SB

29

SB 29

Alaska State Legislature

House of Representatives

Committee on Resources

Terry Gardiner, Co-Chairman
Fred F. Zharoff, Co-Chairman
465-3715

March 17, 1981

Pouch V
State Capitol
Juneau, Alaska 99811

P R E S S R E L E A S E

The House Resources Committee has approved without dissent a bill that would ban most uses of nuclear materials and wastes in the state, and puts strong controls on the transport, storage, and disposal of non-nuclear hazardous materials.

The bill is a Resources Committee substitute for SB 29 passed by the Senate earlier in the session, which put heavy restrictions on construction of nuclear power plants and nuclear wastes.

The House version added an outright ban on construction of most nuclear facilities, including power plants and disposal facilities for high level nuclear wastes. It also added provisions requested by the Hammond Administration to control disposal of hazardous materials.

In the event of court action invalidating the outright ban of nuclear facilities in the state, the bill has backup provisions which require strict licensing procedures which would require approval of the governor, the municipality, and in the unorganized borough approval of the majority of the registered voters living within 100 miles of the proposed facility site. The legislature would retain final authority over site selection under the bill.

"With such strict procedures, it's doubtful that anybody could get a nuclear siting permit in Alaska, given the attitudes of most legislators," said co-chairman Rep. Terry Gardiner.

more

who had introduced a similar House bill,

Rep. Brian Rogers worked closely with the Resources Committee in working out the draft approved, including the provision calling for the ban of most nuclear facilities. Low level radioactive materials would not be covered by the ban, nor would the small quantities of high-level materials used for medical purposes or small-scale research needs. Industrial process testing and security screening also would not be affected under the bill.

The reason backup provisions were placed in the bill is because of federal atomic energy laws which the attorney general's office believes may restrict the state's authority over nuclear issues, since the federal laws reserve these to the federal government. However, Rep. Rogers said the attorney general's opinion was that the provisions still could be put into the bill to establish the state's policy and to put the federal government on notice that Alaska doesn't want the nuclear problem.

Although most energy officials feel that nuclear power would probably not be economic in Alaska, some Alaskans are starting to worry that the Lower 48 might suggest using Alaska as a dumping ground for their nuclear wastes as the problem grows more controversial in those states, Gardiner said. This bill addresses that concern.

The bill also provides strict authority for the Department of Environmental Conservation to restrict the use of hazardous materials and the disposal of hazardous wastes. To protect the users of small quantities of many common materials which could be termed hazardous, two degrees of hazardous wastes are provided for in the bill.

-more-

Hazardous wastes and "extremely hazardous wastes" would call for different types of handling and regulation by the state. Some substances -- the main committee example was PCB's -- are so toxic that they should be carefully monitored no matter how small the quantity, the committee decided. Other substances, many of them common, are only hazardous if handled improperly or disposed of in large quantities, and need less control.

In committee, it was brought out that other states have had problems when organized crime found that there was profit to be made in setting up apparently legitimate companies purporting to dispose of hazardous wastes for a fee, taking the money and abandoning the waste facility or illegally dumping the materials where they created a health hazard and cost the public to clean up the problem. The committee was also aware and concerned about situations such as Love Canal and other areas where hazardous wastes were disposed of without precautions, and without the knowlege of nearby residents.

Activities of the federal government, including the military, are specifically excluded from state jurisdiction in the bill, since the state has no authority over the federal government. It does require federal agencies to notify the state prior to shipment through the state, except when national security might be at risk.

###

Alaska State Legislature

K. Bruce
Senator Rodey's office

POUCH V
STATE CAPITOL
JUNEAU, ALASKA 99811
(907) 465-3834
(907) 465-3835

Senate

Committee on Resources

January 28, 1981 — Beltz Room
1:30 p.m. — 211 Capitol

MEMBERS PRESENT	MEMBERS ABSENT
SENATOR FAHRENKAMP	SENATOR ELIASON
SENATOR FISCHER	
SENATOR BRADLEY	
SENATOR GILMAN	
SENATOR MULCAHY	
SENATOR STURGULEWSKI	

Hearing on: SB29 "An Act relating to nuclear materials."

Senator Kerttula testified on behalf of the bill. He indicated that a similar bill was worked on last Session and the changes are incorporated in SB29. The bill attempts to avoid future problems. With this bill, the State of Alaska, will have a law prohibiting the dumping of hazardous nuclear waste materials. He also indicated that this legislation forbids the federal government to dump hazardous nuclear waste in the state without the Alaska Legislature's approval.

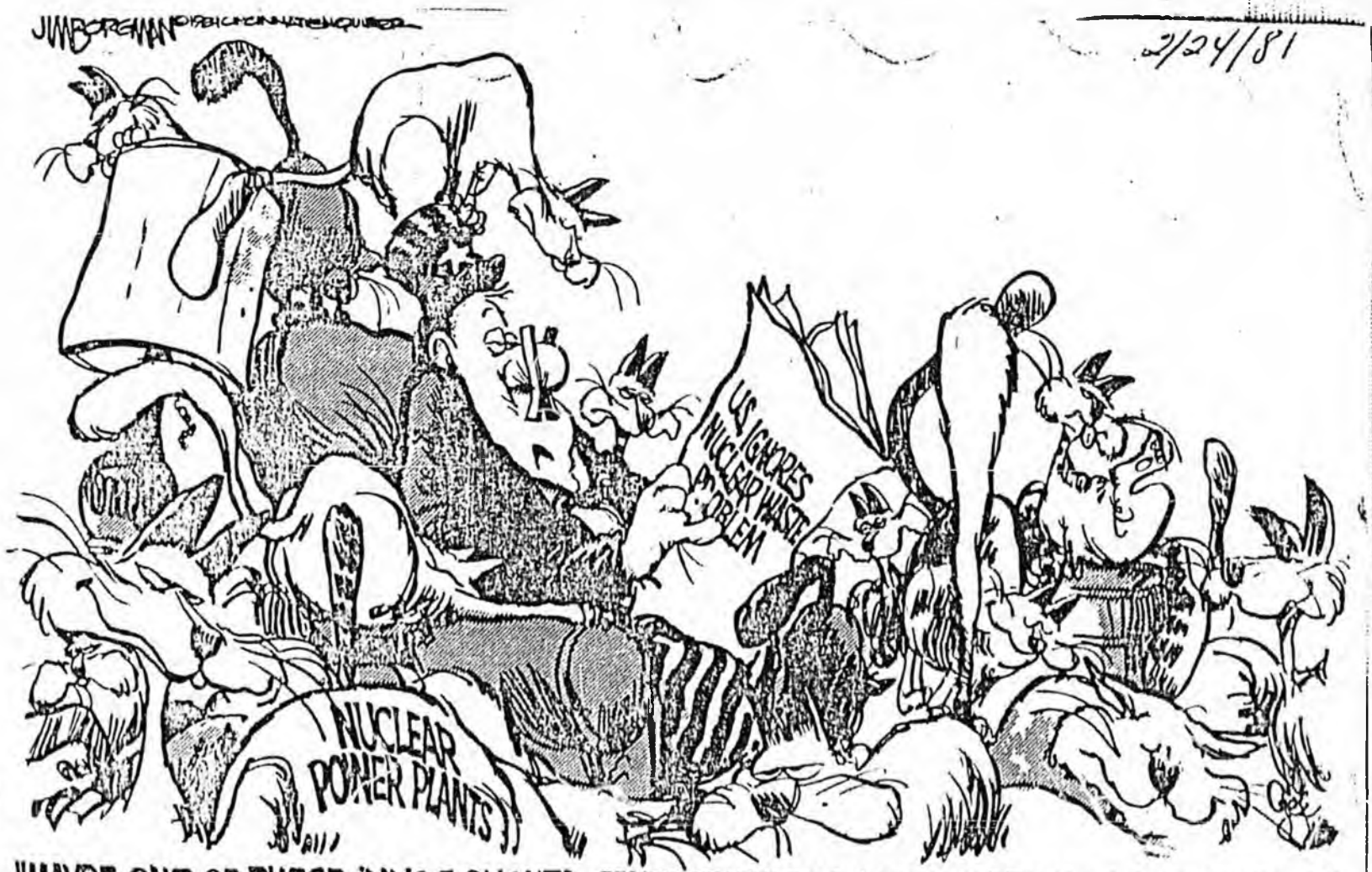
Deming Cowles, Deputy Commissioner of Environmental Conservation, testified in infavor of SB29. He stated that the Governor has drafted an encompassing waste disposal bill which had this measure in it. The Governor removed this section from his bill once Senator Kerttula introduced SB29.

Tom Hanna, Chief Air and Land Management Section, Department of Environmental Conservation, testified infavor of SB29. He stated that he would like to see some changes in the conflicting language: (1) eliminate language prohibited by the Supreme Court decision; (2) some mechanism to obtain prior local government approval; and, (3) Section 46.03.250 and 46.03.260 should be changed adding the words "low level radiation." In response to a question regarding the difference between low and high level radiation wastes, he indicated that high radiation wastes last over a long period of time and also that there is difficulty in finding disposal sites for such waste. Low level radiation wastes last over a short period of time and that they do not have a great toxic affect. In response to the question should some reference

be made to the transportation of hazardous waste, he indicated that a ban on hazardous waste transportation should be added in Section 18.45.025.

Roland Shanks, Alaska Center for the Environment, testified on behalf of the bill. He suggested that possibly an unorganized borough should be allowed to vote on whether to permit the disposal within a centain radius of where they live. He also suggested that in addition to nuclear waste that the Committee might consider adding hazardous waste to the bill.

The bill was passed out of Committee after adding three amendments to the original bill (copy of these amendments attached). Senators Fahrenkamp, Sturgulewski, Bradley and Fischer voted do pass. Senators Mulcahy and Gilman voted no recommendation.



"MAYBE ONE OF THESE DAYS I OUGHTA START THINKING ABOUT GETTING A LITTER BOX."

ANCHORAGE DAILY NEWS, February 25, 1981

SB29

Nuke safeguard: a good proposal

2/25/81

Among the worries Alaskans ought not face in this perilous world is the fear of accident resulting from use of nuclear power. Sometimes geographical isolation and sparse population are blessings in disguise; in this case Alaska is fortunate to afford the luxury of insulation from the nuclear power dilemma.

That's why many will applaud the action of the state senate Monday to seek a ban on construction of nuclear reactors and on storage or transportation of nuclear waste in the state.

The ban would not be absolute. Medical and research uses for low-level radioactive materials would be permitted, if state-approved guidelines are maintained. Nuclear projects, moreover, could be undertaken — but only with prior approval of the legislature and the state Department of Environmental Conservation.

But such requirements force the debate into the public forum where it belongs — and *before* nuclear facilities are in place. Citizens must reserve the right to express their attitudes toward nuclear industry through the political process before the industry arrives.

Americans elsewhere may be forced — against their best instincts, we suspect — to embrace increased use of nuclear power over the next few decades. Surviving the 20th Century in peace and security may require running the terrible risk of letting the nuclear genie out of its bottle, despite the real fears many people feel in the wake of the Three Mile Island disaster.

But Alaska is blessed with tremendous fossil-fuel reserves and hydroelectric power potential — easily enough to serve the state's power needs without need for nuclear power. The senate's action is a commonsense reflection of that fact, and we can only hope the Alaska House of Representatives follows suit without delay.

DAILY NEWS MINER-FAIRBANKS, February 23, 1981

SB 29

Bill banning nuclear activity passes Senate

2/23/81

JUNEAU (AP)—The Senate voted today to ban nuclear fuel facilities in Alaska, as well as the storage or disposal of high-level nuclear waste, unless specifically authorized by the Legislature.

The legislation (CSSB29), approved by a unanimous vote, also would prohibit transportation of high-level nuclear waste in the state, except when transporting the waste outside Alaska for disposal.

Under the bill, a nuclear fuel production facility or waste disposal facility could not be built in Alaska unless the Legislature specifically designated, by law, a site for the facility. In addition, a facility would be required to obtain a permit from the Department of Environmental Conservation.

The bill also stipulates that regulations adopted by the department governing issuance of a permit would have to be approved by both the municipality with jurisdiction over the proposed facility and the governor.

The bill differentiates between high-level and low-level nuclear waste. The measure directs DEC to adopt regulations defining low-level radiation and establishing standards for the discharge of low-level radiation and other nuclear waste material which does not constitute a threat to public health and which may be stored or disposed in the state.

The department also would be required, under the bill, to establish procedures for the storage and disposal of radioactive materials used in medicine, education or scientific research, which are not considered high-level waste.

The bill sponsored by Senate President Jalmar Kerttula, D-Palmer, now goes to the House.

ANCHORAGE DAILY NEWS, February 24, 1981

SB29

Senate passes nuclear ban bill

2/24/81

Our Juneau bureau

JUNEAU — The Alaska Senate voted unanimously Monday to ban construction of nuclear reactors and high-level nuclear waste or storage sites in the state unless the projects are approved in advance by the full legislature.

