.

In summary, it does not appear to be practicable to use Alaska wood for the tunnel initial support system. The cost is prohibitive and the responsibility for safety must remain solely with the contractor.

Prepared by:



Brian I. Crewdson  
Acting General Manager  
Anchorage Water & Wastewater Utility

Respectfully submitted:

Concur:

Tony Knowles  
Mayor

Robert E. Smith  
Municipal Manager

dw.AM.5

EXHIBIT C



# Alaska Testlab



4040 "B" Street

Anchorage, Alaska 99503

Telephone (907) 562-2000

December 19, 1986

W.O. #A23279

Mat-Su Loggers Association  
c/o Valley Sawmill  
6231 Old Seward Highway  
Anchorage, AK 99502

Attention: Greg Bell

Project: Local Wood Strengths

Subject: Test Results

Gentlemen:

At Greg Bell's request, Alaska Testlab tested the compressive strengths and flexural strengths of local wood and Douglas-Fir. This wood was tested essentially in accordance with ASTM D-143. The local woods tested were: Sitka Spruce, White Spruce, and Birch. These test results were compared to second growth Douglas-Fir.

Greg Bell delivered to Alaska Testlab all the wood tested for this project. It is our understanding that the local wood was all processed at the Valley Sawmill and the Douglas-Fir was purchased from a local lumber yard. We were not involved in the sampling process.

As per ASTM D-143, Section 55 through Section 62, all the test specimens tested for compression parallel to grain were 2" X 2" X 8" in size. These specimens were first loaded in our triaxial shear device. This is comprised of a Geotest loading frame attached to a Hewlett-Packard Model HP9121 computer through a load cell. The test specimens were then loaded at a continuous rate of 0.003 in/in/min., (0.024 in/min.) We continued to load the test specimens at this rate until a load of 10,000 to 12,000 lbf., was reached. During this time the deformation associated with the different loads were recorded. With this information the stress-strain curves were developed. The modulus of elasticity parallel to the grain of the wood was determined by the slope of the stress-strain curve. The maximum load that our triaxial load machine will handle is 10,000 to 12,000 lbf. These test specimens were still in the elastic range while

Mat-Su Loggers Association  
c/o Valley Sawmill  
Greg Bell  
December 19, 1986  
Page 2

under this load. After this initial loading, these specimens were loaded to failure in compression parallel to the wood grain with our Forney 400,000 lbf., compression machine. This determined the maximum compressive strength parallel to the grain of this wood.

The flexural strengths of these wood specimens were tested essentially in accordance with ASTM D-143, Section 47 through Section 54. The test specimen size was 2" X 2" X 30". These specimens were tested as a simple beam expanding over a 28.5 inch span with a point load concentrated at the center of the span. The deformation of the center point load was at a rate of 0.10 in/min. This rate of deformation continued until the failure of the beam. From this test, the stress-deformation curve was developed. The maximum flexural stress of the wood fiber was obtained through this test as well as the modulus of elasticity perpendicular to the grain of this wood. The moisture of each of these test specimens was estimated with a Delmhorst moisture meter.

The test results are on the attached figures. Wood is a nonisotropic substance. This explains why the modulus of elasticity is 7 to 8 times greater in flexural bending perpendicular to the grain than it is in compression parallel to grain. These test results indicate that compressive strengths and flexural strengths of local Sitka Spruce are slightly less than that of Douglas-fir. The compressive strengths and flexural strengths of local Birch and White Spruce are greater than those strengths in the Douglas-fir.

If you have any questions regarding this matter, please feel free to contact us.

