

LEGISLATIVE FINANCE-HOUSE / SENATE FINANCE COMM. FILES 8879

HB 478 cont. 533 129

Original sponsor(s): REP. ULMER, Brown, Finkelstein, Ellis, Navarre,
Koponen, M.Davis, Boyer, Kubina, Goll, Menard, Swackhammer, Jacko

1 IN THE HOUSE BY THE C&RA COMMITTEE

2 CS FOR HOUSE BILL NO. 478 (C&RA)

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 SIXTEENTH LEGISLATURE - SECOND SESSION

5 A BILL

6 For an Act entitled: "An Act relating to solid and hazardous waste manage-
7 ment."

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

9 * Section 1. LEGISLATIVE FINDINGS. The legislature finds that

10 (1) there is a growing concern nationally about the environment
11 and the effects on human health from past solid waste management practices;

12 (2) there is a desire to prevent these effects from occurring in
13 the future as well as a growing interest in conserving and ensuring the
14 wise use of virgin materials;

15 (3) present solid and hazardous waste management practices in
16 many communities in the state do not protect human health or the environ-
17 ment;

18 (4) many communities in the state are necessarily concentrating
19 their limited resources on more immediate environmental or human health
20 concerns such as ensuring a safe drinking water supply or the safe manage-
21 ment of sewage;

22 (5) communities in the state, though concerned over the problems
23 associated with current solid and hazardous waste management practices do
24 not have the technical or financial resources to plan for improved waste
25 management or for enhanced recycling, treatment, or disposal facilities;

26 (6) there is a need for the state to provide financial and
27 technical assistance to communities in the state to improve solid and
28 hazardous waste management within the state;

29 (7) there is a need for state government to provide leadership

1 by working actively to improve waste reduction and recycling activities and
2 to use its buying power to strengthen the markets for recycled goods.

3 → * Sec. 2. AS 46.06 is amended by adding new sections to read:

4 Sec. 46.06.021. SOLID AND HAZARDOUS WASTE MANAGEMENT PRACTICES.

5 In order to minimize present and future threats to human health and
6 the environment in the state, the department shall promote the follow-
7 ing solid and hazardous waste management practices in the following
8 order of priority:

- 9 (1) waste source reduction;
10 (2) recycling of waste;
11 (3) waste treatment; and
12 (4) waste disposal.

13 Sec. 46.06.031. SOLID AND HAZARDOUS WASTE REDUCTION AND RE-
14 CYCLING PROGRAM. (a) There is established within the department a
15 solid and hazardous waste reduction and recycling program. Within the
16 limit of funds available, the department shall

17 (1) coordinate community and agency efforts to reduce the
18 production of solid and hazardous waste, including air and water
19 emissions;

20 (2) promote the practices and priorities established under
21 AS 46.06.021 by promoting solid and hazardous waste reduction, on-site
22 recovery of resources from hazardous waste sources, recovery of re-
23 sources from solid waste sources, repeated use of packaging and prod-
24 ucts, materials recycling, appropriate pretreatment, waste separation,
25 or separate management for waste that creates problems when disposed
26 of within the community, transportation for solid waste that cannot be
27 disposed of within the community, and environmentally sound disposal;

28 (3) provide technical assistance and consultation for
29 source reduction and recycling as necessary to assist with the

1 implementation of the practices and priorities established under
2 AS 46.06.021 with communities and regional planning organizations and
3 generators of solid and hazardous waste;

4 (4) sponsor or co-sponsor, with public or private organiza-
5 tions, technical workshops and seminars on implementation of the
6 practices and priorities established under AS 46.06.021, including
7 solid and hazardous waste reduction and recycling;

8 (5) develop a technical reference center and data base
9 relating to the implementation of practices and priorities established
10 under AS 46.06.021 for solid and hazardous waste reduction and re-
11 cycling;

12 (6) establish and maintain an information referral service
13 on the implementation of the practices and priorities established
14 under AS 46.06.021 for solid and hazardous waste reduction and re-
15 cycling;

16 (7) identify and evaluate research needs for state busi-
17 nesses and industry, communities and regional planning organizations,
18 and state agencies as they relate to the implementation of the prac-
19 tices and priorities established under AS 46.06.021 for solid and
20 hazardous waste reduction and recycling;

21 (8) develop, in consultation with institutions of higher
22 education in the state, courses and curricula related to the implemen-
23 tation of the practices and priorities established under AS 46.06.021
24 for solid and hazardous waste reduction and recycling; and

25 (9) issue hazardous waste reduction matching grants under
26 AS 46.03.317 and community solid waste management planning grants
27 under AS 46.06.041.

28 (b) In response to a request of a hazardous waste generator, a
29 representative of the department may visit the hazardous waste

1 generator's site for the purpose of observing a waste generating
2 process, obtaining information relevant to waste reduction, rendering
3 advice, and making recommendations. A visit under this subsection may
4 not be regarded as an inspection or investigation. A representative
5 of the department designated to render advisory or consultative ser-
6 vices may not have enforcement authority.

7 (c) This section does not diminish the responsibility of a
8 person to comply with this chapter, AS 46.03, AS 46.04, or AS 46.09.

9 Sec. 46.06.041. COMMUNITY SOLID WASTE MANAGEMENT PLANNING
10 GRANTS. (a) A community solid waste management planning grant ac-
11 count is established in the general fund. It consists of appropria-
12 tions made to it.

13 (b) The department may issue matching grants from money in the
14 account to a municipality, to an unincorporated community, to an
15 organization representing two or more municipalities or unincorporated
16 communities within a region, to a nonprofit organization, coastal re-
17 sources service area, or regional health corporation for the purpose
18 of a community solid waste management plan.

19 (c) In its award of a grant under this section, the department
20 shall consider the severity of environmental or public health concerns
21 relating to existing solid waste management practices. The department
22 may consider the extent to which the proposed planning effort will
23 meet the needs of more than one community, the extent to which there
24 is clear evidence of local support for the planning effort, and the
25 number of individuals who will benefit from the planning effort.

26 (d) The department shall establish guidelines for the prepara-
27 tion of plans funded under this section to achieve the practices and
28 priorities established under AS 46.06.021.

29 (e) A grant under this section

1 (1) must be matched on a dollar-for-dollar basis by the
2 grantee in cash or in kind;

3 (2) may not exceed \$50,000 for a single proposal or proj-
4 ect.

5 (f) The department may waive the match required under (e) of
6 this section on a showing satisfactory to the commissioner by the
7 prospective applicant that matching funds are not available.

8 * Sec. 3. AS 46.03.100 is amended by adding a new subsection to read:

9 (e) A person who applies for a solid waste permit under this
10 section shall demonstrate to the satisfaction of the commissioner that
11 the applicant has reasonably considered all solid waste management
12 options and that the permit would be consistent with the practices and
13 priorities established under AS 46.06.021.

14 * Sec. 4. AS 46.03.299(f) and 46.03.316 are repealed.

FISCAL NOTE

REQUEST:

Revision Date: _____ Agency Affected: ADEC
 Title: Act relating to solid BRU: Environmental Quality
and haz. waste management
 Sponsor: Rep. Ulmer Components: Environmental Quality
 Requestor: House Finance Projects

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96
PERSONAL SERVICES	146.0	146.0	146.0	146.0	146.0	146.0
TRAVEL	12.0	12.0	12.0	12.0	12.0	12.0
CONTRACTUAL	24.0	24.0	24.0	24.0	24.0	24.0
SUPPLIES	3.0	3.0	3.0	3.0	3.0	3.0
EQUIPMENT	15.0	15.0	15.0	15.0	15.0	15.0
LAND & STRUCTURES	0.0	0.0	0.0	0.0	0.0	0.0
GRANTS, CLAIMS	500.0	500.0	500.0	500.0	500.0	500.0
MISCELLANEOUS	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL OPERATING	700.0	700.0	700.0	700.0	700.0	700.0

CAPITAL	0.0	0.0	0.0	0.0	0.0	0.0
---------	-----	-----	-----	-----	-----	-----

REVENUE	0.0	0.0	0.0	0.0	0.0	0.0
---------	-----	-----	-----	-----	-----	-----

FUNDING: (Thousands of Dollars)

GENERAL FUND	700.0	700.0	700.0	700.0	700.0	700.0
FEDERAL FUNDS	0.0	0.0	0.0	0.0	0.0	0.0
OTHER	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	700.0	700.0	700.0	700.0	700.0	700.0

POSITIONS:

FULL-TIME	3.0	3.0	3.0	3.0	3.0	3.0
PART-TIME	0.0	0.0	0.0	0.0	0.0	0.0
TEMPORARY	0.0	0.0	0.0	0.0	0.0	0.0

ANALYSIS : (Attach a separate page if necessary)

Funds Ecologist III 77.4
 Project Coordinator 70.5
 Admin. Assist I 52.1

Prepared by: Rep. Lyman Hoffman & Rep. Ron Larson Co-chairs Phone: 465-3757
 Division: House Finance Date: 3-12-90

Approved by Commissioner: _____ Date: _____
 Agency: _____

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

Adopted

FISCAL NOTE

REQUEST:

Revision Date: _____
 Title: "An Act relating to solid and hazardous waste management."
 Sponsor: Rep Ulmer etc.
 Requestor: _____

Agency Affected: Community & Regional Affairs
 BRU: _____
 Components: _____

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96
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	-0-	-0-	-0-	-0-	-0-	-0-

POSITIONS:

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

ANALYSIS : (Attach a separate page if necessary)

There is no fiscal effect for FY 90.

Prepared by: Jim Plasman, Deputy Director Phone: 465-4750
 Division: Municipal & Regional Assistance Date: 2/15/90
 Approved by Commissioner: David G. Johnson Date: 2-15-90
 Agency: Community & Regional Affairs

Distribution (by preparer):

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

Adopted

0114 GH

#1

CS HB 470 (C:RA)

Failed
3-5
R.O. w/AM#1

Amendment

By Rieger

Page 5, lines 1 and 2, delete entirely and insert:

"(1) must not require a match;"

Page 5, lines 5 through 7, delete entirely.

Alaska State Legislature

HOUSE OF REPRESENTATIVES



REPRESENTATIVE FRAN ULMER

MEMORANDUM

TO: Rep. Lyman Hoffmann & Rep. Ron Larson, Co-chairs
Members, House Finance Committee

FROM: Rep. Fran Ulmer

DATE: March 8, 1990

RE: HB 478-Solid Waste Management Planning Grants

HB 478 is a first step towards implementation of a solid waste management plan for Alaska that will also include waste reduction and recycling options. This legislation will allow communities to receive help from DEC, both financial and technical, while they are making decisions regarding solid waste management needs for the future. This legislation specifically address the problem of solid waste at the community level. HB 478 would:

- Establish a preferred hierarchy of solid waste management options so that the state would be "on the record" favoring waste reduction, recycling and appropriate treatment of specific wastes rather than "business as usual" -continuing to generate, at an increasing rate, waste destined for disposal.
- Expand the Department of Environmental Conservation's current efforts in hazardous waste reduction and recycling to include solid waste, and thus allowing the department to provide, among other services:
 - * technical assistance to communities in the waste reduction, recycling and the separate management of troublesome wastes, etc;

(over)

House Finance Committee

March 8, 1990

Page 2

- * assistance to community groups and schools to develop public education programs on the importance of waste reduction and recycling;
 - * a more comprehensive analysis of the full range of solid waste management options available to Alaskan communities, including small scale recycling and disposal technologies; and
 - * a waste reduction and recycling hotline.
- Provide planning and technical assistance grants of up to \$50,000 to local communities (or regional groups) for solid waste management planning, so that communities have the ability to explore reduction, recycling and other management options.
 - Ensure that communities and industrial solid waste facility operators begin to focus on waste reduction and recycling by asking that the preferred hierarchy of management options be considered as part of the solid waste disposal facility permit process.

A letter of intent was added in the House C&RA Committee to help alleviate concerns expressed by rural legislators that money currently used to fund the Village Safe Water Act would be diverted to these new solid waste and recycling programs. This legislation will not supersede a community's efforts to obtain safe water and hygienic sewage disposal, nor will it alter the status of these health and safety concerns for DEC.

Three amendments were added in C&RA Committee. The first one on page 3, line 25, just added a statute reference. The second amendment on page 4, lines 18-24, changed the order of priorities which DEC uses to consider awarding planning grants by listing consideration of the severity of environmental or public health concerns first. The third amendment, on page 5 after line three, adds a new subsection which states that DEC may waive the match required for grants if an applicant can prove that matching funds are not available. This is to enable small communities which have no tax base to also apply for these planning grants.

STEVE COWPER, GOVERNOR

DEPT. OF COMMUNITY & REGIONAL AFFAIRS

OFFICE OF THE COMMISSIONER

February 14, 1990

POSITION PAPER

RE: House Bill 478

SPONSOR: Representative Fran Ulmer

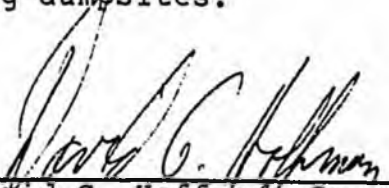
Effects of the Bill

House bill 478 authorizes solid waste management planning grants and requires the Department of Environmental Conservation (DEC) to establish guidelines to assure that source reduction and recycling are considered in those plans.

The bill contains legislative findings supporting a state role in promoting improved waste management and recycling. The findings recognize that many Alaskan communities face environmental health concerns (i.e., safe water) other than solid waste, and will require financial and technical assistance to improve local hazardous and solid waste management. The bill establishes both a solid and hazardous waste reduction and recycling program within the DEC and a program for community solid waste management planning grants. The bill also requires that DEC promote recycling as an activity that should occur before incineration or landfilling.

Comments

Recycling is not mandatory in the legislation, recognizing that it may not be a feasible undertaking in small, remote communities. The legislation also states that two or more communities may join together to plan for solid waste management facilities. In fact, DEC is required to consider the extent to which a solid waste plan will serve more than one community. This may be sufficient incentive for the development of regional or multi-community facilities, and could promote recycling by merging several smaller waste streams to permit economies of scale. DEC is currently considering regional facilities where appropriate to reduce the number of smaller, non-complying dumpsites.



David G. Hoffman, Commissioner

- P.O. BOX 8
JUNEAU, ALASKA 99811-2100
PHONE: (907) 465-4700
- 949 E. 36TH AVENUE, SUITE 400
ANCHORAGE, ALASKA 99506-4302
PHONE: (907) 563-1073

BY REP. ULMER, Brown, Finkelstein, Ellis, Navarre, Koponen, M.Davis, Boyer,
Kubina, Goll, Menard

1 IN THE HOUSE

2

HOUSE BILL NO. 478

3

IN THE LEGISLATURE OF THE STATE OF ALASKA

4

SIXTEENTH LEGISLATURE - SECOND SESSION

5

A BILL

6 For an Act entitled: "An Act relating to solid and hazardous waste manage-
7 ment."

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

9 * Section 1. LEGISLATIVE FINDINGS. The legislature finds that

10 (1) there is a growing concern nationally about the environment
11 and the effects on human health from past solid waste management practices;

12 (2) there is a desire to prevent these effects from occurring in
13 the future as well as a growing interest in conserving and ensuring the
14 wise use of virgin materials;

15 (3) present solid and hazardous waste management practices in
16 many communities in the state do not protect human health or the environ-
17 ment;

18 (4) many communities in the state are necessarily concentrating
19 their limited resources on more immediate environmental or human health
20 concerns such as ensuring a safe drinking water supply or the safe manage-
21 ment of sewage;

22 (5) communities in the state, though concerned over the problems
23 associated with current solid and hazardous waste management practices do
24 not have the technical or financial resources to plan for improved waste
25 management or for enhanced recycling, treatment, or disposal facilities;

26 (6) there is a need for the state to provide financial and
27 technical assistance to communities in the state to improve solid and
28 hazardous waste management within the state;

29 (7) there is a need for state government to provide leadership

1 implementation of the practices and priorities established under
2 AS 46.06.021 with communities and regional planning organizations and
3 generators of solid and hazardous waste;

4 (4) sponsor or co-sponsor, with public or private organiza-
5 tions, technical workshops and seminars on implementation of the
6 practices and priorities established under AS 46.06.021, including
7 solid and hazardous waste reduction and recycling;

8 (5) develop a technical reference center and data base
9 relating to the implementation of practices and priorities established
10 under AS 46.06.021 for solid and hazardous waste reduction and re-
11 cycling;

12 (6) establish and maintain an information referral service
13 on the implementation of the practices and priorities established
14 under AS 46.06.021 for solid and hazardous waste reduction and re-
15 cycling;

16 (7) identify and evaluate research needs for state busi-
17 nesses and industry, communities and regional planning organizations,
18 and state agencies as they relate to the implementation of the prac-
19 tices and priorities established under AS 46.06.021 for solid and
20 hazardous waste reduction and recycling;

21 (8) develop, in consultation with institutions of higher
22 education in the state, courses and curricula related to the implemen-
23 tation of the practices and priorities established under AS 46.06.021
24 for solid and hazardous waste reduction and recycling; and

25 (9) issue hazardous waste reduction grants and community
26 solid waste management planning grants under AS 46.06.041.