The bill, which now goes to the state House, also would prohibit transportation of high-level nuclear waste material within Alaska, except for the purpose of disposing of the waste outside the state.

The bill (CSSB29) says a "nuclear fuel production, utilization, reprocessing or disposal facility" can't be built unless the legislature has passed a law designating a site for the facility.

The bill also would require a nuclear facility to obtain a permit from the state Department of Environmental Conservation (DEC). Municipalities containing a potential site and

the governor also would have to approve any such permit, according to the measure, which passed the Senate 18-0.

But under the bill, prior legislative approval wouldn't be necessary for transportation of such low level radioactive material as used in medicine, education or scientific research, providing the materials are stored and disposed of according to state regulations.

The measure would order the DEC to set those standards — defining "nuclear waste material which does not constitute a threat to public health or safety" and setting procedures for storage and disposal of the low level materials.

Sen. Pat Rodey, D-Anchorage, said he has received as much mail on the nuclear measure as on any other bill, and that he felt there "is much public concern" over dealing with radioactive materials.

Alaska has no commercial nuclear reactors, but Senate President Jay Kerttula, D-Palmer and prime sponsor of the Senate nuclear bill, said state officials are looking into any possible nuclear storage by the military in the state.

The Hanford nuclear disposal site in Washington state currently handles much of the nation's nuclear waste, but under a new Washington law, no more nuclear waste can be sent into that state after July 1 unless a compact is signed between Washington and the state shipping the materials.

Probably taken care of - Nancy Lord - Rogers' aide SB 29

Rick - Here are some notes to help clear up the X-Ray problem (SB-29) we discussed —

Tim Bradner

HOUSE CS FOR CS FOR SENATE BILL-29

As written, House Resources substitute for CSSB-29 would appear to extend DEC permitting authority to industrial, as well as scientific and medical, X-Ray and radiographic operations. Industrial radiographic operators are now regulated by the federal NRC. Under current state law, they are required to notify the Department of Health and Social Services as to location in the state where a radiation source is used in radiography.

There are two different types of systems used in industry, that produce radiation. One system is the X-Ray machine, which produces X-rays. The other system is the use of a radioactive element (usually a manufactured isotope of a metal) that gives off gamma rays, which can then be recorded on a film plate, similar to X-Ray. There is no real difference between X-Rays or Gamma Rays other than the way they are produced (from a small radioactive source rather than a machine) and the wavelength, which itself is a factor of the energy-level of the source. The energy level of gamma rays is fixed and cannot be changed.

BOTH X-RAY AND GAMMA-RAY TEST PROCESSES ARE USED BY ALASKA OPERATORS.

Most of our radiographic operations are performed using a small source of radiation producing gamma rays; the radiation source can be lowered down pipe or used in other ways more conveniently than an X-Ray machine. In terms of process, the two systems are almost identical, though...a shadow image is captured on film after X-Rays or Gamma Rays have passed through something.

Specific problems:

1. The implied exemption of X-Ray operations on Page 5, line 4 of the Resources Committee substitute works to exempt X-Ray operators only from the effect of subsection (a) on the bottom of the preceding page (Page 4, line 22), which relates to a total ban on nuclear waste disposal. This section does not reach regulatory authority.

2. You should substitute "radiographic" for "X-Ray" in these same sections. Radiographic will encompass the use of gamma ray instruments, which are similar to X-Ray. X-Ray is too narrow a definition.

3. Addition of the same language as mentioned in (1) above, the words "x-ray or photographic process testing" on Page 7, line 15, seems to have the opposite effect of the intended exemption: It seems to definitely bring industrial, scientific and medical radiographic operators under DEC authority. This language should be deleted, to conform to what we thought committee intent was.

4. Page 7, line 19: Substitution of the word "low level radiation" for "radionuclides" serves to expand DEC authority in this area, we think. There is apparently no statuatory definition or definition by regulations of radionuclides. The standard scientific meaning, though, involves ~~the emission of~~ a radioactive particles with a nucelus. This does not include X-Rays or Gamma Rays, which are electromagnetic radiation. There is no definition in the bill for "low level radiation" (indeed, the department is left to define it by regulation), but it would seem to encompass other kinds of radiation than previously. In theory, this section of the bill would seem to require a DEC permit each time a radiographic test is made.

5. The term "low level radiation" is used in place of "radionuclides" higher on the same page (Page 7, line 9), under the "authority" section.

OPTIONS:

(1)- "Radiographic" should be substituted for "X-Ray".

NOTE: X-RAY or GAMMA RAY is scientifically not a "photographic process"

(2)- Page 5, line 4 should be amended to read:

"education, x-ray or nondestructive (PHOTOGRAPHIC PROCESS) testing method, security screening..."

(3)- Page 7, line 20 should be amended to read:

"radiation (RADIONUCLIDES) to the air, water, land or subsurface land which will produce a radioactive waste material of..."

THIS WOULD REMOVE radioactive sources not leaving a waste (testing materials) from the bill. It is an option.

(4)- Specifically, exempt radiographic operators involved in non-destructive testing.

STATE OF ALASKA
THE LEGISLATURE

LEGISLATIVE AFFAIRS AGENCY

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

M E M O R A N D U M March 11, 1981

SUBJECT: Nuclear materials and hazardous wastes, draft HCS CSSB 29 (Resources)

TO: Representative Terry Gardiner
Attn: Bob Speed

FROM: John B. Chenoweth
Legislative Counsel

This bill is drafted on the premise that

(1) nuclear waste disposal in the state may be allowed in specially constructed facilities [sec. 2] or otherwise [sec. 5];

(2) all other nuclear facilities are banned from the state [sec. 1] unless the ban is found unconstitutional or invalid [sec. 18], in which case their construction and operation is permitted under stringent regulation and financial responsibility requirements [secs. 3 - 5].

I could not follow the convolutions in the definitions of "high level nuclear waste" and "low level nuclear waste" which you provided. Please check these carefully.

I also may have botched the distinction between "extremely hazardous wastes" and "hazardous wastes" in AS 46.32. You should check this carefully in context. I am not satisfied with the introduction of these concepts in a title where the administering agency is already to be concerned with "hazardous substances". See AS 46.03.822 and 46.03.826(3). Is there some better way to tie these together?

Please note that there is no provision speaking to the transportation of "hazardous wastes". Is this an oversight? Did I just miss this in your notes?

As a practical matter -- rather than a drafting concern -- is the requirement of the financial responsibility provisions regarding in perpetuity care of nuclear material one that can be met reasonably?

It is of concern, though I have not taken the time to do research, that the standards applicable to attempting to distinguish "extremely hazardous waste" and "hazardous waste" may be too vague to support the distinctions which the Department of Environmental Conservation shall make under AS 46.32.040, and that prosecutions based on the statute and any regulation adopted under it may be set aside for failure to give adequate notice as a violation of the constitutional protection of due process.

JBC:ljb

Enclosure

STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR

DEPARTMENT OF LAW

OFFICE OF THE ATTORNEY GENERAL

POUCH K – STATE CAPITOL
JUNEAU, ALASKA 99811
PHONE: (907) 465-3600

March 5, 1981

Rep. Brian D. Rogers
House of Representatives
Pouch V
Juneau, AK 99811

In re: Ban on nuclear power production and importation of nuclear materials.
File #J-66-545-81

Dear Representative Rogers:

On February 16, you requested this department's informal opinion on whether a state can, without violating the U. S. Constitution, impose an outright ban on all in-state nuclear power production or the importation of nuclear wastes. The answer is no.

Congress's intent to exercise exclusive power over the construction and operation of nuclear power plants and the radiological hazards associated with nuclear materials is clearly set forth in the Atomic Energy Act of 1954 (AEA), as amended 42 U.S.C. §§ 2011 - 2296 (1970). Section 2021, entitled Cooperation with States, defines the scope of state regulatory authority permitted by Congress. It provides in pertinent part:

> (c) No agreement entered into pursuant to subsection (b) of this section [agreements with states] shall provide for discontinuance of any authority and the Commission shall retain authority and responsibility with respect to regulations of--

> (1) the construction and operation of any production or utilization facility;
>
> (4) the disposal of such other by-product, source, or special nuclear material as the Commission determines by regulation or order should, because of the hazards or potential hazards thereof, not be so disposed of without a license from the Commission.

Under §2021 it is clear that a state cannot simply ban the production of nuclear power or the interstate transport of nuclear wastes because Congress has preempted the field. Northern States Power Co. v. State of Minnesota, 447 F.2d 1143 (8th Cir. 1971) aff'd per curiam, 405 U.S. 1035 (1972).

In fact, the authority of a state to regulate at all this area is practically nil. States may only "regulate activities for purposes other than a protection against nuclear hazards." 42 U.S.C. 2021(k). In essence, states must treat nuclear power plants as if they were not nuclear power plants. States are foreclosed from enacting statutes or regulations regulating radioactive hazards. Thus, for instance, the court in Northern States Power Co., (supra), held that radioactive releases or effluents are within the NRC's exclusive jurisdiction. And in U.S. v. City of New York, 463 F.Supp. 604 (1978), the court held that the city's "siting" ordinance was unconstitutional as preempted by the AEA.

The full extent of federal preemption is well illustrated by the legislative history of §2021(b) which states that state standards adopted pursuant to an agreement reached

between a governor and the Commissioner of the Nuclear Regulatory Commission (NRC) must be identical with federal standards. Murphy and La Pierre, "Nuclear 'Moratorium' Legislation in the States and the Supremacy Clause: A Case of Express Preemption," 76 Colum. L.R. 392, 400 [hereinafter Murphy and La Pierre]. This article discusses S. Rep. No. 870, 86th Cong., 1st Sess. 9, 11 (1959).

It is difficult to imagine a major non-radiological hazard concern so compelling as to override the federal government's power to regulate foreign and interstate commerce and its war powers. The states may well be in a catch 22 situation.

Under §2021(b), the so-called States Agreement Program, a state may assume regulatory responsibilities for non-radiological hazards such as research, medicine or industrial activities which use only minimal quantities of radioisotopes, natural uranium or special nuclear materials. States currently share with the federal government the regulation of radium, X-ray and fluroscopic machines, particle accelerators, the mining of radioactive ores, and electronic products like color TVs and microwave ovens. Murphy and La Pierre at 402.

In spite of the above authorities, numerous states have enacted statutes purporting to regulate the following areas: full compensation for damages from a nuclear power plant accident, effective safety systems, adequate provisions for disposal of radioactive wastes, security protection for

plants and the transportation of radioactive materials, plans for evacuation, regulation of effluent discharges, nuclear power plant siting and design, and the monitoring of environmental impacts. Many of these statutes were enacted solely in response to, and express a dissatisfaction with, the federal government's assertion of exclusive jurisdiction in this area. A good argument can be made that almost all of these statutes are either impliedly or expressly preempted by Congress.

Furthermore, regardless of the stated purpose of a statute (i.e., protection of the public's health and safety or protection of the environment from adverse impacts), courts will look behind the law at the underlying purpose for the statute. If the underlying purpose is to frustrate the purpose and objectives of Congress in this area, the statute will be struck down. Pacific Legal Foundation v. State Energy Resources, 472 F.Supp. 191 (1979).

Sincerely,

WILSON L. CONDON
ATTORNEY GENERAL

By: Clarke L. Young
Clarke L. Young
Assistant Attorney General

from "A Nuclear Waste Primer"
(League of Women Voters Education Fund)
1980.

The politics of nuclear waste management

As the AEC's experience in Kansas and the more recent history of WIPP plainly demonstrate, there is more to nuclear waste management than solving technical problems. The process by which decisions are arrived at and the degree of trust and mutual regard between levels of government and between citizens and their governments count just as much in determining the outcome of struggles over nuclear waste and, indeed, the future of nuclear power.

There is a natural human tendency for people to want the benefits of nuclear power without suffering the worries or discomforts or risks of coping with the nuclear leftovers. And there is an equally natural tendency on the part of federal officials to want to make decisions without hordes of citizens, or even another set of officials, looking over their shoulders and second-guessing them. But citizens and state and local governments are rightful participants in these decisions. And the principal goal of any political arrangement must be to make it possible for them to play their parts well. It is equally imperative that the net effect of these negotiations and the decisions arising from them be a public perception that risks have been assessed with care and candor and that burdens are being borne equitably.

The state-federal stand-off

While many states are still receptive to the construction of nuclear power plants, few, if any, are interested in furnishing a site for a permanent HLW (and spent fuel) repository. In fact, more than a dozen states, responding to pressure from citizens, have enacted laws that either flatly prohibit or make difficult the establishment within their borders of disposal facilities for either HLW or LLW radioactive waste. And at least 15 more states, according to NRC, are thinking of following suit.

Why do so many state and local governments want to restrict or prohibit nuclear waste disposal (and even temporary storage)? One major reason is that they believe that the federal government has not made enough progress toward solving the management problems. If these localities are going to have radioactive wastes stored or permanently deposited within their borders, they want assurances that the facilities will be properly managed *now* and *in the future* and will pose no significant risks to citizens.

