

ALASKA LEGISLATURE COMMITTEE BILL FILES - 1987 - 1988 8879

SB 131, SB 132 52

SB

131

# HOUSE COMMITTEE REPORT

(11)

Date referred: 3/30/87

FURTHER REFERRALS:

DATE: 4-8-87

The Finance Committee has considered SB 131 am

"An Act regulating the sale and use of TBT-based marine antifouling paints and coatings; and providing for an effective date."

**RECOMMENDS:**

- replace with H CS SB 131 (Finance)  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  same as previous fiscal note published \_\_\_\_\_
- zero fiscal note  same as previous zero fiscal note published \_\_\_\_\_
- zero with analysis

**SIGNING DO PASS:**

Albert P. Adams

Pat Louchot

Ronald L. Larson

Chunalle

Steve King

Don

Mike Davis

Mack Boyer

**SIGNING OTHER RECOMMENDATIONS:**

Peter Jones

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Albert P. Adams  
Chairman's signature

**STATE OF ALASKA 1987 LEGISLATIVE SESSION  
FISCAL NOTE**

MAR 20 1987

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**REQUEST:** \_\_\_\_\_

Bill Version: HCS SB 131 (FIN)

Publish Date: \_\_\_\_\_

Revision Date: \_\_\_\_\_

Agency Affected: Environmental Conservation

Title: An Act Regulating to the sale and use of TBT-based marine anti-fouling paints & coatings

BRU: Environmental Health

Sponsor: Senator Zharoff

Components: Sanitation

Requestor: Senator Zharoff

**EXPENDITURES/REVENUES: (Thousands of Dollars)**

OPERATING	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92
PERSONAL SERVICES	-0-	10.7	10.7	5.3	5.3	5.3
TRAVEL	-0-	1.4	1.4	1.0	1.0	1.0
CONTRACTUAL	-0-	2.0	2.0	1.0	1.0	1.0
SUPPLIES	-0-	1.0	1.0	1.0	1.0	1.0
EQUIPMENT	-0-	0.8	0.8	0.5	0.5	0.5
LAND & STRUCTURES	-0-	-0-	-0-	-0-	-0-	-0-
GRANTS, CLAIMS	-0-	-0-	-0-	-0-	-0-	-0-
MISCELLANEOUS	-0-	-0-	-0-	-0-	-0-	-0-
<b>TOTAL OPERATING</b>	<b>-0-</b>	<b>15.9</b>	<b>15.9</b>	<b>8.8</b>	<b>8.8</b>	<b>8.8</b>

<b>CAPITAL</b>	<b>-0-</b>	<b>-0-</b>	<b>-0-</b>	<b>-0-</b>	<b>-0-</b>	<b>-0-</b>
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<b>REVENUE</b>	<b>-0-</b>	<b>-0-</b>	<b>-0-</b>	<b>-0-</b>	<b>-0-</b>	<b>-0-</b>
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**FUNDING: (Thousands of Dollars)**

GENERAL FUND	-0-	15.9	15.9	8.8	8.8	8.8
FEDERAL FUNDS	-0-	-0-	-0-	-0-	-0-	-0-
OTHER	-0-	-0-	-0-	-0-	-0-	-0-
<b>TOTAL</b>	<b>-0-</b>	<b>15.9</b>	<b>15.9</b>	<b>8.8</b>	<b>8.8</b>	<b>8.8</b>

**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) This fiscal note assumes that the department will only monitor the sale of TBT. This will entail on-site inspection and monitoring of wholesale and retail outlets. It will also involve the investigation and preparation of appropriate enforcement actions. SEE ATTACHED

Prepared by: Doug Donegan  
Division: Environmental Health

Phone: 465-2600  
Date: 3-6-87

Approved by Commissioner: [Signature]  
Agency: Environmental Conservation

Date: 3/6/87

**Distribution (by preparer):**

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

## ATTACHMENT

Based on a recent survey, there are approximately 1000 wholesale and retail distributors in the categories likely to be carrying paints and coatings. In FY 88 the Department will conduct a public information campaign directed at these types of outlets.

The Department will also inspect approximately 250 establishments/per year to monitor compliance with the law. This inspection rate will decline in FY 90 to 125 inspections/year.

Original sponsors: Zharoff, Eliason,  
Josephson, et al.

1 IN THE SENATE

BY THE FINANCE COMMITTEE

2 HOUSE CS FOR SENATE BILL NO. 131 (Finance)

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 FIFTEENTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act regulating the sale and use of TBT-based  
7 marine antifouling paints and coatings; and providing  
8 for an effective date."

9 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

10 \* Section 1. AS 16.05.450(b) is amended to read:

11 (b) The Commercial Fisheries Entry Commission shall issue a  
12 vessel license under AS 16.05.490 to each qualified vessel for which a  
13 written application has been filed, at a place in the state designated  
14 by the commission. An application shall contain a statement by the  
15 applicant that the vessel has not been painted in violation of AS 46.-  
16 03.715. An application shall contain other [, CONTAINING THE] reason-  
17 able information required by the commission together with the required  
18 fee. The application shall be simple in form and shall be executed by  
19 the applicant under the penalty of perjury.

20 \* Sec. 2. AS 46.03.020 is amended by adding a new paragraph to read:

21 (13) inspect the premises of sellers and suppliers of paint,  
22 vessels, and marine and boating supplies, and take other actions  
23 necessary to enforce AS 46.03.715.

24 \* Sec. 3. AS 46.03 is amended by adding a new section to read:

25 Sec. 46.03.715. SALE AND USE OF TBT-BASED ANTIFOULING PAINT.

26 (a) Except as otherwise provided in this section, a person may not  
27 sell or use TBT-based marine antifouling paint or coating in the  
28 state, nor may a person sell, rent, or lease in the state, or import  
29 into the state, or use in state water, a vessel, fishing gear, or

1 other item intended to be partially or completely submerged in water,  
2 if the vessel, gear, or item has been painted or treated with  
3 TBT-based marine antifouling paint or coating.

4 (b) TBT-based marine antifouling paint or coating need not be  
5 removed from fishing gear, or from a vessel or other item that was  
6 painted or treated before December 1, 1987, but the vessel, gear, or  
7 item may not be repainted or retreated with TBT-based marine antifoul-  
8 ing paint or coating. Fish culture or capture nets treated with  
9 TBT-based marine antifouling coating before December 1, 1987, may not  
10 be used in state water on or after December 1, 1992.

11 (c) Notwithstanding other provisions of this section, slow-  
12 leaching TBT-based marine antifouling paint may be imported into and  
13 sold in the state. A slow-leaching TBT-based marine antifouling paint  
14 may be applied in the state only to aluminum vessel hulls. Aluminum  
15 vessel hulls to which a slow-leaching TBT-based marine antifouling  
16 paint has been applied may be imported into and sold, rented, leased,  
17 or used in the state.

18 (d) This section does not apply to

19 (1) a vessel of the United States government;

20 (2) a foreign vessel in state water fewer than 90 days in a  
21 12-month period; or

22 (3) a vessel of 4,000 gross tons or more.

23 (e) In this section

24 (1) "slow-leaching TBT-based marine antifouling paint"  
25 means a TBT-based marine antifouling paint, but not a coating or other  
26 treatment, that has a measured release rate equal to or less than 3.0  
27 micrograms per square centimeter per day at steady state conditions  
28 determined under the U.S. Environmental Protection Agency testing  
29 procedure, as outlined in the agency's call-in notice of July 29,

1 1986, on tributyltin in antifouling paints under 7 U.S.C. 35 - 36y  
2 (the Federal Insecticide, Fungicide, and Rodenticide Act);

3 (2) "TBT-based marine antifouling paint or coating" means a  
4 paint, coating, or treatment that contains tributyltin, or a tri-  
5 organotin compound used as a substitute for tributyltin, and that is  
6 intended to control fouling organisms in a fresh water or marine  
7 environment;

8 (3) "vessel" means watercraft used or capable of being used  
9 as a means of transportation on water, including

10 (A) aircraft equipped to land on water; and

11 (B) barges.

12 \* Sec. 4. Notwithstanding AS 46.03.715, as enacted by sec. 3 of this  
13 Act, after the effective date of this section a person may not import into  
14 the state a TBT-based marine antifouling paint or coating other than a  
15 slow-leaching TBT-based marine antifouling paint, except that paint or  
16 coatings that have been ordered from a source outside of the state before  
17 the effective date of this section may be imported into the state before  
18 December 1, 1987.

19 \* Sec. 5. Sections 1 - 3 of this Act take effect December 1, 1987.

20 \* Sec. 6. Section 4 of this Act takes effect immediately under AS 01.-  
21 10.070(c).

A M E N D M E N T

Offered in the HOUSE

By Zharoff

TO: HCS For SB 131 (Resources)

Page 2, Lines 26 and 27:

Delete "1.0 microgram"

Insert "3.0 micrograms"



SENATOR FRED F. ZHAROFF  
ALASKA STATE LEGISLATURE

P.O. BOX 405, KODIAK, ALASKA 99615 (907) 486-5259

DURING SESSION:

P.O. BOX V, JUNEAU, ALASKA 99811 • (907) 465-3473 • 465-3474

DISTRICT N

ALASKA PENINSULA • ALEUTIAN CHAIN • BRISTOL BAY • KODIAK ISLAND • LAKE CLARK/LAKE ILIAMNA • PRIBILOF ISLANDS • SHUMAGIN ISLANDS

MEMORANDUM

TO: Rep. Al Adams  
Chairman  
House Finance Committee

FROM: Senator Fred F. Zharoff

DATE: April 6, 1987

RE: House CS For Senate Bill No. 131 (Resources), "An Act regulating the sale and use of TBT-based marine antifouling paints and coatings; and providing for an effective date."

HCSSB 131 amends the Prohibited Acts and Penalties article in the Environmental Conservation chapter of Title 46 by adding a new section to prohibit the sale and use in Alaska of marine paints and coatings that contain the chemical tributyltin (TBT).

TBT is a highly toxic pesticide. It is very effective at killing all the marine organisms that attach themselves to boat hulls painted with TBT paint. Research has shown that it is also poisonous to other forms of life in the marine environment, such as oysters and salmon smolt.

HCSSB 131 was originally introduced as part of joint effort by legislators in Washington, Oregon, California and Idaho -- coordinated through the Pacific Fisheries Legislative Task Force -- to ban the use of TBT marine paint on the west coast. Bills also are pending before the U.S. Congress and in the Maryland legislature. TBT already has been banned or restricted in France, England, Germany, Switzerland, Japan, and the State of Virginia. The alternative to TBT marine paint is copper oxide marine paint, used as the industry standard before TBT products were introduced.

HCSSB 131 contains an exemption that allows slow leaching TBT marine paint to be applied to aluminum vessel hulls. Copper oxide paint does not work well on aluminum vessels because of the aluminum vessels' susceptibility to electrolysis. Slow leaching is defined in the bill as "a measured release rate equal to or less than 1.0 microgram per square centimeter per day". This is considered an environmentally acceptable release rate.

Attached are additional background materials, as follows:

1. Sectional Analysis.
2. Department of Environmental Conservation fiscal note.

→ see  
additional  
fiscal note  
explanation  
for more info

3. Department of Environmental Conservation position paper.
4. State statutes containing the penalties for violation of this bill.
5. Pacific Fisheries Legislative Task Force research and position paper.
6. Article from Pacific Coast Federation of Fishermen's Associations newsletter about effects of TBT on salmon.
7. Article from Alaska Fisherman's Journal.
8. Article from San Francisco Chronicle.
9. Guidelines for physical handling of TBT paint from University of Alaska Cooperative Extension Service.
10. Information sheet prepared by Rep. Sund about the House companion bill, HB 138. Also applies to SB 131.
11. Maryland TBT legislation (same as the bill passed by the Virginia State Legislature).
12. List of marine paint containing TBT.

# STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

STEVE COWPER, GOVERNOR

3

February 27, 1987

## POSITION PAPER

Bill No: SB 131

Contact: Amy D. Kyle  
465-2600

Title: An Act regulating the role and use of TBT-based marine anti-fouling paints and coatings.

### Department's Position

The Department supports the intent of the bill to prohibit sale and use of TBT-based paints and coatings. The Department is prepared to enforce a prohibition on the sale of the coatings.

### Bill Analysis

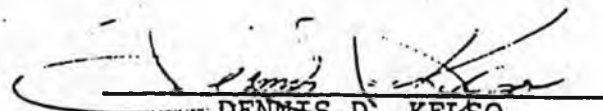
The bill would prohibit the sale and use of TBT-based anti-fouling paint. Such coatings have been shown to release TBT into waters. TBT is a harmful and toxic substance. DEC supports the ban on introduction of the substance into waters of the state. (Since 1985, DEC has prohibited use of TBT as an anti-fouling agents in hatcheries, through conditions placed on state certifications of federal permits for hatcheries.)

The bill does not propose a specific role for any agency in enforcing a ban on sale or use of TBT-based coatings. Rather, the bill establishes general prohibitions.

### Effect on the Agency

DEC understands that it is the intent of the bill's sponsors primarily to prohibit the sale of TBT in the state. DEC can play an active role in enforcing this prohibition through notification to retail outlets and marketplace inspections to confirm that the ban is complied with. TBT is a pesticide under the federal pesticide laws. The ban would be imposed and enforced as an extension of the state's pesticide program. A fiscal note for resources needed to enforce this aspect of the bill is being prepared.

The Department understands that the bill's sponsors do not intend that any additional activities be undertaken by DEC in response to the legislation in order to detect or take enforcement action under other provisions. In light of this understanding, no resources beyond those required to enforce the ban on sale are included in the fiscal note.

  
DENNIS D. KELSO  
COMMISSIONER

4

§ 46.03.760

ALASKA STATUTES

§ 46.03.760

**Sec. 46.03.760. Civil action for pollution; damages.** (a) A person who violates or causes or permits to be violated a provision of this chapter or AS 46.04, or a regulation, a lawful order of the department, or a permit, approval, or acceptance, or term or condition of a permit, approval, or acceptance issued under this chapter or AS 46.04 is liable, in a civil action, to the state for a sum to be assessed by the court of not less than \$500 nor more than \$100,000 for the initial violation, nor more than \$5,000 for each day thereafter on which the violation continues, and which shall reflect, when applicable,

(1) reasonable compensation in the nature of liquidated damages for any adverse environmental effects caused by the violation, which shall be determined by the court according to the toxicity, degradability and dispersal characteristics of the substance discharged, the sensitivity of the receiving environment, and the degree to which the discharge degrades existing environmental quality;

(2) reasonable costs incurred by the state in detection, investigation, and attempted correction of the violation; and

(3) the economic savings realized by the person in not complying with the requirement for which a violation is charged.

(b) Actions under this section may not be used for punitive purposes, and sums assessed by the court must be compensatory and remedial in nature.

(c) The court, upon motion of the department or upon its own motion, may defer assessment of all or part of that portion of the sum imposed upon a person under (a)(3) of this section conditioned upon the person complying, within the shortest feasible time, with the requirement for which a violation is shown.

(d) As used in this section, "economic savings" means that sum which a person would be required to expend for the planning, acquisition, siting, construction, installation and operation of facilities necessary to effect compliance with the standard violated.

(e) In addition to liability under (a) — (d) of this section, a person who violates or causes or permits to be violated a provision of AS 46.03.740 — 46.03.750 is liable to the state, in a civil action brought under AS 46.03.822, for the full amount of actual damages caused to the state by the violation, including direct and indirect costs associated with the abatement, containment or removal of the pollutant, restoration of the environment to its former state, and all incidental administrative costs. (§ 3 ch 120 SLA 1971; am § 9 ch 220 SLA 1976; am § 5 ch 266 SLA 1976; am §§ 5, 6 ch 116 SLA 1980)

**Cross references.** — As to oil pollution control, see AS 46.04. For provision that actions brought under subsections (a) and (e) of this section may be brought directly against insurers or other persons providing evidence of financial security, see AS 46.04.040(e).