27 (b) In response to a request of a hazardous waste generator, a
28 representative of the department may visit the hazardous waste genera-
29 tor's site for the purpose of observing a waste generating process,

1 grantee in cash or in kind;

2 (2) may not exceed \$50,000 for a single proposal or proj-
3 ect.

4 * Sec. 3. AS 46.03.100 is amended by adding a new subsection to read:

5 (e) A person who applies for a solid waste permit under this
6 section shall demonstrate to the satisfaction of the commissioner that
7 the applicant has reasonably considered all solid waste management
8 options and that the permit would be consistent with the practices and
9 priorities established under AS 46.06.021.

10 * Sec. 4. AS 46.03.299(f) and 46.03.316 are repealed.



Alaska State Legislature

House of Representatives Community & Regional Affairs

HOUSE COMMUNITY AND REGIONAL AFFAIRS LETTER OF INTENT
FOR
CSHB 478 (C&RA)

It is the intent of the legislature that the passage of CSHB 478 (C&RA) will not change the status of the program enacted under AS46.07.010 (Village Safe Water Act) in that providing safe water and hygienic sewage disposal for all Alaskans is a primary concern of the Department of Environmental Conservation (DEC).

It is also the intent that funds needed to implement grants under CSHB 478 (C&RA) will be separate from funds used by the DEC for Village Safe Water and the Alaska Clean Water Fund.

It is also the intent of the legislature that the priority of solid and hazardous waste management practices as established in Sec. 46.06.021 of this bill will not supersede a communities' efforts to obtain safe water and hygienic sewage disposal.

Rep. Eileen P. MacLean

Date 2.21.90

Rep. Eileen P. MacLean, Chair
House Community and Regional Affairs Committee



Alaska Environmental Lobby, Inc.

P.O. Box 22151 Juneau, Alaska 99802

907-586-2345

February 19, 1990

Representative Eileen MacLean
Chair, Community and Regional Affairs Committee
Pouch V
Juneau AK 99811

Dear Representative MacLean,

The Alaska Environmental Lobby represents a coalition of 21 Alaskan organizations concerned with environmental quality. I would like to express AEL's support for House Bills 478, 479, and 480, collectively known as the WRRAP Act.

HB 478, introduced by Representative Ulmer, provides a strong framework for responsible management of Alaska's solid wastes. AEL strongly supports policies that encourage waste reduction and recycling.

HB 479, introduced by Representative Brown, will stimulate interest in recycling and responsible use of resources. An award system for Alaskan schools will increase awareness among Alaska's young people, and help them set an example for their communities.

HB 480, introduced by Representative Boyer, will expand the availability of the Clean Water Fund to allow loans for municipal solid waste management projects. In light of the eventual certainty of declining oil revenues, AEL believes that HB 480 demonstrates a laudably realistic approach to the serious solid waste problems facing Alaska.

Thank you for hearing these bills in the Committee on Community and Regional Affairs.

Sincerely,

Molly Kemp
AEL Volunteer



Laurie Ferguson Craig

20 February 1990

TESTIMONY OFFERED FOR WREAP ACT

Thank you for the opportunity to testify in support of this package of bills. The WREAP Act offers positive, forward steps in protecting our environment from unnecessary waste while saving our natural resources through their careful reuse.

Many of us who grew up in a time when we were persuaded by advertisers that everything was manufactured for our "convenience" and that "no deposit - no return" thinking was our birthright, have come to see the consequences of our actions: Landfills are bulging, skies are bruised by polluted air from automobiles and incinerators, and surface water is concentrating chemicals and organisms that negatively affect drinking water sources.

In the next two months we will see the commemoration of two significant events: the oil spill and Earth Day. The wreck of the Exxon Valdez - in addition to shocking the world into the reality of the cost of our demand for resources - inspired the creation of the Valdez Principles, a set of ten

Etchings • Serigraphs • Drawings

P.O. Box 33306 • Juneau, Alaska 99803-3306 • (907) 789-2768



guidelines to encourage corporate operations to function in an environmentally ethical manner. One of the provisions specifically addresses waste reduction, careful disposal and recycling. Corporations are discovering that they can no longer ignore consumer demand for ecologically responsible actions. Profits and good will both result from attention to environmentalism at corporate levels, according to the cover story of the current issue of FORTUNE magazine.

Preparations for the celebration of Earth Day 1990 on Sunday, April 22 are underway internationally as well as locally. It was the first Earth Day twenty years ago which provided the impetus for the establishment of the U.S. Environmental Protection Agency, which is now being upgraded to a cabinet level position by President Bush. Therefore, ~~for~~ your introduction of this group of bills is indeed timely.

In closing, I would like to briefly mention some statistics from Earth Care Paper's catalog of recycled paper products:

"Producing one ton of paper from discarded waste paper uses half the energy, half the water, results in 74% less air pollution and 35% less water pollution, saves 17 pulp trees, reduces solid waste going to landfills, and creates five times more jobs than producing a ton of paper from virgin wood pulp."

I commend you for producing this package of bills and encourage you to provide adequate funding to the agencies designated to fulfill its mandate.

Jimmie Ferguson Craig

My name is Theresa Scott. I am an early childhood administrator in the Juneau School District. Two years ago I started a recycling program at our school to promote recycling newspaper. Seeing these bills makes me very happy and hopeful. I encourage their prompt passage.

I would like to submit the following quotes taken from the "Earth Care Paper, Inc." recycled paper products catalog - a catalog that I use when ordering products for my program.

"The U.S. Forest Service is subsidizing use of virgin wood pulp by selling timber in our national forests below cost. The Forest Service, manager of 22% of the nation's timberlands, lost more than \$2 billion on its sales during the last 10 years. Taxpayers cover the cost of these subsidized timber sales and are effectively paying to shrink the market for recyclable waste paper.

"The Forest Service significantly lowers the price of virgin pulp by leasing large areas of national forest each year regardless of market demand. Limiting sales would make virgin pulp more expensive compared to waste paper pulp and would encourage paper companies to manufacture recycled paper instead of virgin paper.

"While the Forest Service encourages excessive timber harvesting, the world's forests are being cut faster than they grow. Tropical forests continue to be decimated partially due to pulpwood demand. Paper products use about 35 % of the world's annual commercial wood harvest and are projected to use 50% by the year 2000.

"The practice of selling timber below cost depletes wildlife habitat and forces continued reliance on virgin materials. Instead of doubling the timber harvest from national forests by the year 2030, as is currently planned, sales should be reduced as long as waste paper is underutilized. Setting aside publicly owned forests for wilderness and park land would assure forest protection and encourage paper manufacturers to buy waste paper.

"Further, recycled paper, because it requires up to 74% less energy than virgin paper production, is an effective way to scale back the pollutants that contribute to acid rain. Acid rain results from fossil fuel combustion, and the paper industry is the single largest industrial user of fuel oil.

"As citizens of the most consumptive nation in the world, we are easily caught up in the materialistic frame of mind where we take wastefulness for granted. Half of the paper consumed in the U.S. is used solely to wrap and decorate consumer products; most of it ends up in the

landfill where packaging constitutes one third of the volume. Considering the fact that packaging costs account for roughly 10% of the price of a bag of groceries, we could be saving money as well as resources by reducing excess packaging.

"To create a sustainable society, we need to implement the 3-R's: Reduce Waste, Reuse, and Recycle."

I look forward to seeing other bills coming out on recycling plastics and glass. Personally, I rarely buy products that are overpackaged or in packages that we can't recycle. I would love to see a bottle bill passed in Alaska!

Thank you for these bills.



ENVIRONMENTAL SERVICES Ltd.

February 14, 1990

Representatives Ulmer, Brown and Finkelstein
Alaska State House of Representatives
PO Box V
Juneau, Alaska 99811

Representatives,

As we discussed we have reviewed the package of bills you recently introduced on solid waste management and recycling. We concur this is a timely effort in light of growing federal and socio-political pressures to address these complex and difficult problems.

Environmental Services, Ltd. has over 20 years of experience in the arctic and subarctic both in Alaska and Canada with a wide variety of experience and success in dealing with solid and hazardous waste issues. Our staff consists of top environmental professionals from a variety of scientific and engineering fields. Members of our staff have served with the Alaska Department of Environmental Conservation as well as the Department of Interior and have a comprehensive understanding of environmental problems, the regulatory framework and the solutions appropriate and cost effective in Alaska.

Generally, we favor the thrust of the legislation and look forward to being of further assistance in their recrafting to facilitate passage. However, we do offer a few technical changes we believe will clarify implementation and strengthen your efforts toward the goals articulated in your press release.

HB 478 An Act relating to solid and hazardous waste management:

This bill will create a number of new state jobs in the Department of Environmental Conservation. We understand that a fiscal note of \$500,000.00 will be attached. Our main concern is that the individuals hired by the State have the technical expertise and experience required to make this program successful. Over the past two administrations we have watched as DEC Commissioners appoint people to highly technical positions without the proper professional credentials, we find essential in understanding the complexities of waste management problems and in stimulating

HB 480 An Act authorizing loans for solid waste management projects from the clean water fund:

Again our concerns are to ensuring that technically competent people administer any program using these funds and that they not fund public sector efforts that will be in direct competition with existing private sector jobs.

HB 481 An Act relating to state procurement of recycled paper and other products and to the state's use of paper; establishing a waste reduction and recycling task force; and providing for an effective date:

Section 6: Sec 44.99.020 should also include all municipal governments that receive state funds as well as any private company under contract to the State or a municipal government.

This clarification is consistent with the intent of the legislation and reaches far beyond the confines of state agencies. It is also consistent with the reality that the State provides significant funds to local governments which cumulatively create more waste paper, often in remote areas, than state agencies do themselves.

Although the concept of the Task Force is to focus policy makers on the problem, we expect these responsibilities will be delegated down within each agency to those technically competent to make the types of recommendations sought. This is fine, if the policy makers give policy direction as they delegate and as they review the recommendations. Too often, in our experience, the policy makers delegate the work assignment but do not review the broader public policy concerns. This results in a patchwork of public policies that run counter to each other, creating conflict, paralysis, greater public expenditures - and does not move Alaska forward.

General Comments

In order to provide an incentive to reduce waste and recycle used materials it is our experience that specific goals or targets need to be established. These goals must be realistic, economically and technically, but they must also be goals that push public awareness, not drag behind opinion polls. A phased program requiring specific compliance for specific materials that are present, require attention and can be addressed in Alaska should be considered.

We hope these comments are of assistance in your efforts to address this important and timely matter of waste reduction,

Recycling in the States

Update 1989

The rush to recycle continued in 1989 as 38 states and the District of Columbia enacted more than 120 recycling laws through September; yet only two mandates for materials collection were passed. State laws also attacked plastics and such problem wastes as tires, used oil, and batteries with combinations of incentives, bans, and trade-in requirements.

National Solid Wastes Management Association
1730 Rhode Island Avenue, NW
Suite 1000
Washington, DC 20036
(202) 659-4613

NSWMA



CORRECTION

**THIS DOCUMENT
HAS BEEN REPHOTOGRAPHED
TO ASSURE LEGIBILITY**



ENVIRONMENTAL SERVICES Ltd.

February 14, 1990

Representatives Ulmer, Brown and Finkelstein
Alaska State House of Representatives
PO Box V
Juneau, Alaska 99811

Representatives,

As we discussed we have reviewed the package of bills you recently introduced on solid waste management and recycling. We concur this is a timely effort in light of growing federal and socio-political pressures to address these complex and difficult problems.

Environmental Services, Ltd. has over 20 years of experience in the arctic and subarctic both in Alaska and Canada with a wide variety of experience and success in dealing with solid and hazardous waste issues. Our staff consists of top environmental professionals from a variety of scientific and engineering fields. Members of our staff have served with the Alaska Department of Environmental Conservation as well as the Department of Interior and have a comprehensive understanding of environmental problems, the regulatory framework and the solutions appropriate and cost effective in Alaska.

Generally, we favor the thrust of the legislation and look forward to being of further assistance in their recrafting to facilitate passage. However, we do offer a few technical changes we believe will clarify implementation and strengthen your efforts toward the goals articulated in your press release.

HB 478 An Act relating to solid and hazardous waste management:

This bill will create a number of new state jobs in the Department of Environmental Conservation. We understand that a fiscal note of \$500,000.00 will be attached. Our main concern is that the individuals hired by the State have the technical expertise and experience required to make this program successful. Over the past two administrations we have watched as DEC Commissioners appoint people to highly technical positions without the proper professional credentials, we find essential in understanding the complexities of waste management problems and in stimulating

creative solutions. Although it may not be appropriate, in the body of legislation, we would suggest that the Legislature pay close attention to minimal qualifications for each of the positions created by this bill and that an emphasis be placed on private sector experience in the areas to be regulated.

Section 46.06.031(b) places an agent of the State in a very difficult position. If an agent for the State sees a violation, knows that it is a violation and does not report it or serve a citation that agent may be in violation of existing State and Federal law. Furthermore the State will effectively either sanction breaking the law or undermine the credibility of the program. A more productive approach would be to retain enforcement authority, but expand the role of the agent to provide active assistance in designing environmentally effective improvements in an affected facility.

We do not believe this approach would counter the intent of the bill. Much of the "assistance" provided will depend on the management philosophy of the department and the personality of the agent. This reinforces our concern that technically competent people be placed in these positions and that a clear management philosophy be articulated within the department so that professionals understand the parameters within which they must function.

Section 46.06.041(b) gives funds to government agencies (State and Local) as well as non-profit groups that will be in direct competition with existing private corporations in Alaska already providing this service.

We recommend this section be amended so that it restricts public expenditures that are in competition with existing private companies and allows agencies to contract with competent private companies, where they exist, to provide the service. This is clearly consistent with the Governor's policy of, whenever possible, contracting out services the private sector can provide more effectively than State government.

HB 479 An Act establishing an awards program to recognize waste reduction and recycling efforts in school districts; and providing for an effective date:

We have no concerns with this bill. We think it is a positive step forward in establishing the type of recognition and day-to-day environment essential to teach our children the values sought by the bill.

HB 480 An Act authorizing loans for solid waste management projects from the clean water fund:

Again our concerns are to ensuring that technically competent people administer any program using these funds and that they not fund public sector efforts that will be in direct competition with existing private sector jobs.

HB 481 An Act relating to state procurement of recycled paper and other products and to the state's use of paper; establishing a waste reduction and recycling task force; and providing for an effective date:

Section 6: Sec 44.99.020 should also include all municipal governments that receive state funds as well as any private company under contract to the State or a municipal government.

This clarification is consistent with the intent of the legislation and reaches far beyond the confines of state agencies. It is also consistent with the reality that the State provides significant funds to local governments which cumulatively create more waste paper, often in remote areas, than state agencies do themselves.

Although the concept of the Task Force is to focus policy makers on the problem, we expect these responsibilities will be delegated down within each agency to those technically competent to make the types of recommendations sought. This is fine, if the policy makers give policy direction as they delegate and as they review the recommendations. Too often, in our experience, the policy makers delegate the work assignment but do not review the broader public policy concerns. This results in a patchwork of public policies that run counter to each other, creating conflict, paralysis, greater public expenditures - and does not move Alaska forward.

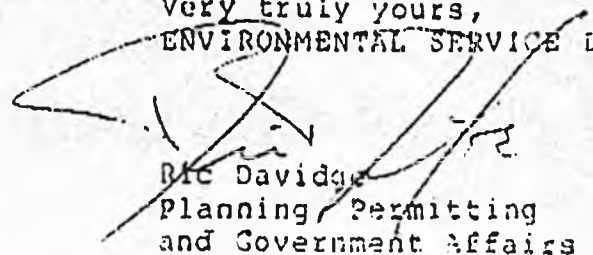
General Comments

In order to provide an incentive to reduce waste and recycle used materials it is our experience that specific goals or targets need to be established. These goals must be realistic, economically and technically, but they must also be goals that push public awareness, not drag behind opinion polls. A phased program requiring specific compliance for specific materials that are present, require attention and can be addressed in Alaska should be considered.