Adverse experiences with other government projects involving hazardous substances have made states extremely wary of saying yes to nuclear waste facilities. Residents of western states, which have the most favorable conditions for nuclear waste disposal—suitable geology, dry climate and sparse population—are in an especially mutinous mood. These states have been the sites for many hazardous federally sponsored activities—above-ground atomic bomb tests . . . uranium mining . . . milling and tailings disposal . . . nerve gas production, testing and storage. As one Westerner put it, "The government has used the wide open spaces as a dumping ground for almost four decades and has inflicted a lot of wounds on us. Well, we've just had enough."

And the impacts of these activities on local populations are just beginning to show up. For instance, recent investigations into the effect of atomic bomb tests conducted in the 1950s revealed that radioactive fallout may have caused an increase in thyroid cancers in southern Utah, Nevada and Arizona during the 1960s. Although these studies are inconclusive, the widespread publicity they received has made people in western states still more uneasy about the prospect of becoming disposal sites for nuclear wastes.

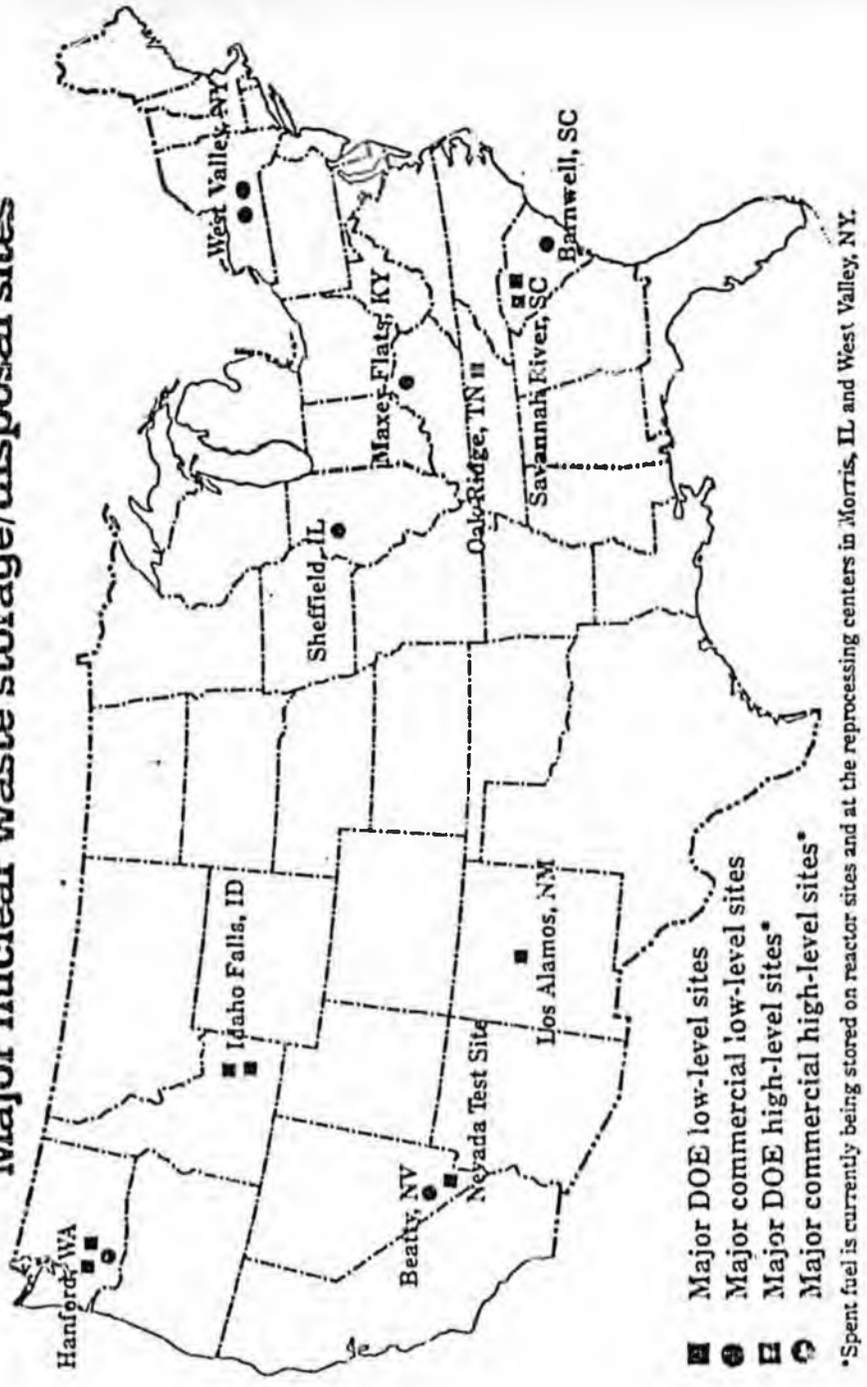
Where, then, can the U.S. government locate a repository? The General Accounting Office (GAO) reported in 1979 that the federal government could obtain land for a repository within any state without getting that state's consent, a finding that calls into question the legality of state laws on the books. A bill has since been introduced in Congress to give states explicit "veto" power over waste facilities. It would require DOE to:

—notify a state of its intent to explore for a radioactive waste disposal site;

—enable state officials and citizens to review technical, environmental and safety questions during the planning process; and

—grant the state the right to refuse the repository after review, through a public referendum or vote of the state legislature.

Proponents of the legislation believe that it will force a thorough and complete examination of all technical and social issues and will be



more likely to lead to a federal decision based on these considerations rather than on what is most expedient.

Some members of Congress believe that states don't need this express veto power because they already have a "de facto" veto, since there are many different ways a state can block or delay federal activities. They want, instead, to give states incentives, such as money or tax breaks, for accepting repositories. Western states generally oppose "special incentives," while the central and eastern states like the idea. All states, however, want the federal government to pay "compensation for the direct and indirect costs of repository siting."[13]

A national policy

Recognizing the urgent need to resolve nuclear waste issues, President Carter in 1978 set up the Interagency Review Group (IRG) as a first step toward strengthening and accelerating the federal nuclear waste management program. Its job was to formulate policy recommendations for long-term management of nuclear wastes.

The final IRG report and recommendations, issued in March 1979, formed the basis of the nation's first comprehensive radioactive waste management program, announced by President Carter on February 12, 1980. Key elements, described below, reflect an attempt to give states a voice, but not an overriding voice, in federal siting decisions, to coordinate and speed federal agency actions and to give citizens, as well as lower levels of government, access points for influencing federal decisions.

■ **State Planning Council** The President created, by executive order, a State Planning Council to advise the executive branch and work with Congress in making and implementing decisions on interim waste management and permanent disposal. The council has 18 members including eight governors, five other state and local government officials, a representative from an Indian tribe, and the heads of EPA and the Departments of Energy, Interior and Transportation. Governor Richard Riley of South Carolina was appointed as its first chair. This council is expected to play a key role in helping to work out the political accommodations between "the feds" and state and local officials so that the radioactive waste management program can go forward.

■ **Consultation and concurrence** Under the framework of consultation and concurrence, a host state will have a continuing voice in the siting, design and construction of a permanent HLW repository.

■ **Interim planning strategy** Pending reviews required by the

POSITION PAPER/Department of Health & Social Services

Position Paper
On
HOUSE BILL NO. 72

An Act entitled: "An Act relating to the transportation, storage and disposal of nuclear and other hazardous waste material; and providing for an effective date."

The major provisions of HB 72 prohibit: (1) the disposal of hazardous wastes in the State unless the waste has been processed to remove its harmful properties; (2) the transportation of nuclear waste material in the State except for purposes of disposal outside the State; and (3) the storage and disposal of high-level nuclear waste material in the State.

AS 18, Chapter 31, Hazardous Waste

The requirement that hazardous waste first be "processed to remove its harmful properties" before it may be disposed of appears to have far-reaching ramifications. The assumption in the disposal of many hazardous wastes is that the waste does, in fact, maintain its harmful properties, but it is disposed of in such a way as to reasonably preclude the possibility of any hazard to human health or the environment.

The following wording for Section 18.31.010 is suggested:

> Section 18.31.010 DISPOSAL OF HAZARDOUS WASTE. It is unlawful to dispose of hazardous waste in the State unless done so in accordance with regulations adopted by the Department.

Radioactive (Nuclear) Wastes

It is recommended that the word "radioactive" replace the word "nuclear" wherever the term makes reference to waste. This is a more precise description of the kind of waste under consideration.

Section 46.03.842. Transportation of Radioactive Waste Material.

As written, this section prohibits disposal of low level radioactive waste in the State if transportation is involved. This is in conflict with Section 46.03.844, which permits waste disposal from use in medicine, education, and scientific research. If low level radioactive waste material is to be disposed of in the State it may have to be transported to a disposal site away from the facility producing the waste.

It is recommended that the words "high level radioactive" be inserted on page 3, line 2, making the section read: "The transportation of high level radioactive waste material..."

Section 46.03.844. STORAGE AND DISPOSAL OF HIGH LEVEL RADIOACTIVE WASTE MATERIAL.

The definition of "high level nuclear waste materials" includes "material of a kind or quantity which when stored or disposed of, would constitute a threat to the health or safety of the public." Low level wastes, improperly stored or disposed of, fall under that definition. The Department recommends against making definition of high level radioactive waste contingent upon factors of storage and disposal. This is contrary to established practice in radiation protection and may be a source of confusion and debate.

To clarify Section 46.03.844(b), the following definition is suggested to replace (b):

> (b) For purposes of this section "high level radioactive waste material" means used reactor fuel or the radioactive wastes produced during the reprocessing of used reactor fuel.

To further clarify existing statutes, AS 46.03.250 and AS 46.03.260, we also suggest a definition for low level radioactive wastes be added as follows:

> (c) "Low level radioactive wastes" means wastes other than high-level radioactive wastes, uranium mine or mill tailings, or transuranic wastes containing more than 10 nanocuries per gram.

The Department of Health & Social Services takes a neutral stand on H. B. 72 with incorporation of the proposed changes.

Recommended by: David Bruce

David Bruce, Deputy Director

Date: March 5, 1981

Approved by: Helen D Beirne

Helen D. Beirne
Commissioner

Date: 3-6-81

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

FISCAL NOTE

I. REQUEST
Bill/Resolution No. House Bill No. 72
Title "An Act Relating to transportation, storage and disposal of nuclear material
Requested by Commissioner's Office Date February 26, 1981

II. FISCAL DETAIL
Agency Affected Department of Health and Social Services
Program Category Affected Division of Public Health
BRU, Program, or Subprogram(s) Affected Radiological Health Program
(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

	FY 81	FY 82	FY 83	FY 84	FY 85	FY 86
100 PERSONAL SERVICES	0	0	0	0	0	0
200 TRAVEL	0	0	0	0	0	0
300 CONTRACTUAL	0	0	0	0	0	0
400 COMMODITIES	0	0	0	0	0	0
500 EQUIPMENT	0	0	0	0	0	0
600 LAND & STRUCTURES	0	0	0	0	0	0
700 GRANTS, CLAIMS, ETC.	0	0	0	0	0	0
	0	0	0	0	0	0
TOTAL	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 (Specify Fund Source)	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

III. ANALYSIS (See Fiscal Note Preparation Instructions, Section III)

DATE February 26, 1981 PREPARED BY Sidney D. Heidersdorf
AGENCY Dept. of Health & Social Services
PHONE 465-3019

gislative Finance
dget and Management
e Sponsor (First Legislator Named) M&B Approval

Chemical waste to leave state

by Ellis E. Conklin
Times Writer

More than 15 tons of potentially harmful debris lies in a toxic heap today as state environmental officials work to cart it off to protected land disposal sites.

Around 9,000 pounds of the hazardous waste — the remnants of a cargo of Ortho Garden fertilizers and insecticides which exploded and burned here early Tuesday morning — will be transported out of state in special metal containers and shipped to a land fill site in Arlington, Ore., according to Ray Morris, a state environmental engineer.

There also was speculation today that some of the more lethal substances like Diazinon, Ratenone and several forms of weed killers may be crated off to Ortho Co. in Tacoma, Wash. That has not been confirmed, however.

Diazinon and Ratenone — both powder insecticides — constitute a hazardous waste substance when placed in water, according to the Environmental Protection Agency.

Most of the other materials — mostly bone meal, phosphates and other fertilizers -- will be packed in barrels and taken to the municipality's land disposal area south of Merrill Field.

Local fire investigators believe the Totem Ocean Trailer Express van containing the substances shipped from Seattle may have been burglarized and set ablaze behind V. F. Grace Co. at E. 13th Ave.

The wholesale firm is located next to an apartment building and across the street from other residential units.

The fire destroyed $27,000 worth of goods.

Hours after the fire broke out at 4 a.m. Tuesday, state authorites roped off the area and called in state and national environmental officials to investigate. The area will remain cordoned off until all materials are removed.

V.F. Grace Co. has hired armed security agents to make sure no one gets into the contaminated boxes.