Sincerely yours,

ALASKA TESTLAB

*Greg Luther*  
Greg Luther, E.I.T.  
Materials Engineer

APPROVED:

*M. R. Nichols*

Melvin R. Nichols, P.E.  
President

MRN:GL:pok



MODULUS OF ELASTICITY AND MAXIMUM COMPRESSIVE STRENGTH PARALLEL TO GRAIN

Wood Type	Moisture Content	Test Load (lbf.)	Maximum Compressive Strength (psi)	Modulus of Elasticity Parallel to Grain (100,000 psi)	Average Maximum Compressive Strength (psi)	Average Modulus of Elasticity Parallel to Grain (100,000 psi)	Percent of Douglas-Fir Strength
Sitka Spruce	15%	12800	3200	2.00	3250	2.15	95%
	17%	14475	3620	2.18			
	19%	13000	3250	2.16			
	19%	11000	2750	1.59			
	22%	13200	3300	2.39			
	25%	13500	3380	2.35			
Birch	15%	22200	5500	2.73	4700	2.43	138%
	17%	15400	3850	2.12			
				2.43			
White Spruce	16%	16800	4200	2.31	4420	2.35	130%
	20%	18500	4630	2.39			
Douglas-Fir	17%	14400	3600		3410		100%
	20%	14700	3680				
	22%	11750	2940				



MAXIMUM BENDING STRESS AND MODULUS OF ELASTICITY PERPENDICULAR TO GRAIN

Wood Type	Moisture Content	Test Load (lbf.)	Maximum Bending Stress (psi)	Modulus of Elasticity Parallel to Grain (Million psi)	Average Maximum Bending Stress (psi)	Average Modulus of Elasticity Perpendicular to Grain (Million psi)	Percent of Douglas-Fir Strength
Sitka Spruce * (Less than Grade #1 not used in average)	14% 19% 30% 30%	1010 970 1060 590	5150 4950 5400 3000*	1.55 1.54 1.14 1.20	5200	1.41	95%
Birch	14% 16%	1700 1700	8650 8700	1.98 2.27	8700	2.13	158%
White Spruce (Both were less than Grade #1)	17% 20%	1110 1190	5650 6050	1.67 1.71	5900	1.69	107%
Douglas-Fir	20%	1070	5500	2.85	5500	2.85	100%

EXHIBIT D

## Chapter 15. Forest Products Preference.

### Section

10. Use of local forest products required in projects financed by public money

### Section

20. Insertion of clause in calls for bids and in contracts

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Collateral references. — 64 Am. Jur. §§ 2, 3, 7, 10, 18; 81A C.J.S., States, 2d, Public Works and Contracts, § 94. §§ 154, 158, 161.  
72 C.J.S. Supplement, Public Contracts,

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Sec. 36.15.010. Use of local forest products required in projects financed by public money. In a project financed by state money in which the use of timber, lumber, and manufactured lumber products is required, only timber, lumber, and manufactured lumber products originating in this state from local forests shall be used wherever practicable. (§ 14-3-1 ACLA 1949) See 1986 Amendment

Sec. 36.15.020. Insertion of clause in calls for bids and in contracts. A clause containing the substance of AS 36.15.010 shall be inserted in all calls for bids and in all contracts awarded. (§ 14-3-2 ACLA 1949)

## Chapter 20. Purchases and Supplies.

### Section

10. Preference of producers or dealers in Alaska

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Collateral references. — 64 Am. Jur. §§ 2, 3, 7, 10, 18; 81A C.J.S., States, 2d, Public Works and Contracts, § 94. §§ 154, 158, 161.  
72 C.J.S. Supplement, Public Contracts,

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Sec. 36.20.010. Preference of producers or dealers in Alaska. In making purchases or awarding contracts for supplies, commodities or materials for an office or institution of this state preference shall be given, whenever practicable, to producers and dealers in the state, price and quality being equal. (§ 14-4-2 ACLA 1949)

Cross references. — As to preference for Alaska bidders under the Fiscal Procedures Act, see AS 37.05.230.



# LAWS OF ALASKA

1986

Source

HCS CSSB 57(Fin)

Chapter No.

16

## AN ACT

Relating to preferential use of Alaska agricultural or fisheries products; and providing for an effective date.