We hope these comments are of assistance in your efforts to address this important and timely matter of waste reduction,

waste management and recycling. We look forward to working with you during the session to move these bills into law.

Very truly yours,
ENVIRONMENTAL SERVICE LTD

A large, stylized handwritten signature in black ink, appearing to read 'Ric Davidge', is written over the typed name and company name.

Ric Davidge
Planning, Permitting
and Government Affairs

Recycling in the States

Update 1989

The rush to recycle continued in 1989 as 38 states and the District of Columbia enacted more than 120 recycling laws through September; yet only two mandates for materials collection were passed. State laws also attacked plastics and such problem wastes as tires, used oil, and batteries with combinations of incentives, bans, and trade-in requirements.

National Solid Wastes Management Association
1730 Rhode Island Avenue, NW
Suite 1000
Washington, DC 20036
(202) 659-4613



Comprehensive Recycling Laws

	Year	Plan	Goal	Mandated Goal	Mandatory Source Separation	Mandated Drop-off Center or Collection	Education	Market Studies	Grants or Loans	Tax Incentives
Arkansas	1989	●							●	
California	1989	●	50% by 2000	●			●	●	●	●
Connecticut	1987	●	25% by 1991		●		●	●	●	
District of Columbia	1989	●	45% by 1994		●		●	●	●	
Florida	1988	●	30% by 1994	●				●		●
Hawaii	1988	●				●			●	
Illinois	1988	●	25% ¹				●		●	
Iowa	1989	●	50% by 2000				●		●	
Louisiana	1989	●	25% by 1992				●		●	
Maine	1989	●	50% by 1994		● ²		●		●	●
Maryland	1988	●	20% by 1994 ³	●				●	●	
Massachusetts	1987	●	20% by 1992						●	
Michigan	1988	●	50% by 2005				●		●	
Minnesota	1989	●	25% by 1993			●	●		●	
New Jersey	1987	●	25% by 1992		●		●		●	●
New York	1988	●	50% by 1997		●		●		●	
North Carolina	1989	●	25% by 1993				●		●	●
Ohio	1988	●	25% by 1994	●			●		●	
Oregon	1983					●	●			●
Pennsylvania	1988	●	25% by 1997		●		●		●	
Rhode Island	1986	●	maximum possible ⁴		●		●		●	
Tennessee	1989	●					●			
Vermont	1987	●	40% by 2000						●	
Virginia	1989	●								
Washington	1989	●	50% by 1995		●		●		●	●
West Virginia	1989	●	30% by 2000							
Wisconsin	1983					●	●		●	

Notes: This chart depicts requirements of both new and revised comprehensive recycling laws; the date of the most recent law is given. Recycling plans may be a component of state or municipal solid waste management plans, or separate requirements. Only final recycling goals are listed; states often include source reduction and composting in this percentage.

¹ This goal only applies to counties with populations greater than 100,000.

² Source separation requirements only apply to offices.

³ Twenty percent recycling is the optimal goal. Counties with populations greater than 150,000 must recycle at least 15 percent of their waste. Counties with populations under 150,000 must recycle at least five percent of their waste.

⁴ Municipalities must achieve at least 15 percent recycling.

Each year, Americans produce 17 million tons of residential and commercial waste. As landfills rapidly reach capacity, local governments are urging citizens to reduce the amount of trash destined for landfills. In some parts of the country, also, landfills are so expensive that recycling is

Twenty-six states plus the District of Columbia now have comprehensive recycling laws. Some provide a framework for state or local government; some mandate local government participation in collection efforts. New York, Phoenix, Philadelphia, and San Francisco have begun collecting recyclables. Three of the others (Houston, Dallas) have programs in place. Over 1,000 curbside recycling programs exist in municipalities around the country.

What is recycling?

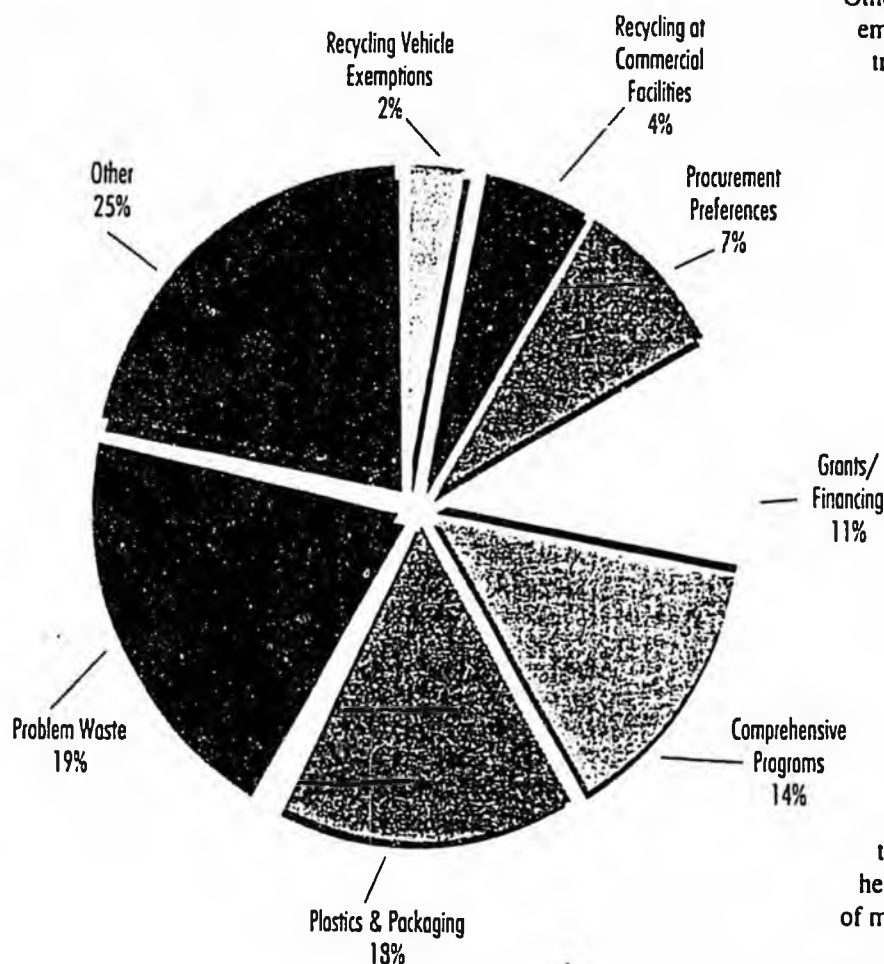
Recycling involves three main steps:

□ Separating recyclables from other waste. Two common methods are curbside collection of materials that have already been separated, and transport of mixed recyclables to a materials recovery facility (MRF) for sorting.

□ Processing recyclables into products. For example, at a plastics recycling facility, plastic waste is cleaned, sorted, and shredded. The chips are melted and molded into new products.

□ Returning recycled materials to the marketplace. Usually as part of other products, recycled materials include old newspaper, which is used for new newspaper or tissue, and recycled glass used in packaging.

1989 Recycling Laws by Primary Topic



Total: 125 laws in 38 states and the District of Columbia¹

¹ States that passed recycling laws through September 1989: Arkansas, Arizona, California, Colorado, Connecticut, Delaware, Florida, Hawaii, Iowa, Illinois, Indiana, Louisiana, Massachusetts, Maryland, Maine, Michigan, Minnesota, Missouri, Montana, North Carolina, North Dakota, New Hampshire, New Jersey, Nevada, New York, Ohio, Oklahoma, Oregon, Rhode Island, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, Wisconsin, West Virginia, and Wyoming.

² This survey identifies recycling bills signed into law as of September 20, 1989. Also included are recycling laws signed by the governor of California through October 1, and Minnesota HF 417, the "Score Bill" signed into law on October 3. Legislatures in Massachusetts, Michigan, New Jersey, Pennsylvania, and Wisconsin were still in session at date of publication.

State Recycling Efforts Expand in 1989

The 125 recycling laws enacted in 1989 encompass a broad range of tactics and programs for materials recovery.² Comprehensive laws were enacted in eleven states — Arkansas, California, Iowa, Louisiana, Maine, Minnesota, North Carolina, Tennessee, Virginia, Washington, and West Virginia — plus the District of Columbia. States also stepped up efforts to recover plastics and problem wastes such as tires, used oil, and car batteries for recycling. Many of the 1989 laws created or reauthorized grant and loan funds to help municipalities purchase equipment and build facilities. Others addressed such diverse topics as exemptions from size limits for recycling trucks, feasibility studies for recycling ash, and recycling in government agencies. Some laws just made minor amendments to earlier acts.

Comprehensive recycling laws passed between 1986 and 1988 were mainly enacted by states with severe landfill capacity shortages. Prominent features of such laws were requirements for separating recyclables at the source, also known as mandatory curbside collection. But 1989 yielded only two separation mandates, in Washington and the District of Columbia. (Maine's separation requirements apply only to offices.) Reluctance to establish the more stringent rules in 1989 may be a reaction to the glutted market conditions that resulted when hundreds of thousands of citizens began to source separate in the Northeast. Also, the majority of states that enacted comprehensive programs this year have the luxury of more than ten years of landfill space.

Here are some examples of 1989 laws:

California. On October 1, 1989, the governor concluded the legislative session by signing the last of 18 new recycling laws. The state now has a mandatory goal of 25 percent source reduction, composting, and recycling by January 1, 1995, which jumps to 50 percent by the year 2000, where feasible. Cities must prepare nine-part source reduction and recycling plans by July 1, 1991 for county approval. Failure to submit adequate plans can result in fines of up to \$10,000 per day. County plans for siting disposal facilities to handle the remaining waste must be sent to the new state Integrated

Waste Management Board. A variety of measures were adopted to create new markets for recyclables. To meet a goal of purchasing 40 percent recycled products by 1995, the state will give preference to recycled oil, glass, compost, plastics, solvents, and paint. The state is also required to begin using retreaded tires, and to purchase only recycled lead acid batteries. In addition, 40 percent of high grade paper purchased by the state must be recycled paper. Local governments will work to create a recycling infrastructure with "market development zones." Incentives for private investment include individual and corporate tax credits and industrial development bonds.

Washington. HB 1671, signed by the governor in May, requires all cities and counties to add waste reduction and recycling strategies to their waste management plans. After plan approval, the municipalities have one year to begin source separation and collection programs. A tax on homeowners, based on the number of refuse containers set out for collection each week, provides funds for municipal composting and recycling facilities. Market development is assigned to the Department of Trade and Economic Development and a task force of state and industry officials. Other provisions include a ban on disposing car batteries, a fee on replacement tires, a public information hotline, and an award program.

Iowa. HF 753 creates a framework for statewide recycling in the future, while targeting reduction and recycling of problem waste. The law establishes ambitious goals of 25 percent waste reduction by 1994 and 50 percent by the year 2000. Communities must develop and implement recycling plans. To aid market development, the state will set up a recycling network linking waste generators and private recycling companies. The law bans a series of materials from landfills including yard waste, lead acid batteries, scrap tires, and used oil. It also prohibits the sale of plastics containing chlorofluorocarbons. In addition, if 50 percent of all polystyrene packaging used in the state is not recycled by January 1, 1994, it cannot be manufactured or sold.

District of Columbia. Noting that 53 percent of the waste stream in the nation's capital is paper, the District passed its mandatory source separation act in January. Residents are scheduled to begin separating all newspaper and yard waste for collection by October 1, 1989. Government agencies and businesses must recycle office paper and newsprint. Separation of glass and metals for both commercial business and residents should start in 1990. (Due to a short start-up time and lack of funds to implement the program, requirements are being phased in more slowly than planned.) A multi-material buy-back center will be constructed to handle some of the

materials; an intermediate processing facility is authorized. The law also requires the District's paper purchases to include "not less than 45 percent (recycled paper products) by October 1, 1992." A plan will be developed to recycle certain hard-to-dispose items and to create tax incentives and loans for businesses.

North Carolina. SB 111 takes a cautious approach towards mandatory recycling. Counties are required to "attempt to achieve" a 25 percent reduction in their waste stream by January 1, 1993. First, recycling provisions must be added to waste management plans, then communities have until July 1, 1991 to ensure "separation before final disposal" of waste. Those who do not comply with the law are ineligible for solid waste grants. State responsibilities include providing technical, planning, and financial assistance for local governments, maintaining a market directory for recyclables, conducting education programs, creating a full-cost accounting system for solid waste disposal, and conducting periodic market evaluations. Lead acid batteries, used oil, white goods and yard trash are banned from landfills. Detailed standards for used oil and scrap tire recycling address facility licenses, transporter registration, and fees. The law also bans the sale of plastic bags unless they are recyclable. Finally, the law establishes a purchase preference for recycled materials in construction projects.

Three states — Oregon, Wyoming and New Hampshire — passed less sweeping laws that require waste reduction measures at landfills and incinerators. Municipalities may send waste to commercial landfills in Oregon only if they have rules in effect at least as stringent as Oregon recycling laws. (This measure is partly in response to proposed shipments of Seattle, Portland, and other big city refuse to landfills in less populated Oregon communities.) Wyoming assesses commercial waste facilities \$10 for each ton of waste they accept, but reimburses \$5 for each ton they reclaim for recycling. In New Hampshire, recyclables must be removed or the garbage otherwise reduced in weight by 15 percent before landfilling (incineration in waste-to-energy plants is acceptable).

A few states have already reported results of earlier legislation:

□ This summer, Rhode Island's mandatory recycling law took effect for commercial businesses. (Residences have until next year to comply.) The state is currently recovering 14 percent of its waste.

□ New Jersey passed voluntary recycling laws in 1982 and then enacted mandatory source separation requirements in 1986. The state achieved an 18 percent recycling rate in 1988.

□ Oregon's 1983 "Opportunity to Recycle Act" took effect in 1986. The Department of Environmental Quality estimates that the state is recovering 24 percent of its waste stream. Portland, which implemented a mandatory curbside program in June of 1987, reports a 26 percent recovery rate.

Creating Markets for Recycled Materials

Successful recycling depends on finding a market for recycled materials. Merely separating such products from other trash does not guarantee their reuse. To increase the demand for recycled materials, state programs must overcome several barriers.

□ Post-consumer materials must meet a manufacturer's need for a steady, high-quality supply. The necessary infrastructure for collecting and processing recycled materials is only now being established.

□ As more recyclables are recovered, the capacity to process the materials into new products must also increase. This will require substantial investment in new plants and equipment.

□ The demand for most recyclables fluctuates with prices in the commodities market for virgin materials. Municipal programs must be able to adapt to such constant change.

So far, state success at collecting recyclables has resulted in supply exceeding demand. Mandatory collection of newspaper in many East Coast cities has caused prices to plummet; in some areas, brokers even charge a fee to remove such paper. Additional paper mill capacity to recycle newsprint is at least three to five years away. In the meantime, states are trying a variety of methods to solve the market problem.

Materials Recycled in the U.S., 1986

	Amount Generated (millions of tons)	Amount Recycled (millions of tons)	% of Waste Stream
Paper & paperboard	64.7	14.6	9.2
Glass	12.9	1.1	0.7
Metals	13.7	1.0	0.6
Plastics	10.3	0.1	0.1
Rubber & leather	4.0	0.1	0.1
Textiles	2.8	0.0	0.0
Wood	5.8	0.0	0.0
Food waste	12.5	0.0	0.0
Yard waste	28.3	0.0	0.0
Other	2.7	0.0	0.0
Total	157.7	17.0	10.7

Source: Franklin Associates, *Characterization of Municipal Solid Wastes in the United States, 1960 to 2000*. Prepared for the U.S. Environmental Protection Agency (Update, 1988).

Incentives for Recycling



California—Recycling equipment investment tax credit for individuals and corporations. Development bonds for manufacturing products with recycled materials.



Colorado—Tax credits for investments in plastics recycling equipment.



Florida—Sales tax exemption on recycling machinery purchased after July 1, 1988.



Indiana—Property tax exemptions for buildings, equipment, and land involved in recycling operations.



Maine—Tax credit equal to 30% of cost of equipment and machinery. Subsidies to municipalities for scrap metal transportation costs.