**Effect of amendments.** — The 1980 amendment substituted "AS 46.04" for "AS 30.25.020" and for "AS 30.25" and substituted "approval, or acceptance" for "or certificate" in two places, all in the introductory paragraph of subsection (a), deleted "except disbursements for pollu-

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§ 46.03.765

WATER, ETC., CONSERVATION

§ 46.03.765

tion abatement cost under AS 30.25.260(a)(2)" following "violation" in paragraph (2) of subsection (a), and deleted the former second and third sentences of subsection (e), which read, respectively: "That portion of the damages recovered by the state in a civil action brought under AS 46.03.822 attributable to costs incurred by the department in the abatement, containment or removal of the

pollutant resulting from a discharge of crude oil, refined petroleum products or their by-products shall be deposited in the coastal protection fund created under AS 30.25.220" and "Except for special risk charges collected under AS 30.25.270, a person holding a risk avoidance certificate may not be held liable for costs associated with the abatement, containment or removal of the pollutant."

NOTES TO DECISIONS

This section and AS 46.03.790 held not unconstitutional. — See *Stock v. State*, Sup. Ct. Op. No. 1076 (File No. 2007), 526 P.2d 3 (1974), decided prior to

the 1976 amendment of those sections. Quoted in *State v. Alaska Int'l Air, Inc.*, Sup. Ct. Op. No. 1409 (File No. 2S08), 562 P.2d 1064 (1977).

Collateral references. — Injunction against pollution of stream by private persons or corporations. 46 ALR 8.

When statute of limitations commences to run as to action against municipality for damages to riparian premises by pollution of stream by discharge of sewage. 122 ALR 1509.

Tenant's remedy against stranger for wrongful pollution of waters. 12 ALR2d 1234.

Measure and elements of damages for pollution of well, cistern, or spring. 19 ALR2d 769.

Measure and elements of damages for pollution of stream. 49 ALR2d 253.

Landowner's right to relief against pollution of his water supply by industrial or commercial waste. 39 ALR3d 910.

Maintainability in state court of class action for relief against air and water pollution. 47 ALR3d 769.

Preliminary mandatory injunction to prevent, correct, or reduce effects of polluting practices. 49 ALR3d 1239.

Liability of water supplier for damages resulting from furnishing impure water. 54 ALR3d 936.

Validity of state statutory provision permitting administrative agency to impose monetary penalties for violation of environmental pollution statute. 81 ALR3d 1258.

Recovery in trespass for injury to land caused by airborne pollutants. 2 ALR4th 1054.

**Sec. 46.03.765. Injunctions.** The superior court has jurisdiction to enjoin a violation of this chapter or AS 46.04, or of a regulation, a lawful order of the department, or permit, approval, or acceptance, or term or condition of a permit, approval, or acceptance issued under this chapter or AS 46.04. In actions brought under this section, temporary or preliminary relief may be obtained upon a showing of an imminent threat of continued violation, and probable success on the merits, without the necessity of demonstrating physical irreparable harm. The balance of equities in actions under this section may affect the timing of compliance, but not the necessity of compliance within a reasonable period of time. (§ 10 ch 220 SLA 1976; am § 6 ch 266 SLA 1976; am § 7 ch 116 SLA 1980)

**Effect of amendments.** — The 1980 amendment, in the first sentence, substituted "AS 46.04" for "AS 30.25" in two places and "approval, or acceptance" for "or certificate" in two places.

**Sec. 46.03.770. Detention of vessel without warrant as security for damages.** — A vessel which is used in or in aid of a violation of AS 46.03.740 — 46.03.750 may be detained after a valid search by the department, an agent of the department, a peace officer of the state, or an authorized protection officer of the Department of Fish and Game. Upon judgment of the court having jurisdiction that the vessel was used in or the cause of a violation of AS 46.03.740 — 46.03.750 with knowledge of its owner or under circumstances indicating that the owner should reasonably have had this knowledge, the vessel may be held as security for payment to the state of the amount of damages assessed by the court under AS 46.03.760(b), and if the damages so assessed are not paid within 30 days after judgment or final determination of an appeal, the vessel shall be sold at public auction, or as otherwise directed by the court, and the damages paid from the proceeds. The balance, if any, shall be paid by the court to the owner of the vessel. The court shall permit the release of the vessel upon posting of a bond set by the court in an amount not to exceed \$100,000. The damages received under this section shall be transmitted to the proper state officer for deposit in the general fund. A vessel seized under this section shall be returned or the bond exonerated if no damages are assessed under AS 46.03.760(b). (§ 3 ch 120 SLA 1971)

**Editor's notes.** — The reference to AS 46.03.760(b) near the middle of the section is to AS 46.03.760(b) as it existed prior to the 1976 amendments.

**Sec. 46.03.780. Liability for restoration.** (a) A person who violates a provision of this chapter or AS 46.04, or who fails to perform a duty imposed by this chapter or AS 46.04, or violates or disregards an order, permit, or other determination of the department made under the provisions of this chapter or AS 46.04, respectively, and thereby causes the death of fish, animals, or vegetation or otherwise injures or degrades the environment of the state is liable to the state for damages.

(b) Liability for damages under (a) of this section includes an amount equal to the sum of money required to restock injured land or waters, to replenish a damaged or degraded resource, or to otherwise restore the environment of the state to its condition before the injury.

(c) Damages under (a) of this section shall be recovered by the attorney general on behalf of the state. (§ 3 ch 120 SLA 1971; am § 7 ch 266 SLA 1975; am § 111 ch 59 SLA 1982)

**Effect of amendments.** — The 1982 amendment, effective May 28, 1982, substituted "AS 46.04" for "AS 30.25" in three places in subsection (a).

**Editor's notes.** — As amended by § 111, ch. 59, SLA 1982, subsection (a) contained three references to "AS 43.04." There is no such chapter, however, and the

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§ 46.03.790

WATER, ETC., CONSERVATION

§ 46.03.790

references have been corrected to AS 46.04.

**Sec. 46.03.790. Criminal penalties.** (a) A person who violates or who causes or permits a violation of a provision of this chapter or AS 46.04, or of a regulation, lawful order of the department, or permit, approval, or acceptance, or term or condition of a permit, approval, or acceptance issued under this chapter or AS 46.04 is guilty of a class B misdemeanor.

(b) A person who wilfully violates a provision of this chapter, or of a regulation, lawful order of the department, or permit, approval, or acceptance, or term or condition of a permit, approval, or acceptance issued under this chapter or AS 46.04 is guilty of a class A misdemeanor.

(c) Each day on which a violation described in (a) or (b) of this section occurs is considered a separate violation.

(d) A person who fails to provide or falsely states information required under AS 46.03.755 or AS 46.04 is guilty of a misdemeanor and, upon conviction, is punishable by a fine of not more than \$25,000, or by imprisonment for not more than one year, or by both. Each unlawful act constitutes a separate offense. (§ 3 ch 120 SLA 1971; am § 11 ch 220 SLA 1976; am § 8 ch 266 SLA 1976; am §§ 8, 9 ch 116 SLA 1980; am §§ 11, 12 ch 93 SLA 1981; am § 112 ch 59 SLA 1982)

**Cross references.** — As to sentences for misdemeanors, see AS 12.55.135.

**Effect of amendments.** — The 1980 amendment, in subsection (a), substituted "AS 46.04" for "AS 30.25" in two places, "approval, or acceptance" for "or certificate" in two places, and "violation" for "misdemeanor and, upon conviction, is punishable by a fine of not more than \$25,000 and costs of prosecution." In subsection (b), the amendment substituted "approval, or acceptance" for "or certificate" in two places and "AS 46.04" for

"AS 30.25," and deleted "and, upon conviction, is punishable by a fine of not more than \$25,000 and costs of prosecution, or by imprisonment for not more than one year, or by fine, costs, and imprisonment" from the end of the subsection.

The 1981 amendment substituted "class B misdemeanor" for "violation" in subsection (a) and added "class A" preceding "misdemeanor" in subsection (b).

The 1982 amendment, effective May 28, 1982, substituted "AS 46.04" for "AS 30.25" in subsection (d).

**NOTES TO DECISIONS**

**This section and AS 46.03.760 held not unconstitutional.** — See *Stock v. State*, Sup. Ct. Op. No. 1076 (File No.

2007), 526 P.2d 3 (1974), decided prior to the 1976 amendment of those sections.

**Collateral references.** — Necessity of showing scienter, knowledge, or intent, in prosecution for violation of air pollution or

smoke control statute or ordinance. 46 ALR3d 758.

TRIBUTYL TIN (TBT)

Tributyltins (TBT) have been called the most toxic compounds ever deliberately introduced by societies into natural waters.<sup>1</sup> A growing body of scientific research indicates that TBT may seriously affect non-target organisms and have unknown effects on humans who eat marine organisms containing TBT or are exposed to it in the workplace.

In the United States, many bodies of water have concentrations of TBT that have reached levels which may cause lethal and sublethal effects in non-target organisms. For example, TBT levels in San Diego Bay have been measured at levels which could cause lethal effects in fish, mollusks, crustaceans, and algae.<sup>2</sup>

TBT is used in antifouling paints and is primarily applied to boat and ship hulls to control the growth of fouling organisms such as barnacles, tubeworms, algae, bacteria, and sponges. These organisms increase hull friction and weight, which in turn increases fuel consumption by reducing vessel speed. The antifouling paints are also used to control fouling organisms on docks, buoys, and other marine structures. TBT has been used in antifouling paints for almost 10 years and replaced the copper-based antifouling paints. The paints with tributyltins last approximately 5-7 years, whereas the copper-based paints last approximately two years.

There are two types of antifouling paints containing TBT: copolymer paints and free association paints. The copolymer antifouling paints contain TBT which is chemically bonded to the paint polymer and is released through a chemical bond breaking process called hydrolysis. New TBT molecules are exposed and released by the gradual erosion of the paint as the vessel moves through the water. The release rate is slow except during the initial one month "conditioning" period and can be controlled by

altering the paint's water absorption characteristics. The free association paints contain TBT which is physically incorporated into the paint matrix; the TBT is released through diffusion as surface paint particles dissolve. This type of paint has a short time period of protection and is characterized by a high initial release.

Antifouling paints containing TBT are registered, in the United States, for use on aluminum, steel, fiberglass, wood and cement hulls.<sup>3</sup> These paints are used on commercial and recreational vessels and some military ships. However, the Navy is the major domestic user of antifouling paints. The Navy is planning to replace the copper-based paints it is currently using on its steelhulled vessels with antifouling paints containing TBT compounds. This Navy conversion would take approximately 5 years and add an additional 90,000 pounds of TBT active ingredients to the environment. Economically, if all the Navy ships are painted, it would annually save the Navy \$150 million.<sup>4</sup> However, this cost does not include the cost to the marine environment.

Currently, there are 340 federally registered antifouling paints containing TBT active ingredients. U.S. domestic usage of TBT in antifouling paints range from 250,000 to 300,000 pounds.<sup>5</sup> In addition to antifouling paints, TBT compounds are registered for use as disinfectants, textile biocides, wood preservatives, paper and pulp mills, leather processing and as plastics stabilizers, etc. In the United States, total usage of TBT pesticides (for all uses) ranges from 730,000 to 860,000 pounds of active ingredients.<sup>6</sup>

In 1981 France banned the use of TBT paints on all vessels less than 80 feet in length because of shellfish deformations, particularly in Arcachon Bay.<sup>7</sup>

England researched and then combined their studies with France's experience and banned the use of free association paints and copolymer formulations with more than 7.5 percent TBT on January 1, 1986.<sup>8</sup> Germany and Switzerland have banned TBT paints for fresh water usage. Japan has banned the use of TBT compounds in household products such as house paints and textiles, but has not restricted its use in vessel antifouling paints.<sup>9</sup>

In the United States, Senators Cohen and Tribble introduced Senate Resolution 272 in December 1985 calling for "public hearings to determine if further action is warranted with respect to the future use of TBT compounds" and "urging EPA to accelerate its investigation into the environmental and health effects of organotin bearing paints...." The resolution has been referred to the Senate Committee on Environment and Public Works.

On June 11, 1986 Congressman Parris introduced HR 5015, calling for a temporary ban on TBT-based paints on the hulls for commercial and recreational vessels until, "EPA has completed their ongoing studies to determine the safety of such paints and their impact on the aquatic environment.

Currently, only North Carolina has limited the input of TBT into its waters. North Carolina instituted regulations on January 1, 1985 to limit discharges from industries to 2 ppt for salt water and 8 ppt for fresh water.<sup>10</sup> These regulations were initiated because it was determined that hundreds of North Carolina companies were using TBT to control odor-causing bacteria in textiles or to control slime in piping. Some of the discharges from the textile mills were high enough to kill aquatic organisms.

On January 8, 1986, EPA commenced a special review of the nine most common TBT antifoulant paint formulations. EPA's support

document indicates that EPA is concerned about the acute and chronic toxicity potential of tributyltin compounds to nontarget aquatic organisms. Water samples have been found to contain TBT levels that may have direct effects on aquatic organism populations (mollusks). The TBT compounds may bioaccumulate in aquatic habitat and may pose a hazard to the food chain. Absorption of tributyltin compounds to sediment may have long-term toxicity effects on benthic browsing organisms such as crustaceans and snails. Contamination of estuarine areas at sublethal concentrations can influence the reproduction of several aquatic groups from fish to plankton, thus impacting the marine environment. The present use of tributyltin in antifouling paints presents a potential hazard to nontarget aquatic organisms.

The Pacific Fisheries Legislative Task Force, working in coordination with the Pacific Coast Federation of Fishermen's Associations, has passed three task force resolutions offered by Assemblyman Dan Hauser, the Task Force Vice Chairman, regarding TBT. The resolutions:

1. Urged and encouraged the Environmental Protection Agency to take the lead in creating a public information education brochure about TBT that could be distributed to every boat owner in America. The pamphlet concept is based on a similar project done in the United Kingdom entitled, Don't Foul Things Up. Short of a Congressional ban on the use of TBT, a nationwide public information awareness program is thought to be the next best alternative for controlling the amount of TBT introduced into the marine environment. It is thought by some scientists that this type of education program could reduce the amount of active TBT in the marine environment by 50%.<sup>12</sup>

2. Memorializes the Food and Drug Administration, the Environmental Protection Agency and the National Marine Fisheries Service to impose an immediate ban on all salmon imported into or produced in the United States in pens treated with TBT. This is important because TBT levels for safe human consumption have not been established. TBT was found in the flesh of salmon that were pen-reared in TBT-treated pens. Moreover, the study found that cooking does not remove the TBT from the fish.<sup>13</sup>
  
3. Memorializes Congress to enact an immediate ban on the use of TBT-based bottom paints on all military, commercial, and recreational vessels until such time, and if, methods of use of TBT-based bottom paints or derivatives of organotin paints are developed that pose no threat to the marine environment.

In addition to the resolutions passed by the task force, it is anticipated that the participating states may introduce state legislation to further regulate TBT usages in their states. Currently, efforts are underway to explore legislation to monitor dry docks, set water quality standards, ban or restrict the uses of TBT, or regulate the amount of TBT used in antifouling paints.

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## TRIBUTYL TIN CONTAMINATION OF PEN-REARED SALMON?\*

Pen-reared salmon contaminated with tributyltin (TBT) are entering U.S. seafood markets according to a recent report released by the National Marine Fisheries Service's Auke Bay Laboratory. According to a report by Jeffery W. Short and Frank P. Thrower, salmon reared in sea pens treated with TBT, sold as aquaculture products and purchased in public markets were found to contain concentrations of 0.081-0.20 ug/g of TBT.

TBT has been described as the most toxic compound ever deliberately introduced by society into natural waters. TBT, an organotin, is used as a wood preservative, an additive to bottom paints, and to treat netting used in salt water pens for rearing salmon. It can be toxic in levels as low as 5 parts per trillion (see FRIDAY, 17 October, pp. 5-7).

The most common pen-reared salmon products entering the U.S. market are the so-called "pan-sized" or "baby" coho, Oncorhynchus kisutch, harvested as juveniles from pens in places such as Puget Sound, and the Norwegian Salmon, an Atlantic salmon or salmon trout, Salmo salar or Salmo trutta, raised in salt water pens in fjords in Norway. The farmed salmon has proved popular with some restaurants and markets seeking to promote "fresh" fish year-round.

The research of Short and Thrower on TBT contamination of salmon began when they sought to determine the rate of mortality of salmon transferred into TBT-treated marine pens. According to them, TBT compounds "are emerging as the leading compounds in the effective control of marine fouling of sea pens, a serious problem in the salmon farming industry."