While police and fire officials continue to look into the cause of the fire, toxic waste cleanup specialists — Crowley Environmental Service — rushed to the scene Tuesday to sift through the chemical remnants to determine which substances pose a hazard to humans.

Carl Harmon, a solid waste engineer, said it will take several days to remove all the materials and sanitize the area. A spokesman for V.F. Grace said the chemical debris poses no danger to humans as long as people stay clear of of the area.

Cleanup crews wore masks and other special gear Tuesday as they sorted out the materials.

The biggest obstacle appears to be getting rid of the Diazonal. When mixed with water, Diazonol becomes Sulfotepp, a chemical which can cause dizziness, nausea and diarrhea, said Morris.

There also was some concern Tuesday that some of the waste materials might have been washed into storm drains and entered the city's water supply. However, Morris said there was no evidence that occured.

"Most of it when down into the street and into the ice, but the levels (of contamination) are so low that we're not terribly concerned," Morris said. He said waste water samples will be taken to make sure there is no danger.

Harmon said most of the water was sucked up by the trucks brought in by Crowley.

One substance found in the cargo was snail and slug pellets. The pellets contain methaltehyde, a chemical that attacks the mucous membrances in dogs and can result in death.

Autoharpist to give play

Aut
presen
at Do
Th
and
ipar
aut
ch
m
a
T

weather

Fair today. High in upper 20s. Light wind becoming to 15 in

5 tons of wastes will be shipped out of state

By JULIE ANNE GOLD
Daily News reporter

Five tons of toxic chemical wastes — pulled from a cargo van Tuesday after it burst into flames in the parking lot of a Anchorage warehouse — will be packed in metal barrels and shipped to Washington state by truck.

The wastes are the remains of about one-third the total, 30,000-pound cargo of toxic garden insecticides, fertilizers, and herbicides. They will be shipped back to the Ortho Co. in Tacoma, said Carl Harmon, a solid waste engineer for the state Department of Environmental Conservation.

The rest of the material — mostly bone meal and fertilizers — will be packed into large plastic garbage cans and hauled by truck to be buried in the city dump, Harmon said Tuesday night.

"What we have more than a danger is a big mess," Harmon said of the piles of chemicals still lining a cement pad.

"We're segregating the hazardous materials from the non-toxic ones," he said.

The chemicals, along with some sporting good supplies, were delivered to the V.F. Grace Co. Monday by a Totem Ocean Trailer Express van, Grace's vice-president Chuck Rush said.

The truck was set on fire by an arsonist at about 4 a.m. Tuesday, fire investigators said. The warehouse is located at 605 E. 13th Ave. A padlock on the van's doors had been broken, investigators said.

"We suspect someone was breaking into the van to steal the merchandise, and when he saw a bunch of fertilizer, decided to set it on fire," said Fire Investigator John Glenn.

A fire department spokesman estimated damage to the truck at $10,000; Rush said the

See Back Page, TOXIC

Agreement on dumping of nuclear wastes predicted

Associated Press

Juneau — State Sen. Bettye Fahrenkamp said Monday she thinks Alaska will be able to reach an agreement with Washington state to continue dumping low-level radioactive waste there.

"They like us because we produce a small amount of low-level waste," Ms. Fahrenkamp, D-Fairbanks, reported to senators after attending a Western Interstate Energy Board meeting over the weekend. Disposal agreements were discussed at the Seattle meeting.

She said an agreement on low-level waste disposal is needed by July 1 because Washington voters last fall approved an initiative which prohibits dumping of non-medical radioactive waste in-state, except by special agreement.

Ms. Fahrenkamp said the initiative was one in a series of actions prompted by Washington residents' concern over poor packaging and unsafe transportation of radioactive waste brought into the state for disposal.

In 1979, the problem became so severe that then-Gov. Dixy Lee Ray refused all shipments of radioactive waste.

Prompted by complaints from Washington and other states, Congress in December approved a low-level radioactive waste policy which makes each state responsible for commercial waste generated within its borders. The policy also allows states to make agreements regarding low-level waste disposal.

Ms. Fahrenkamp said Washington is glad to have Alaska as a customer because Alaska has a good record for transporting and packaging radioactive waste. Most of Alaska's radioactive waste is from universities and hospitals, she said.

More federal money for nuclear power

The Los Angeles Times

WASHINGTON — Secretary of Energy James Edwards promised a big increase in federal spending for nuclear power Tuesday, despite the Reagan administration's overall budget austerity. And he said that the future prosperity of the country will depend on electricity generated by nuclear plants.

"To say 'no' to nuclear energy would be turning our backs on the 33 million Americans", who will come of working age in the next 20 years by depriving them of jobs, Edwards told reporters.

His statements emphasized a dramatic change in policy from that of the Carter administration, which had placed a high reliance on energy conservation programs while considering nuclear power attractive only as an energy source of last resort.

Edwards said he wants the government to:

- Encourage development of the breeder reactor, which creates new atomic fuel even as it consumes its fuel.
- Move ahead quickly in finding disposal sites for nuclear wastes. The material should be buried where it can be retrieved later if better methods of disposal are discovered, he said.
- Foster a reprocessing industry, in which spent nuclear fuel is made usable again.

Federal spending to promote nuclear power will be one of the few areas of increased outlays under the Reagan administration, which hopes to cut $50 billion from the $739 billion federal budget proposed by President Carter for the fiscal year starting Oct. 1.

Winter storm hit...

Kenai seeks waste sites

By TOM ATKINSON
Daily News correspondent

SOLDOTNA — Hazardous wastes may have Alaska burial grounds if efforts by Kenai Peninsula borough administrators and engineers pay off.

Responding to local pressures, Borough Mayor Stan Thompson has initiated a search for the ultimate waste site — one where septic, special and hazardous wastes all could be dumped.

While borough engineers study maps and soil information relating to possible sites on borough and state land in the Kenai area, Thompson has made overtures to the federal government about using Kenai Wildlife Refuge lands for a dump.

"We are trying to check all possibilities," Thompson said.

The mayor said he informed Congressman Don Young of the disposal problem and Young asked how he could help.

Although Thompson is skeptical about getting any answer from federal agencies in less than five years, he is encouraged by the new Secretary of Interior's stance on federal land use. He says Secretary James Watt's receptivity to local use of federal lands may improve borough chances of locating a disposal site on the refuge. The refuge comprises the majority of land within the Kenai Peninsula borough.

A site on the refuge has been proposed by Walt Pedersen of Sterling who has spearheaded a citizen's drive to close the Sterling special waste site. Industrial wastes — sometimes contaminated by oil and thus falling in the category of special wastes — are disposed of in Sterling, much to the dismay of nearby residents.

Both the borough and the operators of the Sterling sites have acknowledged the need to relocate the site. They concur that future industrial expansion on the peninsula will aggravate present waste problems.

Pedersen's vision calls for the U.S. government to donate a square mile of refuge away from any settlement, and for the state to build roads and a septic treatment plant there. The borough would operate the site according to Pedersen's plan.

Thompson says Pedersen's proposed site southeast of Soldotna would be ideal, except for its inaccessibility. But the mayor isn't putting all his eggs in Pedersen's basket. Thompson wants to pursue at least three alternative sites.

What may be the most promising site lies on borough-owned land north of the present road system in north Kenai. Borough engineers are investigating the water table in that area to determine if a waste site is feasible.

A north Kenai site could be connected by road to the Swanson river oil fields, and to the North Kenai industrial area, Thompson said. Marine links to the Beluga coal field, Anchorage and other areas also would be possible.

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

FISCAL NOTE

I. REQUEST
Bill/Resolution No. HB-72
Title Act relating to the disposal of radioactive and hazardous wastes
Requested by Rogers, Gardiner, Clocksin and Miller Date

II. FISCAL DETAIL
Agency Affected Dept. of Environmental Conservation
Program Category Affected Environmental Conservation
BRU, Program, or Subprogram(s) Affected Env. Quality Management, Env. Quality Operations
(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

		FY 81	FY 82	FY 83	FY 84	FY 85	FY 86
100	PERSONAL SERVICES		363.4	405.2	445.8	490.3	539.4
200	TRAVEL		57.4	63.1	69.4	76.3	83.9
300	CONTRACTUAL		145.8	600.0*	326.4**	359.0	394.9
400	COMMODITIES		24.2	26.6	29.3	32.2	35.4
500	EQUIPMENT		26.5	462.0*	12.1	13.3	14.6
600	LAND & STRUCTURES						
700	GRANTS, CLAIMS, ETC.						
	TOTAL		622.3	1,556.9*	883.0	971.1	1,068.2

* Includes $1,000.0 to purchase, start up and operate a hazardous waste recycling-and-incineration facility.

FUNDING (Thousands of Dollars)

GENERAL FUND		622.3	1,556.9	883.0	971.1	1,068.2
FEDERAL FUNDS		(213.8)				
OTHER (Specify Fund Source)						

** Includes 150.0 to operate and maintain the hazardous waste recycling and incineration facility.

POSITIONS

FULL TIME		5	5	5	5	5
PART TIME		4 1/2	4 1/2	4 1/2	4 1/2	4 1/2
TEMPORARY						

III. ANALYSIS (See Fiscal Note Preparation Instructions, Section III)

1. BACKGROUND:

HB-72 will require the establishment of regulations plus controls, to assure proper disposal and handling of hazardous and radioactive wastes throughout the state. Up to now there has been no systematic state effort in controlling either type of waste.

There is very little radioactive waste in the state. Substantially larger quantities of hazardous wastes are present, with the majority of Alaskan generators being small firms and private individuals. However, there is

IV. DATE 2/20/81 PREPARED BY Thomas R Harris
AGENCY Department of Environmental Conservation
PHONE 465-2666

Original: Legislative Finance
cc: Budget and Management
Prime Sponsor (First Legislator Named)

133-001 (Rev. 12/80

little widespread understanding or recognition of hazardous waste and its problems by either the general public or industry. The national Resource Conservation and Recovery Act places requirements on only the large generators, transporters, and disposers of hazardous waste, of which there are not many in the state now. Future industrial development will substantially increase the quantity of hazardous wastes.

Section 18.31.010 of HB-72 requires that all hazardous waste be "processed to remove its harmful properties". While it is not possible to accomplish this for all hazardous wastes, approximately 80-85% can be rendered harmless through incineration and recycling. A facility to do this does not exist now, and costs for developing one are included in the FY 82-83 timeframe of the Fiscal Note.

II. ASSUMPTIONS:

(1) Assume full bill to be enacted.

(2) Technical assistance, training, and public awareness will be emphasized so that general public and industry will be encouraged to use safe methods and procedures.

(3) A control effort to handle small hazardous waste users should also regulate industry covered under federal legislation. thus eliminating federal involvement at little additional cost.

(4) Program is to be 100% supported by state funds, to minimize influence of federal government.

(4) 10% inflation assumed in all years after FY-82.

III. PERSONAL SERVICES:

A.	For the Southeast Regional Office: one environmental field officer to provide technical assistance, public awareness, training and conduct inspections (R17 for 10 months)	39.1
B.	For the Southcentral Regional Office (Including Anchorage-Wasilla-Valdez-Kenai): two environmental field officers to provide technical assistance, public awareness,training conduct inspections (R17 for 10 months)	78.2
C.	For the Northern Regional Office (including Fairbanks and Prudhoe Bay) two environmental field officers to provide technical assistance, public awareness, training and conduct inspections (R17 for 10 months).	89.5
D.	Half-time clerk-typist to support development and maintenance of regulations, plans, training and technical assistance in the Central Office (R8 for twelve months, half-time)	12.3
E.	Clerk Typist support for Regional Offices	32.8
	1. Southeast Regional Office (R8 for 10 months, 1/4-time)	6.3
	2. Southcentral Regional Office (R8 for 10 months, 1/2-time)	12.3
	3. Northern Regional Office (R8 for 10 months, 1/2-time)	14.2
F.	Needed: One person-year from the Dept. of Law, to support inspections and investigations as needed by regional personnel (see fiscal note from Dept. of Law)	
	SUBTOTAL, PERSONAL SERVICES:	251.9

IV. TRAVEL: In support of each field officer position, a total of $6,000 will be needed to provide travel, to carry out technical assistance, inspection/investigations and adequately provide for safe handling of hazardous wastes.

$30.0

V. CONTRACTUAL:

A. Southeast Regional Office (1 position)

Rent	2.7
Telephone	2.0
Advertising	.5
Repair & maintenance of machines	.5
Equipment Rental (1/4 Lexitron rental)	1.2
Subtotal	6.9

B. Southcentral Regional Office (two positions located in the Cook Inlet area)

Contractual costs per position will be identical to those shown for the Southeast Regional Office above.

Subtotal 13.8

C. Northern Regional Office (two positions located in the Fairbanks area)

Cost per position will be 1.15 times that shown for the Southeast Regional Office above.

Subtotal 15.6

D. Professional Services - to provide for investigation of specific disposal conditions and/or to provide for cleanup of environmental hazards due to improperly disposed-of wastes, or from emergency spill conditions.