New Jersey—50% investment credit for recycling equipment and programs.



North Carolina—Industrial and corporate tax credits and exemptions for equipment and facilities.



Oregon—Individual and corporate income tax credits for equipment purchases and facilities.



Texas—Franchise tax exemption for sludge recycling corporations.



Washington—Exemption of tires and certain other hard-to-dispose materials from portions of sales and use taxes.



Wisconsin—Sales tax exemptions for equipment and facilities; business property tax exemptions for some equipment.

States Target Materials

In 1989, many states focused their legislative efforts on recycling specific materials such as plastics, packaging, yard waste, and hard-to-dispose items.

Recycling Problem Waste

State lawmakers this year favored recycling as the best method of managing such problem wastes as tires, used oil and car batteries. These laws create infrastructures for recycling, which include disposal restrictions, storage facility permits, public notices, and trade-in requirements. **New Hampshire** and **Maine** place a surcharge on new car batteries, and then give consumers a rebate if they bring in their used battery for trade-in. **Oklahoma** places a \$1.00 fee on each new tire sold and then returns 50 cents to permitted processing facilities for each tire handled. **North Carolina** funds a separate public education campaign just for used oil collection and recycling. **Connecticut** is the first state to mandate recycling of nickel cadmium batteries, one source of heavy metals in municipal waste. Consumer products containing these batteries must be labeled, and the battery must be easy to remove. Recycling efforts begin after July, 1993.

State	Used Oil	Lead Acid Batteries	Tires
California	•	•	•
Florida			•
Hawaii	•	•	
Iowa	•	•	•
Illinois		•	
Indiana	•	•	
Louisiana	•	•	•
Maryland	•	•	•
Maine		•	
Minnesota		•	
North Carolina	•	•	•
New Hampshire	•	•	•
New York		•	•
Oklahoma		•	•
Oregon	•	•	•
Rhode Island		•	•
Tennessee		•	•
Texas		•	•
Virginia	•	•	•
Washington	•	•	•
Wyoming		•	

Why are these problem wastes?

Over 400 million gallons of used oil (40 times the amount of the Exxon Valdez oil spill) end up in the trash or sewers each year. About 50 million gallons of used oil are reprocessed each year into fuel, lubricant, and hydraulic oils.

About 27 percent of the 240 million vehicle tires discarded each year are reclaimed, most of them recycled. One promising use for the other 73 percent is rubberized asphalt. Currently, surplus tires are thrown in stockpiles, adding 150 million to 200 million tires a year to the estimated two billion to three billion tires already there. Such stockpiles can be breeding grounds for disease-carrying mosquitoes. Another hazard is tire pile fires, which send noxious gases into the air and can take months to extinguish.

Even though about 80 percent of the lead acid batteries sold in the U.S. are recycled each year, a recent EPA report found that the discarded ones are still a major source of lead in municipal waste. New laws aim to capture the remaining 20 percent for recycling.

Plastics and Packaging

Plastics and packaging have received intense scrutiny as symbols of a disposable society. EPA estimates that packaging and containers account for about 30 percent of our waste, and plastics represent

seven percent (by weight). Recent research has shown that plastics packaging accounts for about nine percent of the volume in landfills. (All plastics account for 18 percent of the volume.) Relatively little plastics and packaging is recycled, partly because the multiple materials and resins in the products are difficult to separate. However, research is underway to surmount this obstacle. Chemical companies and the waste industry have recently formed joint ventures to collect and recycle soda, milk, and detergent bottles, as well as polystyrene containers and utensils into such products as fiberfill, strapping tape, flower pots, and lumber-substitutes. (Plastic containers can absorb traces of their contents, so they are not approved for reuse as food packaging.)

Meanwhile, some states are threatening to ban some types of plastic and packaging if they are not recycled. Others are passing laws to facilitate recycling of these products by requiring codes on plastic bottles that name resin types, and by restricting the sale of multi-material containers. Colorado is

attempting to lure the fledgling plastics recycling industry into the state with tax credits, as well as grants and loans for research and development and new equipment.

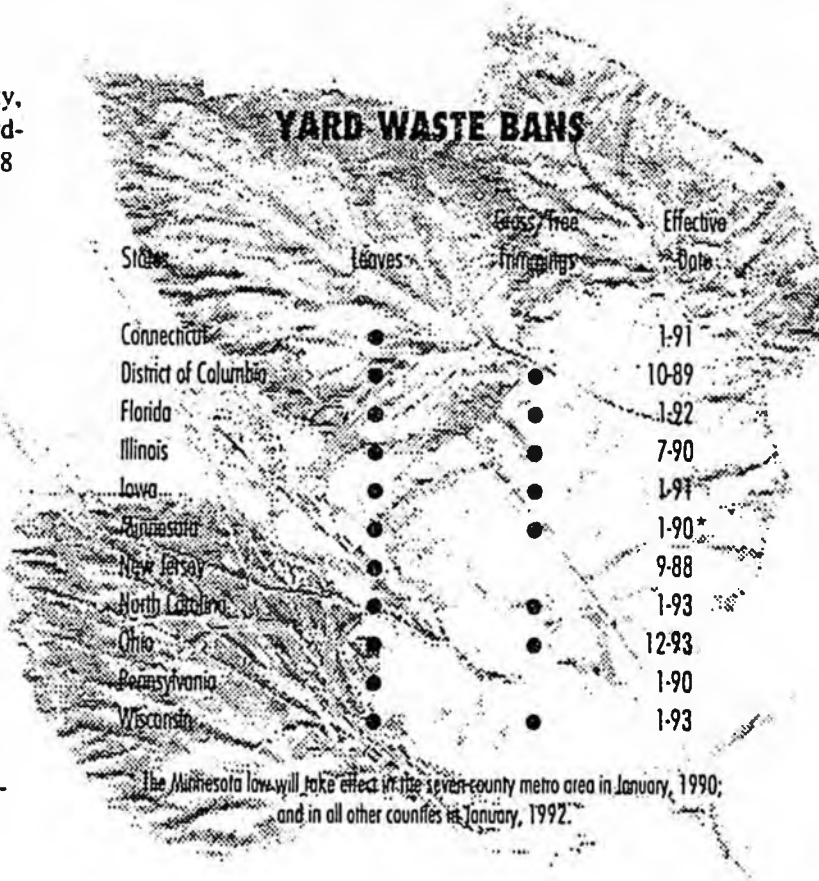
At least 18 states now require codes on plastic containers to identify the type of resin they are made from so that industry can readily sort them for recycling purposes. Twelve states (Colorado, Iowa, Indiana, Louisiana, Ohio, Maine, Massachusetts, Michigan, Missouri, North Carolina, North Dakota, and Texas) passed such laws in 1989. The deadlines for coding range from January 1990 to July 1992.

Illinois, Connecticut, and New Hampshire passed laws in 1989 to put logos on recyclable products and those made from recycled materials to encourage consumers to buy them.

At least ten states (Illinois, Iowa, Louisiana, Maine, Missouri, North Carolina, Oregon, Nevada, Rhode Island, and North Dakota) enacted product bans in 1989. Common targets were plastic beverage containers unless recyclable, beverage containers with detachable rings or tabs, and polystyrene packaging made with chlorofluorocarbons. Similar bans have been enacted in Berkeley, CA; Newark, NJ; Suffolk County, NY; Minneapolis and St. Paul, MN; and Portland, OR.

Yard Waste

In the quest to save landfill capacity, yard waste is an attractive target. According to EPA, this material accounts for 18 percent (by weight) of total discards. In some states with year-long growing seasons, the percentage can be much higher. Ten states plus Washington, D.C., have now banned yard waste from landfills (the District of Columbia, Iowa, Ohio, and North Carolina enacted such bans this year). While most laws provide for separate collection, residents of Illinois, Wisconsin, and Minnesota may have to bring the material to city facilities themselves or keep the materials at home. Yard debris can be composted to make mulch and soil stabilizers. Louisiana, Florida, Maine, and Ohio are among the states in the process of drafting regulations for compost production and use.



Conclusion

In 1989, state laws began to reflect an understanding that recycling is more than separate collection of materials. New legislation tried to put the process into a larger framework of planning and goal setting. Progress was made toward recycling such problem wastes as used tires, oil, and car batteries, and toward recycling materials that are not now being extensively recovered. These efforts are still evolving. More stringent rules, such as requirements to use recycled materials, along with tax incentives for manufacturers, may be needed to ensure that markets can keep pace with plans for recycling in the states.

**ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL QUALITY**

SOLID WASTE AND WASTE REDUCTION STAFFING

The House Finance Committee requested information concerning the Department's ability to carry out the duties described in CSHB 478 with existing Solid Waste Management and Waste Reduction Project staff.

SOLID WASTE MANAGEMENT PROJECT

The Department currently has 2 full-time equivalent (FTEs) staff members in the Central Office, a Solid Waste Project Manager and an Environmental Engineer, the latter added in FY 90 by the Toxics Control Increment to work on industrial waste issues. Another 12.5 FTEs are technical staff positions distributed among the Department's three regional offices and 14 district offices. These field staff positions include 1 FTE for drilling waste and 5 FTEs added in FY 90 by the Toxics Control and the Rural Health Increments, respectively. The remaining staff provide regional program management and administrative support of the technical staff.

The Solid Waste Management Project now is responsible to:

- Maintain regulations that prescribe standards for the collection and disposal of garbage, refuse, and other solid wastes from industrial, commercial, agricultural, and community activities at an estimated 750 solid waste landfills, 400 oil and gas drilling sites, and 150 other waste disposal sites in Alaska;
- Annually issue permits for approximately 100 solid waste disposal facilities, including municipal landfills, oil and gas drilling waste sites, ore processing waste disposal sites, wood waste disposal sites, and other industrial waste disposal sites;
- Annually conduct approximately 130 inspections of solid waste disposal sites to determine the operators' compliance with the Department's regulations and permit conditions;
- Annually respond to approximately 100 citizen complaints involving the improper management or disposal of solid wastes;
- Prepare enforcement actions for violations of Alaska's solid waste management laws;
- Monitor and influence the development of proposed federal legislation and regulations for municipal solid wastes, oil and gas drilling wastes, infectious wastes, mining and ore processing wastes, and marine debris, to ensure they properly apply to and benefit Alaska; and

D R A F T

- Assist Alaskan communities to improve their local solid waste management and disposal practices and facilities and comply with federal and state requirements, including MARPOL, through education and direct technical assistance;

The Solid Waste Management Project is unable to add further responsibilities or shift current staff responsibilities to perform many of the tasks included in CSHB 478. The Department's existing Solid Waste Management Project staff already is unable to keep pace with the demands placed upon them. The Department proposed an FY 91 Solid Waste Management operating budget increment to improve the capacity of the Solid Waste Project to meet the current and projected demands. This increment was not recommended to the Legislature by the Governor.

WASTE REDUCTION PROJECT

The Department's Waste Reduction Project was initiated in FY 90. The Project's staff now consists of one full-time Ecologist position, funded by a two-year, Source Reduction, Recycling, and Technical Assistance (SRRTA) grant from EPA for hazardous waste reduction. Because the SRRTA grant was awarded to conduct specific hazardous waste reduction projects described in the application's workplan, the Department will be unable to devote any of this staff member's time to the tasks described in CSHB 478, except to the extent that those tasks overlap. The Legislature declined to fund two hazardous waste reduction positions requested by the Department in conjunction with enactment of HB 106 in 1989. Under the terms of the EPA SRRTA grant and within the limits of funding provided by the Legislature in FY 90, the Waste Reduction Project now is responsible to:

- Provide technical assistance on waste reduction methods to Alaska businesses, government agencies, and communities;
- Develop a long-term plan to provide waste reduction and recycling technical assistance to businesses and government agencies;
- Develop a multi-media pollution prevention plan within the agency and implement it;
- Evaluate other state government programs for their potential involvement in an integrated Alaska pollution prevention plan;
- Work with other Northwest states and EPA to discuss regional waste reduction issues and develop regional waste reduction plans; and
- Work with the Alaska Health Project, a co-recipient of the SRRTA grant, who will provide waste reduction technical assistance to businesses, answer public inquiries, develop a waste reduction course curriculum for the University of Alaska Anchorage, produce a waste reduction newsletter, conduct waste reduction seminars, and design and implement a pilot waste reduction project in the North Slope Borough;

D R A F T

House Demos push recycling bills

By LARRY PERSILY

The Associated Press

JUNEAU — House Democrats introduced a package of bills Wednesday to promote recycling and safe disposal of Alaska's trash.

"We need to change society's behavior regarding garbage," said Rep. Kay Brown, D-Anchorage, one of the bills' sponsors.

The sponsors said problems stemming from Alaska's growing pile of garbage are not limited to any one area of the state.

"Fairbanks is facing the most immediate crisis in terms of landfill shortage," Brown said.

Many rural communities lack approved dumps and residents are forced to use illegal sites, said Rep. Fran Ulmer, D-Juneau.

The state Department of Environmental Conservation says it could cost more than \$100 million to correct all of the illegal and unsafe dumps around the state, Brown said.

"Alaska doesn't have a choice," Ulmer said.

Mandatory recycling doesn't make sense for Alaska because of the state's immense size and diversity, Ulmer said.

Instead, the focus of the

Trio of lawmakers gets funky about garbage

The Associated Press

JUNEAU — Three lawmakers got down, got funky and got news coverage Wednesday when they performed a rap song to promote legislation they introduced in the State House.

The word that the trio would sing was written by Rep. Kay Brown of Anchorage. It attracted nearly every reporter and camera crew in the Capitol, where news conferences on routine bill introductions often are ignored.

The legislation they promoted is called the Waste Reduction, Recycling and Planning Act — the WRRA Act for short. Proving that they were here,

rap singers, Brown and fellow Democrat Reps. Fran Ulmer of Juneau and David Finkelstein of Anchorage sat at a table to perform the song. Singing in a cappella, they kept a beat by rapping their hands.

The song, which is the best way to move recycling bills in the following weeks.

Garbage running over landfills shut the door.

Where to put the garbage from villages.

Reduce it, reuse it, recycle it, that's the thing. Garbage is a resource, so let's begin.

bills includes promotion of a program in House Bill 479 is recycling efforts, public education, adopted.

A second bill would provide planning and technical aid grants to communities for recycling, garbage disposal and pollution control. House Bill 478 does not include an appropriation and the co-sponsors said a cost estimate would be developed later.

House Bill 481 would require the state to start buying recycled paper, with a goal of 25 percent recycled paper by 1994, said Rep.

Each of the four bills have up to a dozen House Democrats as co-sponsors. One of the bills calls for the state to provide grants to schools for recycling programs. The measure does not provide any money for grants, but Ulmer and Brown said they hope lawmakers will agree to fund the grants if the incentive

David Finkelstein, D-Anchorage. The measure also would give preference to recycled products in state contract bids.

House Bill 480 would expand the Alaska Clean Water Fund to allow loans for landfill improvements and other waste-disposal programs.

The fund is comprised of state and federal money and would offer low-interest loans to communities, said Rep. Mark Boyer, D-Fairbanks.

THE FOLLOWING DOCUMENT HAS
NOT BEEN FILMED BUT IS
AVAILABLE IN THE ORIGINAL
FILE

EPA REGION 10
MUNICIPAL SOLID WASTE NEEDS ASSESSMENT

FINAL REPORT

prepared for:

U. S. ENVIRONMENTAL PROTECTION AGENCY
1200 Sixth Avenue
Seattle, Washington 98101

September 29, 1989

VI. ALASKA PROFILE

Preliminary Observations

We have identified eight major issues facing Alaskans with respect to their management of municipal solid waste. These are briefly summarized below and then each issue is explored in greater detail.

1. Lower Priority of Solid Waste Issue Municipal solid waste has had a relatively low profile as an environmental issue commanding statewide attention. There appear to be three reasons for this -

- Many Alaska communities face more immediate problems on a daily basis, such as having a safe drinking water supply or some minimal safe handling of sewage. Thus, solid waste concerns tend not to be ranked as highly when scarce resources are allocated. In addition, solid waste management is generally not perceived as a problem for there is no "capacity crisis" as such in Alaska.
- The environmental costs associated with current solid waste disposal practices are not fully acknowledged, partly because neither the communities nor the state have the resources to monitor and analyze these impacts.
- There is no homogeneity in community solid waste management practices in Alaska, thus there is little commonality in solid waste problems. As a result, there has not been a united effort by concerned parties to raise the overall profile of the issue.