In their paper "Tri-N-Butyltin Caused Mortality of Chinook Salmon, Oncorhynchus tshawtscha, on Transfer to a TBT-Treated Marine Net Pen," Short and Thrower reported that, "TBT compounds are widely used in the salmon aquaculture industry....Salmon at aquaculture facilities are raised to market size in marine pens for 1 to 3 years, during which they gain most of their body mass. Nets must be periodically cleaned or chemically coated to retard fouling by marine organisms; fouling will reduce sea water exchange and result in fish kills. Antifoulants are much more economical than manual cleaning and are therefore preferred by the industry. Several antifoulant formulations are used to treat nets, but TBT compounds are among the most effective ingredients. These compounds have low solubility in seawater, are exceptionally toxic to marine fouling organisms, and can be formulated for slow release."

In their study, Short and Thrower used chinook salmon raised for one year in fresh water and acclimated to sea water for four months before testing. The chinook salmon died in all doses of TBT oxide tested, "but none died in the clean water control tank during or immediately after the bioassay. Only five salmon in the lowest exposure dose survived the bioassay; of these, three died within the next 24 hours in clean seawater," reported the researchers.

They went on to say that "juvenile salmon are very sensitive to TBT poisoning in sea water....TBT concentrations in salmon that died during the bioassay were nearly constant for all doses, suggesting that TBT continues to accumulate until a threshold concentration is reached in critical tissues and causes death....low doses of TBT can impair the immune system of rats, which suggests that salmon raised in TBT-treated marine net pens may be more susceptible to disease."

In this first report on TBT, Short and Thrower concluded that "juvenile chinook salmon are very sensitive to TBT poisoning in sea water, that they rapidly accumulate TBT to high concentration in tissues, and that lethal effects are dose and time dependent."

Recognizing that aquaculturists would not likely use high dosages of TBT that may be found in the flesh of pen-reared salmon in the marketplace that was exposed to lower amounts of TBT, (i.e., those that survived the pens). They purchased both Atlantic salmon (e.g., Norwegian) and coho salmon in addition to chinook; all the fish was advertised as farm (pen-reared) raised aquaculture fish. They found no traces of TBT in the chinook but concentrations in the muscle tissue of both coho and Atlantic salmon of organotins as TBT as high as 0.81 ug/g.

The purchases of the fish were from markets in Seattle and Portland. The results were published in their report "Accumulation of Butylins in Muscle Tissue of Chinook Salmon Reared in Sea Pens Treated with Tri-N-Butyltin." The following is Short and Thrower's summary in this report of their research:

Rearing salmon in sea pens treated with antifoulant containing TBT compounds resulted in the accumulation of organotins in the muscle tissue of salmon. Organotins were detected in several fish from different countries purchased from the marketplace and advertised as products of aquaculture. Additionally, cooking was found to be ineffective in destroying or removing accumulated organotins. We believe this is the first evidence of entry of organotins into the human diet in the United States.

The report of TBT-laced pen-reared salmon is not the first indicating tainting of these aquaculture-bred fish. There have also been reports received by PCFFA that farmed salmon from Norway and Scotland may contain the artificial coloring agent, canthaxanthin, an agent added to the feeding stuffs of the pen-reared fish (see FRIDAY, 16 August 1985, pp. 10-11). Although canthaxanthin is banned by the U.S. Food & Drug Administration, there is no evidence that PCFFA has received that the FDA is checking imported pen-reared salmon for traces of this substance used to give the fish their deep-red coloring.

The use of TBT as an additive to bottom paints has already been restricted in both France and Great Britain following the die-offs of shellfish beds attributed to TBT paints on vessel bottoms. The PCFFA Board of Directors at their 9-10 October meeting called for a ban on the use of TBT (see FRIDAY, 17 October, pp. 5-7).

In Great Britain, Environment Minister William Waldergrave announced last year that nation's intent to place new controls on paints with the TBT additive including a proposed ban on the use of those paints on vessels less than 12 meters long, and "free association" paints with high levels of organotin were banned. The Government action was "prompted by complaints from the fisheries industry that such paints are responsible for declining catches," according to the 13 March 1985 issue of the International Environmental Reporter. France has imposed a complete ban on such paints.

According to that issue of IER, "research carried out by the British Ministry of Agriculture, Fisheries & Food, and the French Institute Scientifique et Technique des Pesches Maritime, the effects of organotin compounds, the active agents in anti-fouling paints, are especially acute where pleasure craft and fisheries share the same waters."

High levels of TBT have been found in most marinas along the California coast, indicating that action similar to that taken by Britain and France should be taken. Fortunately, TBT has a short half-life and, unlike toxics such as DDT, the beneficial affects of a ban could be seen within a short time on the marine environment.

\* From PCFFA Friday, October 31, 1986

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# Toxic Anti-Foulant Under Fire The Move to Ban TBT

by Peter Kenyon

A fledgling mariculture industry, commercial and recreational fishing groups, aquaculture organizations, and legislators from Juneau to Sacramento are rapidly joining a movement to ban the toxic anti-fouling agent TBT from West Coast waters.

Anti-foulants such as TBT (for trin-butyltin) are proven labor and cost saving devices for boat and net owners. The chemical keeps boat hulls and nets clean of marine foulants such as algae, barnacles, and other organisms. But as scientists investigate mysterious fish and shellfish mortalities up and down the Pacific coast, it's become clear that TBT is doing more than keeping things clean.

"It's one of the most toxic chemicals to marine life we know of," said Rep. John Sund, D-Ketchikan, sponsor of a bill to ban TBT in Alaska. "Research shows it's devastating to shellfish, and can be toxic to salmon and other fish as well. We're not sure of the impacts on humans, but I think it's time to get ahead of the game and prohibit its use until we know more about it."

A few scientists have been raising questions about TBT for several years. Some of the first research on TBT in Alaska was done by Dr. Jeff Short of the National Marine Fisheries Service Lab at Auke Bay. Short said there's no question TBT is an effective anti-foulant.

"Unfortunately the reason it's extraordinarily effective is that it's extraordinarily toxic. We found for example that juvenile chinook salmon are sensitive at about 1.5 parts per billion. And that translates into about twelve drops

in an Olympic-sized swimming pool.

The fact that TBT is so toxic in such minute quantities worries Senator Dick Eliason. "There's so many unknowns here. I'm thinking about the herring fishery in my community of Sitka. They're practically fishing right next to the boat harbor some years. We don't really know what's happening to those fish swimming around these boats that may have TBT all over their hulls."

Short's research leaves little doubt about TBT's toxicity. His paper with Frank Thrower on the subject states that "chinook salmon died in all doses of TBT tested, but none died in the control tank... only five salmon in the lowest exposure dose survived... of these, three died within the next 24 hours in clean seawater."

TBT tended to accumulate in the muscle tissue of those fish it didn't kill, leading to Short's next step in the research process: he determined

that pen-reared salmon being sold on the market contain the chemical.

"We bought fish in Seattle and Portland that were advertised as products of aquaculture," he said, "and about half of them turned up quantities of TBT... we tried pan frying, micro-waving, and boiling the fish, and we didn't eliminate the TBT."

Short's proof that TBT has entered the human diet for the first time, along with a slew of other data from the U.S. and western Europe about TBT dangers, has provided solid ammunition for the proposed ban on its use. The movement is being coordinated by the Pacific Fisheries Legislative Task Force. Staff Assistant Mary Morgan has been collecting data on the chemical.

"TBT has been called by many scientists the worst chemical ever deliberately introduced into the marine environment," she said. "The concentrations are measured in parts per trillion. And I think any time you have to measure something at that low a level, you're talking about a bad molecule that probably ought to be banned."

Morgan said the Environmental Protection Agency currently limits safe levels of TBT to 50-60 parts per trillion.

"Already several marinas in California have been measured at a thousand parts per trillion or more," she said.

While those kinds of numbers have not been documented in Alaska yet, the newly created Alaska Mariculture Association isn't waiting around to find out. Executive Director Rodger Painter scys AMA has endorsed a statewide ban on the chemical.

"We're very concerned by the information presented on the human health hazards of TBT. It would be a real disaster for farm industries in Alaska to be tainted with the possibility that their product carries that stuff," he said.

Painter said the cost savings are

insignificant, especially considering the added protections needed for workers who apply the chemical to nets. Health officials say TBT has caused rashes, dizziness and retching; and humans may become sensitized to the chemical, so that increasingly smaller exposures may prove harmful.

That situation also applies to boat owners and shipyard employees using TBT-based bottom paints. For most boats (with the possible exception of aluminum hulls) alternative copper-based paints are available. Boat owners generally like the results of TBT bottom paints: 10 percent greater speed and 40 percent greater fuel efficiency, among other things. (The U.S. Navy, for example, says it can save up to \$150 million a year in fuel costs alone; but it's currently abiding by an EPA moratorium on TBT paints.)

The environmental horror stories--which include dead salmon, dead or deformed shellfish, highly toxic harbors and estuaries, and TBT-laden fish in the marketplace--have prodded several groups to agree to voluntary bans on the chemical. The last holdout among the state's private non-profit aquaculture groups, the Southern Southeast Aquaculture Association, agreed to stop using TBT last November. General Manager Don Amend said the risks are just too great.

"We feel the environmental concerns and the public perception of what this might mean might have a real adverse effect on our fisheries resource," he said.

A report on mariculture in British Columbia known as the Gillespie Report also raises questions about the use of TBT. At least one union has called for a ban on the chemical there.

Meanwhile, state legislatures from Juneau to Sacramento introduced bills to ban TBT on March 18th. Senator Fred Zharoff (D-Kodiak), sponsored the Senate companion measure to Sund's House bill.

AMA's Rodger Painter hopes the TBT ban will move quickly up and down the coast, before concern about the chemical spreads to consumers.

"The whole public relations aspect of this thing has everybody worried," he said. "One case of TBT reaching consumers could have the effect of a botulism incident, or mercury in tuna. It's real scary."

Sund thinks there's no need to panic, but it is time to move. "I see this as an opportunity to get a real toxic chemical out of the water, and avoid any economic impact on the industry," he said. □

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## ■ THE FISHMONGER

**Salmon Farming Technique Could Prove to Be Dangerous**

BY JAY HARLOW

With aquacultured salmon from various countries showing up in our markets in increasing quantities, there is growing concern over tributyl tin, a chemical used to treat the pens where the salmon are reared.

Tributyl tin compounds (TBTs) are part of a larger group of compounds known as organotins, which combine the metal tin with various organic constituents.

As a group, the organotins are extremely toxic to certain marine organisms, particularly mollusks. In recent years, their most important commercial use has been in "antifoulant" paint for boat hulls. These paints slowly release TBTs from the surface, preventing the growth of barnacles and similar organisms. But once in the marine environment, TBTs also can kill "non-target organisms" such as oysters, mussels and clams, especially in shallow waters with heavy boat traffic.

In order to protect commercial shellfish beds, both France and Britain have banned the use of TBT paints on commercial and pleasure boats, and there is a growing call for similar legislation in this country.

Of greatest concern, however, are the TBT antifoulants used in salmon aquaculture. In a typical salmon farm, the fish are raised to maturity in ocean water, then enclosed in pens made of fine nylon mesh. If the nets become clogged by fouling organisms, water flow through the pens is impaired, and the oxygen supply can fall to dangerous or lethal levels. Fouling can be controlled by periodic manual cleaning, but that adds labor costs. A less costly alternative has been to treat the pens with TBT compounds, and this method has been standard throughout the salmon aquaculture industry.

There are two crucial questions posed by the

use of TBTs in salmon farming: 1) Are they taken up by the fish, and if so, 2) are they potentially dangerous to humans?

While the toxic effects of TBTs in mollusks are dramatic and well-documented, the evidence on other organisms is less clear. So far, there is no solid evidence that TBTs are dangerous to humans, but little research has been done.

According to the manufacturers of TBT-based paints, these compounds are not toxic to fish, crustaceans or mammals except in very large amounts; unlike the mollusks, these animals can metabolize and excrete tri-organotins

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### **To protect shellfish beds, both France and Britain have banned the use of TBT paints**

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without any accumulation. However, other research by a National Marine Fisheries Service laboratory in Alaska has shown that TBTs can accumulate in the flesh of salmon reared in TBT-treated pens, and that accumulation increases with concentration of the chemical in the water and with time. Sufficient accumulation can kill the fish, especially young fish.

In the meantime, the fishing industry appears to be taking an extremely cautious approach. Both the Pacific Fisheries Legislative Task Force, a group of legislators from several western states, and the Pacific Coast Federation of Fishermen's Associations passed a resolution late last year asking Congress to ban both the use

of TBT paints and the sale of fish raised in TBT-treated pens.

According to Mary Morgan of the state Senate Office of Research, the resolution comes in the absence of a known safe level of TBT consumption in the human diet. "Until we find out (what is a safe level), maybe we should look into alternative methods," said Morgan.

For salmon farmers, the main alternative method is manual cleaning.

Meanwhile, there will be salmon coming to market over the next few years that have spent part of their lives in TBT-treated pens. Whether these fish will have any measurable residues of TBTs in their flesh is an open question. TBT antifoulants are still in use in Norway, although in greatly reduced amounts and circumstances, according to an importer of Norwegian salmon. An importer of New Zealand salmon said TBTs were "absolutely not" in use at that country's salmon farms.

It is a complex issue, and there is no simple answer. So far, TBTs seem to pose a danger mainly to shellfish, although that danger alone is sufficient to restrict their use. They are being phased out in aquaculture mainly for their effects on the environment at large, rather than on the farmed fish. Based on the very limited evidence to date, there is no clear and present danger in eating aquacultured salmon. Still, there could be long-term effects of even slight exposure.

If there is sufficient public concern, the state or federal government could require inspection and regulation of TBTs in salmon aquaculture. At this point, however, individual consumers will have to decide the safety issue for themselves.

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Jay Harlow is co-author of the "California Seafood Cookbook" (Aris Books).

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## COOPERATIVE EXTENSION SERVICE

UNIVERSITY OF ALASKA  
FAIRBANKS ALASKA 99701

Marine Advisory Programs  
2651 Providence Avenue  
Anchorage, Alaska 99504  
(907) 263-1890

June 29, 1981

### MEMORANDUM

TO: Brian Paust, Agent.  
FR: John Ball, Safety Specialist *John*  
RE: Tributyl-Tin-Fluoride (TBF)

This is a response to your question about the toxicity and special handling of this anti-fouling compound. Since it is not uncommon and is a nasty item, I am taking the liberty of circulating this information to other friends in MAP/CES/Sea Grant.

For more information on this or other compounds there are several places to turn to in the future:

- ① Carl Harmon, Environmental Engineer with the State Department of Environmental Conservation in Anchorage (the person who helped me with this)--phone: 274-2533.
- ② Environmental Protection Agency (EPA)--phone: 271-5083.
- ③ Poison Center at Providence Hospital in Anchorage--phone: 274-6535.
- ④ Chemical Transportation Emergency Center (CHEMTREC)  
Phones: (800) 424-9300 (supposedly toll free)  
(202) 483-7616 (call collect 24 hours a day).

I did not have the occasion to call the Coast Guard on this, but on materials that are recognized hazardous materials, the Coast Guard does have some references.

- ① Well, basically this is a substance not unrelated to 2,4-D and agent orange. ② It operates as an anti-fouling agent by breaking down the cell walls of living tissue. It will do this in people too. ③ It can be absorbed through the skin, inhaled, ingested, etc. ④ If it gets into the eyes and remains there for any appreciable period of time, it can affect vision and cause blindness. ⑤ Using this material in a confined space can lead to unconsciousness and presumably death. ⑥ For physical as well as health reasons this material should not be applied in a spray. It should be painted onto the surface to be protected (and I would go try to find my worst enemy to do the work).

Brian Paust  
Page 2  
June 29, 1981

① The material collects in fatty tissue and therefore has a considerable impact upon kidneys and livers.

② If one is going to use it, it is recommended that the application be done under controlled conditions, in open air (so others can share in the bounty?), with a respirator, protective clothing, gloves, etc.

I did not get the recommended solvent, but at all cost one ought to avoid getting this material in contact with the skin and it might be a good idea to be prepared with the recommended solvents and eye washes.

Basically, the stuff sounds almost too dangerous to use. The only other thing to add is that several brands have been removed from the market, and one ought to check with the CHEMTREC number above to see if specific brands are even allowed in the market anymore. Apparently, many of the earlier editions have been recalled. Keep the stuff in Petersburg, eh?