\* Section 1. AS 36 is amended by adding a new chapter to read:

### CHAPTER 16. PREFERENTIAL USE OF ALASKA AGRICULTURAL OR FISHERIES PRODUCTS.

Sec. 36.16.010. USE OF LOCAL AGRICULTURAL AND FISHERIES PRODUCTS REQUIRED IN PURCHASES WITH STATE MONEY. (a) When agricultural products are purchased using state money, only agricultural products harvested in this state shall be purchased whenever competitively priced, available, and of like quality compared with agricultural products harvested outside the state.

(b) When fisheries products are purchased using state money, only fisheries products harvested or processed within the jurisdiction of the state shall be purchased whenever competitively priced, available, and of like quality compared with fisheries products harvested or processed outside the jurisdiction of the state.

(c) As used in this section, "agricultural products" includes timber and lumber harvested in the state and products manufactured in the state from timber and lumber that has been harvested in the state.

Sec. 36.16.020. INSERTION OF CLAUSE IN CALLS FOR BIDS AND IN CONTRACTS. A clause containing the substance of the relevant subsection of AS 36.16.010 shall be inserted in all calls for bids and in all contracts awarded that involve agricultural or fisheries products.

\* Sec. 2. This Act takes effect immediately in accordance with AS 01.-10.070(c).

Approved by the Governor: April 23, 1986  
Actual Effective Date: April 24, 1986

EXHIBIT E



# Matanuska-Susitna Borough

BOX B, PALMER, ALASKA 99645 • PHONE 745-4801

DEPARTMENT OF PUBLIC WORKS

October 14, 1986

Valley Sawmill  
6231 Old Seward Hwy.  
Anchorage, Alaska 99518

Attention: Mark Stearns

Gentlemen:

As you requested, I am sending a copy of the Borough Attorney's review of the Alaska statute that deals with the use of wood products produced in Alaska on state funded projects. As I stated in our conversation, this is strictly a legal interpretation and is not necessarily the position being taken by the Matanuska-Susitna Borough. That is, we would very much encourage contractors to utilize materials produced within the State of Alaska but we don't feel that we have the legal, contractual power to require the purchase and utilization of Alaska wood products. This is especially true on projects that were bid prior to the adoption of this Alaska statute.

If I can be of further assistance, please don't hesitate to contact me.

Sincerely,

A handwritten signature in cursive script, appearing to read "C.J. Horner".

C.J. Horner  
Deputy Director of Buildings

CJH:nt  
Enclosure



# Matanuska-Susitna Borough

BOX B, PALMER, ALASKA 99645 • PHONE 745-9687

BOROUGH ATTORNEY'S OFFICE

August 11, 1986

## MEMORANDUM

TO: C. J. Horner, Deputy Director - Buildings  
Public Works Department

FROM: Michael Gatti, Deputy Borough Attorney *M. G.*

SUBJECT: July 15, 1986 Opinion Request

You have asked for a legal opinion on the operative effect of state Administrative Order 87, AS 36.15.010, 36.30.322 and 36.16.010 relating to use preferences for forest agricultural and fisheries products.

### 1. Administrative Order 87

Administrative Order 87 establishes a state preference policy to encourage the use of Alaskan products provided such products are competitively priced with similar products available outside the state. The order applies only to state agencies purchasing such products and requires a preference clause in all state contracts and invitations for bids. By its own terms, the order does not apply to local governments. Even if it did require local compliance, it is doubtful the governor could constitutionally invoke his executive power to unilaterally affect a local government by administrative order. This is so since the power of a local government is constitutionally vested in the assembly pursuant to Article X, sections 1, 2 and 4 of the Alaska Constitution.

### 2. AS 36.15.010, AS 36.18.010, AS 36.20.010 and AS 36.30.322

Each of the foregoing statutes provide a preference for state products or producers when the state government is involved in a procurement. AS 36.15.010 requires projects financed by state money to use timber, lumber or manufactured lumber products originating in-state to be used when practicable. AS 36.20.010 requires state offices or institutions to award contracts for supplies, commodities or materials to in-state producers and dealers if practicable and equal in price and quality with outside products.