2. Discrepancy between National Environmental Standards and Alaska Conditions Alaska's unique characteristics and history result in a mismatch between Alaska's existing conditions and the environmental standards and enforcement practices designed for communities in the rest of the country. This raises two issues:

- What is the appropriate way for the regulatory agencies to acknowledge this "mismatch?" and,
- To the extent that national environmental standards are inappropriate, what standards are useful as a means of reducing the environmental costs associated with solid waste disposal in Alaska?

3. Limited Availability of Resources at Every Governmental Level Through Alaska, there are limited resources to address solid waste problems because many communities lack local tax bases and tend to pay for services and, to an even greater extent, capital improvements with state funds. Thus, the state - through the legislature - is likely to set spending priorities. Capital improvement programs such as solid waste facilities must, in turn, compete with other spending priorities (schools, roads, sewers, etc.) The state's revenue crisis caused by lower oil prices exacerbates this situation. In addition, communities may feel unable to charge a user fee which covers the full cost of providing solid waste services because that might encourage use of readily available illegal alternatives, such as dumping at remote roadsides, in rivers in the ocean or on ice. Furthermore, many communities do not have any local government structure, per se, making planning, building and operating better solid waste management facilities difficult, at best.

4. Industry Regulation in a Changing Environment Regulation by the Alaska Public Utilities Commission of the solid waste hauling industry raises several issues. First, state regulation decreases the flexibility of the overall system by precluding local governments from regulating that portion of the industry operating in their areas in accordance with their solid waste objectives. It also is institutionalizing - through the rate structure - a system where collection companies also handle recycling activities, possibly preempting the growth of a separate recycling industry. Finally, private disposal operators are regulated under this system. While in the past collection was the largest cost associated with garbage services, in the future, the cost of environmental compliance is likely to shift a growing percentage of the overall cost of garbage service to disposal. For the communities served by private disposal operations, there will be no regulation as to how - or when - these environmental costs, including the ability to meet long-term disposal costs, are passed on to the customer.

5. Economic Reality of Alaska Commercial Recycling While recycling is clearly an essential component of a solid waste management system in many places, it faces a difficult economic challenge in establishing itself as a crucial part of Alaska's solid waste management system. The economics of recycling depend on one of two things - profits resulting from reselling the recyclables or the amount of subsidy paid to communities to recyclers as a means of avoiding the cost of disposal. Profits from Alaska recycling are likely to be slim to non-existent for most commodities because of the cost of shipping a small volume of goods to market in Seattle or the Orient. Subsidies are likely to be paid only by communities facing a disposal capacity crunch which makes it worthwhile to pay to divert waste from the system. None of the interviews suggested that such lack of capacity was a determining factor in establishing

recycling programs in Alaska. However, public support of recycling activities is seen as important to change the way Alaskans view their waste stream and to involve them in environmentally-sound solid waste management.

6. Special Waste Issues Complicating solid waste management issues in many communities is the issue of special wastes, notably used oil, used anti-freeze and asbestos. Climate plays a part in this problem. For example, once items such as paint freeze, they become unusable and hence a waste product. Most Alaska communities have neither a suitable landfill to receive this waste nor the wherewithal to ship it out for appropriate disposal.

7. Planning Vacuum Compliance with tighter environmental regulations, whether it is EPA's Subtitle D for landfills or any of its anticipated regulations on incineration or ash management, raises the fixed costs of operating a disposal facility. This, in turn, spawns the need for larger, regional facilities serving more people and thus, spreading these environmental compliance costs over a larger rate base. Because so many Alaska communities lie in the Unorganized Borough, where no legally organized government exists beyond those of the isolated villages, there is a governmental vacuum for regional planning efforts in solid waste.

As well, even many of the organized boroughs do not have planning mechanisms in place to deal with this issue, either within the borough or with adjacent jurisdictions. For instance, communities in both Southeast and Southwest Alaska recognize the need to comply with the MARPOL ANNEX V (MARPOL) requirements for shoreside handling of ship board wastes, as well as to improve compliance with environmental standards. Thus, communities in these regions are currently using informal methods to work together to think about solid waste issues as a region. However, these areas lack a vehicle for formal coordination between boroughs and those communities lying outside borough boundaries.

8. Need to Recognize Regional Differences Each of the issues outlined above exists to a greater or lesser extent in all of the communities throughout the state. However, each issue takes on a different aspect when viewed in a regional or geographic context. In this profile, there are four distinct Alaska regions which have different capabilities for dealing with these issues: Southcentral, Rural, Southwest and Southeast. For instance, while Anchorage may be troubled by lack of financial resources for implementing solid waste management improvement, it has in place a mechanism to deal with that issue - the tipping fee. However, rural communities facing the same generic problem of lack of resources have far fewer options, for they do not have

regulated dumps or tipping fees. Nor do these rural residents have the cash incomes needed to pay these costs. Thus, each problem must be understood on two levels: in terms of the regional characteristics which affect practical solutions about solid waste management and in the context of statewide concerns.

In the following sections, each of these issues will be discussed in more detail. They will be taken in the order listed above, with one exception. In order to provide some understanding of the regional component of these issues, we will discuss Issue #8 - The Need to Recognize Regional Differences, first.³

Need to Recognize Alaska's Regional Differences

Alaska's solid waste concerns are first and foremost a function of the state's tremendous size, encompassing widely varying climatic and geographic features. Given that its small population is widely scattered over an immense land area - with communities connected to each other more often than not by air or waste transport - it is much more difficult to generalize about the solid waste issues facing Alaska communities than it is in states where communities are more similar. On one hand, many rural Alaska communities are still relying upon some of the most elemental solid waste management techniques found in the Pacific Northwest - including open burning and open dumping. Anchorage, on the other hand, has a state-of-the-art landfill and a program which could be a national model for household hazardous waste (HHW) segregation and disposal. Different demographic, governmental and economic characteristics define four distinct regions: Southcentral, Rural, Southwest and Southeast. After a brief introduction to the state, each of these regions will be discussed in more detail.

Policymakers outside Alaska often fail to appreciate its size and diversity, making it hard for them to fully comprehend the problems associated with distances in Alaska and the

³ The focus of this regional solid waste needs assessment has been on municipal solid waste. Clearly, each state in the region has other solid waste issues - issues likely to command more attention over time as federal regulations are developed to address the associated environmental issues they raise. In Alaska, there appear to be eight distinct solid waste streams apart from municipal solid waste: wastes associated with the oil and gas industry which is currently concentrated on the Kenai Peninsula and the North Slope; wastes generated by mining operations, other than camp wastes; timber industry wastes, including stockpiles of logs for which there is no market; asbestos insulation from old schools and buildings; waste generated by the Army Corps of Engineers from the clean-up of abandoned military sites; medical wastes; raw sewage septage and sewage sludge; and, foreign food wastes handled under APHIS regulations. Generally these waste streams are handled apart from the general flow of municipal solid waste, and thus, fall outside the scope of this regional assessment.

cost of transportation. Perceptions of the state are distorted by most maps of Alaska for, in an atlas where every U.S. state is given one page, the scale for the Alaska map is quite different than that used for other states. Thus, it seems appropriate to outline some of the differences in scale that exist between Alaska and the other Region 10 states:

- Alaska covers an area almost two and a half times as large as Idaho, Oregon and Washington combined, with only 6.5 percent of the people. The North Slope Borough alone is larger than either Washington or Idaho.
- The Unorganized Borough (UOB) of Alaska - covering an area one and a half times as large as Washington, Oregon and Idaho combined - is an entity unique in the United States. It has no organized regional government (i.e. counties, parishes, etc.) and while there are over one hundred organized "cities" in the UOB, the largest has only 4,400 people and most have less than 1,000 people.
- The organized local governments in the Southcentral Alaska corridor, the "Railbelt" - from Fairbanks to the Kenai Peninsula, cover an area about two-thirds the size of Washington state.
- The Kenai Peninsula Borough, home to about 43,000 people, covers over 14,000 square miles - an area greater than the nine counties in the Idaho Panhandle.

Not surprisingly, given its size, Alaska communities experience extremes of climate: from parts of the Interior with frigid temperatures, rivers frozen for all but a few months a year and ground which is permanently frozen just a few feet below the surface, to the more moderate maritime climates of Southeast and Southwest Alaska. However, while these latter regions may have more moderate temperatures, they also tend to receive significant amounts of precipitation and have little topsoil, resulting in leachate problems; as well, they are mountainous with few suitable landfill sites. Communities in all parts of Alaska must contend with the fact that they are often located in wetlands - complicating both the practice and regulation of solid waste management. Those in Southwest Alaska and the Yukon Delta lack good local sources of cover material. And, some communities face seasonal flooding and high winds which disperses solid waste.

Further influencing solid waste management is the fact that, of Alaska's half million people, about twenty-five percent live in communities with no road access:

- some 3,000 people live in the Southcentral coastal communities of Whittier and Cordova;
- about 52,000 people live in rural Alaska - the North Slope, the Interior and the western areas;
- another 68,000 people live in Southeast Alaska (including Haines & Skagway which only have road access into Canada); and,
- finally, some 21,000 people live in the southwestern part of the state extending along the Aleutian Islands.

Altogether, 162 incorporated communities and 96 unincorporated ones do not have road access and must rely on air or water transport, including ocean-going ships and river barges. All Alaska transportation - both within the state and to/from the Lower 48 - is expensive because of the distances involved and the lack of economies of scale for transport operators.

The following four sections briefly describe the characteristics of each region, the current state of solid waste management, and the solid waste issues which are emerging there.

Southcentral Alaska - The Railbelt Seventy-five percent of Alaska's residents are concentrated in a corridor from the Kenai Peninsula to Fairbanks, along the road and railroad systems. Unlike other parts of Alaska, most of the communities in Southcentral are connected by both the road system and rail service. In 1987, Anchorage - the largest city in Alaska - opened a new state-of-the-art landfill. Both the Kenai Peninsula Borough and the Fairbanks North Star Borough are reported to be considering the need for new landfill sites. Solid waste management costs vary widely along this corridor. The Anchorage landfill has a tipping fee of \$45 a ton, while the Kenai Peninsula Borough has four landfills with no tipping fee. With the exception of parts of Anchorage which have municipal collection services, collection in the organized parts of Southcentral Alaska is provided by private collection contractors and garbage is taken to the appropriate borough landfill.

Recycling services are provided in Anchorage through buy-back centers and a commercial recycling program operated by the Anchorage Recycling Center (ARC), which is owned by Alaska's largest collection company, Anchorage Refuse Company. When vans are available (currently, southbound vans are all committed to shipping oil

spill clean-up wastes), ARC ships south between twenty and forty vans of materials a month. It ships under the auspices of Alaska Litter Prevention and Recycling Program (ALPAR), a non-profit group committed to litter control throughout Alaska. ALPAR has been able to negotiate with shippers for a favorable backhaul rate. ALPAR also works with airlines to have them carry out aluminum from rural areas to be recycled. Limited recycling by other communities in this region feeds materials into the Anchorage operation.

In Southcentral Alaska, solid waste planning and management conforms more closely with that being practiced in the rest of the country. There are local governments; there is a cash economy; and because of the concentration of population, there is both the need and the ability to pay for formal solid waste management programs. The boroughs in this corridor are wrestling with the full range of emerging solid waste issues - monitoring and remediation of closed landfills, siting of new facilities in the face of local opposition, exploring the trade-offs between charging the true cost of disposal and concern over illegal dumping, investigating methods to keep hazardous wastes out of MSW landfills, and debating the need for curbside recycling given the marketing problems associated with the cost of transportation and the currently declining prices for key recyclables such as paper.

Rural Alaska Generally that entire expanse of territory north, west, southwest and east of the Anchorage/Fairbanks road corridor is considered rural. There are also remote villages with rural characteristics on the Kenai Peninsula and in Southeast and Southwest Alaska. Many of these villages have their roots in one of the Native Alaska cultures. Because of the provisions of the Alaska Native Claims Settlement Act, these Native villages are not "Indian reservations" and the State has jurisdiction over their environmental regulation, though some services are provided through the Indian Health Service. [The Metlakatla Reservation, south of Ketchikan, is the only federally-recognized Indian Reservation in Alaska.]

The larger communities (2,000 to 4,000 people) may have some tax base, however they still have limited financial and technical resources to devote to solid waste management. The smaller villages are characterized by: small populations - most with under 500 people; a subsistence-based economy; no tax base; and, limited financial ability to maintain any complex system. The exception to this is the North Slope Borough, which through its property tax revenues from the Prudhoe Bay oil and gas complex, can afford to provide Barrow, and its seven villages, with heavy equipment and technical assistance in solid waste management. Rural communities are generally only accessible by air or boat and are not connected to each other or to regional centers by any year-round

surface transportation. For those on the northern and western coasts of Alaska, as well as along the river systems, barge access is available only during the summer months, after the "break-up" of ice. Those living in areas of permafrost cannot dig proper landfills because the tundra turns to "goeey mud" when the top few feet thaw each summer.

The Indian Health Service and the state recommend creating landfills where feasible, though for many villages it is not. About three-quarters of the 209 native villages do not have permits for their landfills and the state does not attempt to literally enforce its standards or require permits. Many villages find a pond on the tundra - hopefully big enough to last for several years - and use that for waste disposal. Some communities have landfills which regularly put cover material over their wastes, but most do not. Some communities have both landfills and illegal dumping. Unlike communities of a similar size which may exist in other states, these rural Alaska communities cannot take advantage of nearby county or regional landfills. Over half of these villages rely on individuals to take trash to the dumps and, without collection services, community governments have less control over the waste stream.

A rural village is generally only able to provide funding for projects to the extent that it receives funds from the state government. Thus, to some extent, its priorities are set by the state legislature as it approves funding for various programs. Capital spending on solid waste competes with programs for water and sewer, as well as schools, airports and roads. Operating funds compete with the full range of services that are required in rural areas. In some communities individuals may have incomes, but mechanisms do not exist to get people to pay for services. One estimate indicates that \$2 billion may be required to bring bush facilities up to lower 48 standards - about \$38,000 per person.

A primary vehicle for assisting rural Alaska villages in planning for and providing solid waste services is the Alaska Department of Environmental Conservation's (ADEC) Village Safe Water (VSW) Program. VSW provides technical assistance, gives grants, oversees construction and provides technical support to operators of some water, sewer and solid waste projects in 220 villages. By working with communities on the planning, operational financing, and maintenance needs of a project, VSW is able to design and build projects which reflect the villages' needs and pocketbooks and which are technologically appropriate for remote areas. Not all state-funded rural projects are administered by VSW. Many have been direct grants to communities. Federal assistance can come in the form of U.S. Public Health Service or Indian Health Service projects as well. One reviewer noted that rural villages may not be able to afford

landfill operators, or even to collect user fees, as the village governmental infrastructure weakens over time with decreasing levels of state support.

In rural Alaska, there is tacit acknowledgement on the part of the ADEC that current regulatory standards are not workable in these rural communities. Thus, the issues facing the state and these communities in their solid waste efforts are more basic:

- How do small isolated villages achieve any measure of sound solid waste management practice in a severe climate and a non-cash economy?
- Assuming there are alternate methods or improved methods of solid waste management, how is that information best communicated and those methods implemented?

In addition, there is no existing mechanism in the Unorganized Borough which would promote, where possible, the creation of regional solutions to solid waste disposal problems.

Southwest Alaska Southwest Alaska stretches from Dillingham and Bristol Bay southwestward onto the Aleutian Chain. This area includes the Bristol Bay Borough, the Kodiak Island Borough and the Aleutians East Borough, as well as the major port city of Unalaska (Dutch Harbor) which lies outside any borough boundary. None of these communities has road access. While similar in topography and climate to Southeast Alaska, Southwest communities are smaller and more distant from each other. Kodiak, the largest community in this area, has about 6,700 people and Unalaska is second largest with a full-time population of about 1,900.

A number of factors affect solid waste management in Southwest Alaska. Landfilling along the Alaska Peninsula and in the Aleutian Islands is complicated by heavy rains and snow which result in huge amounts of leachate generation. Suitable landfill sites are lacking because of the mountainous terrain. There is heavy competition for any available flat land between the siting demands of housing, business and other public facilities such as airports and roads.

While the communities in Southwest Alaska have small resident populations, their wastes represent the tip of the solid waste iceberg. These communities see the population swell during the peak fishing months which greatly increases the solid waste volume. Recently, the Coast Guard promulgated regulations implementing MARPOL, an international restriction on the ocean dumping of wastes, particularly plastic wastes.