Hope this helps.

ee

JOHN SUND, REPRESENTATIVE  
2504 2nd Avenue  
Ketchikan, Alaska 99901  
(907) 225-5552

HOUSE BILL 138  
AN ACT BANNING THE USE OF TBT

While in Juneau  
P. O. Box V  
Juneau, Alaska 99811  
(907) 465-4919

WHAT IS TBT AND WHAT IS IT USED FOR?

TBT, or Tributyltin, is a tin based pesticide added to paint used on vessel bottoms and hulls to repel barnacles and algae. It is also used on fish net pens to retard marine growth. TBT has been called one of the most toxic substances ever deliberately introduced into natural waters.

ARE OTHER MARINE PAINTS AVAILABLE?

Yes. Copper-based antifouling paints.

IS ALASKA ALONE IN ITS EFFORTS TO BAN TBT?

No. France, England, Germany (freshwater) and Switzerland (freshwater) have already banned or restricted the use of TBT based bottom paints. Japan has restricted its use in other products. In the United States, Virginia has recently passed a law restricting the sale and use of TBT based paints and Maryland is considering identical legislation. North Carolina has instituted maximum TBT concentration limits in their water quality regulations.

On the West Coast, California, Oregon and Alaska, member states of the Pacific Fisheries Legislative Task Force, have introduced bills to ban TBT after reviewing the issue at their fall meeting. Washington and Hawaii are also taking action to limit the use of TBT-based marine paints.

TBT MAY BE TOXIC, BUT THERE'S A LOT OF WATER OUT THERE. IN ALASKA, WE PROBABLY WILL NEVER NOTICE ANY IMPACT FROM ITS USE.

Not true. Research right here in Southeast Alaska has increased national and international concern about the potential economic and biological impact of TBT on fisheries. Scientists for the Auke Bay Lab (NMFS) determined that high death rates of juvenile chinook salmon at Little Port Walter Fish Hatchery were the result of TBT treated net pens. Further research showed that some chinook salmon died in all doses of TBT oxide tested.

Finally, a subsequent study by Auke Bay Lab on adult salmon in Seattle and Portland markets found that TBT had accumulated and persisted in the flesh of fish reared in TBT treated pens and could not be destroyed by cooking.

I JUST PUT TBT PAINT ON MY HULL. DOES THIS BILL MEAN I HAVE TO HAUL MY BOAT OUT OF THE WATER AND SCRAPE IT ALL OFF?

No. Absolutely not. House Bill 138 specifically states that TBT based marine paint need not be removed. However, after July 1st, 1987 you will not be able to apply new TBT paint on your boat. (This date may be changed back to December, 1987).

I'VE BEEN USING TBT MARINE PAINT FOR YEARS. WHAT HEALTH HAZARDS HAVE I BEEN EXPOSED TO BY USING IT.

According to OSHA, the major health concern is the potential for liver, kidney, heart and central nervous system damage at low concentrations. Skin problems, eye irritation and respiratory problems have been associated with inhalation of or contact with TBT. Increased sensitivity may occur with repeated use. Ingestion of Tributyltin Chloride has been found to cause progressive weakness, tremors and brain damage.

HAVE THERE EVER BEEN ANY DOCUMENTED ENVIRONMENTAL IMPACTS FROM THE USE OF TBT PAINT IN ALASKA?

No. However, consider the location of Deer Mountain Hatchery and the release of juvenile hatchery salmon into the Thomas Basin Boat Harbor for rearing purposes. Given the fact that juvenile salmon are extremely sensitive to TBT poisoning and are more susceptible to death and disease when exposed to the chemical coupled with evidence that shows that salmon rapidly accumulate higher concentrations in their tissues, it is obvious that potential problems do exist.

I OWN AN ALUMINUM BOAT. I CAN'T USE COPPER OXIDE PAINT BECAUSE OF ELECTROLYSIS. WHAT AM I GOING TO DO?

Owners of aluminum boats do have a special consideration. The sponsors of the legislation recognize this and will try to address this problem in the committee process. A provision to allow aluminum boat owners to use slow-leaching TBT paint may be considered.

I UNDERSTAND THAT THERE ARE TWO KINDS OF TBT PAINT.. FREE ASSOCIATION PAINTS AND COPOLYMER PAINTS. WHAT'S THE DIFFERENCE?

Copolymer paints generally release the TBT toxicant slower than the free association paints which have a quicker release. Although slow leaching paints are considered the less evil of the two, both are considered harmful.

IF TBT IS BANNED, WON'T THE PAINT MANUFACTURERS JUST BE ABLE TO SUBSTITUTE ANOTHER PESTICIDE IN THEIR PRODUCTS?

Amendments are being considered to tighten up the definition to prevent this from occurring.

WHAT'S THE BIG DEAL ABOUT BANNING TBT IN ALASKA?

The potential threat of a TBT scare cannot be over stated. TBT has been called the new DDT. We have the advantage of preventing an environmental problem today and avoiding a costly action later.

MY PAINT DEALER HAS A STOREROOM FULL OF TBT PAINT. WHAT IS HE OR SHE SUPPOSED TO DO WITH IT? DRINK IT?

Given the serious health effects, absolutely not!

In order to allow paint dealers to either move the paint off their shelves and/or return it to the distributors a phase-in approach is being considered by the sponsors. The date banning the sale of TBT-based paints may be changed to December, 1987 to allow stores to take care of their inventories and plan for the future.

Rep Sund  
NEUETTE - 5 pg.

11

SENATE OF MARYLAND

71r1540

No. 499

M1  
CF 71r1545

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By: Senators Winegrad, Fowler, and Garrott  
Introduced and read first time: February 6, 1987  
Assigned to: Economic and Environmental Affairs  
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A BILL ENTITLED

1 AN ACT concerning

2 Antifouling Paints - Regulation

3 FOR the purpose of prohibiting certain persons from distributing,  
4 possessing, selling, offering for sale, using, or offering  
5 for use any antifouling paints containing tributyltin;  
6 providing certain exceptions; defining certain items;  
7 allowing certain persons to distribute, sell, possess, and  
8 apply certain antifouling paints under certain conditions;  
9 providing for the scope and application of this Act;  
10 requiring the State Secretary of Agriculture to adopt  
11 certain regulations before a certain date; providing for  
12 seizures and penalties under this Act; requiring the  
13 Department of Health and Mental Hygiene to develop certain  
14 standards and regulate certain items in this Act; requiring  
15 the Department of Natural Resources to develop a certain  
16 program by a certain date in coordination and consultation  
17 with certain groups; requiring certain publications under  
18 this Act; providing for certain effective dates for certain  
19 provisions of this Act; and generally relating to the  
20 regulation of the distribution, possession, sale, offering  
21 for sale, use, and offering for use of antifouling paints  
22 containing tributyltin.

23 BY adding to

24 Article - Agriculture  
25 Section 14-101 through 14-106, inclusive, to be under the  
26 new title "Title 14. Antifouling Paints"  
27 Annotated Code of Maryland  
28 (1985 Replacement Volume and 1986 Supplement)

29 BY adding to

30 Article - Health - Environmental  
31 Section 11-501 and 11-502 to be under the new subtitle  
32 "Subtitle 5. Antifouling Paints"  
33 Annotated Code of Maryland  
34 (1982 Replacement Volume and 1986 Supplement)

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EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.  
[Brackets] indicate matter deleted from existing law.

1 BY adding to

2 Article - Natural Resources  
3 Section 8-703.1  
4 Annotated Code of Maryland  
5 (1983 Replacement Volume and 1986 Supplement)

6 SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF  
7 MARYLAND, That the Laws of Maryland read as follows:

8 Article - Agriculture  
9 TITLE 14. ANTIFOULING PAINTS

10 14-101.

11 (A) IN THIS TITLE THE FOLLOWING WORDS HAVE THE MEANINGS  
12 INDICATED.

13 (B) "ACCEPTABLE RELEASE RATE" MEANS A MEASURED RELEASE RATE  
14 EQUAL TO OR LESS THAN 1.0 MICROGRAM PER SQUARE CENTIMETER PER DAY  
15 AT STEADY STATE CONDITIONS DETERMINED IN ACCORDANCE WITH THE U.S.  
16 ENVIRONMENTAL PROTECTION AGENCY TESTING PROCEDURE, AS OUTLINED IN  
17 THE AGENCY'S CALL-IN NOTICE OF JULY 29, 1986 ON TRIBUTYL TIN IN  
18 ANTIFOULING PAINTS UNDER THE FEDERAL INSECTICIDE, FUNGICIDE, AND  
19 RODENTICIDE ACT.

20 (C) "ANTIFOULING PAINT" MEANS A COMPOUND, COATING, PAINT,  
21 OR TREATMENT APPLIED OR USED FOR THE PURPOSE OF CONTROLLING  
22 FRESHWATER OR MARINE FOULING ORGANISMS ON VESSELS.

23 (D) "COMMERCIAL BOATYARD" MEANS:

24 (1) A FACILITY THAT ENGAGES FOR HIRE IN THE  
25 CONSTRUCTION, STORAGE, MAINTENANCE, REPAIR, OR REFURBISHING OF  
26 VESSELS; OR

27 (2) AN INDEPENDENT MARINE MAINTENANCE CONTRACTOR WHO  
28 ENGAGES IN ANY OF THE ACTIVITIES UNDER PARAGRAPH (1) OF THIS  
29 SUBSECTION.

30 (E) "TRIBUTYL TIN COMPOUND" MEANS ANY ORGANOTIN COMPOUND  
31 THAT HAS 3 NORMAL BUTYL GROUPS ATTACHED TO A TIN ATOM AND WITH OR  
32 WITHOUT AN ANION, SUCH AS CHLORIDE, FLUORIDE, OR OXIDE.

33 (F) (1) "VESSEL" MEANS A WATERCRAFT OR OTHER CONTRIVANCE  
34 USED AS A MEANS OF TRANSPORTATION ON WATER, WHETHER  
35 SELF-PROPELLED OR OTHERWISE.

36 (2) "VESSEL" INCLUDES BARGES AND TUGS.

37 14-102.

38 (A) EXCEPT AS PROVIDED IN SUBSECTION (B) OF THIS SECTION, A  
39 PERSON MAY NOT DISTRIBUTE, POSSESS, SELL, OFFER FOR SALE, USE, OR

1 OFFER FOR USE ANY ANTIFOULING PAINT CONTAINING A TRIBUTYL TIN  
2 COMPOUND.

3 (B) (1) A PERSON MAY CONTRIBUTE OR SELL AN ANTIFOULING  
4 PAINT CONTAINING A TRIBUTYL TIN COMPOUND WITH AN ACCEPTABLE  
5 RELEASE RATE TO THE OWNER OR AGENT OF A COMMERCIAL BOATYARD.

6 (2) THE OWNER OR AGENT OF A COMMERCIAL BOATYARD MAY  
7 POSSESS AND APPLY OR PURCHASE FOR APPLICATION AN ANTIFOULING  
8 PAINT CONTAINING TRIBUTYL TIN WITH AN ACCEPTABLE RELEASE RATE, IF  
9 THE ANTIFOULING PAINT:

10 (I) IS APPLIED ONLY WITHIN A COMMERCIAL  
11 BOATYARD; AND

12 (II) IS APPLIED ONLY TO VESSELS EXCEEDING 25  
13 METERS IN LENGTH OR THAT HAVE ALUMINUM HULLS.

14 (C) THIS SECTION DOES NOT PROHIBIT THE SALE, USE,  
15 DISTRIBUTION, OR POSSESSION OF AN ANTIFOULING PAINT CONTAINING A  
16 TRIBUTYL TIN COMPOUND, IF THE ANTIFOULING PAINT:

17 (1) IS IN A SPRAY CAN OF 16 OUNCES OR LESS;

18 (2) IS COMMONLY REFERRED TO AS AN OUTBOARD OR LOWER  
19 DRIVE UNIT PAINT; AND

20 (3) HAS AN ACCEPTABLE RELEASE RATE.

21 14-103.

22 THIS TITLE DOES NOT INFRINGE ON INTERSTATE COMMERCE, AND  
23 OUT-OF-STATE VESSELS THAT HAVE AN ANTIFOULING PAINT CONTAINING A  
24 TRIBUTYL TIN COMPOUND IN EXCESS OF AN ACCEPTABLE RELEASE RATE MAY  
25 TRAVEL AND DOCK IN STATE WATERS.

26 14-104.

27 THE SECRETARY SHALL ADOPT REGULATIONS BEFORE SEPTEMBER 15,  
28 1987 TO CARRY OUT THE PROVISIONS OF THIS TITLE.

29 14-105.

30 (A) THE DEPARTMENT MAY SEIZE ANY ANTIFOULING PAINT THAT IS  
31 HELD FOR SALE OR DISTRIBUTION, USED, OR POSSESSED IN VIOLATION OF  
32 THIS TITLE.

33 (B) ANY ANTIFOULING PAINT SEIZED BY THE DEPARTMENT UNDER  
34 THIS SECTION IS DEEMED FORFEITED TO THE STATE.

35 14-106.

36 A PERSON WHO VIOLATES ANY PROVISION OF THIS TITLE IS GUILTY  
37 OF A MISDEMEANOR AND ON CONVICTION IS SUBJECT TO A FINE NOT  
38 EXCEEDING \$2,500.

1 (C) THE DEPARTMENT SHALL DEVELOP THE EDUCATIONAL PROGRAM  
2 UNDER SUBSECTION (A) OF THIS SECTION AND THE MATERIALS USED IN  
3 THE PROGRAM IN COORDINATION WITH THE STATE DEPARTMENT OF  
4 AGRICULTURE AND IN CONSULTATION WITH THE MARINE TRADES AND WITH  
5 REPRESENTATIVES OF THE BOATING PUBLIC.

6 SECTION 3. AND BE IT FURTHER ENACTED, That Section 1 of  
7 this Act shall take effect December 1, 1987.

8 SECTION 4. AND BE IT FURTHER ENACTED, That Section 2 of  
9 this Act shall take effect June 1, 1987.

ANTI-FOULING PAINTS FOR VESSEL BOTTOMS AND HULLS  
CONTAINING TBT METHACRYLATE

Carboline Company  
40600 Albrae Street  
Fremont, CA 94538

Carboline Super Tropical anti-fouling red 1240-31  
Carboline Super Tropical anti-fouling black 1240-30

Hempel's Marine Paints, Inc.  
Foot of Currie Ave  
Wallington, NJ 07057

Hempel's antifouling nautic 7690-5030 red  
Hempel's antifouling nautic 7690-5111 red  
Hempel's antifouling nautic 7680-1221 gray  
Hempel's antifouling nautic 7687-4222 green  
Hempel's antifouling nautic 7685-1000 white  
Hempel's antifouling nautic 7680-1999 black  
Hempel's antifouling nautic 7685-1999 black  
Hempel's antifouling nautic 7695-5030 red  
Hempel's antifouling nautic 7695-5111 red  
Hempel's antifouling nautic 7695-1999 black  
Hempel's antifouling sleek 7650 Brown 6464  
Hempel's antifouling nautic 7695-6464 Brown  
Hempel's antifouling nautic 7697-5030 Red  
Hempel's antifouling nautic Hi 7695-5030 Red

Pettit Paint Company, Inc.  
36 Pine Street  
Rockaway, NJ 07866

Pettit marine paint offshore antifouling Red 1680  
Pettit marine paint offshore antifouling Black 1880  
Pettit marine paint offshore antifouling Brown 1580  
Pettit marine paint offshore antifouling Blue 1280  
Pettit marine paint offshore antifouling Green 1380

ANTI-FOULING PAINTS FOR VESSEL BOTTOMS AND HULLS  
CONTAINING TBT OXIDE

Carboline Company  
40600 Albrae Street  
Fremont, CA 94538

Carboline Super Tropical anti-fouling red 1240-18  
Carboline Super Tropical anti-fouling black 1240-1