Subtotal $30.0

E. Half-time Clerk/Typist in Central Office

Rent	1.4
Repair & maintenance of machine	1.0
Equipment Rental (1/2 Lexitron at $400 per month)	2.4
Subtotal	4.7

F. Laboratory Support:

Equipment repair, maintenance service	4.0
Sample analysis	2.0
Subtotal:	6.0
SUBTOTAL CONTRACTUAL	77.3

VI. COMMODITIES:

A. In support of positions ($.5 times 5.5 positions)	2.8
B. Laboratory and sampling supplies-Regional Offices ($2.0 times 5 professional regional positions, plus $5.0 for Laboratory analysis supplies)	15.0
SUBTOTAL COMMODITIES	17.8

VII. EQUIPMENT:

A.	$2.0 per professional position, to provide for sampling supplies (masks, sampling equipment, and protective devices)	10.0
B.	$16.5, for equipment to identify and quantify specific hazardous substances	16.5
	SUBTOTAL EQUIPMENT	26.5

VIII. SUMMARY OF NEW FISCAL NEEDS:

Personal services	270.5
Travel	30.0
Contractual	75.7
Commodities	17.8
Equipment	17.8
TOTAL, NEW COSTS NOT INCLUDED IN FY-82 BUDGET	404.8

IX. ADDITIONAL STATE FUNDS TO REPLACE FEDERAL FUNDS IN FY-82 BUDGET

In an effort to avoid unnecessary interference and harassment from the U. S. Environmental Protection Agency, this Fiscal Note replaces all federal funds associated with the hazardous waste control effort. In this way, the state will not be placed under any obligation to carry out unreasonable federal demands for fear of losing grant funds. A tabulation of the hazardous waste federal funds in the FY-82 budget is as follows:

1. Personal Services:

A.	25% of Chief, Air and Solid Waste Management Section	15.8
B.	25% of Clerk/Typist III (Air and SWM Section)	5.6
C.	100% of Hazardous Waste Engineer (Air and SWM Section)	43.1
D.	42% of Planner, Air and Solid Waste Management Section	15.7
E.	20% of Solid Waste-Landfill Engineer (Air and SWM Sec.)	10.0
F.	75% of Hazardous Waste Ecologist/Engineer position (new position)	26.3
	Subtotal, Personal Services	116.5

2.	Travel:	27.4
3.	Contractual:	68.5
4.	Commodities:	6.4
5.	Equipment:	--
	TOTAL:	217.2

X. PROJECTED EXPENSE FOR PROPERLY TREATING HAZARDOUS WASTE

Section 18.31.010 requires that hazardous wastes be rendered harmless before being disposed of in this state. The only effective ways to accomplish this objective is to recycle and/or incinerate these wastes. Through these means about 80-85% of the total hazardous wastes could be rendered harmless. No such devices occur in the state, however, and if the state were to establish and operate such a facility it would have costs as below:

FY-82: Review of incinerator designs, location, and completion of feasibility studies. No additional expense, to be handled within program personnel projected above.

FY-83: Purchase of incinerator ($500,000), completion of site location and design, and initiation of operation ($500,000).

$1 million

FY-84: Annual operating expenses of approximately $150,000 per year.

150.0

XI. SECURE LANDFILL COSTS

Secure landfills are normally the way of handling and disposing of hazardous wastes in other states. However, HB-72 as written would not allow for instate disposal unless the hazardous properties were eliminated. As noted above, this will be impractical for 15-20% of the total hazardous wastes generated in the state, even with resource recovery and incineration taking place. If HB-72 is modified to provide for some instate disposal, the costs associated with operating a secure landfill (which would be designed to make certain that no environmental or health hazards result from waste disposal) would be approximately as follows:

1. If no resource recovery or incineration capability is developed, a secure landfill to accommodate Alaskan hazardous wastes would cost approximately $3-4 million per year.

2. If incineration/resources recovery facilities are present, a secure landfill to handle the remaining hazardous wastes would be substantially reduced to approximately $1.5-$3 million per year.

These costs are not projected in the Fiscal Note because of the possibility that private enterprise and/or industry may operate and fund this facility if HB-72 allows for instate disposal. The costs are presented for informational purposes only, to provide a full perspective of hazardous waste disposal costs.

XII. TOTAL FY-82 COSTS FOR STATE HAZARDOUS WASTE CONTROL PROGRAM

	New Funds	State funds to replace federal funds	Total
A. Personal Services	251.9	116.5	368.4
B. Travel	30.0	27.4	57.4
C. Contractual	77.3	68.5	145.8
D. Commodities	17.8	6.4	24.2
E. Equipment	26.5	-	26.5
Total	403.5	218.8	622.3

Comments on 5/28 Draft

Page 7, lines 25-26 - Delete "and safe handling and storage of hazardous materials."

This has nothing to do with hazardous waste regulation. Further, this subject is covered adequately by DOT regulations under the Hazardous Materials Transportation Act.

§46.03.296(a) -

Page 8, line 1 - Insert after "to" - "treat, store, or"; add after "unless" - "authorized by permit."

Page 8, lines 2-6 - delete.

"Dispose", as defined under RCRA, includes placing a waste in a landfill, landfarm or surface impoundment. Requiring pretreatment would effectively ban landfarming which is an effective and environmentally acceptable method of treating oily wastes. It would also ban surface impoundments. This is impossible to comply with since most hazardous wastes are high in water content and even pretreatment may have to be done in some type of surface impoundment. (Note that because EPA feels that no liner can be guaranteed 100% effective, surface impoundments, even when used for treatment or storage, are considered "disposal" facilities because of the potential, even if remote of leaking.)

What is "best available technology?" How does the ADEC determine BAT? Are pretreatment facilities available in Alaska? At what cost to generators, particularly small generators in the bush? The ADEC should not be given authority to determine the appropriate technology to be used on every possible hazardous waste stream. A general performance standard should be set which allows the generator or disposer to choose the most cost effective method for meeting the performance standard (lines 4-6 can be considered a performance standard).

§46.03.301(2) - How can the ADEC, by regulation, give itself enforcement authority? This authority must be granted by the legislature.

Page 8, line 2, delete "adopt, administer, and enforce" and substitute "receive final authorization to administer."

2

§46.03.301(6) - This provision seems to indicate that the ADEC will establish de minimus quantities for wastes listed under (4). What about wastes which are not listed but which meet the hazardous waste characteristics?

This bill would require all hazardous wastes to be listed. Any waste which the ADEC did not know of or think of would escape regulation. This bill does not provide for a dual system of waste identification as per RCRA since only listed wastes are subject to permit and reporting requirements (see language in 46.03.301(6) referring to 46.03.306 (permits) and 46.03.311 (reports)).

Page 8, line 27, after "section" insert "or meeting one of the characteristics identified under (3) of this section."

§46.03.301(7) - The RCRA small generator exemption applies to generators not disposers, etc. For example, a small generator is entitled to this exemption only if he sends his hazardous waste to a permitted facility.

Page 9, lines 1-4 - delete in their entirety. Any exemptions can be handled under 46.03.301(6).

Also, the appropriate words of art under RCRA should be used. Therefore, page 9, line 1 - delete "produces" and substitute "generators"; delete "processes" and substitute "treats".

§46.02.306 - Federal law does not require the transporter to have a permit. The state can require one but is it really needed or will this impose just another burden on transporters?

Again, the term "process" should be changed to "treat" in lines 8 and 15.

What types of requirements may the ADEC include in the permit? Does the legislature want to give the ADEC complete discretion? I suggest some guidelines be given. It may be desirable to copy §3004 of RCRA (see my markup of Title 46 - i.e., 46.03.370).

What about a facility which has achieved interim status or has received a final EPA permit before the state takes over the program. These facilities must be grandfathered in. (See my markup - 46.03.380(d) and (e)).

3

§46.03.311 - The reference in this section and the previous reference in 46.03.306 is "submits to the departments any... manifests." There is more to the manifest system than a submission to the ADEC. The manifest system is the linchpin of the RCRA cradle to grave regulation of hazardous wastes. See my markup which requires generators to initiate the manifest (46.03.350) and transporters (46.03.360) and treaters, storers and disposers (46.03.370) to comply with manifest.

§12 - page 10 -

Line 10 - "disposal" not "dispose" is defined in 42 U.S.C. 6903(3).

Line 12 - "solid waste" needs to be defined inasmuch as RCRA "solid waste" includes semi-solid, liquid and contained gaseous material. See my markup - 46.03.900(10).

This section needs a definition of "treatment" - see my markup 46.03.900(24).

Suggested rewording for Sec. 46.03.296:

"Sec. 46.03.296. DISPOSAL OF HAZARDOUS WASTES. (a) It is unlawful to dispose of hazardous wastes in the state unless

(1) the waste has been treated and disposed of in a manner that uses best available control technology [to remove or reduce its harmful properties]; and

(2) it is disposed of in a manner which will ensure the protection of human health, livestock, wildlife, property, and the environment.

(b) The department shall adopt regulations in accordance with the Administrative Procedure Act (AS 44.62) for the treatment, storage and disposal of hazardous wastes to ensure the protection of human health, livestock, wildlife, property, and the environment.

Suggested definition for "best available technology":

"best available technology" means the maximum degree of reduction of the harmful qualities of each hazardous waste subject to ~~regulations~~ which the department, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such waste through application of production processes and available methods, systems and techniques.

CHANGES MADE:

1. Page 6: Definition for "nuclear fuel production facility" added after line 19

2. Page 7: A new section 11 after line 26 added, to amend AS 46.03.100

3. Page 8: Minor wording changes on lines 26-27.

4. Page 9: A. A new subsection (7) added before line 1, to clarify department's policies for characterizing hazardous wastes consistent with federal requirements.

   B. Minor wording changes to line 1

   C. A new subsection (10) added, to require the establishment of criteria for the location of any hazardous waste disposal facility.

5. Page 11: New subsection 14, to update the criminal penalties in AS 46.03.790 to more closely conform with federal requirements

6. Page 11: New section 15, to establish requirements for proof of financial responsibility for controlling hazardous substances

Original sponsor: Kerttula

IN THE SENATE BY THE JUDICIARY COMMITTE

HOUSE CS FOR CS FOR SENATE BILL NO. 29 (Judiciary)

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWELFTH LEGISLATURE - FIRST SESSION

A BILL

For an Act entitled: "An Act amending laws relating to nuclear and radio-active materials and adding provisions of law regulating hazardous wastes; and providing for an effective date."

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

* Section 1. AS 18.45 is amended by adding a new section to read:

Sec. 18.45.100. NUCLEAR FACILITIES PROHIBITED. A person may not construct a nuclear fuel production facility, a nuclear utilization facility, a nuclear reprocessing facility, or a nuclear enhancement facility in the state.

* Sec. 2. AS 18.45 is amended by adding new sections to read:

Sec. 18.45.110. HIGH LEVEL RADIOACTIVE WASTE DISPOSAL FACILITY PERMIT. (a) A person may not construct a high level radioactive waste disposal facility in the state unless he has first obtained a permit from the commissioner to construct the facility on land designated by the legislature under (b) of this section.

(b) The legislature shall designate by law the land in the state on which a high level radioactive waste disposal facility may be located.

(c) A permit may not be issued by the commissioner under this section unless

(1) the governor has approved the permit;

(2) local approval has been obtained; local approval is obtained

(A) if the municipality with jurisdiction over the proposed facility site has approved the permit; or

(B) if the facility is to be located in the unorganized borough, a majority of the registered voters who live within 100 miles of the proposed facility votes to approve the issuance of the permit at a general election of the state or at a special election of the state called for the purpose; and

(3) issuance of the permit is approved by a majority of the registered voters at a general or special statewide election.

(d) The commissioner shall adopt regulations governing the issuance of permits required by this section.

Sec. 18.45.120. PROOF OF FINANCIAL RESPONSIBILITY REQUIRED FOR FACILITY OPERATION. (a) A person may not operate a high level radioactive waste disposal facility unless he has furnished proof to the commissioner of financial ability to care for the radioactive material which will be used in the facility until the material is no longer a threat to health or safety, as determined by the commissioner by regulation. Financial responsibility may be demonstrated by self-insurance insurance, surety, or guarantee, under terms the commissioner may prescribe.

(b) Acceptance of proof of financial responsibility under this section expires

(1) one year from its issuance for self-insurance;

(2) on the effective date of a change in the surety bond, guarantee, or insurance agreement; or

(3) on the expiration or cancellation of the surety bond, guarantee, or insurance agreement.

(c) The person whose proof of financial responsibility is accepted by the commissioner under this section shall notify the commissioner at

least 30 days before the effective date of a change, expiration or cancellation in the surety bond, guarantee, or insurance agreement. Application for renewal of acceptance of proof of financial responsibility under this section must be filed at least 30 days before the date of expiration.

(d) The commissioner, after notice and hearing, may revoke acceptance of proof of financial responsibility if he determines that

(1) acceptance was procured by fraud or misrepresentation; or

(2) a change of circumstance has occurred, other than a change specified in (b)(1) - (3) of this section, which would have warranted denial of the application.