Ports receiving ocean-going vessels are required to receive ship-board waste, and to dispose of it in a suitable way. The Coast Guard has the authority to close a port if it does not comply with these solid waste regulations. Though the full effect of MARPOL is not yet known, it has been estimated that its effect may be to give Unalaska, for example, the same solid waste volumes as a town many times its size.

The issue of foremost concern to communities in Southwest Alaska is how they can comply with the requirements of MARPOL. While the requirements of this treaty also affect Southeast Alaska communities, the impact is greater on the many Southwest ports which may have less of an existing solid waste infrastructure than their Southeastern counterparts.

The Southwest Alaska Municipal Conference is currently investigating the impacts of MARPOL regulation. Some observers have suggested that the Kodiak landfill may be considered as the site for a regional facility, while others have suggested siting a regional incinerator, or encouraging shipboard incineration with off-loading of ash for disposal. As there are three boroughs in this region, a framework exists for some coordination. However, one of the largest ports is Unalaska, which lies immediately west of the Aleutians East Borough and is in the Unorganized Borough.

The commercial fishing fleet is clearly a potential source of revenue which might be tapped in order to provide needed facilities, but once again this raises the issue of how to balance charging the full cost of disposal with the environmental costs resulting from illegal dumping. Furthermore, depending on the solid waste options selected by various communities, there may be economic reasons for fishermen to prefer one port to another for off-loading waste. Given the broad range of issues involved, there is a need for some recognized process to sort out the ramifications of MARPOL and the appropriate financial framework for achieving compliance.

Southeast Alaska Southeast Alaska is comprised of a string of islands and a narrow band of land forming British Columbia's northwestern border. It runs from Yakutat, Haines and Skagway on the north, south to Ketchikan and Prince of Wales Island. All intra-region transport in Southeast is by boat or plane, with the exception of a limited road network connecting four small communities on Prince of Wales Island. [There is road access through Haines and Skagway into the Yukon Territory. However, for all intents and purposes, no major community in Southeast Alaska has road access useful for regional solid waste management.]

About 68,000 people live in this area, with the numbers of "garbage generators" swelling in the summer months, due to weekly visits by large cruise ships as well as other tourists and fishermen. Southeast Alaska communities are likewise affected by the MARPOL regulations, requiring them to take the wastes from cruise ships and the Southeast Alaska fishing fleet.

As in Southwest Alaska, the climate and terrain of Southeast make land disposal problematic. Heavy precipitation generate large amounts of leachate and the lack of flat land makes siting landfills difficult. Bears and birds are found in abundance, and are naturally attracted to landfills creating both vector problems and safety hazards. [In fact the hazard may be more to the bears than to the people. Legislation passed last year prohibits shooting bears within a mile of a landfill - too many were being killed as they followed their natural inclination toward a free, but often fatal, lunch.]

Municipal solid waste is incinerated in some Southeast communities. Juneau is served by a privately-owned incinerator which is said to be nearing operational capacity. Sitka has a publicly-owned facility which produces steam for heating a nearby college. Ketchikan has received funds for construction of an incinerator, but is still relying upon an outmoded landfill. Smaller communities in Southeast practice open burning - sometimes on the shore below the high tide line. A number of people also noted that some illegal dumping is occurring directly into the various waterways in weighted bags; this practice has been traced to residents, fishing boats and tour ship operators.

Southeast and Southwest Alaska face similar planning issues. There are four borough governments in Southeast and about two dozen incorporated and unincorporated communities lying outside their boundaries. To the extent that regional solutions are necessary - encompassing all or parts of this area - there is no formal way to plan for those solutions or to implement them. MARPOL regulations provide an impetus for addressing these issues by increasing the waste volumes being handled. The Southeast Conference, a group of municipal officials and private sector interests, is beginning to discuss these issues and to explore the feasibility of cooperative ventures. In addition, decisions under consideration now by EPA concerning the proper disposal of MSW incinerator ash will affect Juneau, Sitka and Ketchikan. If the decision is made to consider that ash "hazardous" under RCRA, costs for ash disposal will increase greatly since Alaska has no legally permitted commercial hazardous waste disposal sites and ash may need to be shipped to facilities such as those in Oregon.

Lower Priority in Competition for Funds

Solid waste management is given a lower priority than other needs in many Alaska communities. There appear to be three reasons for this: the presence of more immediate problems; the lack of awareness about environmental costs associated with current solid waste management practices; and the fact that, since the communities have such different solid waste concerns, there has been no homogeneity of interests which would raise the statewide profile of the issue.

In many Alaska communities where potable water supplies, basic sewage services and simply staying warm are everyday concerns, solid waste disposal is not given a high priority. Most rural Alaska communities are focussing on sewage and drinking water problems first. Since the need for improvement in these basic public services is still great in many parts of Alaska, rural communities are just beginning to address solid waste concerns. In fact, in many communities, solid waste is not seen as a problem at all, as there is no "capacity crunch." And, some communities are not even involved in providing solid waste services. These services are provided instead by the private sector.

The second reason for the relatively low profile of solid waste management as an environmental issue may be due to the fact that environmental effects from solid waste disposal generally occur over the long-term and are not readily apparent. Because there is a great deal of concern in Alaska over the impact of industrial facilities on the pristine environment of "The Last Frontier," these facilities are more likely to bear the costs of monitoring and compliance. As a result, more is known about their impacts. In contrast, little is known of the environmental costs associated with the current state of solid waste disposal practices - in part because neither the communities nor the state have the resources to monitor and analyze these impacts.

As the consumption habits in many Alaska communities are not dramatically different from those in the rest of the country, it is likely that Alaskans are disposing of plastics, cans, bottles, batteries, waste oil, and paints in their local landfills. In some cases, these wastes are burned on the beaches, dumped into the ocean, or landfilled in tundra ponds with no environmental protection. If the experience of communities in the Lower 48 serves as a guide - where too many landfills are now found on Superfund clean-up lists - it is likely that those Alaskans who are not paying the cost of preventing environmental damage (in terms of adequate landfill or incineration capacity) are most likely incurring environmental costs, the severity of which will only be known over time.

About 68,000 people live in this area, with the numbers of "garbage generators" swelling in the summer months, due to weekly visits by large cruise ships as well as other tourists and fishermen. Southeast Alaska communities are likewise affected by the MARPOL regulations, requiring them to take the wastes from cruise ships and the Southeast Alaska fishing fleet.

As in Southwest Alaska, the climate and terrain of Southeast make land disposal problematic. Heavy precipitation generate large amounts of leachate and the lack of flat land makes siting landfills difficult. Bears and birds are found in abundance, and are naturally attracted to landfills creating both vector problems and safety hazards. [In fact the hazard may be more to the bears than to the people. Legislation passed last year prohibits snooting bears within a mile of a landfill - too many were being killed as they followed their natural inclination toward a free, but often fatal, lunch.]

Municipal solid waste is incinerated in some Southeast communities. Juneau is served by a privately-owned incinerator which is said to be nearing operational capacity. Sitka has a publicly-owned facility which produces steam for heating a nearby college. Ketchikan has received funds for construction of an incinerator, but is still relying upon an outmoded landfill. Smaller communities in Southeast practice open burning - sometimes on the shore below the high tide line. A number of people also noted that some illegal dumping is occurring directly into the various waterways in weighted bags; this practice has been traced to residents, fishing boats and tour ship operators.

Southeast and Southwest Alaska face similar planning issues. There are four borough governments in Southeast and about two dozen incorporated and unincorporated communities lying outside their boundaries. To the extent that regional solutions are necessary - encompassing all or parts of this area - there is no formal way to plan for those solutions or to implement them. MARPOL regulations provide an impetus for addressing these issues by increasing the waste volumes being handled. The Southeast Conference, a group of municipal officials and private sector interests, is beginning to discuss these issues and to explore the feasibility of cooperative ventures. In addition, decisions under consideration now by EPA concerning the proper disposal of MSW incinerator ash will affect Juneau, Sitka and Ketchikan. If the decision is made to consider that ash "hazardous" under RCRA, costs for ash disposal will increase greatly since Alaska has no legally permitted commercial hazardous waste disposal sites and ash may need to be shipped to facilities such as those in Oregon.

FILE

Finally, the solid waste issues in Alaska appear to be too diverse to generate statewide interest and thus, raise the overall profile of solid waste management. One observer with a statewide perspective noted that, because each Alaska community offers different solid waste services, they are likely to face different problems. As a result, each person is touching a different part of the elephant, and not recognizing the problem as a whole or thinking in terms of overall system solutions. However, a number of observers did note that there is a growing awareness of solid waste problems in some areas. For instance, while Southwest communities now see "garbage" as a moderately important local government issue, one observer predicted that within a decade, managing garbage will be seen as an extremely important issue. Currently however, other areas, such as hazardous waste management, are seen as more interesting and pressing environmental issues.

Another observer noted that most Alaskans would not consider solid waste management to be a problem, thus while people from outside the state may see a large number of issues emerging, those in the state may not. It was suggested that the biggest "problem" facing Alaska policymakers in convincing Alaskans that solid waste management is something that should be addressed and paid for.

Relevance of National Standards to Alaska Conditions

In response to Congressional concern over past solid waste management practices, EPA has proposed, and is currently in the process of revising, new regulations intended to upgrade land disposal practices at all new or expanded MSW landfills in the nation. These regulations are authorized under RCRA Subtitle D. The proposed regulations would include requirements for daily cover, the lining of landfills, groundwater monitoring, leachate collection systems, and the development of closure plans, including a financial mechanism to insure the ability to pay closure costs for a thirty-year period. These proposed criteria raise the issue of the relevance of national standards to Alaska conditions. As one city official noted, it is a problem if regulations designed to protect the last 2 percent of Florida's wetlands are applied to Alaska which still has 99 percent of its wetlands left. This problem is further compounded if all the flat land in a community falls within the wetland designation.

In this context, it is important to first understand ADEC's current role in solid waste management. As in most states, local governments in Alaska have the responsibility for providing solid waste management, while ADEC enforces state regulations. ADEC administers the solid waste regulations which are found in 18 AAC 60 and issues permits

last
more
with
have
which
and
high
water
still
solid
in a
ed
ctor
s an
vase
here
the
r the
acc
stat
stat
ren
tics
ness
nde
r 48
sts
mtal
ring

for all MSW facilities. These regulations were last updated in September of 1987. ADEC has flexibility in a number of areas in administering these regulations to meet the unique conditions of Alaska communities. For instance, groundwater analysis and monitoring, remedial action and closure plans are required under Alaska law only if a community: 1) serves more than 2,000 people each day; 2) receives 5 or more tons per day; or 3) receives septage wastes that account for more than 10 percent of the tonnage received by the facility. Of the 151 incorporated Alaska communities, 130 have fewer than 2,000 people, though some of these may receive enough wastes from tour and fishing ships to put them over the 5 ton threshold. Thus, the majority of the communities are exempt from these more stringent regulations.

ADEC regulations also allow for landfill cover to be applied at varying frequencies depending on the size of the community and the daily amount of waste received. ADEC retains the discretion to require more or less frequent cover depending on waste composition, vector problems, etc. ADEC can also give waivers from some provisions of the regulations, if it can be shown that "because of unusual conditions, [the provision would] impose an unwarranted financial, technological, or safety burden on the applicant and does not provide commensurate benefit to the public health and welfare or protection of the environment." ADEC has 19.5 full-time equivalent staff working on solid waste issues, including industrial solid waste.

According to ADEC, about 740 landfills in the state should be permitted, but only half have applied for and been issued permits. Of the permitted landfills, just over one-third are for municipal solid waste; the remaining two-thirds are for use by military installations or industrial operators - mines, timber facilities, oil companies, etc. ADEC concentrates its efforts on the 20 largest landfills (those serving more than 2,000 people) and which receive about 95 percent of the state's municipal solid waste stream. In addition, ADEC also regulates MSW incinerators operating in Juneau, Sitka, Adak and Prudhoe Bay. Incineration standards are found in 18 AAC 50; ADEC permits are required for incinerators burning more than 1,000 pounds per hour. Controlled open burning is also regulated under 18 AAC 50.

In its comments on Subtitle D, ADEC distinguished between three types of Alaska communities: large communities, small communities on road systems and small, remote villages. ADEC then indicated to EPA that, whereas large communities would be likely to have some problems complying with the criteria, and the small communities on road systems might be "encouraged" by the criteria to form regional solid waste management systems, the small remote communities would not have the economic resources

necessary to overcome their remoteness through a regional solution, or to meet the criteria within their own communities.

Obviously, national standards and enforcement practices have little relevance in many parts of Alaska. Less obvious is the form by which regulators can acknowledge this difference, and once that is addressed, what standards and/or enforcement practices are appropriate in order to reduce environmental costs of solid waste disposal in Alaska.

There are three possible regulatory approaches to this Alaska reality: formal recognition of the differences through a waiver and/or exemption from regulations; a de facto recognition of the differences through lack of enforcement; or, attempts to force compliance in spite of the wide gap between reality and the standards. The issue from a regulatory perspective is, at what point does an effort to enforce inappropriate standards become counterproductive and focus energy away from the necessary task of improving the prospects for environmentally-sound solid waste management?

Enforcement of MARPOL regulations does not raise this issue of regulatory relevance to the same degree, even though Alaska port communities have far different capabilities to deal with solid waste issues than port cities such as Seattle (WA) or Coos Bay (OR). There are two factors which distinguish this compliance issue from Subtitle D issues. Clearly, the Bering Sea fishing fleet and the cruise ships visiting Alaska ports are a significant part of the ocean traffic targeted by MARPOL. If international ocean dumping is to be curtailed at all, Alaska compliance is important. This is unlike the Subtitle D regulations which address land disposal problems more associated with large communities than those of the size found in most of Alaska. Second, the fishing boats and tour ships are both the source of the problem and a likely source of revenue for addressing the problem. In contrast, Subtitle D assumes an ability to pay on the part of the communities it is regulating, an ability which may be lacking in many Alaska villages.

Limited Availability of Resources at Every Governmental Level

In Alaska, boroughs (roughly similar in function to counties in other states) and cities are given the authority to establish and operate solid waste collection and disposal facilities. In Alaska, there are 13 Organized Boroughs which cover 203,380 square miles. They range in size from the Bristol Bay Borough with 1,297 people to the City and Borough of Anchorage with 246,139 people. Boroughs may either operate solid waste facilities themselves or contract to a private firm.

Alaska is unique, however, in that a large portion of its land area is not under the jurisdiction of any local government; as noted earlier, this area is called the Unorganized Borough. There are also 148 incorporated cities in Alaska and another 128 unincorporated ones; of these 276 communities, 193 of them are in the UOB. Boroughs can be formed under Alaska law by vote of the people, but only a few areas in the UOB have decided recently to organize. While a new borough was formed in 1986, and another in 1987, they were the first to form since 1972. Within the UOB, an organized city provides services for itself. However, as most of the organized cities in the UOB have small populations, solid waste services are rudimentary at best. If a "service area" is deemed needed within the UOB, it must be established by the state legislature. To date, this has occurred only to meet the need for local school districts and coastal zone management planning areas.

The ability of the State to promote solid waste management is a function of resources - both at the state and local levels. Compliance with regulation of any sort costs money and, in effect, raises the fixed costs of government. In turn, this requires (absent an ever-flowing Prudhoe Bay and high oil prices) a sufficiently large population over which to spread the costs in order for them to be affordable. As noted earlier, ADEC has limited staff in the area of solid waste, as do local communities. Even two of Alaska's larger communities - the City of Ketchikan and the Ketchikan Gateway Borough with about 13,000 people - have had to make hard decisions about whether to direct recent capital spending toward improving drinking water supplies or upgrading solid waste management. Not surprisingly, the immediate drinking water concerns came before solid waste management concerns - though the latter are now being addressed. Thus, it becomes necessary to maintain a certain sense of basic priorities and fiscal reality regarding the pace of funding for improved solid waste management services in Alaska.

Complicating solid waste management is the potential for citizen suits under RCRA to enforce solid waste regulations. Such suits may be filed by public interest groups or by individuals wanting full compliance with the regulations. In some cases, such suits might be brought by private disposal companies looking for a way of insuring a market for their services - a market which would otherwise be served by inadequate facilities or illegal dumping. Such suits would stretch resources at all levels and involve a reshuffling of priorities.