AS 36.16.010 and 36.30.322 require agricultural and fisheries products purchased with state money to be purchased from state producers if they are of comparable price and quality to outside products. AS 36.30.326 requires state agencies to include the state preference for state products in-state procurements.

The statutes referenced above, by their own terms, do not apply to local governments because the language refers to state agencies using state money for procurements. While most of the statutes do not express the scope of their applicability AS 36.30.850 does. It provides that AS 36.30 et seq. does not apply to grants or to political subdivisions (local governments) of the state. In reviewing these preference statutes without an expression of the scope of their applicability, a court may apply AS 36.30.850 to those statutes with similar language in order to assist in its search for the legislature's intent. Because all the use preference statutes discussed herein contain language similar to AS 36.30 et seq. it is reasonable to assume that a court would hold the legislature intended them to be limited in the same manner as AS 36.30 et seq. Even if a court refused to extend the limitation by analogy, the use preferences by their own terms may be limited to state agencies using state money. The key to ascertaining the legislature's intent in this area is found in the language "state money." Since local governments receive money from the state in the form of grants, municipal assistance and revenue sharing is it all state money or is state money limited to that money used by the state for state projects. One answer is that state money is money used by the state for its own projects. This approach recognizes that money simply originating from the state and passed through to local governments loses its characterization as state money since the money has now been transformed into local money once accepted by the local government. This approach follows the generally accepted rule of statutory construction which provides that general words will be construed according to their plain meaning. The plain meaning of state money is money belonging to the state and not money belonging to a local government.

### 3. Commerce Clause

The use of preferences by a state raises constitutional issues involving the commerce clause. United States Constitution Article I, Sec. 3, Clause 8. The commerce clause provides congress with the "power to regulate commerce with foreign nations, and among the several states, and with the Indian tribes." Under the commerce clause, the federal government retains exclusive regulatory jurisdiction over subjects of commerce which are national in character and require uniformity of regulation. The states retain exclusive control over commerce which is completely internal. Where national uniformity is not essential or where state regulation only incidentally affects interstate commerce the state regulation may be upheld. To determine whether a state regulation affects interstate commerce

the competing demands of state and national interests must be balanced. In balancing state regulations affecting commerce a court will review such factors as whether a direct or indirect substantial burden is placed on interstate commerce, whether the regulation discriminates against interstate commerce, and whether the state is acting solely as a market participant or a market regulator.

In South-Central Timber v. Wunnicke, \_\_\_ U.S. \_\_\_, 81 L.Ed 2d 71, 104 S.Ct. \_\_\_\_\_ (1984) the U.S. Supreme Court reviewed an Alaska forest products use preference which required all contracts involving the sale of timber on state land to include a clause requiring the primary manufacture of the timber to take place in Alaska. The state's asserted purpose for the primary manufacture requirement was to protect industry, establish new industry, derive revenue and manage the state's forest. The state in defending against the challenge to the regulation argued a comparable federal policy for the removal of timber on federal lands established congressional intent to authorize similar state action, that it was solely a market participant, and that the regulation did not substantially burden interstate commerce. The supreme court rejected the state's claims and struck down the regulation holding the regulation to be a downstream restriction having a substantial regulatory effect on interstate commerce. The state, the court held, was not merely choosing its own trading partners but was attempting to govern the private, separate, economic relationships of its trading partners by restricting past purchase activity rather than merely purchasing activity.

South-Central Timber defines an area of permissible regulation in a states purchasing activity. If the state is solely a market participant, that is, an entity exercising its independent discretion as to parties with whom he will deal; the commerce clause does not limit the state's refusal to deal with particular parties when participating in the interstate market in goods.

In the instant case a court may hold that the state is solely involved in interstate commerce as a market participant since it does not control the flow of the goods once the contract is executed. The regulation is a pre-purchase condition which the state imposes as a condition of conducting business with it; the impact on interstate commerce may be only incidental and the state does not make the choice of disposition of goods for the other party to the contract. A regulation involving the foregoing condition may be upheld as a permissible state regulation.

MG:jr