Devoe Marine Coatings Co.  
4000 Dupont Circle  
Louisville, KY 40207

Devoe Marine Super Tropical anti-fouling ship bottom paint MD-2771  
Triple "C" Cape Cod Copper Compound MD-8024  
Devoe Marine Tropical anti-fouling ship bottom paint MD-1754  
Devoe Marine Devran 216 permanent red anti-fouling paint MD-3873  
Devoe Marine Forumula 218 Devran permanent red anit-fouling paint  
MD-3888  
Devoe Marine ABC anti-fouling coating formula 8 MD-4755  
Devoe Marine ABC Anti-fouling coating formula 2 red MD 4754  
Devoe Marine ABC anti-fouling coating formula 8 black MD-5027  
Devoe Marine Devchlor lt. red anti-fouling paint MD-5188  
Devoe Marine Devran 222 Allseas permanent red anit-fouling paint  
MD-4312  
Devoe Marine Devchlor anti-fouling paint red MD-4366  
Devoe Marine ABC Anti-fouling coating formula 2 red MD-4754  
Devoe Marine Devran 222 Allseas light blue Anti-fouling paint  
MD-5023  
Devoe Marine ABC anti-fouling coating formula 2 black MD-4883  
Devoe Marine ABC anti-fouling coating formula 2 light blue  
MD-5100

Dupont De Nemours, E.I. & Co. Inc.  
Agricultural Products Department  
Attn: Billie Lynn Rach  
Barley Mill Plaza  
Wilmington, DE 19898

Du Pont Chlorinated Rubber anti-fouling red 360-Y-782  
Du Pont Chlorinated Rubber anti-fouling red 360-78-2  
Du Pont Extended Life anti-fouling red 360-Y-785  
Du Pont Extended Life anti-fouling red 360-785

Glidden Coatings and Resins  
Div. of SCM Corporation  
Attn: James Wuebkenberg  
16651 Sprague Road  
Strongsville, OH 44136

178-R-401 red vinyl-cote no-cop anti-fouling coating  
Vinyl-Cote no-cop anti-fouling coating 7082 red (178-R-401)  
178-B-404 Black Vinyl Cote no-cop anti-fouling coating  
Vinyl-cote no-cop anti-fouling coating 7081 black (178-B-404)  
178-R-401B Red vinyl-cote no-cop anti-fouling coating  
Vinyl-cote no-cop anti-fouling coating 7083 (DGL 3 191)  
178-W-401 White vinyl-cote no-cop anti-fouling coating  
Vinyl-cote no-cop anti-fouling coating 7080 white (178-W-401)

Hempel's Marine Paints, Inc.  
Foot of Currie Ave  
Wallington, NJ 07057

Hempel's antifouling nautic 7690-5030 red  
Hempel's antifouling nautic 7690-5111 red  
Hempel's antifouling nautic 7680-1221 gray  
Hempel's antifouling nautic 7687-4222 green  
Hempel's antifouling nautic 7685-1000 white  
Hempel's antifouling nautic 7680-1999 black  
Hempel's antifouling nautic 7685-1999 black  
Hempel's antifouling nautic 7695-5030 red  
Hempel's antifouling nautic 7695-5111 red  
Hempel's antifouling nautic 7695-1999 black  
Hempel's antifouling sleek 765U Brown 6464  
Hempel's antifouling nautic 7695-6464 brown  
Hempel's antifouling nautic 7697-5030 red  
Hempel's antifouling nautic HI 7695-5030 red

International Paint Co. (California) Inc.  
220 S Linden Avenue  
South San Francisco, CA 94080

Copper-lux antifouling paint 80 red  
Latenac high builo antifouling red extra 3022/3021  
Copper-lux antifouling paint 82 blue  
International tropex antifouling paint 1600  
Interlux antifouling 62T bottom paint red  
Interlux antifouling 62T bottom paint blue  
Intermooth self polishing copolymer antifouling blue BFA042  
Intermooth SPC self polishing copolymer antifouling green BFA043  
Intermooth SPC self polishing copolymer antifouling pink BFA206  
Intermooth SPC self polishing copolymer antifouling plum BFA 204

Interspeed special copolymer antifouling brown BHA 018  
Interspeed special copolymer antifouling red BHA017

Intersmooth spc self polishing copolymer antifouling pink BFA096  
Intersmooth spc self polishing copolymer antifouling plum BFA094  
Micron 22 organo-metallic polymer anti-fouling paint 450 blue  
Micron 22 organo-metallic polymer anti-fouling paint 451 green  
Micron 22 organo-metallic polymer anti-fouling paint 452 red  
Micron 22 organo-metallic polymer anti-fouling paint 453 black  
Micron 22 organo-metallic polymer anti-fouling paint 454 white  
Micron 33 an organo-metallic polymer anti-fouling paint for  
brush or roller application 460 blue  
Micron 33 an organo-metallic polymer anti-fouling paint for  
brush or roller application 461 green  
Micron 33 an organo-metallic polymer anti-fouling paint for  
brush or roller application 462 red  
Micron 33 an organo-metallic polymer anti-fouling paint for  
brush or roller application 463 black  
Micron 33 an organo-metallic polymer anti-fouling paint for  
brush or roller application 464 white

Pettit Paint Company, Inc.  
36 Pine Street  
Rockaway, NJ 07866

Pettit marine paint anti-fouling 1970 starline bronze  
Pettit marine paint unepoxy anti-fouling 1626 red inland formula  
Pettit marine paint unepoxy anti-fouling 1326 green inland formula  
Pettit marine paint unepoxy anti-fouling 1226 blue inland formula  
Pettit marine paint unepoxy anti-fouling 1920 bronze tropic formula  
Pettit marine paint unepoxy anti-fouling 1926 bronze inland formula  
Pettit marine paint unepoxy anti-fouling 1924 bronze pacific formula  
Pettit marine paint unepoxy anti-fouling 1324 green pacific formula  
Pettit marine paint unepoxy anti-fouling 1320 green tropic formula  
Pettit marine paint unepoxy anti-fouling 1224 blue pacific formula  
Pettit marine paint unepoxy anti-fouling 1624 red pacific formula  
Pettit marine paint unepoxy anti-fouling 1220 blue tropic formula  
Pettit marine paint unepoxy anti-fouling 1620 red tropic formula  
Pettit marine paint unepoxy anti-fouling 1126 white inland formula  
Pettit marine paint anti-fouling 1130 alumacide white  
Pettit marine paint anti-fouling 1805 alumacide black  
Pettit marine paint anti-fouling 1205 alumacide blue  
Pettit marine paint anti-fouling 1649 alumacide red  
Pettit marine paint unepoxy 1124 anti-fouling white pacific

Pro-Line Paint Manufacturing Company  
2646 Main Street  
San Diego, CA 92113

1077 vinyl anti-fouling paint  
1025-03-E red seven seas copperbottom anti-fouling paint

U.S. Paint Division/Grow Group, Inc.  
831 South 21st Street  
St. Louis, MO 63103

Awlgrip awlstar anti-fouling blue label 73134 red  
Awlgrip awlstar anti-fouling blue label 73132 black  
Awlgrip awlstar anti-fouling blue label 73133 lt. blue

Woolsey Marine Industries, Inc.  
183 Lorraine Street  
Brooklyn, NY 11231

Woolsey neptune anti-fouling 710 royal red  
Woolsey self-spraying anti-fouling for outboard lower units  
321 white  
Woolsey maxitcx fiber-glass anti-fouling 775 blue  
Woolsey maxitox fiber-glass anti-fouling 774 green  
Woolsey maxitox fiber-glass anti-fouling 773 red  
Woolsey blue streak vinelast 200 sr blue

**ANTI-FOULING PAINTS FOR VESSEL BOTTOMS AND HULLS  
CONTAINING TBT FLUORIDE**

**Carboline Company  
40600 Albrae Street  
Fremont, CA 94538**

Carboline Super Tropical anti-fouling red 1240-18  
Carboline Super Tropical anti-fouling black 1240-1B  
Carboline Super Tropical anti-fouling 1240-31

**DeSoto, Inc  
1700 S. Mt. Prospect Road  
Des Plaines, IL 60017**

Sears Best anti-fouling bottom paint - gold bronze  
Sears Best anti-fouling bottom paint - red  
Sears Best anti-fouling bottom paint - copper bronze  
Sears Best anti-fouling bottom paint - white  
Sears Best anti-fouling bottom paint - green  
Sears Best anti-fouling bottom paint - blue

**DeVoe Marine Coatings Co.  
4000 Dupont Circle  
Louisville, KY 40207**

Navicote anti-fouling vinyl anti-fouling white MD-3095  
Navicote anti-fouling vinyl anti-fouling gray MD-3883  
Navicote anti-fouling vinyl anti-fouling black MD-3761

**Gibson Paint Co.  
1199 East 12th Street  
Oakland, CA 94606**

Gibson Paints Copper Bottom Paint

**Hempel's Marine Paints, Inc.  
Foot of Currie Avenue  
Wallington, NJ 07057**

Hempel's antifouling oceanic 0733  
Hempel's antifouling oceanic 0733-5140 red  
Hempel's antifouling oceanic 0733-3084 blue  
Hempel's antifouling nautic 7680-1999 black  
Hempel's antifouling nautic 7685-1999 black  
Hempel's antifouling nautic 7695-6464 brown

International Paint Co. (California) Inc.  
220 S. Linden Avenue  
South San Francisco, CA 94030

International red hand wide spectrum antifouling red  
Mark II 3210  
Interantioanl wide spectrum antifouling gray Mark I 3201  
International red hand wide spectrum antifouling  
Tri-Lux Vinyl-Base paint antifouling paint 64 wide spectrum  
red (TBIF) Mark I  
Tri-Lux Vinyl-Base paint antifouling paint 65 wide spectrum  
dark green (TBIF) Mark I  
Tri-Lux Vinyl-Base paint antifouling paint 66 wide spectrum  
dark blue (TBTF) Mark I  
Tri-Lux Vinyl-Base paint antifouling paint 67 wide spectrum  
black (TBTF) Mark I  
Tri-Lux Vinyl Base paint antifouling paint 68 wiide spectrum  
white (TBTF) Mark I  
Interlux outboard/outdrive antifouling paint 263 white  
Interlux outboard/outdrive antifouling paint 267 black  
Tri-lux vinyl base paint antifouling paint 63 wide spectrum  
light green mark I (TBTF)  
Tri-lux vinyl base paint antifouling paint GI wide spectrum  
light blue Mark I (TBTF)

Koppers Company, Inc  
1201 Kippers Building  
Pittsburgh, PA 15219

Brolite Z-spar colortox bottom paint antifouling B-43 green  
Brolite 2-spar colortox hard vinyl type antifouling paint  
B-43 green  
Brolite Z-spar colortox bottom paint antifouling B-42 blue  
Brolite 2-spar colortox hard vinyl type antifouling paint B-42 blue  
Brolite Z-spar colortox bottom paint B-41 red  
Brolite 2-spar colortox hard vinyl type antifouling paint b-41 red  
Brolite z-spar colortox bottom paint antifouling B-40 white  
Brolite 2-spar colortox hard vinyl type antifouling paint B-40 white  
Brolite z-spar colortox bottom paint antifouling B-44 black  
Brolite 2-spar colortox hard vinyl type antifouling paint B-44 black  
Brolite Z-spar B-70 supertox red antifouling paint  
Brolite Z-spar B-71 supertox blue antifouling paint  
Brolite Z-spar supertox hard type antifouling paint B-71 blue  
Brolite Z-spar B-90 antifouling paint semi-hard type  
Brolite Z-spar the protector hard type antifouling paint B-90 red  
Brolite Z-spar B-60 racing bronze antifouling paint  
Brolite Z-spar B-60 racing bronze hard racing type antifouling paint  
Brolite Z-spar colortox bottom paint antifouling B-45 international orang  
Brolite 2-soar colortox hard vinyl type antifouling  
paint B-45 international orange  
Brolite Z-spar supertox hard type antifouling paint B-73 brown  
Brolite Z-spar the protector B-901 blue antifouling paint semi-hard type

Brolite Z-spar the protector hard type antifouling paint B-91 blue  
Brolite Z-spar supertox hard type antifouling paint B-74 black

Porter Coatings Division of Porter Paint Co  
400 South 13th Street  
Louisville, KY 40201

Chlorinated rubber antifouling paint 1195 red  
Chlorinated rubber antifouling paint 11958K black

Pro-Line Paint Manufacturing Co  
2446 Main Street  
San Diego, CA 92113

1077 Vinyl Antifouling paint  
1088 Hi-speed antifouling paint

Sears Roebuck and Co.  
Attn. L.D. Hurse  
Sears Tower Dept. 766  
Chicago, IL 60634

Sears Marine anti-fouling bottom paint gold bronze  
Sears Marine antifouling bottom paint red  
Sears Marine antifouling bottom paint copper bronze  
Sears Marine antifouling bottom paint white  
Sears Marine antifouling bottom paint green  
Sears Marine antifouling bottom paint blue

The Valspar Corporation  
Attn. B.C. Heath,  
Technical Manager  
1101 Third Street South  
Minneapolis, MN 55415

Valspar Vinyl antifouling bottom paint 3548 bright red  
Valspar vinyl antifouling bottom paint 3537 coho blue  
Valspar vinyl antifouling bottom paint 3505 white

Woolsey Marine Industries Inc.  
183 Lorraine Street  
Brooklyn, N.Y. 11231

Woolsey Lumalast antifouling finish 678 white  
Woolsey super vinelast 723 permanent red  
Woolsey lumilast antifouling finish 679 black  
Woolsey super vinelast 724 permanent blue

ALL TBT RESINATE

Woolsey Marine Industries Inc.  
183 Lorraine Street  
Brooklyn, NY 11231

Woolsey antifouling hard racing finish T 758 blue  
Woolsey antifouling hard racing finish T 754 white  
Woolsey antifouling hard racing finish T 755 red  
Woolsey antifouling hard racing finish T 759 green  
Woolsey antifoulin hard racing finish T 756 black

STATE OF ALASKA  
THE LEGISLATURE

POUCH Y STATE CAPITOL  
JUNEAU, ALASKA 99811  
907 465-3800

LEGISLATIVE AFFAIRS AGENCY

MEMORANDUM

April 8, 1987

SUBJECT: Sectional analysis of HCSSB 131 (Resources)  
TO: Senator Fred Zharoff  
FROM: Edward H. Hein *EHA*  
Legislative Counsel

Section 1 requires commercial fishing vessel license applications to include a statement that the applicant's vessel has not been painted with TBT, unless allowed to be under AS 46.03.715. The statement is made under penalty of perjury, as is the entire vessel license application.

Sec. 2 authorizes, but does not require, the Department of Environmental Conservation to inspect the premises of paint dealers and suppliers to enforce the ban on TBT paints.

Sec. 3 is the key provision of the bill. Subsection (a) bans the sale and use of TBT-based marine antifouling paints and coatings in the state. It also bans the sale, rental, leasing, importation, or use in state water of boats, fishing gear, or other items intended to be partially or completely submerged in water if they have TBT-based marine antifouling paint or coating on them.

Subsection (b) provides that TBT paint doesn't have to be removed if it was applied before December 1, 1987, but that it cannot be reapplied after that date. Hatchery nets and other fishing nets that are treated with TBT before December 1, 1987, may be used in state water for five more years.

Subsection (c) creates an exception for slow-leaching TBT paint. Such paint may be imported and sold in the state, but it may be used only on aluminum hulls of boats. Aluminum boat hulls that have been painted with TBT outside the state may be imported and used in the state.

Subsection (d) exempts United States government vessels, foreign vessels in state water for less than 90 days in a

Senator Zharoff  
Page 2  
April 8, 1987

12-month period, and vessels of 4,000 gross tons or more from the TBT ban.

Subsection (e) defines "slow-leaching" TBT paint according to the release rate recommended by national TBT experts. Currently, only two or three of the 350+ TBT paints on the market meet this definition. "TBT-based marine antifouling paint or coating" is defined broadly in an effort to keep paint manufacturers from getting around the ban by slightly altering the chemical composition of the paint. Note that only paints intended for use on vessels and other items placed in state water are covered; this does not include house paints or other products containing TBT. "Vessels" are defined to include float planes and barges.

Sec. 4 places an immediate ban on the importation of TBT paints banned under AS 46.03.715. However, any TBT paint that has already been ordered but has not yet arrived by the effective date of this section may be imported until December 1, 1987.

Sec. 5 gives a December 1, 1987 effective date for the first three sections of the bill.

Sec. 6 gives an immediate effective date to the immediate ban on importation in Sec. 4.

EHH:mkr  
m10/118

Original sponsors: Zharoff, Eliason,  
Josephson, et al.