Industry Regulation in a Changing Environment

Solid waste services throughout the country are either provided by local government or private industry. At one end of this continuum are municipally-owned and operated collection and disposal facilities, while at the other end these services are provided solely by private industry. Generally, communities adopt some mix of public and private provision of services. An integral part of providing these services is often some agreement as to collection service areas which are then franchised by government on a periodic basis to private collection contractors who deliver the services. This is based on the notion that it is probably cheaper to have one truck serve a subdivision, for instance, than to have many trucks from many firms competing for business in the same area. Usually, in return for an agreement on the division of service areas, there is also public regulation of what a company may charge its customers.

In 46 of the 50 states, the regulatory authority for establishing service areas and rates falls to counties. The counties then issue franchises to hauling firms operating within their boundaries. In Alaska, this type of regulation is done at the state level by the Alaska Public Utilities Commission (APUC). APUC issues certificates which define each collection contractor's service area. If the collection contractor has revenues in excess of \$200,000 a year, APUC also regulates the rates it charges. There are 43 certificated collection contractors in Alaska, nine of which are rate regulated. Municipally-owned collection systems are not subject to regulation, nor does APUC regulate the operation or rates charged by municipal or private disposal (either landfill or incineration) operations.

APUC has in the past urged the legislature to eliminate solid waste utilities from its jurisdiction because of the amount of effort required to regulate them. The refuse hauling industry is the smallest of the six industries regulated by APUC and accounts for 3.5 percent of the total revenues of its regulated utilities. In lieu of deregulation, APUC has proposed expanding its scope to include disposal facilities, so that it can more effectively regulate jointly-owned disposal and collection operations.

In Alaska, the changes affecting solid waste management are also raising issues regarding industry regulation. Specifically, is the current framework flexible enough to meet the varying needs of Alaska communities, and how is the public's interest in the level of disposal rates best represented in a regulatory context?

APUC regulation affects the flexibility of the industry to meet changing conditions by deterring the entry of new collection contractors and by possibly discouraging the

development of a separate recycling industry. Boroughs have been pushing for deregulation of the industry, and had hoped that APUC authority over refuse collection contractors would have been allowed to "sunset" when the opportunity recently arose. "Sunsetting" APUC authority over the collection contractors would have allowed boroughs to encourage new collection contractors to enter the industry in their jurisdictions, as they saw fit.

APUC regulation also affects the recycling side of the industry. Solid waste collection contractors generally favor state regulation as opposed to no regulation or regulation by the boroughs. In return for continued regulation, the collection contractors have offered to "subsidize" recycling by committing to spend a certain amount of their revenues on recycling services. They argue that because recycling is so expensive to provide in Alaska, it must be included in the overall garbage collection service and, as such, reflected in the garbage collection rates. Or, in their terms, garbage collection would "subsidize" recycling.

For reasons discussed in the next section, the current prospects of large volume recycling in Alaska are limited. However, to the extent that recycling may be considered a part of the overall solid waste management picture in the long-term, the collection contractors' proposed arrangement raises the issue of how and by whom is recycling best accomplished: should recycling be provided by collection contractors; by the development of a separate industry; or, as a local government program? The question of how to encourage recycling and who should provide this service is as much a question of solid waste management as it is of regulation.

The second issue raised by this changing environment concerns disposal rates. In the past, the major costs associated with solid waste management were the costs of moving waste from one place to another. Hence, these costs became the regulatory focus. In the future, the cost of environmental compliance is likely to mean that disposal costs will make up an ever increasing portion of the overall cost of garbage service. In addition to raising day to day operating costs, Subtitle D requires the owner/operators of landfills to estimate the costs associated with closing and maintaining the landfill for a period of 30 years. Then, they must assure through some financial instrument the wherewithal to meet those cost obligations.

Assuming that some additional private disposal operations are started in Alaska, to whom will it fall to insure that firms are charging enough to cover these future closure costs? Or to insure that disposal companies are not over-charging collection contractors - and hence the public - on the pretext of meeting the financial criteria? For those

communities served by private disposal operations, there will be no regulation as to how, and when, those costs are passed on to the customer. This will be a particular problem wherever both the hauling and the disposal operations are found under one corporate roof. [Municipally-owned landfills must also comply with these financial assurance requirements - and thus, local governments will also face this question of how, and when, will these costs be passed on to the customer.] One municipal reviewer noted that his community is studying whether the complexity of solid waste regulations may be moving beyond the capability of the private sector to address.

Economic Reality of Alaska Recycling

Generically, the economics of profit-oriented recycling are a function of the market value of the recycled material, less the cost of diverting the material from the solid waste stream and transporting it to market. A community's interest in recycling is somewhat different, for the "value" of recycling lies in its ability to help a community avoid disposal costs or preserve landfill capacity, as well as to conserve natural resources and protect the environment.

Few commodities in Alaska can be recycled profitably. In addition, it appears that few Alaska communities are facing a disposal capacity "crunch" severe enough for them to have to subsidize recycling to reduce disposal volumes and thus preserve capacity. Aluminum cans and scrap metals are currently worth the cost of collecting (and, in some cases, buying) and shipping south. For other commodities with declining market values, the cost of transportation overwhelms the market value of the product. (It is expected that, by this fall, some grades of paper will have no value in the Seattle market and, thus, will not even contribute to covering their own transportation costs.)

Recycling is often seen as the "right thing to do." However, the economics of recycling in Alaska make recycling driven exclusively by the profit motive on resale of the recyclable possible for only a limited portion of the waste stream. The fact that many communities do not currently have any sort of tipping fee at the landfill means that individuals do not feel any financial incentive to recycle. "Avoided" costs of disposal are not an incentive in communities which have landfills with long remaining lives. Some sources noted the generalized "usefulness" of mandatory recycling or curbside recycling in the cities. However, unless there are markets or subsidies for these products, such efforts merely segregate the wastes for a time, leaving them in storage indefinitely or forcing them to take a circuitous route to the same eventual disposal destination - the landfill or incinerator. Nonetheless, many communities support a growing public interest

in recycling because they recognize the importance of changing people's attitudes about the amount of waste they generate, and see a commitment to recycling as a sound step in the process of transforming Alaska's waste management practices.

Special Wastes

Municipal solid waste includes, by definition, HHW and conditionally-exempt small quantity generator (CESQG) wastes; these wastes include old paint, various household chemicals, waste oil, etc. In Alaska, the disposal of these wastes poses a serious problem for many communities. Climate and terrain may result in the production of more of these wastes - dusty roads may lead to more oil changes, freezing conditions may render poorly stored paints unusable, etc. And to the extent that inadequate solid waste management may create long-term environmental and public health concerns, poor handling of waste oils and household chemicals may result in more immediate problems. In addition, the collection and handling of segregated HHW is very expensive, since Alaska also does not have a permitted disposal site for hazardous wastes in the state. All wastes must be shipped to facilities in Washington and Oregon. The issue raised by these special wastes is whether the problems they cause should be addressed separately from the overall solid waste issue, or whether solutions are best found within the context of upgrading MSW management practices overall.

ADEC has sponsored HHW clean-up days for various communities. In addition, Anchorage has developed a program of receiving household and CESQG wastes on a regular basis at its transfer station and at its landfill. These wastes are carefully segregated, temporarily stored, and sent south for treatment or disposal. The program is funded by customer payments, through the landfill fee and through the water utility. The issue for many Alaska communities is the extent to which they can afford to adopt the Anchorage model.

Planning Vacuum

As has been noted many times, one of the major effects of tightening environmental regulation of disposal facilities is that the fixed costs of operating the facilities go up. As fixed costs go up, disposal facilities may need to draw from a larger population base to generate the revenues for improvements or to keep garbage rates at a level which people may be willing to pay. Because so many Alaska communities lie in the UOB, there is a governmental vacuum to foster these regional planning efforts in solid waste.

This vacuum is particularly noticeable as communities in both Southeast and Southwest Alaska seek to comply with MARPOL.

To the extent that regional solutions might be feasible from a cost point of view in the UOB - notably along the road system in the Copper River valley, in Southeast Alaska, or parts of Southwest Alaska, there is no planning authority to work with the communities to develop a facility or to help them respond to private sector proposals for solid waste facilities. For example, is it sufficient for facilities to be sited solely in accordance with ADEC standards or should there be additional constraints or input from the local residents? If local input or oversight is desired, how can this be achieved in the absence of a local/regional planning or regulatory body?

In Southeast Alaska, elements of the private sector have indicated a desire to fashion a regional solid waste solution for smaller communities. What is not clear is how these efforts might enhance, foreclose or conflict with other options undertaken by the boroughs. As the landfills in these communities may be expected to comply with Subtitle D criteria (when promulgated) and incinerators may be expected to comply with the growing range of regulations on burning MSW and subsequent ash disposal, some sort of overall planning - and accountability - may need to be in place before the initiation of long-term projects. The Southeast Conference is beginning to explore this possibility. Planning in Southeast Alaska is also complicated by the fact that various communities are achieving different standards of environmental compliance, due in part to different disposal technologies and differing abilities to finance improved solid waste facilities. Complicating planning is the lack of a statewide forum to bring together people facing solid waste problems, to exchange information about what "works" under Alaska conditions.

Interview List for the Alaska Profile

Christine Benson	Alaska Center for the Environment	Anchorage
Kay Brown	Alaska State Representative	Anchorage
Scott Burgess	Alaska Municipal League	Juneau
McKie Campbell	Assemblyman	Juneau
Sky Carver	Peninsula Sanitation	Soldotna
Steve Corp	Alaska Indian Health Service	Anchorage
Bettye Fahrenkamp	Alaska State Senator	Fairbanks
Bob Higgins	Ketchikan Pulp	Ketchikan
Larry Kimball	Alaska Federation of Natives	Anchorage
Susan Knowles	APUC	Anchorage
Audrey Lee	AK Litter Prevention & Recycling	Anchorage
John Levy	SW Alaska Municipal Conference	Anchorage
Chris Mello	North Slope Borough	Barrow
Curt Menard	Alaska State Representative	Wasilla
Eric Meyers	Leg. Asst. to Rep. Kay Brown	Anchorage
Jack Pierson	Acting City Manager, Ketchikan	Ketchikan
Pat Redmond	Anchorage League of Women Voters	Anchorage
Kevin Ritchie	City Manager	Juneau
Jim Sweeney	Anchorage Solid Waste	Anchorage
Shorty Tonsgard	Channel Sanitation	Juneau
Tom Turner	Anchorage Recycling Center	Anchorage
David Wigglesworth	Alaska Health Project	Anchorage

STATE OF ALASKA
1990 LEGISLATIVE SESSION

No. 1
BILL VERSION: CSHB 478(C&RA)
PUBLISH DATE: HOUSE 2/22/90

FISCAL NOTE

REQUEST:

Revision Date: _____ Agency Affected: Environ. Conservation
Title: An Act relating to solid and
hazardous waste management. BRU: Environmental Quality
Sponsor: Rep. Ulmer Components: Environmental Quality
Requestor: House Community & Regional Affairs Projects

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96
PERSONAL SERVICES	391.2	391.2	391.2	391.2	391.2	391.2
TRAVEL	32.0	32.0	32.0	32.0	32.0	32.0
CONTRACTUAL	72.0	72.0	72.0	72.0	72.0	72.0
SUPPLIES	9.0	9.0	9.0	9.0	9.0	9.0
EQUIPMENT	45.0	45.0	45.0	45.0	45.0	45.0
LAND&STRUCTURES	0.0	0.0	0.0	0.0	0.0	0.0
GRANTS,CLAIMS	500.0	500.0	500.0	500.0	500.0	500.0
MISCELLANEOUS	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL OPERATING	1,049.2	1,049.2	1,049.2	1,049.2	1,049.2	1,049.2

CAPITAL	0.0	0.0	0.0	0.0	0.0	0.0
---------	-----	-----	-----	-----	-----	-----

REVENUE	0.0	0.0	0.0	0.0	0.0	0.0
---------	-----	-----	-----	-----	-----	-----

FUNDING: (Thousands of Dollars)

GENERAL FUND	1,049.2	1,049.2	1,049.2	1,049.2	1,049.2	1,049.2
FEDERAL FUNDS	0.0	0.0	0.0	0.0	0.0	0.0
OTHER	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	1,049.2	1,049.2	1,049.2	1,049.2	1,049.2	1,049.2

POSITIONS:

FULL-TIME	9.0	9.0	9.0	9.0	9.0	9.0
PART-TIME	0.0	0.0	0.0	0.0	0.0	0.0
TEMPORARY	0.0	0.0	0.0	0.0	0.0	0.0

ANALYSIS: (Attach a separate page if necessary)

SEE ATTACHED

Prepared by: Jeff Mach
Division: Environmental Quality

Phone: 465-2671
Date: 2/15/90

Approved by Commissioner: A. D. Kule
Agency: Environmental Conservation

Date: 2/15

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

Section 1

Section 1 will not require any additional resources for the Department of Environmental Conservation.

Sections 2-3

Section 2 repeals the Department's existing provisions regarding the management and reduction of hazardous wastes and re-enacts these provisions in expanded form to include both solid and hazardous waste management. The Department is directed to coordinate efforts to reduce the production of solid and hazardous wastes, promote waste source reduction, provide technical assistance to help establish reduction and recycling practices, develop a technical reference center and data base, establish an information referral service, and develop appropriate courses and curricula related to solid and hazardous waste reduction and recycling.

This section also establishes a matching grant program for community solid waste management planning which is reflected in the fiscal note. The \$500.0 requested would allow the Department to issue approximately 10-15 grants.

Section 3 requires the Department to ensure that applicants for solid waste disposal permits satisfactorily demonstrate that all waste management options were considered.

The following positions would be needed to adequately carry out all of the provisions of this bill:

<u>Position</u>	<u>100</u>	<u>200</u>	<u>300</u>	<u>400</u>	<u>500</u>	<u>Total</u>
Ecologist III	58.4	5.0	8.0	1.0	5.0	\$77.4
Ecologist II	51.5	5.0	8.0	1.0	5.0	70.5
Project Coordinator	51.5	5.0	8.0	1.0	5.0	70.5
Env. Field Off. II	44.9	5.0	8.0	1.0	5.0	63.9
Env. Field Off. II	44.9	5.0	8.0	1.0	5.0	63.9
Env. Field Off. II	44.9	5.0	8.0	1.0	5.0	63.9
Admin. Assist. I	36.1	2.0	8.0	1.0	5.0	52.1
Clerk Typist III	29.5	0	8.0	1.0	5.0	43.5
Clerk Typist III	29.5	0	8.0	1.0	5.0	43.5
TOTALS	391.2	32.0	72.0	9.0	45.0	\$549.2

Position Title Ecologist III		No. of Positions 1	Range/Step 20A	Barg. Unit SU	
Time Status PFT	Staff Months 12	Location Juneau		Election District	
Type of Expenditure		Justification			
		See attached page			
1	2				3
Salary	\$42,800				
Benefits	15,600				
Premium Pay	0				
Other	0				
Total Personal Services					\$58,400
Travel					5,000
Contractual					8,000
Commodities					1,000
Equipment					5,000
Other					
Total Cost					\$77,400
Funding Source for Total Cost					
Federal Receipts	1002				
G. F. Match	1003				
General Fund	1004	\$77,400			
GF Program Receipts	1005				
Other					

**Request For
New Position**

Agency ENVIRONMENTAL CONSERVATION
 BRU ENVIRONMENTAL QUALITY
 Component ENVIRONMENTAL QUALITY PROJECTS

Page 3 of 14
 Revised Date

FY 91

No. 1
 CSHB 478 (CERA)
 HOUSE 2/22/90

HB 478
JUSTIFICATION FOR ECOLOGIST III

The incumbent will serve as the Department's Waste Minimization Project Manager to coordinate and promote the Department's efforts pursuant to HB 478, to reduce the production of solid and hazardous wastes, including the following specific tasks:

- Supervise the Department's provision of waste management and reduction technical assistance and other services to communities, regional organizations, school districts, and waste generators;
- Supervise the Department's sponsorship or co-sponsorship and development of technical workshops or seminars on waste reduction;
- Supervise the evaluation, selection, and procurement of materials and equipment necessary to establish and maintain a solid and hazardous waste reduction technical reference center and data base;
- Supervise the establishment and maintenance of solid and hazardous waste reduction referral services;
- Supervise the identification and evaluation of solid and hazardous waste reduction research needs for government agencies and private businesses;
- Supervise the development of local courses and curricula for solid and hazardous waste reduction;
- Supervise the development and operation of the Department's hazardous waste reduction matching and community solid waste management planning grant programs, including the development of guidelines, advertising for and evaluation of proposals, awards, monitoring, and closeout of grants;
- Serve as the Department's primary expert on waste reduction and recycling practices; and
- Serve as the Department's staff representative to the Pacific Northwest Waste Reduction Roundtable;