* Sec. 3. AS 18.45.110(a) is amended to read:

Sec. 18.45.110. FACILITIES [HIGH LEVEL RADIOACTIVE WASTE DISPOSAL FACILITY] PERMIT. (a) A person may not construct a nuclear fuel production facility, nuclear utilization facility, nuclear reprocessing facility, nuclear enhancement facility, or high level radioactive waste disposal facility in the state unless he has first obtained a permit from the commissioner to construct the facility on land designated by the legislature under (b) of this section.

* Sec. 4. AS 18.45.110(b) is amended to read:

(b) The legislature shall designate by law the land in the state on which a nuclear fuel production, utilization, reprocessing, enhancement, or high level radioactive waste disposal facility may be located.

* Sec. 5. AS 18.45.120(a) is amended to read:

(a) A person may not operate a nuclear fuel production facility, a nuclear utilization facility, a nuclear reprocessing facility, a nuclear enhancement facility, or a high level radioactive waste disposal facility unless he has furnished proof to the commissioner of

financial ability to care for the radioactive material which will be used in the facility until the material is no longer a threat to healt or safety, as determined by the commissioner by regulation. Financial responsibility may be demonstrated by self-insurance, insurance, suret or guarantee, under terms the commissioner may prescribe.

* Sec. 6. AS 18.45 is amended by adding new sections to read:

Sec. 18.45.130. TRANSPORTATION OF RADIOACTIVE WASTE MATERIAL. (a) The transportation of high level radioactive waste material, except to a facility approved for operation under this chapter or for purposes of disposal outside the state, is prohibited.

(b) A person may not transport radioactive waste materia' in the state unless he has first obtained a permit from the commissioner. Th commissioner shall adopt regulations governing the issuance of permits required by this subsection, and shall establish and implement a syste to record by manifest the movement of radioactive waste materials whic are transported.

(c) This section does not apply to the transportation of radio-active waste material by the federal government. When an agency of th federal government proposes to transport radioactive waste material i the state, the agency shall notify the commissioner and the Departmen of Public Safety of its plans. When notice is received from the feder agency, the commissioner and the commissioner of publ c safety may tak any action they regard as necessary to protect the health and safety o persons in the vicinity of the route to be used to transport the radio active waste material. The notice provisions of this subsection do no apply if advance notice would represent a threat to national security

Sec. 18.45.140. PROOF OF RESPONSIBILITY FOR DISPOSAL OF HIGH LEVEL RADIOACTIVE WASTES REQUIRED. (a) A person may not dispose of high level radioactive wastes in the state unless he has furnished

proof to the commissioner of financial ability to care for the radioactive waste material. Financial responsibility may be demonstrated by self-insurance, insurance, surety, or guarantee, under terms the commissioner may prescribe.

(b) Acceptance of proof of financial responsibility under this section expires

(1) one year from its issuance for self-insurance;

(2) on the effective date of a change in the surety bond, guarantee, or insurance agreement; or

(3) on the expiration or cancellation of the surety bond, guarantee, or insurance agreement.

(c) The person whose proof of financial responsibility is accepted by the commissioner under this section shall notify the commissioner at least 30 days before the effective date of a change, expiration or cancellation in the surety bond, guarantee, or insurance agreement. Application for renewal of acceptance of proof of financial responsibility under this section must be filed at least 30 days before the date of expiration.

(d) The commissioner, after notice and hearing, may revoke acceptance of proof of financial responsibility if he determines that

(1) acceptance was procured by fraud or misrepresentation; or

(2) a change of circumstance has occurred, other than a change specified in (b)(1) - (3) of this section, which would have warranted denial of the application.

Sec. 18.45.150. PENALTIES. (a) A person who violates a provision of AS 18.45.130 is guilty of a class C felony.

(b) In addition to the penalty prescribed for a class C felony under AS 12.55.035(b)(2) and (c), a person who violates a provision of

AS 18.45.130 - 18.45.140 is subject to

(1) a penalty of $50,000 for each offense; each day that the violation continues constitutes a separate offense;

(2) the payment to the state of expenses incurred by the state in removing, correcting, or abating the adverse effects of the violation; and

(3) actual damages resulting from the violation.

Sec. 18.45.160. DEFINITIONS. In AS 18.45.100 - 18.45.160,

(1) "commissioner" means the commissioner of environmental conservation;

(2) "high level radioactive waste" means

(A) used nuclear reactor fuel;

(B) waste produced during the reprocessing of used nuclear reactor fuel; and

(C) elements having an atomic number greater than 92 and containing 10 or more nanocuries per gram;

(3) "manifest" means the form used for identifying the quantity, composition, origin, routing, and destination of radioactive wastes during transportation; and

(4) <u>"nuclear fuel production facility" means a facility which purifies radioactive mineral concentrates and fabricates fissionable material to be used for producing energy in a nuclear reactor</u>.

(~~4~~ 5) "nuclear utilization facility" means an apparatus, device, or equipment in which nuclear fission is sustained in a self-supporting and controlled chain reaction; term does not include an apparatus, device, or equipment used excusively for educational, medical, or research purposes.

* Sec. 7. AS 46.03.250 is amende to read:

Sec. 46.03.250. AUTHORITY. The department shall adopt regulations

<u>(1)</u> establishing standards governing the discharge of <u>low level radioactive materials</u> [RADIONUCLIDES] to the air, water, land,

and subsurface land of the state;

(2) establishing safeguards for radioactive waste materials which do not constitute a threat to public health or safety and which may be stored or disposed in the state; and

(3) establishing procedures for the storage and disposal of radioactive materials used in medicine, education, instruments, industrial testing, or scientific research.

* Sec. 8. AS 46.03.260 is amended to read:

Sec. 46.03.260. USE OF RADIOACTIVE MATERIALS [ATOMIC RADIATION]. A person who conducts an operation which results in the discharge of low level radioactive materials [RADIONUCLIDES] to the air, water, land or subsurface land of the state must obtain a permit from the department before commencing the discharge.

* Sec. 9. AS 46.03.900 is amended by adding a new paragraph to read:

(30) "low level radioactive materials" means a radioactive waste other than

(A) used nuclear reactor fuel;

(B) waste produced during the reprocessing of used nuclear reactor fuel; and

(C) elements having an atomic number greater than 92 and containing 10 or more nanocuries per gram.

* Sec. 10. AS 46.03.020(10) is amended by adding a new subparagraph to read:

(I) handling, transportation, treatment, storage, and disposal of hazardous wastes, ~~and safe handling and storage of hazardous materials;~~

* Sec. 11. AS 46.03.100 is amended by adding a new subparagraph to read:

(c) A permit for disposing of hazardous wastes shall be conditioned upon proof of financial responsibility as provided in AS 46.03.830.

* Sec. ~~11.~~ 12. AS 46.03 is amended by adding new sections to read:

ARTICLE 5. RADIATION AND HAZARDOUS WASTE PROTECTION.

Sec. 46.03.296. DISPOSAL OF HAZARDOUS WASTES. (a) It is un-

Am #2

treat, store or

[illegible] disposal of hazardous wastes in the state unless authorized by permit

(1) the waste has been treated to remove or reduce its harm properties by the best available technology; and

(2) it is disposed of in a manner which will ensure the protection of human health, livestock, wildlife, property, and the environment.

(b) The department shall adopt regulations in accordance with the Administrative Procedure Act (AS 44.62) for the disposal of hazardous wastes to ensure the protection of human health, livestock, wildlife, property, and the environment.

Sec. 46.03.301. CONTROL OF HAZARDOUS WASTES. The department shall, by regulations adopted under the Administrative Procedure Act (AS 44.62), establish a state hazardous waste program; the state hazardous waste program shall

Am 3

(1) be consistent with the Federal Resource Conservation and Recovery Act of 1976 (P.L. 94-580, 42 U.S.C. 6901-6987);

(2) qualify the department to receive final authorization to adopt, administer, and enforce a hazardous waste program in accordance with the Federal Resource Conservation and Recovery Act;

(3) establish criteria to identify the characteristics of hazardous wastes;

(4) enumerate specific hazardous wastes subject to the provisions of AS 46.03.306 and 46.03.311;

(5) identify the source or sources of hazardous wastes enumerated under (4) of this section;

(6) determine the amount of [each] A hazardous waste [enumerated under (4) of this section] which is so small as not to present a hazard to public health, livestock, fish, wildlife, and the environment of the state when disposed of;

substantially equivalent with the federal Resource Conservation and Recovery Act of 1976 (P.L. 94-580) unless the commissioner determines, in accordance with regulations adopted under this chapter, that a specific hazardous waste poses a substantial threat to the public health and welfare.

(8) (7) exempt a person who [GENERATES produces] [TREATS processes], transports, stores, or disposes of a hazardous waste from the provisions of this chapter if the quantity of the hazardous waste is less than the amount identified in (6) of this section; and

(9) (8) avoid duplication of federal laws and regulations relating to the control of hazardous wastes.

(10) establish criteria for identification of appropriate hazardous waste disposal site locations and require opportunity for public participation in site selection and issuance of hazard waste disposal permits.

Sec. 46.03.306. HAZARDOUS WASTE PERMIT. (a) A person may not process, transport, store, or dispose of a hazardous waste as defined by the department by regulation unless that person first secures a permit from the department and submits to the department any reports or manifests which the department may require for handling the hazardous wastes.

(b) A person who generates hazardous waste is not required to obtain a permit under (a) of this section unless the person also processes, transports, stores, or disposes of the hazardous waste.

Sec. 46.03.311. HAZARDOUS WASTE REPORTS. A person who generates hazardous wastes shall submit to the department reports or manifests which the department may require for handling the hazardous wastes.

Sec. 46.03.316. PUBLIC RECORDS. (a) Permits, permit applications, records, reports, and information and documentation obtained under AS 46.03.306 or 46.03.311 are available to the public for inspection and copying. However, upon a showing satisfactory to the commissioner that a record, report, permit, application, or informatic would, if made public, divulge methods or processes entitled to protec tion as trade secrets, the commissioner shall treat the record, report permit, application, or information as confidential.

(b) Information which is confidential may be transmitted under continuing restriction of confidentiality to other officers, employees or authorized representatives of the state or of the United States if

(1) the person responsible for furnishing the record, report, permit, application, or information to which such information pertains is informed at least two weeks before the transmittal; and

(2) the information has been acquired by the department under the provisions of AS 46.03.296 - 46.03.316.

(c) The provisions of this section do not limit the department's authority to release confidential information during emergency situations.

* Sec. 13. AS 46.03.900 is amended by adding new paragraphs to read:

(30) "dispose" has the same meaning as the term is defined in 42 U.S.C. 6903(3);

(31) "hazardous waste" means a solid waste or combination of wastes which because of quantity, concentration, or physical, chemical or infectious characteristics may

(A) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or

(B) pose a substantial hazard to human health or the environment when improperly disposed of;

(32) "manifest" means the form used for identifying the quantity, composition, origin, routing, and destination of hazardous wastes;

(33) "storage" means the containment of hazardous waste, either on a temporary basis or for a period of years, in a manner which does not constitute disposal of the hazardous waste.

(34) "treatment" has the same meaning as provided in 42 U.S.C. 6903(27).

Section 14. AS 46.03.790 is amended to read:

AS 46.03.790. CRIMINAL PENALTIES. (a) A person who violates or who causes or permits a violation of a provision of this chapter or AS 46.04, or of a regulation, lawful order of the department, or permit, approval, or acceptance, or term or condition of a permit, approval, or acceptance issued under this chapter or AS 46.04 is guilty of a [violation] Class B misdemeanor.

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

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

Sec. 15. AS 46.03.830, PROOF OF FINANCIAL RESPONSIBILITY, is amended by adding new subsections to read:

(a) A person may not operate a petrochemical production facility or a hazardous waste disposal site unless the the person has furnished proof to the commissioner of financial ability to control a hazardous substance which will be used in or produced or disposed of or stored at the site of the facility. Proof of financial responsibility shall include responsibility after closure of the facility or site and may be demonstrated by self-insurance, surety, or guarantee, under regulations issued by othe department.

(b) Acceptance of proof of financial responsibility under this section expires

(1) one year from its issuance for self-insurance;

(2) on the effective date of a change in the surety bond, guarantee, or insurance agreement; or

(3) on the expiration or cancellation of the surety bond, guarantee, or insurance agreement.

(c) The person whose proof of financial responsibility is accepted by the department under this section shall notify the department at least 30 days before the effective date of a change, expiration, or cancellation in the surety bond, guarantee, or insurance agreement. Application for renewal of acceptance of proof of financial responsibility under this section must be filed at least 30 days before the date of expiration.

(d) The department, after notice and hearing, may revoke acceptance of proof of financial responsibility if it determines that acceptance was procured by fraud or misrepresentation, or that a change of circumstance has occurred which warrants revocation under regulations issued by the department.

* Sec. ~~13~~ 16. AS 18.45.010 - 18.45.080 are repealed.