1 IN THE SENATE BY THE RESOURCES COMMITTEE  
2 HOUSE CS FOR SENATE BILL NO. 131 (Resources)  
3 IN THE LEGISLATURE OF THE STATE OF ALASKA  
4 FIFTEENTH LEGISLATURE - FIRST SESSION

5 A BILL  
6 For an Act entitled: "An Act regulating the sale and use of TBT-based  
7 marine antifouling paints and coatings; and providing  
8 for an effective date."

9 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

10 \* Section 1. AS 16.05.450(b) is amended to read:

11 (b) The Commercial Fisheries Entry Commission shall issue a  
12 vessel license under AS 16.05.490 to each qualified vessel for which a  
13 written application has been filed, at a place in the state designated  
14 by the commission. An application shall contain a statement by the  
15 applicant that the vessel has not been painted in violation of AS 46.-  
16 03.715. An application shall contain other [, CONTAINING THE] reason-  
17 able information required by the commission together with the required  
18 fee. The application shall be simple in form and shall be executed by  
19 the applicant under the penalty of perjury.

20 \* Sec. 2. AS 46.03.020 is amended by adding a new paragraph to read:

21 (13) inspect the premises of sellers and suppliers of paint,  
22 vessels, and marine and boating supplies, and take other actions  
23 necessary to enforce AS 46.03.715.

24 \* Sec. 3. AS 46.03 is amended by adding a new section to read:

25 Sec. 46.03.715. SALE AND USE OF TBT-BASED ANTIFOULING PAINT.  
26 (a) Except as otherwise provided in this section, a person may not  
27 sell or use TBT-based marine antifouling paint or coating in the  
28 state, nor may a person sell, rent, or lease in the state, or import  
29 into the state, or use in state water, a vessel, fishing gear, or

1 other item intended to be partially or completely submerged in water,  
2 if the vessel, gear, or item has been painted or treated with  
3 TBT-based marine antifouling paint or coating.

4 (b) TBT-based marine antifouling paint or coating need not be  
5 removed from fishing gear, or from a vessel or other item that was  
6 painted or treated before December 1, 1987, but the vessel, gear, or  
7 item may not be repainted or retreated with TBT-based marine antifoul-  
8 ing paint or coating. Fish culture or capture nets treated with  
9 TBT-based marine antifouling coating before December 1, 1987, may not  
10 be used in state water on or after December 1, 1992.

11 (c) Notwithstanding other provisions of this section, slow-  
12 leaching TBT-based marine antifouling paint may be imported into and  
13 sold in the state. A slow-leaching TBT-based marine antifouling paint  
14 may be applied in the state only to aluminum vessel hulls. Aluminum  
15 vessel hulls to which a slow-leaching TBT-based marine antifouling  
16 paint has been applied may be imported into and sold, rented, leased,  
17 or used in the state.

18 (d) This section does not apply to

19 (1) a vessel of the United States government;

20 (2) a foreign vessel in state water fewer than 90 days in a  
21 12-month period; or

22 (3) a vessel of 4,000 gross tons or more.

23 (e) In this section

24 (1) "slow-leaching TBT-based marine antifouling paint"  
25 means a TBT-based marine antifouling paint, but not a coating or other  
26 treatment, that has a measured release rate equal to or less than 1.0  
27 microgram per square centimeter per day at steady state conditions  
28 determined under the U.S. Environmental Protection Agency testing  
29 procedure, as outlined in the agency's call-in notice of July 29,

1 1986, on tributyltin in antifouling paints under 7 U.S.C. 35 - 36y  
2 (the Federal Insecticide, Fungicide, and Rodenticide Act);

3 (2) "TBT-based marine antifouling paint or coating" means a  
4 paint, coating, or treatment that contains tributyltin, or a tri-  
5 organotin compound used as a substitute for tributyltin, and that is  
6 intended to control fouling organisms in a fresh water or marine  
7 environment;

8 (3) "vessel" means watercraft used or capable of being used  
9 as a means of transportation on water, including

10 (A) aircraft equipped to land on water; and

11 (B) barges.

12 \* Sec. 4. Notwithstanding AS 46.03.715, as enacted by sec. 3 of this  
13 Act, after the effective date of this section a person may not import into  
14 the state a TBT-based marine antifouling paint or coating other than a  
15 slow-leaching TBT-based marine antifouling paint, except that paint or  
16 coatings that have been ordered from a source outside of the state before  
17 the effective date of this section may be imported into the state before  
18 December 1, 1987.

19 \* Sec. 5. Sections 1 - 3 of this Act take effect December 1, 1987.

20 \* Sec. 6. Section 4 of this Act takes effect immediately under AS 01.-  
21 10.070(c).

BY ZHAROFF, ELIASON, JOSEPHSON,  
SZYMANSKI, KERTTULA, DUNCAN,  
UEHLING AND STURGULEWSKI

1 IN THE SENATE

2

SENATE BILL NO. 131 am

3

IN THE LEGISLATURE OF THE STATE OF ALASKA

4

FIFTEENTH LEGISLATURE - FIRST SESSION

5

A BILL

6

For an Act entitled: "An Act regulating the sale and use of TBT-based  
7 marine antifouling paints and coatings; and providing  
8 for an effective date."

9

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

10

\* Section 1. AS 46.03 is amended by adding a new section to read:

11

Sec. 46.03.715. SALE AND USE OF TBT-BASED ANTIFOULING PAINT.

12

(a) Except as otherwise provided in this section, a person may not  
13 sell or use TBT-based marine antifouling paint or coating in the  
14 state, nor may a person sell, rent, or lease in the state, or import  
15 into the state, or use in state water, a vessel, fishing gear, or  
16 other item intended to be immersed or submerged in water, if the  
17 vessel, gear, or item has been painted or treated with TBT-based  
18 marine antifouling paint or coating.

19

(b) TBT-based marine antifouling paint or coating need not be  
20 removed from fishing gear, or from a vessel or other item that was  
21 painted or treated before July 1, 1987, but the vessel, gear, or item  
22 may not be repainted or retreated with TBT-based marine antifouling  
23 paint or coating. Fish culture or capture nets treated with TBT-based  
24 marine antifouling coating before July 1, 1987, may not be used in  
25 state water on or after July 1, 1992.

26

(c) This section does not apply to

27

(1) a vessel of the United States government;

28

(2) a foreign vessel temporarily in state water;

29

(3) a vessel of 5,000 gross tons or more; or

1                   (4) a passenger vessel of 3,000 gross tons or more.

2                   (d) In this section

3                   (1) "TBT-based marine antifouling paint or coating" means a  
4 paint, coating, or treatment that contains tributyltin, or a  
5 tri-organotin compound used as a substitute for tributyltin, and that  
6 is intended to control fouling organisms in the fresh water or marine  
7 environment;

8                   (2) "vessel" means watercraft used or capable of being used  
9 as a means of transportation on water, including aircraft equipped to  
10 land on water.

11 \* Sec. 2. This Act takes effect July 1, 1987.

SB

132

2/29/88 S. P. Lee

STATE OF ALASKA  
1988 LEGISLATIVE SESSION

BILL VERSION: SB 132  
PUBLISH DATE: \_\_\_\_\_

FISCAL NOTE

REQUEST

Revision Date: 2/25/88  
Title: "An Act relating to public use of the Dalton Highway"  
Sponsor: Sen. Coghill  
Requestor: Senate Rules

Agency Affected: Public Safety  
BRU: Alaska State Troopers  
Components: Detachments

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY88	FY89	FY90	FY91	FY92	FY93
PERSONAL SERVICES	0	213.0	213.0	213.0	213.0	213.0
TRAVEL	0	3.9	3.9	3.9	3.9	3.9
CONTRACTUAL	0	63.2	63.2	63.2	63.2	63.2
SUPPLIES	0	6.6	6.6	6.6	6.6	6.6
EQUIPMENT	0	66.9				
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0	353.6	286.7	286.7	286.7	286.7

CAPITAL		322.0				
---------	--	-------	--	--	--	--

REVENUE						
---------	--	--	--	--	--	--

FUNDING: (Thousands of Dollars)

GENERAL FUNDS		675.6	286.7	286.7	286.7	286.7
FEDERAL FUNDS						
OTHER						
TOTAL	0	675.6	286.7	286.7	286.7	286.7

POSITIONS:

FULL-TIME	0	3	3	3	3	3
PART-TIME						
TEMPORARY						

ANALYSIS: (Attach a separate page if necessary)

See attached schedule. Revised 2/16/88 to reflect 8 months operations only.

JNR  
2/25/88

Prepared by: Francis C. Allan  
Division: Alaska State Troopers

Phone: 269-5691  
Date: 2/25/88

Approved by Commissioner: Arthur A. English

Date: 2/25/88

Agency: Public Safety  
Distribution: (by preparer):  
Legislative Finance  
Legislative Sponsor  
Requestor  
Office of Management and Budget  
Impacted Agency(ies)

RECEIVED  
FEB 20 1988

LEGISLATIVE FINANCE  
Page 1 of 2

Fiscal Notes  
received after  
bill R/O.

CONTINUATION OF FISCAL NOTE ANALYSIS

For Bill/Resolution No. HB 115

In order to keep the Dalton Highway open throughout the entire year, a full range of law enforcement services must be maintained. In order to provide accident response, patrol, investigation, and search and rescue services, three additional State Trooper positions will be needed; one at Coldfoot, and two others in Prudhoe Bay. The costs below summarize their Personal Services and related costs. It is anticipated that equipment will be needed in the first year only and that the road would not be open to the public until July 1, 1988. Further, FY89 costs are based upon budgeted costs for FY88 with no inflation included and basic costs for 8 months only.

<u>Operating Budget</u>	<u>Trooper Coldfoot</u>	<u>Trooper Prudhoe Bay</u>	<u>Trooper Prudhoe Bay</u>	<u>Increased Helo Oper. Costs (1)</u>	<u>Total</u>
Personal Services	71.0	71.0	71.0		213.0
Travel	1.3	1.3	1.3		3.9
Contractual	5.7	28.1	28.1	1.3	63.2
Supplies	2.2	2.2	2.2		6.6
Equipment	22.3	22.3	22.3		66.9
<b>Total</b>	<b>102.5</b>	<b>124.9</b>	<b>124.9</b>	<b>1.3</b>	<b>353.6</b>

(1) - Helicopter costs include one additional trip up and down the highway, fueling at Coldfoot and Prudhoe Bay (contract). This is expected to involve seven hours @ \$187 per hour.

Capital Budget

Currently, there is no housing available in Coldfoot as was originally anticipated when this fiscal note was first prepared. Accordingly, it will be necessary to construct a new housing unit located next to the FWP unit in Coldfoot. Cost is estimated to be \$322,000 for a single family unit.

Revised 2/16/88

Position Title		State Trooper		No. of Positions	1	Range/Step	76/A	Barg. Unit	PSEA			
Time Status	PFT	Staff Months	8.0	Location	Coldfoot	Election District	22					
Type of Expenditure			Amount			<p>Justification</p> <p>A fully trained and experienced law enforcement officer is needed to provide accident response, patrol, investigation, and Search and Rescue along the Dalton Highway. This trooper position must have a 4 x 4 vehicle (152P) in order to be able to travel the rough road during winter conditions. All other costs are average Trooper costs and are based upon experience. Eight months funding is included to coincide with the length of time the road would be open.</p> <p>Additionally, no housing currently exists in Coldfoot and a unit would need to be constructed.</p>						
1			2							3		
Salary			36,124									
Benefits			31,584									
Premium Pay			3,334									
Other												
Total Personal Services										71.0		
Travel										1.5		
Contractual										5.7		
Commodities										2.2		
Equipment										22.3		
Other												
Total Cost										102.5		
Funding Source for Total Cost												
Federal Receipts			1002									
G.F. Match			1003									
General Fund			1004			102.5						
I-A Receipts			1006									
CIP Receipts			1061									
Other												
Revised 2/16/88												

REQUEST FOR  
NEW POSITION

Agency Department of Public Safety

BRU Alaska State Troopers

Component Detachments and CIB

FY 89

Page 1 of 3

Revised Date

Position Title		State Trooper		No. of Positions	1	Range/Step	76/A	Barg. Unit	PSEA					
Time Status	PFT	Staff Months	8.0	Location	Prudhoe Bay		Election District	22						
Type of Expenditure			Amount		<p><b>Justification</b></p> <p>A fully trained and experienced law enforcement officer is needed to provide accident response, patrol, investigation, and Search and Rescue along the Dalton Highway. This trooper position must have a 4 x 4 vehicle (152P) in order to be able to travel the rough road during winter conditions. All other costs are average Trooper costs and are based upon experience. Eight months funding is included to coincide with the length of time the road would be open.</p> <p>Contractual costs include housing and office space at a cost of \$2,800 per month, which is based upon previous AST experience in Prudhoe Bay and assumes space availability.</p>									
1		2		3										
Salary		36,124												
Benefits		31,584												
Premium Pay		3,334												
Other														
Total Personal Services				71.0										
Travel				1.3										
Contractual				28.1										
Commodities				2.2										
Equipment				22.3										
Other														
Total Cost				124.9										
Funding Source for Total Cost														
Federal Receipts		1002												
G.F. Match		1003												
General Fund		1004				124.9								
I-A Receipts		1006												
CIP Receipts		1061												
Other														
Revised 2/16/88														

REQUEST FOR  
NEW POSITION

Agency Department of Public Safety  
 BRU Alaska State Troopers  
 Component Detachments and CIB

Page 2 of 3  
 Revised Date \_\_\_\_\_

89

Position Title		State Trooper		No. of Positions	1	Range/Step	76/A	Barg. Unit	PSEA			
Time Status	PFT	Staff Months	8.0	Location	Prudhoe Bay	Election District	22					
Type of Expenditure			Amount			<p>Justification</p> <p>A fully trained and experienced law enforcement officer is needed to provide accident response, patrol, investigation, and Search and Rescue along the Dalton Highway. This trooper position must have a 4 x 4 vehicle (152P) in order to be able to travel the rough road during winter conditions. All other costs are average Trooper costs and are based upon experience. Eight months funding is included to coincide with the length of time the road would be open.</p> <p>Contractual costs include a leased housing space of approximately \$24,000 per year, assuming that it is available.</p>						
1			2							3		
Salary			36,124									
Benefits			31,584									
Premium Pay			3,334									
Other												
Total Personal Services			71.0									
Travel			1.3									
Contractual			28.1									
Commodities			2.2									
Equipment			22.3									
Other												
Total Cost			124.9									
Funding Source for Total Cost												
Federal Receipts			1002									
G.F. Match			1003									
General Fund			1004			124.9						
I-A Receipts			1006									
CIP Receipts			1061									
Other												
Revised 2/16/88												

REQUEST FOR  
NEW POSITION

Agency Department of Public Safety  
BRU Alaska State Troopers  
Component Detachments and CIB

FY 89

Page 3 of 3  
Revised Date

# STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

OFFICE OF THE COMMISSIONER

STEVE COWPER, GOVERNOR

P.O. BOX Z  
JUNEAU, ALASKA 99811-2500  
PHONE: (907) 465-3900

February 24, 1988

The Honorable Steve Frank  
Alaska State Legislature  
P.O. Box V  
Juneau, AK 99811

Dear Representative Frank:

You have asked for information concerning housing and a new RV dump station. The following is a preliminary estimate of costs.

1. For on site construction of a 1,440 sq. ft., 3 bedroom house with garage built at either Sag River or Coldfoot we estimate costs to be:

Contract Cost	\$183,000
Sitework	10,000
Design	40,000
Ad & Bid Process	15,000
Construction Engineering/Contingency	45,000
	<u>\$293,000</u>
10% Escalation*	29,000
TOTAL PRICE	<u>\$322,000</u>

\*Estimated cost is based on construction of a similar unit seven years ago. This escalation component anticipates some increase in prices.

We recognize that alternate housing techniques may be available which would possibly allow a cheaper bottom line. However, it is debatable whether the state could realize savings using an alternate housing technique over the long run once M&O costs are factored in.

2. For a new RV dump site we estimate costs to be \$12,000. However, since the proposed site for the new RV dump site is north of the Brooks Range and consequently in a permafrost area, we would not recommend installation since maintenance of the site would be prohibited.

February 24, 1988

3. At Sag River, DOT&PF currently has support facilities which include 2 135 KW generators, a 10,000 gallon water system and a septic system. We feel these support facilities would be adequate to support a single trailer home with one permanent occupant.