Position Title Ecologist II			No. of Positions 1	Range/Step 18A	Barg. Unit GGU
Term Status FTE	Staff Months 12		Location Juneau		Election District 4
Type of Expenditure			Justification		
Amount			See attached page		
1	2	3			
Salary	\$37,400				
Benefits	14,100				
Premium Pay	0				
Other	0				
Total Personal Services		\$51,500			
Travel		5,000			
Contractual		8,000			
Commodities		1,000			
Equipment		5,000			
Other					
Total Cost		\$70,500			
Funding Source for Total Cost					
Federal Receipts	1002				
G. F. Match	1003				
General Fund	1004	\$70,500			
GF Program Receipts	1005				
Other					

**Request For
New Position**

Agency ENVIRONMENTAL CONSERVATION
 BRU ENVIRONMENTAL QUALITY
 Component ENVIRONMENTAL QUALITY PROJECTS

Page 5 of 14
 Revised Date

FY 91

No. 1
 CSHB 478 (CERA)
 HOUSE 2/22/90

HB 478
JUSTIFICATION FOR ECOLOGIST II

The incumbent will work on a largely independent basis, under the supervision of the Solid Waste Management Project Manager, to develop the Department's Solid Waste Management Project, including the following specific tasks:

- Develop information necessary to apply for and receive EPA approval of the Department's solid waste permit program;
- Develop and advocate the Department's position on proposed federal solid waste and incinerator ash disposal legislation and regulations, so that final federal requirements take Alaska's unique conditions into account;
- Coordinate the development of a statewide solid waste management plan that incorporates the solid waste management plans resulting from community solid waste management planning grants, as well as the recommendations of the Governor's Waste Reduction and Recycling Task Force;
- Provide increased technical assistance to the Department's regional staff, communities, and regional organizations on new and proposed federal solid waste management requirements, MARPOL requirements, long-range solid waste management planning, and solid waste management facility siting issues; and
- Develop State solid waste management policies and procedures to improve the quality and consistency of disposal permits issued by DEC and meet federal standards for state solid waste management programs

Position Title Project Coordinator		No. of Positions 1	Range/Step 18A	Barg. Unit GGU	
Time Status PFT	Staff Months 12	Location Juneau		Election District 4	
Type of Expenditure		Justification			
Amount		See attached page			
1	2				3
Salary	\$37,400				
Benefits	14,100				
Premium Pay	0				
Other	0				
Total Personal Services					\$51,500
Travel					5,000
Contractual					8,000
Commodities					1,000
Equipment					5,000
Other					
Total Cost					\$70,500
Funding Source for Total Cost					
Federal Receipts	1002				
G. F. Match	1003				
General Fund	1004		\$70,500		
GF Program Receipts	1005				
Other					

**Request For
New Position**

Agency ENVIRONMENTAL CONSERVATION
 BRU ENVIRONMENTAL QUALITY
 Component ENVIRONMENTAL QUALITY PROJECTS

Page 7 of 14
 Revised Date

FY 91

No. 1
 CSHB 478 (C&RA)
 HOUSE 2/22/90

HB 478
JUSTIFICATION FOR PROJECT COORDINATOR

The incumbent will work on a largely independent basis, under the supervision of the Waste Minimization Project Manager, developing, coordinating, and promoting the Department's efforts pursuant to HB 478, to reduce the production of solid and hazardous wastes, including the following specific tasks:

- Prepare, evaluate, and select one or more contractors to provide technical assistance, or other services to state agencies, waste generators, and school districts;
- Develop and arrange for the Department's sponsorship or co-sponsorship of technical workshops or seminars on waste reduction;
- Evaluate and select materials and equipment necessary to establish and maintain a solid and hazardous waste reduction technical reference center and data base;
- Establish and maintain solid and hazardous waste reduction referral services;
- Develop courses and curricula for solid and hazardous waste reduction.
- Identify and evaluate solid and hazardous waste reduction research needs for government agencies and private businesses; and
- Develop guidelines for the administration of, advertise the availability of, evaluate proposals for, award, monitor, and closeout hazardous waste reduction matching and community solid waste management planning grants.

Position Title Environmental Field Officer II			No. of Positions 3	Range/Step 16A	Barg. Unit GGU
Time Status PFT	Staff Months 12		Location Juneau, Fairbanks, Anchorage		Election District 4, 20, 10
Type of Expenditure			Justification		
Amount			See attached page		
1	2	3			
Salary	\$98,600				
Benefits	36,100				
Premium Pay	0				
Other	0				
Total Personal Services		\$134,700			
Travel		15,000			
Contractual		24,000			
Commodities		3,000			
Equipment		15,000			
Other					
Total Cost		\$191,700			
Funding Source for Total Cost					
Federal Receipts	1002				
G. F. Match	1003				
General Fund	1004	\$191,700			
GF Program Receipts	1005				
Other					

**Request For
New Position**

Agency ENVIRONMENTAL CONSERVATION
BRU ENVIRONMENTAL QUALITY
Component ENVIRONMENTAL QUALITY PROJECTS

Page 9 of 14
Revised Date

FY 91

HB 478
JUSTIFICATION FOR ENVIRONMENTAL FIELD OFFICER II POSITIONS

The incumbents, stationed in the Department's Fairbanks, Anchorage, and Juneau regional offices, will provide technical assistance to communities and regional organizations on solid waste management and reduction practices, review and issue permits to additional solid waste disposal facilities, and coordinate and promote the Department's efforts pursuant to HB 478 to reduce the production of solid and hazardous wastes, including the following specific tasks:

- Serve as the Department's regional contacts to provide waste management and reduction technical assistance and other services to communities, regional organizations, and solid waste generators;
- Review solid waste disposal permit applications for consideration of the preferred waste management practices and priorities, issue permits for solid waste disposal facilities, and inspect solid waste disposal facilities for compliance with permit and regulatory requirements;
- Assist the Department's sponsorship or co-sponsorship of technical workshops or seminars on waste reduction;
- Assist the evaluation and selection of materials and equipment necessary to establish and maintain a solid and hazardous waste reduction technical reference center and data base;
- Assist in the identification and evaluation of solid and hazardous waste reduction research needs for government agencies and private businesses;
- Assist in the development of local courses and curricula for solid and hazardous waste reduction;
- Assist in the evaluation of proposals, awards, and monitoring, of hazardous waste reduction matching grants and community solid waste management planning grants; and
- Serve as regional contacts for information to and from the Pacific Northwest Waste Reduction Roundtable;

Position Title Administrative Assistant I		No. of Positions 1	Range/Step 12A	Barg. Unit GGU
Time Status PFT	Staff Months 12	Location Juneau		Election District 4
Type of Expenditure		Justification		
		See attached page		
Amount				
1	2	3		
Salary	\$24,900			
Benefits	11,200			
Premium Pay	0			
Other	0			
Total Personal Services		\$36,100		
Travel		2,000		
Contractual		8,000		
Commodities		1,000		
Equipment		5,000		
Other				
Total Cost		\$52,100		
Funding Source for Total Cost				
Federal Receipts	1002			
G. F. Match	1003			
General Fund	1004	\$52,100		
GF Program Receipts	1005			
Other				

**Request For
 New Position**

Agency ENVIRONMENTAL CONSERVATION
 BRU ENVIRONMENTAL QUALITY
 Component ENVIRONMENTAL QUALITY PROJECTS

Page 11 of 14
 Revised Date

FY 91

HB 478
JUSTIFICATION FOR ADMINISTRATIVE ASSISTANT I

This position will work under the supervision of the Waste Reduction Project Manager implementing the provisions of HB 478, including the following specific tasks:

- Assist in the preparation of and accounting for one or more contracts for the provision of technical assistance and other services to solid and hazardous waste generators;
- Assist with arrangements for the Department's sponsorship or co-sponsorship of technical workshops or seminars on waste reduction and recycling;
- Assist in the procurement of and accounting for materials and equipment necessary to establish and maintain a solid and hazardous waste reduction technical reference center and data base;
- Assist in the establishment and maintenance of a solid and hazardous waste reduction referral service;
- Assist in the development of guidelines for the award of community solid waste management planning grants; and
- Assist in the award of and account for funds disbursed through hazardous waste reduction and community solid waste planning grant programs.

Position Title Clerk Typist III		No. of Positions 2	Range/Step 8A	Barg. Unit GGU	
Time Status PFT	Staff Months 12	Location Juneau, Anchorage		Election District 4, 10	
Type of Expenditure		Justification			
		See attached page			
1	2				3
Salary	\$39,200				
Benefits	19,800				
Premium Pay	0				
Other	0				
Total Personal Services					\$59,000
Travel					0
Contractual					16,000
Commodities					2,000
Equipment					10,000
Other					
Total Cost					\$87,000
Funding Source for Total Cost					
Federal Receipts	1002				
G. F. Match	1003				
General Fund	1004		\$87,000		
GF Program Receipts	1005				
Other					

**Request For
New Position**

Agency ENVIRONMENTAL CONSERVATION
 BRU ENVIRONMENTAL QUALITY
 Component ENVIRONMENTAL QUALITY PROJECTS

Page 13 of 14
 Revised Date

FY 91

HB 478
JUSTIFICATION FOR CLERK TYPIST III POSITIONS

The incumbents, stationed in the Department's Solid and Hazardous Waste Management Section and Southcentral Regional Office will provide clerical staff necessary to support the Department's efforts under HB 478 to reduce the production of solid and hazardous wastes, including the following specific tasks:

- Production of documents and files related to:
 - providing waste management and reduction technical assistance,
 - review of applications and issuance of solid waste disposal permits,
 - sponsorship and development of technical workshops or seminars on waste reduction,
 - establishment and maintenance of waste reduction information services,
 - identification and evaluation of waste reduction research needs, waste reduction courses and curricula,
 - development and operation of the Department's hazardous waste reduction matching and community solid waste management planning grant programs, and
 - participation on the Pacific Northwest Waste Reduction Roundtable.

SENATE FINANCE COMMITTEE REPORT

DATE: 5/6/90

FURTHER:

RETURNED TO _____ DATE TURNED INTO OFFICE: 5/6/90

The Finance Committee considered CSHB 478 (C&RA)

Solid and hazardous waste management.

and recommended:

- | | |
|---|---|
| <input type="checkbox"/> replace with _____ CS _____ | <input type="checkbox"/> same title |
| <input type="checkbox"/> or adopt _____ CS _____ | <input type="checkbox"/> new title |
| | <input type="checkbox"/> technical title change (HB only) |
| <input type="checkbox"/> attached amendment(s) | |
| <input type="checkbox"/> _____ letter of intent adopted | |

do pass

do not pass

no recommendation

individual recommendations

further referral to _____

ATTACHES NEW FISCAL NOTE(S):

fiscal note(s) _____ Dept/Date: _____

zero fiscal note(s) _____

appropriation-no fiscal note

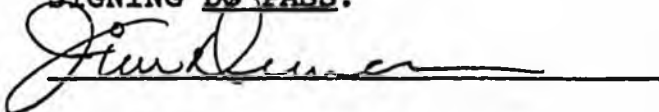
APPROVES PREVIOUS:

fiscal note(s) _____ Dept/Date: _____

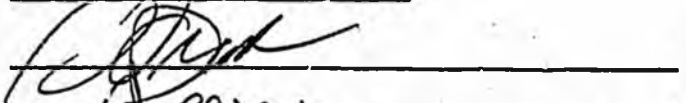
zero fiscal note(s) _____

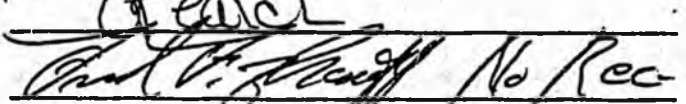
SFC/DEC 5/6/90

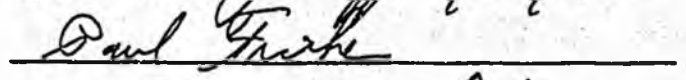
SIGNING DO-PASS:

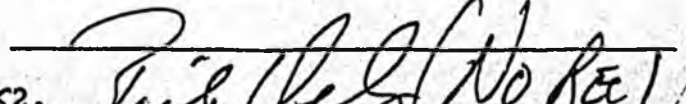


OTHER RECOMMENDATIONS:









1.  Do Pass

Co-Chairs: Signatures and Recommendations

FISCAL NOTE

REQUEST:

Revision Date: _____
Title: Relating to solid & hazardous waste management
Sponsor: Representative Ulmer
Requestor: Senate Finance

Agency Affected: Dept of Environmental Conservation
BRU: Environmental Quality
Components: Environmental Quality Projects

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0	0	0	0	0	0
CAPITAL	0	0	0	0	0	0
REVENUE	0	0	0	0	0	0

FUNDING: (Thousands of Dollars)

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

POSITIONS:

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

ANALYSIS : (Attach a separate page if necessary)

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

Phone: 465-4821
Date: May 6, 1990

Approved by Commissioner: _____
Agency: _____

Date: _____

Distribution (by preparer) :

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

Adopted

Original sponsor(s): REP. ULMER, Brown, Finkelstein, Ellis, Navarre,
Koponen, M.Davis, Boyer, Kubina, Goll, Menard, Swackhammer, Jacko, Collins

1 IN THE HOUSE BY THE C&RA COMMITTEE

2 CS FOR HOUSE BILL NO. 478 (C&RA)
3 IN THE LEGISLATURE OF THE STATE OF ALASKA
4 SIXTEENTH LEGISLATURE - SECOND SESSION
5 A BILL

6 For an Act entitled: "An Act relating to solid and hazardous waste manage-
7 ment."

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

9 * Section 1. LEGISLATIVE FINDINGS. The legislature finds that

10 (1) there is a growing concern nationally about the environment
11 and the effects on human health from past solid waste management practices;

12 (2) there is a desire to prevent these effects from occurring in
13 the future as well as a growing interest in conserving and ensuring the
14 wise use of virgin materials;

15 (3) present solid and hazardous waste management practices in
16 many communities in the state do not protect human health or the environ-
17 ment;

18 (4) many communities in the state are necessarily concentrating
19 their limited resources on more immediate environmental or human health
20 concerns such as ensuring a safe drinking water supply or the safe manage-
21 ment of sewage;

22 (5) communities in the state, though concerned over the problems
23 associated with current solid and hazardous waste management practices do
24 not have the technical or financial resources to plan for improved waste
25 management or for enhanced recycling, treatment, or disposal facilities;

26 (6) there is a need for the state to provide financial and
27 technical assistance to communities in the state to improve solid and
28 hazardous waste management within the state;

29 (7) there is a need for state government to provide leadership

1 by working actively to improve waste reduction and recycling activities and
2 to use its buying power to strengthen the markets for recycled goods.

3 * Sec. 2. AS 46.06 is amended by adding new sections to read:

4 Sec. 46.06.021. SOLID AND HAZARDOUS WASTE MANAGEMENT PRACTICES.

5 In order to minimize present and future threats to human health and
6 the environment in the state, the department shall promote the follow-
7 ing solid and hazardous waste management practices in the following
8 order of priority:

9 (1) waste source reduction;

10 (2) recycling of waste;

11 (3) waste treatment; and

12 (4) waste disposal.

13 Sec. 46.06.031. SOLID AND HAZARDOUS WASTE REDUCTION AND RE-
14 CYCLING PROGRAM. (a) There is established within the department a
15 solid and hazardous waste reduction and recycling program. Within the
16 limit of funds available, the department shall

17 (1) coordinate community and agency efforts to reduce the
18 production of solid and hazardous waste, including air and water
19 emissions;

20 (2) promote the practices and priorities established under
21 AS 46.06.021 by promoting solid and hazardous waste reduction, on-site
22 recovery of resources from hazardous waste sources, recovery of re-
23 sources from solid waste sources, repeated use of packaging and prod-
24 ucts, materials recycling, appropriate pretreatment, waste separation,
25 or separate management for waste that creates problems when disposed
26 of within the community, transportation for solid waste that cannot be
27 disposed of within the community, and environmentally sound disposal;

28 (3) provide technical assistance and consultation for
29 source reduction and recycling as necessary to assist with the