* Sec. ~~14~~ 17. Sections 1, 2, 6 - 9, and 13 of this Act take effect immediately in accordance with AS 01.10.070(c).

* Sec. ~~15~~ 18. Sections 3 - 5 of this Act take effect on the date of a final court order ruling AS 18.45.100 as enacted by sec. 1 of this Act invalid or unconstitutional.

* Sec. ~~16~~ 19. Sections 10 - 12 of this Act take effect July 1, 1981.

5/28/81

Chenoweth

Original sponsor: Kerttula

IN THE SENATE BY THE JUDICIARY COMMITTEE

HOUSE CS FOR CS FOR SENATE BILL NO. 29 (Judiciary)

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWELFTH LEGISLATURE - FIRST SESSION

A BILL

For an Act entitled: "An Act amending laws relating to nuclear and radioactive materials and adding provisions of law regulating hazardous wastes; and providing for an effective date."

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

* Section 1. AS 18.45 is amended by adding a new section to read:

* Sec. 18.45.100. NUCLEAR FACILITIES PROHIBITED. A person may not construct a nuclear fuel production facility, a nuclear utilization facility, a nuclear reprocessing facility, or a nuclear enhancement facility in the state.

* Sec. 2. AS 18.45 is amended by adding new sections to read:

Sec. 18.45.110. HIGH LEVEL RADIOACTIVE WASTE DISPOSAL FACILITY PERMIT. (a) A person may not construct a high level radioactive waste disposal facility in the state unless he has first obtained a permit from the commissioner to construct the facility on land designated by the legislature under (b) of this section.

(b) The legislature shall designate by law the land in the state on which a high level radioactive waste disposal facility may be located.

(c) A permit may not be issued by the commissioner under this section unless

(1) the governor has approved the permit;

(2) local approval has been obtained; local approval is obtained

(A) if the municipality with jurisdiction over the proposed facility site has approved the permit; or

(B) if the facility is to be located in the unorganized borough, a majority of the registered voters who live within 100 miles of the proposed facility votes to approve the issuance of the permit at a general election of the state or at a special election of the state called for the purpose; and

(3) issuance of the permit is approved by a majority of the registered voters at a general or special statewide election.

(d) The commissioner shall adopt regulations governing the issuance of permits required by this section.

Sec. 18.45.120. PROOF OF FINANCIAL RESPONSIBILITY REQUIRED FOR FACILITY OPERATION. (a) A person may not operate a high level radioactive waste disposal facility unless he has furnished proof to the commissioner of financial ability to care for the radioactive material which will be used in the facility until the material is no longer a threat to health or safety, as determined by the commissioner by regulation. Financial responsibility may be demonstrated by self-insurance, insurance, surety, or guarantee, under terms the commissioner may prescribe.

(b) Acceptance of proof of financial responsibility under this section expires

(1) one year from its issuance for self-insurance;

(2) on the effective date of a change in the surety bond, guarantee, or insurance agreement; or

(3) on the expiration or cancellation of the surety bond, guarantee, or insurance agreement.

(c) The person whose proof of financial responsibility is accepted by the commissioner under this section shall notify the commissioner at

least 30 days before the effective date of a change, expiration or cancellation in the surety bond, guarantee, or insurance agreement. Application for renewal of acceptance of proof of financial responsibility under this section must be filed at least 30 days before the date of expiration.

(d) The commissioner, after notice and hearing, may revoke acceptance of proof of financial responsibility if he determines that

(1) acceptance was procured by fraud or misrepresentati ; or

(2) a change of circumstance has occurred, other than a change specified in (b)(1) - (3) of this section, which would have warranted d nal of the application.

* Sec. 3. AS 18.45.110(a) is amended to read:

Sec. 18.45.110. FACILITIES [HIGH LEVEL RADIOACTIVE WASTE DISPOSAL FACILITY] PERMIT. (a) A person may not construct a nuclear fuel production facility, nuclear utilization facility, nuclear reprocessing facility, nuclear enhancement facility, or high level radioactive waste disposal facility in the state unless he has first obtained a permit from the commissioner to construct the facility on land designated by the legislature under (b) of this section.

* Sec. 4. AS 18.45.110(b) is amended to read:

(b) The legislature shall designate by law the land i. the state on which a nuclear fuel production, utilization, reprocessing, enhancement, or high level radioactive waste disposal facility may be located.

* Sec. 5. AS 18.45.120(a) is amended to read:

(a) A person may not operate a nuclear fuel production facility, a nuclear utilization facility, a nuclear reprocessing facility, a nuclear enhancement facility, or a high level radioactive waste disposal facility unless he has furnished proof to the commissioner of

financial ability to care for the radioactive material which will be used in the facility until the material is no longer a threat to health or safety, as determined by the commissioner by regulation. Financial responsibility may be demonstrated by self-insurance, insurance, surety, or guarantee, under terms the commissioner may prescribe.

* Sec. 6. AS 18.45 is amended by adding new sections to read:

Sec. 18.45.130. TRANSPORTATION OF RADIOACTIVE WASTE MATERIAL. (a) The transportation of high level radioactive waste material, except to a facility approved for operation under this chapter or for purposes of disposal outside the state, is prohibited.

(b) A person may not transport radioactive waste material in the state unless he has first obtained a permit from the commissioner. The commissioner shall adopt regulations governing the issuance of permits required by this subsection, and shall establish and implement a system to record by manifest the movement of radioactive waste materials which are transported.

(c) This section does not apply to the transportation of radioactive waste material by the federal government. When an agency of the federal government proposes to transport radioactive waste material in the state, the agency shall notify the commissioner and the Department of Public Safety of its plans. When notice is received from the federal agency, the commissioner and the commissioner of public safety may take any action they regard as necessary to protect the health and safety of persons in the vicinity of the route to be used to transport the radioactive waste material. The notice provisions of this subsection do not apply if advance notice would represent a threat to national security.

Sec. 18.45.140. PROOF OF RESPONSIBILITY FOR DISPOSAL OF HIGH LEVEL RADIOACTIVE WASTES REQUIRED. (a) A person may not dispose of high level radioactive wastes in the state unless he has furnished

proof to the commissioner of financial ability to care for the radioactive waste material. Financial responsibility may be demonstrated by self-insurance, insurance, surety, or guarantee, under terms the commissioner may prescribe.

(b) Acceptance of proof of financial responsibility under this section expires

(1) one year from its issuance for self-insurance;

(2) on the effective date of a change in the surety bond, guarantee, or insurance agreement; or

(3) on the expiration or cancellation of the surety bond, guarantee, or insurance agreement.

(c) The person whose proof of financial responsibility is accepted by the commissioner under this section shall notify the commissioner at least 30 days before the effective date of a change, expiration or cancellation in the surety bond, guarantee, or insurance agreement. Application for renewal of acceptance of proof of financial responsibility under this section must be filed at least 30 days before the date of expiration.

(d) The commissioner, after notice and hearing, may revoke acceptance of proof of financial responsibility if he determines that

(1) acceptance was procured by fraud or misrepresentation; or

(2) a change of circumstance has occurred, other than a change specified in (b)(1) - (3) of this section, which would have warranted denial of the application.

Sec. 18.45.150. PENALTIES. (a) A person who violates a provision of AS 18.45.130 is guilty of a class C felony.

(b) In addition to the penalty prescribed for a class C felony under AS 12.55.035(b)(2) and (c), a person who violates a provision of

AS 18.45.130 - 18.45.140 is subject to

(1) a penalty of $50,000 for each offense; each day that the violation continues constitutes a separate offense;

(2) the payment to the state of expenses incurred by the state in removing, correcting, or abating the adverse effects of the violation; and

(3) actual damages resulting from the violation.

Sec. 18.45.160. DEFINITIONS. In AS 18.45.100 - 18.45.160,

(1) "commissioner" means the commissioner of environmental conservation;

(2) "high level radioactive waste" means

(A) used nuclear reactor fuel;

(B) waste produced during the reprocessing of used nuclear reactor fuel; and

(C) elements having an atomic number greater than 92 and containing 10 or more nanocuries per gram;

(3) "manifest" means the form used for identifying the quantity, composition, origin, routing, and destination of radioactive wastes during transportation; and

(4) "nuclear utilization facility" means an apparatus, device, or equipment in which nuclear fission is sustained in a self-supporting and controlled chain reaction; term does not include an apparatus, device, or equipment used excusively for educational, medical, or research purposes.

* Sec. 7. AS 46.03.250 is amended to read:

Sec. 46.03.250. AUTHORITY. The department shall adopt regulations

(1) establishing standards governing the discharge of low level radioactive materials [RADIONUCLIDES] to the air, water, land,

and subsurface land of the state;

(2) establishing safeguards for radioactive waste materials which do not constitute a threat to public health or safety and which may be stored or disposed in the state; and

(3) establishing procedures for the storage and disposal of radioactive materials used in medicine, education, instruments, industrial testing, or scientific research.

* Sec. 8. AS 46.03.260 is amended to read:

Sec. 46.03.260. USE OF RADIOACTIVE MATERIALS [ATOMIC RADIATION]. A person who conducts an operation which results in the discharge of low level radioactive materials [RADIONUCLIDES] to the air, water, land or subsurface land of the state must obtain a permit from the department before commencing the discharge.

* Sec. 9. AS 46.03.900 is amended by adding a new paragraph to read:

(30) "low level radioactive materials" means a radioactive waste other than

(A) used nuclear reactor fuel;

(B) waste produced during the reprocessing of used nuclear reactor fuel; and

(C) elements having an atomic number greater than 92 and containing 10 or more nanocuries per gram.

* Sec. 10. AS 46.03.020(10) is amended by adding a new subparagraph to read:

(I) handling, transportation, treatment, storage, and disposal of hazardous wastes, and safe handling and storage of hazardous materials;

* Sec. 11. AS 46.03 is amended by adding new sections to read:

ARTICLE 5. RADIATION AND HAZARDOUS WASTE PROTECTION.

Sec. 46.03.296. DISPOSAL OF HAZARDOUS WASTES. (a) It is un-

lawful to dispose of hazardous wastes in the state unless

(1) the waste has been treated to remove or reduce its harmful properties by the best available technology; and

(2) it is disposed of in a manner which will ensure the protection of human health, livestock, wildlife, property, and the environment.

(b) The department shall adopt regulations in accordance with the Administrative Procedure Act (AS 44.62) for the disposal of hazardous wastes to ensure the protection of human health, livestock, wildlife, property, and the environment.

Sec. 46.03.301. CONTROL OF HAZARDOUS WASTES. The department shall, by regulations adopted under the Administrative Procedure Act (AS 44.62), establish a state hazardous waste program; the state hazardous waste program shall

(1) be consistent with the Federal Resource Conservation and Recovery Act of 1976 (P.L. 94-580, 42 U.S.C. 6901-6987);

(2) qualify the department to adopt, administer, and enforce a hazardous waste program in accordance with the Federal Resource Conservation and Recovery Act;

(3) establish criteria to identify the characteristics of hazardous wastes;

(4) enumerate specific hazardous wastes subject to the provisions of AS 46.03.306 and 46.03.311;

(5) identify the source or sources of hazardous wastes enumerated under (4) of this section;

(6) determine the amount of each hazardous waste enumerated under (4) of this section which is so small as not to present a hazard to public health, livestock, fish, wildlife, and the environment of the state when disposed of;

(7) exempt a person who produces, processes, transports, stores, or disposes of a hazardous waste from the provisions of this chapter if the quantity of the hazardous waste is less than the amount identified in (6) of this section; and

(8) avoid duplication of federal laws and regulations relating to the control of hazardous wastes.

Sec. 46.03.306. HAZARDOUS WASTE PERMIT. (a) A person may not process, transport, store, or dispose of a hazardous waste as defined by the department by regulation unless that person first secures a permit from the department and submits to the department any reports or manifests which the department may require for handling the hazardous wastes.

(b) A person who generates hazardous waste is not required to obtain a permit under (a) of this section unless the person also processes, transports, stores, or disposes of the hazardous waste.

Sec. 46.03.311. HAZARDOUS WASTE REPORTS. A person who generates hazardous wastes shall submit to the department reports or manifests which the department may require for handling the hazardous wastes.

Sec. 46.03.316. PUBLIC RECORDS. (a) Permits, permit applications, records, reports, and information and documentation obtained under AS 46.03.306 or 46.03.311 are available to the public for inspection and copying. However, upon a showing satisfactory to the commissioner that a record, report, permit, application, or information would, if made public, divulge methods or processes entitled to protection as trade secrets, the commissioner shall treat the record, report, permit, application, or information as confidential.

(b) Information which is confidential may be transmitted under a continuing restriction of confidentiality to other officers, employees, or authorized representatives of the state or of the United States if

(1) the person responsible for furnishing the record, report, permit, application, or information to which such information pertains is informed at least two weeks before the transmittal; and

(2) the information has been acquired by the department under the provisions of AS 46.03.296 - 46.03.316.

(c) The provisions of this section do not limit the department's authority to release confidential information during emergency situations.