Sincerely,

  
Mark S. Hickey  
Commissioner

Commissioner John Andrews, Department of Administration  
Commissioner Art English, Department of Public Safety  
Representative Pat Pourchot  
Representative F. Kay Wallis  
Lynn Harnisch, Regional Director, Northern Region, DOT&PF  
Susan K. Fleischhauer, Legislative Liaison  
Clyde Stoltzfus, Special Assistant to the Commissioner, DOT&PF

2/25/88 & Res

STATE OF ALASKA 1987 LEGISLATIVE SESSION  
FISCAL NOTE

REQUEST

Revision Date: 2/16/88  
Title: "An Act relating to public use of the Dalton Highway."  
Sponsor: Sen. Coghill  
Requestor: Senate Rules

Bill Version: SB 132

Publish Date: \_\_\_\_\_

Agency Affected: Public Safety

BRU: Alaska State Troopers

Components: Detachments

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY88	FY89	FY90	FY91	FY92	FY93
PERSONAL SERVICES		213.0	213.0	213.0	213.0	213.0
TRAVEL		3.9	3.9	3.9	3.9	3.9
CONTRACTUAL		63.2	63.2	63.2	63.2	63.2
SUPPLIES		6.6	6.6	6.6	6.6	6.6
EQUIPMENT		66.9				
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING		353.6	286.7	286.7	286.7	286.7

CAPITAL		395.0				
---------	--	-------	--	--	--	--

REVENUE						
---------	--	--	--	--	--	--

FUNDING: (Thousands of Dollars)

GENERAL FUNDS		748.6	286.7	286.7	286.7	286.7
FEDERAL FUNDS						
OTHER						
TOTAL		748.6	286.7	286.7	286.7	286.7

POSITIONS:

FULL-TIME		3	3	3	3	3
PART-TIME						
TEMPORARY						

ANALYSIS: (Attach a separate page if necessary)

See attached schedule. Revised 2/16/88 to reflect 8 months operations only.

JJR  
2/19/88

Prepared by: Francis C. Allan *F.C.A.*

Phone: 269-5691

Division: Alaska State Troopers

Date: 2/16/88

Approved by Commissioner: Arthur English *A.H.*

Date: 2/16/88

Agency: Public Safety

Distribution: (by preparer):

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

RECEIVED  
FEB 25 1988

CONTINUATION OF FISCAL NOTE ANALYSIS

For Bill/Resolution No. SB 132

In order to keep the Dalton Highway open throughout the entire year, a full range of law enforcement services must be maintained. In order to provide accident response, patrol, investigation, and search and rescue services, three additional State Trooper positions will be needed; one at Coldfoot, and two others in Prudhoe Bay. The costs below summarize their Personal Services and related costs. It is anticipated that equipment will be needed in the first year only and that the road would not be open to the public until July 1, 1988. Further, FY89 costs are based upon budgeted costs for FY88 with no inflation included.

<u>Operating Budget</u>	<u>Trooper Coldfoot</u>	<u>Trooper Prudhoe Bay</u>	<u>Trooper Prudhoe Bay</u>	<u>Increased Helo Oper. Costs (1)</u>	<u>Total</u>
Personal Services	71.0	71.0	71.0		213.0
Travel	1.3	1.3	1.3		3.9
Contractual	5.7	28.1	28.1	1.3	63.2
Supplies	2.2	2.2	2.2		6.6
Equipment	22.3	22.3	22.3		66.9
<b>Total</b>	<b>102.5</b>	<b>124.9</b>	<b>124.9</b>	<b>1.3</b>	<b>353.6</b>

(1) - Helicopter costs include one additional trip up and down the highway, fueling at Coldfoot and Prudhoe Bay (contract). This is expected to involve seven hours @ \$187 per hour.

Capital Budget

Currently, there is no housing available in Coldfoot as was originally anticipated when this fiscal note was first prepared. Accordingly, it will be necessary to construct a new housing unit located next to the FWP unit in Coldfoot. Cost is estimated to be \$395,000 for a single family unit.

Revised 2/16/88

Position Title State Trooper		No. of Positions 1	Range/Step 76/A	Barg. Unit PSEA
Time Status PFT	Staff Months 8.0	Location Coldfoot		Election District 22
Type of Expenditure		Amount		
1	2	3		
Salary	36,124			
Benefits	31,584			
Premium Pay	3,334			
Other				
Total Personal Services		71.0		
Travel		1.3		
Contractual		5.7		
Commodities		2.2		
Equipment		22.3		
Other				
Total Cost		102.5		
Funding Source for Total Cost				
Federal Receipts	1002			
G.F. Match	1003			
General Fund	1004	102.5		
I-A Receipts	1006			
CIP Receipts	1061			
Other				
Revised 2/16/88				
<p>Justification</p> <p>A fully trained and experienced law enforcement officer is needed to provide accident response, patrol, investigation, and Search and Rescue along the Dalton Highway. This trooper position must have a 4 x 4 vehicle (152P) in order to be able to travel the rough road during winter conditions. All other costs are average Trooper costs and are based upon experience. Eight months funding is included to coincide with the length of time the road would be open.</p> <p>Additionally, no housing currently exists in Coldfoot and a unit would need to be constructed.</p>				

REQUEST FOR  
NEW POSITION

Agency Department of Public Safety  
 BRU Alaska State Troopers  
 Component Detachments and CIB

FY 89

Page 1 of 3  
 Revised Date

Position Title State Trooper		No. of Positions 1	Range/Step 76/A	Barg. Unit PSEA
Time Status PFT	Staff Months 8.0	Location Prudhoe Bay		Election District 22
Type of Expenditure		Amount		
1	2	3		
Salary	36,124			
Benefits	31,584			
Premium Pay	3,334			
Other				
Total Personal Services		71.0		
Travel		1.3		
Contractual		28.1		
Commodities		2.2		
Equipment		22.3		
Other				
Total Cost		124.9		
Funding Source for Total Cost				
Federal Receipts	1002			
G.F. Match	1003			
General Fund	1004	124.9		
I-A Receipts	1006			
CIP Receipts	1061			
Other				
Revised 2/16/88				
<p><b>Justification</b></p> <p>A fully trained and experienced law enforcement officer is needed to provide accident response, patrol, investigation, and Search and Rescue along the Dalton Highway. This trooper position must have a 4 x 4 vehicle (152P) in order to be able to travel the rough road during winter conditions. All other costs are average Trooper costs and are based upon experience. Eight months funding is included to coincide with the length of time the road would be open.</p> <p>Contractual costs include housing and office space at a cost of \$2,800 per month, which is based upon previous AST experience in Prudhoe Bay and assumes space availability.</p>				

REQUEST FOR  
NEW POSITION

Agency Department of Public Safety  
 BRU Alaska State Troopers  
 Component Detachments and CIB

FY 89

Page 2 of 3  
 Revised Date

Position Title State Trooper		No. of Positions 1	Range/Step 76/A	Barg. Unit PSEA
Time Status PFT	Staff Months 8.0	Location Prudhoe Bay		Election District 22
Type of Expenditure		Amount		
1	2	3		
Salary	36,124			
Benefits	31,584			
Premium Pay	3,334			
Other				
Total Personal Services		71.0		
Travel		1.3		
Contractual		28.1		
Commodities		2.2		
Equipment		22.3		
Other				
Total Cost		124.9		
Funding Source for Total Cost				
Federal Receipts	1002			
G.F. Match	1003			
General Fund	1004	124.9		
I-A Receipts	1006			
CIP Receipts	1061			
Other				
Revised 2/16/88				
<p><b>Justification</b></p> <p>A fully trained and experienced law enforcement officer is needed to provide accident response, patrol, investigation, and Search and Rescue along the Dalton Highway. This trooper position must have a 4 x 4 vehicle (152P) in order to be able to travel the rough road during winter conditions. All other costs are average Trooper costs and are based upon experience. Eight months funding is included to coincide with the length of time the road would be open.</p> <p>Contractual costs include a leased housing space of approximately \$24,000 per year, assuming that it is available.</p>				

REQUEST FOR  
NEW POSITION

Agency Department of Public Safety

BRU Alaska State Troopers

Component Detachments and CIB

FY 89

Page 3 of 3  
Revised Date

2/12/88 J We

STATE OF ALASKA 1987 LEGISLATIVE SESSION  
FISCAL NOTE

Bill Version: SB 132  
 Publish Date: \_\_\_\_\_  
 Agency Affected: Public Safety  
 BRU: Fish & Wildlife Protection  
 Components: Enforcement

REQUEST  
 Revision Date: 2/9/88  
 Title: "An Act relating to public use of the Dalton Highway."  
 Sponsor: Sen. Coghill  
 Requestor: Senate Rules

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY88	FY89	FY90	FY91	FY92	FY93
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0	0	0	0	0	0

CAPITAL						
---------	--	--	--	--	--	--

REVENUE						
---------	--	--	--	--	--	--

FUNDING: (Thousands of Dollars)

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

POSITIONS:

FULL-TIME		3	3	3	3	3
PART-TIME						
TEMPORARY						

ANALYSIS: (Attach a separate page if necessary)

An act opening Dalton Highway year round. No impact on FWP because they have a position established at Coldfoot.

JWR  
2/9/88

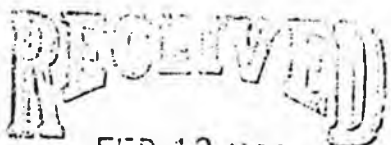
Prepared by: Kyle Weaver  
 Division: Fish & Wildlife Protection

Phone: 269-5539  
 Date: 2/9/88

Approved by Commissioner: Arthur English  
 Agency: Public Safety

Date: 2-11-88

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



FEB 12 1988

2/1/88  
3 (Rules)  
F

STATE OF ALASKA 1987 LEGISLATIVE SESSION  
FISCAL NOTE

Bill Version: SB 132  
 Publish Date: \_\_\_\_\_  
 Agency Affected: Public Safety  
 BRU: Alaska State Troopers  
 Components: Detachments and CIB

REQUEST  
 Revision Date: \_\_\_\_\_  
 Title: "An Act relating to public use of the Dalton Highway."  
 Sponsor: Sen. Coghill  
 Requestor: Senate Resources

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY88	FY89	FY90	FY91	FY92	FY93
PERSONAL SERVICES		240.6	240.6	240.6	240.6	240.6
TRAVEL		6.0	6.0	6.0	6.0	6.0
CONTRACTUAL		84.4	84.4	84.4	84.4	84.4
SUPPLIES		9.9	9.9	9.9	9.9	9.9
EQUIPMENT		66.9				
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING		407.8	340.3	340.3	340.3	340.3

CAPITAL		395.0				
---------	--	-------	--	--	--	--

REVENUE						
---------	--	--	--	--	--	--

FUNDING: (Thousands of Dollars)

GENERAL FUNDS		802.8	340.3	340.3	340.3	340.3
FEDERAL FUNDS						
OTHER						
TOTAL		802.8	340.3	340.3	340.3	340.3

POSITIONS:

FULL-TIME		3	3	3	3	3
PART-TIME						
TEMPORARY						

ANALYSIS: (Attach a separate page if necessary)

See attached schedule.

JNR  
1/19/88

Prepared by Francis C. Allan  
 Division: Alaska State Troopers

Phone: 269-5691  
 Date: 1/12/88

Approved by Commissioner: Arthur English  
 Agency: Public Safety

Date: 1-28-88

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

RECEIVED  
 JAN 30 1988

SB 132

CONTINUATION OF FISCAL NOTE ANALYSIS

For Bill/Resolution No. SB 132

In order to keep the Dalton Highway open throughout the entire year, a full range of law enforcement services must be maintained. In order to provide accident response, patrol, investigation, and search and rescue services, three additional State Trooper positions will be needed; one at Coldfoot, and two others in Prudhoe Bay. The costs below summarize their Personal Services and related costs. It is anticipated that equipment will be needed in the first year only and that the road would not be open to the public until July 1, 1988. Further, FY89 costs are based upon budgeted costs for FY88 with no inflation included.

<u>Operating Budget</u>	<u>Trooper Coldfoot</u>	<u>Trooper Prudhoe Bay</u>	<u>Trooper Prudhoe Bay</u>	<u>Increased Helo Oper. Costs (1)</u>	<u>Total</u>
Personal Services	80.2	80.2	80.2		240.6
Travel	2.0	2.0	2.0		6.0
Contractual	8.5	42.1	32.5	1.3	84.4
Supplies	3.3	3.3	3.3		9.9
Equipment	22.3	22.3	22.3		66.9
Total	<u>116.3</u>	<u>149.9</u>	<u>140.3</u>	<u>1.3</u>	<u>407.8</u>

(1) - Helicopter costs include one additional trip up and down the highway, fueling at Coldfoot and Prudhoe Bay (contract). This is expected to involve seven hours @ \$187 per hour.

Capital Budget

Currently, there is no housing available in Coldfoot as was originally anticipated when this fiscal note was first prepared. Accordingly, it will be necessary to construct a new housing unit located next to the FWP unit in Coldfoot. Cost is estimated to be \$395,000 for a single family unit.

Position Title State Trooper		No. of Positions 1	Range/Step 76/A	Barg. Unit PSEA
Time Status: PFT	Staff Months 12.0	Location Coldfoot		Election District 22
Type of Expenditure		Amount		
1	2	3		
Salary	54,192			
Benefits	21,054			
Premium Pay	5,002			
Other				
Total Personal Services		80.2		
Travel		2.0		
Contractual		8.5		
Commodities		3.3		
Equipment		22.3		
Other				
Total Cost		116.3		
Funding Source for Total Cost				
Federal Receipts	1002			
G.F. Match	1003			
General Fund	1004	116.3		
I-A Receipts	1006			
CIP Receipts	1061			
Other				
Justification				
A fully trained and experienced law enforcement officer is needed to provide accident response, patrol, investigation, and Search and Rescue along the Dalton Highway. This trooper position must have a 4 x 4 vehicle (152P) in order to be able to travel the rough road during winter conditions. All other costs are average Trooper costs and are based upon experience.				
Additionally, no housing currently exists in Coldfoot and a unit would need to be constructed.				

REQUEST FOR  
NEW POSITION

Agency Department of Public Safety  
BRU Alaska State Troopers  
Component Detachments and CIB

FY 89

Page 1 of 3  
Revised Date





2/2/88 S Rules

STATE OF ALASKA 1988 LEGISLATIVE SESSION  
FISCAL NOTE

Bill Version: SB 132  
Publish Date: \_\_\_\_\_

REQUEST \_\_\_\_\_  
Revision Date: \_\_\_\_\_  
Title: Cost for Opening the Dalton  
Highway to the Public  
Sponsor: Coghill  
Requestor: Rules

Agency Affected: DOT&PF  
BRU: \_\_\_\_\_  
Components: \_\_\_\_\_

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93
PERSONAL SERVICES		10.0	10.0	10.0	10.0	10.0
TRAVEL						
CONTRACTUAL		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING		0	0	0	0	0
CAPITAL		60.0	0	0	0	0
REVENUE						

FUNDING: (Thousands of Dollars)

GENERAL FUND		60.0	0	0	0	0
FEDERAL FUNDS						
OTHER						
TOTAL		60.0	0	0	0	0

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS: See attached

Prepared by: Norm Plispannen/Lynn J. Harnisch Phone: 474-2423/451-2210  
Division: DOT&PF Planning/Reg. Director, Northern Region Date: 1/25/88  
Approved by Commissioner: Mark S. Hickey Date: 1/28/88  
Agency: DOT&PF

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

RECEIVED

FEB 2 1988

CONTINUATION of FISCAL NOTE ANALYSIS

For Bill/Resolution No. SB 132

1. Assumptions

In order to open the remainder of the Dalton Highway to the public, we anticipate the need for two wayside facilities with campsites, vault toilets and litter barrels. One such facility would probably be developed in the Atigun/Galbraith area. The other would probably be developed in the Happy Valley area.. Preferably they would be located in existing material sources. Also, we would expect to install four additional sets of litter barrels at scattered locations along the northern portion of the route. The number and location of projected facilities is based on the assumption that private facilities are available at Coldfoot and at Deadhorse. Opening the entire Dalton Highway to public use would allow us to close the existing checkpoint near Chandalar Camp.

2. Capital Costs

Two Campsite Facilities		\$30,000
Two Vault Toilets		24,000
Information Signs		2,000
Bear Proof Litter Barrels (Six Pair)		4,000
	TOTAL	\$60,000

3. Operating Costs

Personal Services:		\$10,000
Campsite/Litter Barrel Maintenance		
	TOTAL	\$10,000
 Contractual Services:		 10,000
Vault Toilet Maintenance		
 Contractual Services:		 <20,000>
Savings: Closing Existing Checkpoint		
Contractual Services Subtotal		<\$10,000>
TOTAL IMPACT		\$-0-

CONTINUATION OF FISCAL NOTE ANALYSIS

For Bill/Resolution No. SB 132

These figures indicate a neutral operating budget impact would be realized by eliminating the Dalton Highway checkpoint near Chandalar. No appreciable increased highway maintenance costs would be anticipated as a result of opening the entire Dalton Highway to public use.

By removing the authority to institute a Dalton Highway user toll, this bill would eliminate the possibility of collecting \$5.5 million per year at an annual operating cost of \$290,000. Revenue collected could have been deposited in the general fund to offset the cost of Dalton Highway maintenance.

There are two additional issues that could increase the fiscal impact from this legislation.

- (1) The Dalton currently stops short of the Deadhorse Airport. Access is now available across private oil company roads.
- (2) The proposed bill calls for opening the road to the Arctic Ocean, yet the Dalton stops several miles short. Again, access would have to be obtained across private roads.

We do not presently know if either of these issues result in a real problem leading to additional costs. The first concern is probably easily resolvable; the second concern is more problematic if the Legislature intends to ensure public access as far as the Arctic Ocean.

STATE OF ALASKA  
1988 LEGISLATIVE SESSION

BILL VERSION: SB 132  
PUBLISH DATE: \_\_\_\_\_

FISCAL NOTE

REQUEST:

Revision Date: January 14, 1988  
Title: Relating to public use of the Dalton Highway  
Sponsor: Coghill and Bennett  
Requestor: Senate Finance Committee

Agency Affected: Dept. of Transportation  
BRU: and Public Facilities  
Components: \_\_\_\_\_

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0	0	0	0	0	0

CAPITAL						
---------	--	--	--	--	--	--

REVENUE						
---------	--	--	--	--	--	--

FUNDING: (Thousands of Dollars)

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

POSITIONS:

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

ANALYSIS : (Attach a separate page if necessary)

Prepared by: *Rick Halford*  
Division: Senator Rick Halford, Co-chairman  
Senate Finance Committee

Phone: 465-4958  
Date: \_\_\_\_\_

Approved by Commissioner: \_\_\_\_\_  
Agency: \_\_\_\_\_

Date: \_\_\_\_\_

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

SENATE COMMITTEE REPORT

FURTHER:

DATE TURNED INTO OFFICE 5/15/87

Mr. President:

FINANCE Committee considered SB 132

public use of the Dalton Highway.

and recommended:

replace with CS FOR \_\_\_\_\_ )  same title  
 or adopt \_\_\_\_\_ CS FOR \_\_\_\_\_ )  new title

attached amendment(s) and

do pass

do not pass

no recommendation

individual recommendations

further referral to \_\_\_\_\_

letter of intent adopted \_\_\_\_\_

Committee  attached or  adopted fiscal note(s)

new  updated or  previous  
 zero  fiscal impact

MEMBERS SIGNING DO PASS

[Signature]  
[Signature]  
[Signature]  
Paul G. [Signature]

OTHER RECOMMENDATIONS

[Signature]  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

X3 No Ref.  
Chairman signature and recommendation

Committee Backup Attached

5/15/87  
Bennett  
Adopted

AMENDMENT NO. 1

SENATE BILL NO. 132

For an Act entitled: "An Act relating to public use of the Dalton Highway"

At line 11, delete "the ARctic Ocean" and insert in its place "Galbraith Lake"

At line 13, delete the period after "highway" and add "for a ten year test period."

1 IN THE SENATE

BY COGHILL AND BENNETT

2

SENATE BILL NO. 132

3

IN THE LEGISLATURE OF THE STATE OF ALASKA

4

FIFTEENTH LEGISLATURE - FIRST SESSION

5

A BILL

6 For an Act entitled: "An Act relating to public use of the Dalton High-

7

way."

8 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

9

\* Section 1. AS 19.40.110 is repealed and reenacted to read:

10

Sec. 19.40.110. PUBLIC USE OF THE HIGHWAY. The department shall

11

maintain the highway between the Yukon River and the Arctic Ocean and

12

shall keep the highway open to the public throughout the year without

13

a toll for use of the highway or a portion of the highway.

14

\* Sec. 2. AS 19.40.100 is repealed.

**STATE OF ALASKA 1987 LEGISLATIVE SESSION  
FISCAL NOTE**

**REQUEST:** \_\_\_\_\_

Bill Version: SB 132  
Publish Date: \_\_\_\_\_

Revision Date: \_\_\_\_\_

Agency Affected: DOT/PF

Title: Relating to public use of  
the Dalton Highway

BRU: \_\_\_\_\_

Sponsor: Coghill & Bennett

Components: \_\_\_\_\_

Requestor: \_\_\_\_\_

**EXPENDITURES/REVENUES: (Thousands of Dollars)**

OPERATING	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
<b>TOTAL OPERATING</b>		0	0	0	0	0

<b>CAPITAL</b>		0	0	0	0	0
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<b>REVENUE</b>		0	0	0	0	0
----------------	--	---	---	---	---	---

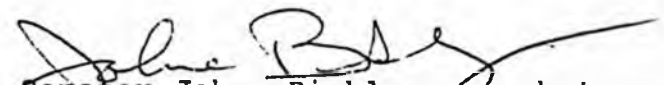
**FUNDING: (Thousands of Dollars)**

GENERAL FUND		0	0	0	0	0
FEDERAL FUNDS		0	0	0	0	0
OTHER		0	0	0	0	0
<b>TOTAL</b>		0	0	0	0	0

**POSITIONS:**

FULL-TIME						
PART-TIME						
TEMPORARY						

**ANALYSIS :** (Attach a separate page if necessary)



Prepared by: Senator John Binkley, co-chairman

Phone: 465-4985

Division: Senate Finance Committee

Date: 3/17/87

Approved by Commissioner: \_\_\_\_\_

Date: \_\_\_\_\_

Agency: \_\_\_\_\_

Distribution (by preparer):

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

A/B

STATE OF ALASKA 1987 LEGISLATIVE SESSION  
FISCAL NOTE

Bill Version: SB 132

Publish Date:                     

**REQUEST**

Revision Date:                       
 Title: Opening the entire Dalton Highway to the public without toll.  
 Sponsor: Cochill  
 Requestor: Jones

Agency Affected: DOT&PF  
 BRU:                     

Components:                     

**EXPENDITURES/REVENUES: (Thousands of Dollars)**

OPERATING	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92
PERSONAL SERVICES		<243.0>	<243.0>	<243.0>	<243.0>	<243.0>
TRAVEL						
CONTRACTUAL		<127.0>	<27.0>	<27.0>	<27.0>	<27.0>
SUPPLIES		<20.0>	<20.0>	<20.0>	<20.0>	<20.0>
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
<b>TOTAL OPERATING</b>		<390.0>	<290.0>	<290.0>	<290.0>	<290.0>
<b>CAPITAL</b>						
<b>REVENUE</b>		<5600.0>	<5500.0>	<5500.0>	<5500.0>	<5500.0>

**FUNDING: (Thousands of Dollars)**

GENERAL FUND						
FEDERAL FUNDS						
OTHER (IARF)		<390.0>	<290.0>	<290.0>	<290.0>	<290.0>
<b>TOTAL</b>						

**POSITIONS:**

FULL-TIME		<5>	<5>	<5>	<5>	<5>
PART-TIME		<1>	<1>	<1>	<1>	<1>
TEMPORARY						

**ANALYSIS:** This bill will remove the authority to charge tolls on the Dalton Highway. These are estimated to produce \$5.6 million in FY88 to support the maintenance and operating costs of this route. These tolls would have been deposited in the General Fund to offset the budgeted costs for operation.

The deletion of the requirement for the checkpoint will not impact the 1988 budget because funding is not included.

The reduced operating expenditures and funding are related to the estimated costs of collection of the tolls.

*Zeroed 5/15/87 SFC*

Prepared by: Ron B. Lind, Director Phone: 465-4070  
 Division: Plans, Programs, and Budget Date: 2/27/87

Approved by Commissioner: *Mark S. Hilg* Date: 3/3/87  
 Agency: DOT & PF

**Distribution (by preparer):**

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(i)
- Senate Secretary

STATE OF ALASKA 1987 LEGISLATIVE SESSION  
FISCAL NOTE

Bill Version: SB 132

Publish Date: \_\_\_\_\_

REQUEST

Revision Date: \_\_\_\_\_

Title: "An Act relating to public use  
of the Dalton Highway."

Sponsor: Sen. Coghill

Requestor: Senate Transportation

Agency Affected: Public Safety

BRU: Alaska State Troopers

Components: Detachments & CIB

**EXPENDITURES/REVENUES: (Thousands of Dollars)**

OPERATING	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92
PERSONAL SERVICES		281.4	289.8	298.5	307.5	316.7
TRAVEL		8.0	8.2	8.5	8.7	9.0
CONTRACTUAL		92.9	95.7	98.6	101.5	104.6
SUPPLIES		13.2	13.6	14.4	14.8	15.3
EQUIPMENT		89.2				
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING		484.7	407.3	420.0	432.5	445.6
CAPITAL						
REVENUE						

**FUNDING:: (Thousands of Dollars)**

GENERAL FUNDS		484.7	407.3	420.0	432.5	445.6
FEDERAL FUNDS						
OTHER						
TOTAL						

**POSITIONS:**

FULL-TIME		4	4	4	4	4
PART-TIME						
TEMPORARY						

**ANALYSIS: (Attach a separate page if necessary)**

See attached schedule.

Prepared by: Francis C. Allan

Division: Alaska State Troopers

Phone: 269-5691

Date: 2/27/87

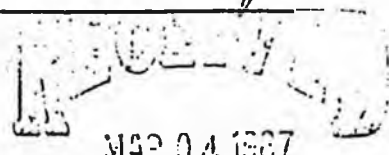
Approved by Commissioner: William R. Nix

Agency: Public Safety

Date: 3/3/87

**Distribution (by preparer):**

Legislative Finance  
Legislative Sponsor  
Requestor  
Office of Management and Budget  
Impacted Agency(ies)  
Senate Secretary



MAR 04 1987

LEGISLATIVE FINANCE

CONTINUATION OF FISCAL NOTE ANALYSIS

For Bill/Resolution No. SB 132

In order to keep the Dalton Highway open throughout the entire year, a full range of law enforcement services must be maintained. In order to provide accident response, patrol, investigation and search and rescue services, four additional State Trooper positions will be needed; one at Coldfoot, one at 7-Mile Camp, and two others in Prudhoe Bay. The costs below summarize their Personal Services and related costs. It is anticipated that equipment will be needed in the first year only and that a 3% inflationary cost will be incurred each year after 1988.

	Trooper Coldfoot	Trooper 7-Mile	Trooper Prudhoe Bay	Trooper Prudhoe Bay	Increased Helo Oper. Costs (1)	Total
Personal Services	71.5	66.9	71.5	71.5		281.4
Travel	2.0	2.0	2.0	2.0		8.0
Contractual	8.5	8.5	42.1	32.5	1.3	92.9
Supplies	3.3	3.3	3.3	3.3		13.2
Equipment	22.3	22.3	22.3	22.3		89.2
	<u>107.6</u>	<u>103.0</u>	<u>141.2</u>	<u>131.6</u>	<u>1.3</u>	<u>484.7</u>

(1) - Helicopter costs include one additional trip up and down the highway, fueling at Coldfoot and Prudhoe Bay (contract). This is expected to involve seven hours @ \$187 per hour.

Position Title <b>State Trooper</b>		No. of Positions	Range/Step <b>76/A</b>	Barg. Unit <b>PSEA</b>																										
Time Status <b>PFT</b>	Staff Months <b>12.0</b>	Location <b>Coldfoot</b>		Election District <b>22</b>																										
<table border="1"> <thead> <tr> <th>Type of Expenditure</th> <th>Amount</th> </tr> <tr> <th>1</th> <th>2</th> </tr> </thead> <tbody> <tr> <td>Salary</td> <td>48,516</td> </tr> <tr> <td>Benefits</td> <td>12,454</td> </tr> <tr> <td>Premium Pay</td> <td>4,478</td> </tr> <tr> <td>Other</td> <td>6,097</td> </tr> <tr> <td><b>Total Personal Services</b></td> <td><b>71.5</b></td> </tr> <tr> <td>Travel</td> <td>2.0</td> </tr> <tr> <td>Contractual</td> <td>8.5</td> </tr> <tr> <td>Commodities</td> <td>3.3</td> </tr> <tr> <td>Equipment</td> <td>22.3</td> </tr> <tr> <td>Other</td> <td></td> </tr> <tr> <td><b>Total Cost</b></td> <td><b>107.6</b></td> </tr> </tbody> </table>		Type of Expenditure	Amount	1	2	Salary	48,516	Benefits	12,454	Premium Pay	4,478	Other	6,097	<b>Total Personal Services</b>	<b>71.5</b>	Travel	2.0	Contractual	8.5	Commodities	3.3	Equipment	22.3	Other		<b>Total Cost</b>	<b>107.6</b>	<b>Justification</b>  A fully trained and experienced law enforcement officer is needed to provide accident response, patrol, investigation and Search and Rescue along the Dalton Highway. This trooper position must have a 4 X 4 vehicle (152P) in order to be able to travel the rough road during winter conditions. All other costs are average Trooper costs and are based upon experience.  Currently, The FY88 FWP operating plan calls for the elimination of the FWP Trooper stationed in Coldfoot. This state housing unit will be occupied by this new AST Trooper.		
Type of Expenditure	Amount																													
1	2																													
Salary	48,516																													
Benefits	12,454																													
Premium Pay	4,478																													
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<table border="1"> <thead> <tr> <th colspan="2">Funding Source for Total Cost</th> </tr> </thead> <tbody> <tr> <td>Federal Receipts</td> <td>1002</td> </tr> <tr> <td>G. F. Match</td> <td>1003</td> </tr> <tr> <td>General Fund</td> <td>1004</td> </tr> <tr> <td>I-A Receipts</td> <td>1006</td> </tr> <tr> <td>CIP Receipts</td> <td>1061</td> </tr> <tr> <td>Other</td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>		Funding Source for Total Cost		Federal Receipts	1002	G. F. Match	1003	General Fund	1004	I-A Receipts	1006	CIP Receipts	1061	Other																
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General Fund	1004																													
I-A Receipts	1006																													
CIP Receipts	1061																													
Other																														

**Request For  
New Position**

Agency Department of Public Safety  
BRU Alaska State Troopers  
Component Detachments & CIB

Page 1 of 4  
Revised Date

**FY 88**

Position Title State Trooper		No. of Positions	Range/Step 76/A	Barg. Unit PSEA
Time Status PFT	Staff Months 12.0	Location 7-Mile		Election District 22
Type of Expenditure		Justification		
1	2	3		
Salary	45,060	A fully trained and experienced law enforcement officer is needed to provide accident response, patrol, investigation and Search and Rescue along the Dalton Highway. This trooper position must have a 4 X 4 vehicle (152P) in order to be able to travel the rough road during winter conditions. All other costs are average Trooper costs and are based upon experience.		
Benefits	11,567			
Premium Pay	4,159			
Other	6,097			
Total Personal Services	66.9			
Travel		2.0		
Contractual		8.5		
Commodities		3.3		
Equipment		22.3		
Other				
Total Cost		103.0		
Funding Source for Total Cost		Under the current AST FY88 plan, the 7-Mile housing unit was to be vacated and sub-leased as part of the reduction. This new trooper position however will occupy the unit.		
Federal Receipts	1002			
G. F. Match	1003			
General Fund	1004	103.0		
I-A Receipts	1006			
CIP Receipts	1061			
Other				

**Request For  
New Position**

Agency Department of Public Safety  
 BRU Alaska State Troopers  
 Component Detachments & CIB

Page 2 of 4  
 Revised Date

**FY 88**