* Sec. 12. AS 46.03.900 is amended by adding new paragraphs to read:

(30) "dispose" has the same meaning as the term is defined in 42 U.S.C. 6903(3);

(31) "hazardous waste" means a solid waste or combination of wastes which because of quantity, concentration, or physical, chemical, or infectious characteristics may

(A) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or

(B) pose a substantial hazard to human health or the environment when improperly disposed of;

(32) "manifest" means the form used for identifying the quantity, composition, origin, routing, and destination of hazardous wastes;

(33) "storage" means the containment of hazardous waste, either on a temporary basis or for a period of years, in a manner which does not constitute disposal of the hazardous waste.

* Sec. 13. AS 18.45.010 - 18.45.080 are repealed.

* Sec. 14. Sections 1, 2, 6 - 9, and 13 of this Act take effect immediately in accordance with AS 01.10.070(c).

* Sec. 15. Sections 3 - 5 of this Act take effect on the date of a final

court order ruling AS 18.45.100 as enacted by sec. 1 of this Act invalid or unconstitutional.

* Sec. 16. Sections 10 - 12 of this Act take effect July 1, 1981.

5/28

SO H10

SUGGESTED AMENDMENTS, CSSB-29

1. Hazardous materials deletion

Page 7, line 25, delete "and safe handling and storage of hazardous materials."

2. Reference to landfill.

Page 7, line 29, amend section to read:

Sec. 46.03.296. DISPOSAL OF HAZARDOUS WASTES. (a) It is unlawful to dispose of hazardous wastes in any landfill in the state unless:

3. Defining universe of hazardous wastes.

Sohio Prefers

Option 1: Page 8, line 20 through 25, delete subsections (3), (4) and (5), replacing with:

(3) adopt Part 261, Identification and Listing of Hazardous Wastes, as contained in regulations published under the Resource Conservation and Recovery Act of 1976.

Option 2: Same lines, add the words, "consistent with the Federal Resource Conservation and Recovery Act of 1976 (P.L. 94-580, 42 U.S.C. 6901-6987)." to each item, (3), (4) and (5).

4. Page 9, line 1: substitute words "generates" for "produces" and "treats" for "processes".

This makes wording consistent with RCRA. Same word changes should be made in following sections, elsewhere in bill.

5. Page 10, line 9: Definitions should be made consistent with RCRA.

In the HOUSE By Clocksin

To: HCS CSSB 29( )

AMENDMENT

* Sec. 46.03.100. Waste disposal permit. ADD:
(c) A permit for disposing of hazardous wastes shall be conditioned upon proof of financial responsibility as provided in AS 46.03.830.

* Sec. 46.03.301. Page 9, Line 7, ADD NEW SUBSECTION (9):
(9) establish criteria for identification of appropriate hazardous waste disposal site locations and require opportunity for public participation in site selection and issuance of hazard waste disposal permits.

* Sec. 46.03.790. is amended by adding a new subsection to read:
(a) increase penalty from class B to class A misdemeanor and raise fine to $10,000.

* Sec. 46.03.824. is amended by adding a new subsection to read:
(b) In an action seeking damages for injury caused to persons or property by the entry of a hazardous substance in or upon the waters or lands of the state, in addition to actual damages awarded under (a) of this section, the court may award punitive damages in an amount not to exceed three time the award of actual damages made under (a) of this section.

* Sec. 46.03.826. Definitions. is amended by adding a new subsection to read:
3) (A) An element or compound, including a petrochemical, which, when it enters in or upon the waters or surface or subsurface lands of the state, presents an imminent and substantial danger to the public health or welfare, including but not limited to fish, animals, vegetation, or any part of the natural habitat in which they are found.

* Sec. 46.30.830. PROOF OF FINANCIAL RESPONSIBILITY. is amended by adding new subsections to read:
(a) A person may not operate a petrochemical production facility or a hazardous waste disposal site unless the person has furnished proof to the commissioner of financial ability to control a hazardous substance which will be used in or produced or disposed of or stored at the site of the facility. Proof of financial responsibility shall include responsibility after closure of the facility or site and may be demonstrated by self-insurance, insurance, surety, or guarantee, under regulations issued by the department.

(b) Acceptance of proof of financial responsibility under this section expires
(1) one year from its issuance for self-insurance;
(2) on the effective date of a change in the surety bond, guarantee, or insurance agreement; or
(3) on the expiration or cancellation of the surety bond, guarantee, or insurance agreement.

(c) The person whose proof of financial responsibility is accepted by the department under this section shall notify the department at least 30 days before the effective date of a change, expiration, or cancellation in the surety bond, guarantee, or insurance agreement. Application for renewal of acceptance of proof of financial responsibility under this section must be filed at least 30 days before the date of expiration.

(d) The department, after notice and hearing, may revcke acceptance of proof of financial responsibility if it determines that acceptance was procured by fraud or misrepresentation; or that a change of circumstance has occurred which warrants revocation under regulations issued by the department.

HCSCSSB 29

Page 6 - add the following definition:

"nuclear fuel production facility" means a facility which purifies radioactive mineral concentrates and fabricates fissionable material to be used for producing energy in a nuclear reactor.

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION X
1200 SIXTH AVENUE
SEATTLE, WASHINGTON 98101

REPLY TO ATTN OF: M/S 530

MAY 8 1981

RECEIVED
MAY 1 : 1981
Department of
Environmental Conservation

Thomas R. Hanna, Chief
Air & Solid Waste Management
Department of Environmental Conservation
Pouch O
Juneau, Alaska 99811

Dear Mr. Hanna:

We have received and reviewed the marked-up version of HCS CSSB 29, which you sent on April 22. In this draft of proposed hazardous waste legislation for Alaska, several of the problems we noted in our review of the original version have been resolved. From talking with you I am aware of other changes you are making which will also improve the bill relative to the requirements for authorization of a State hazardous waste management program under RCRA. The comments which follow, however, are based on the version of the bill which you submitted to us. It should be noted that our review is based on the requirements for final authorization. Please contact me if you have any questions regarding the bill's adequacy relative to the requirements for interim authorization.

1. We note that AS 46.03.50 establishes a permit requirement for generation and transportation of hazardous wastes, as well as their treatment (processing), storage, and disposal. Permits for generators and transporters are not, of course, required under the Federal program.

DONE - CORRECTED

Also, this section ties the permit requirement to activities involving wastes listed under 46.03.340(2). However, 46.03.340(1) references characteristics of hazardous wastes which are to be established. It must be ensured that wastes which are not listed but are hazardous because of their characteristics are also covered under the permit requirement.

✓

2. The language of 46.03.370(a), specifically the conjunction "or" between sections (1) and (2), suggests that if a waste is processed according to (1), it would not have to be disposed of according to (2), that is, "in a manner which will ensure the protection of human health, livestock, wildlife, property, and the environment."

DONE - CORRECTED

3. ADEC would be required by 46.03.370(b) to develop regulations for hazardous waste disposal. Since regulations are not mentioned for other activities (generation, transportation, treatment, and storage), it becomes unclear whether the bill provides authority to develop the full complement of regulations necessary to establish and operate a hazardous waste program. DONE— CORRECTED

4. AS 46.03.380 discusses criminal penalties and refers to violations of "this chapter," presumably Chapter 03. However, there already exists a section on criminal penalties, AS 46.03.790, which also covers violations of provisions of "this chapter". The relation between these two sections is unclear. CORRECTE

AS 46.03.380(b) makes reference to AS 12.55.035(b)(3) and (c). Since we have not been provided with a copy of the referenced statute, we are not able to comment on whether it meets RCRA requirements. If the fine for class A misdemeanors is less than the amount required under RCRA ($10,000), then 46.03.380 establishes a criminal penalty adequate only for "corporations". NOT COMPLETELY CORRECTED

Furthermore, the proposed legislation does not address civil penalties. There is a pre-existing section (46.03.760) which covers violations of provisions of "this chapter", but as with the criminal penalty section, it is unclear to us whether this section would apply to the hazardous waste program. If 46.03.760 is applicable to hazardous waste program violations, it does not meet RCRA requirements for a civil penalty of $10,000 per day. PARTIALLY CORRECTED

5. The definition of "hazardous waste" in 46.03.900(33) references material "for which no use or reuse is intended and which is to be disposed of". This definition is too limiting in that RCRA requires regulation of wastes which are to be treated, and regulation would extend to storage activities prior to treatment. This is an important point in that it could well be argued that the wastes to be treated are not the wastes which are to be disposed of. Furthermore, although RCRA gives special consideration to wastes which are recycled or reused, all activities prior to reuse would be regulated, including generation, transportation, and storage. CORRECTED

6. We remain concerned about ADEC's entry and inspection authority since it is tied to the consent of the owner or occupier (46.03.020(6)). This provision is contrary to the intent of RCRA 3007(a), and could prove a significant obstacle to Alaska's obtaining authorization. NOT APPROPRIAT

7. Information used or obtained in the administration of a State hazardous waste program must be available to EPA without restriction. We note that State regulations provide for sharing of information unless exempt by law. In 46.03.020(6) there is a reference to confidential information but it is unclear whether this reference constitutes such an exemption. If it does, a modification of this provision would be necessary. DONE— CORRECTED

8. We recommend that you consider adding language to the bill which would allow the State to either administer or adopt as its own any Federal permits issued prior to authorization of Alaska's program. Such a provision would prevent the State from having to re-issue permits upon assumption of Phase II program responsibilities. The language of 46.03.110(e), relative to NPDES permits, could be followed for hazardous waste permits.

NOT DESIRABLE

9. AS 46.03.765 refers to injunctions for violations of Chapter 03, regulations, permits, etc. This section goes on to provide for temporary or preliminary relief "upon a showing of an imminent threat of continued violation". In contrast, Section 7003 of RCRA ("imminent hazard") discusses injunctions "notwithstanding any other provision of this Act". The point is that in Alaska injunctions are tied to actual violations, whereas under RCRA there is no need to specify violations of regulations or permit conditions in order to take action. Thus, when compared to RCRA 7003, AS 46.03.765 is potentially limiting.

N.A

10. Certain permitting procedures are established in 46.03.110. In the first place, it is unclear whether this section applies to all hazardous waste permits. (It could be construed that because of Section 46.03.100, the section would apply to hazardous waste disposal permits.)

N.A.

If Section 46.03.110 applies to any or all hazardous waste permits, the following concerns arise. Section 46.03.110(a) requires that applications be made at least 60 days before commencement of a proposed discharge. As an aside, it should be clear that issuance of a hazardous waste permit would take longer than 60 days. More importantly, it is unclear how the word "discharge" pertains to hazardous waste management activities. (This latter point again raises the question of whether this section would even apply to hazardous waste permits.)

N.A.

AS 46.03.110(b) gives very specific requirements for public notice of permit applications. While there does not appear to be a conflict between this section and the permitting procedures laid out in 40 CFR Part 124, the specificity of this section raises the legal question of how far ADEC can go in developing regulations covering other specific requirements without additional statutory authority. Such specific requirements would be necessary if the State is to have a permitting program equivalent to the Federal program. In short, we wish to be assured that Alaska has the authority to develop a program with permitting procedures equivalent to those referenced in 40 CFR 123.7.

N.A - TAKEN CARE OF IN NEW BILL

We continue to appreciate the opportunity to work closely with you as you develop your legislation. Please call me if you have any questions.

Sincerely,

David Hanline

David Hanline
Program Development Section

A M E N D M E N T

In the HOUSE By Clocksin

TO: HCS CSSB 29( )

"* Sec. . AS 46.03.824 is amended by adding a new subsection to read:

(b) In an action seeking damages for injury caused to persons or property by the entry of a petrochemical in or upon the waters or lands of the state, in addition to actual damages awarded under (a) of this section, the court may award punitive damages in an amount not to exceed three times the award of actual damages made under (a) of this section."

"* Sec. . AS 46.03.826(3)(B) is amended to read:

(B) oil and petrochemicals;"

" Sec. . AS 46.03 is amended by adding a new section to read:

Sec. 46.03.830. PROOF OF FINANCIAL RESPONSIBILITY REQUIRED FOR PETROCHEMICAL FACILITY OPERATION. (a) A person may not operate a petrochemical facility unless the person has furnished proof to the commissioner of financial ability to control a hazardous substance which will be used in or produced by the facility. Proof of financial responsibility may be demonstrated by self-insurance, insurance, surety, or guarantee, under regulations issued by the department.

(b) Acceptance of proof of financial responsibility under this section expires

(1) one year from its issuance for self-insurance;

(2) on the effective date of a change in the surety bond, guarantee, or insurance agreement; or

(3) on the expiration or cancellation of the surety bond, guarantee, or insurance agreement.

(c) The person whose proof of financial responsibility is accepted by the department under this section shall notify the department at least 30 days before the effective date of a change, expiration, or cancellation in the surety bond, guarantee, or insurance agreement. Application for renewal of acceptance of proof of financial responsibility under this section must be filed at least 30 days before the date of expiration.

(d) The department, after notice and hearing, may revoke acceptance of proof of financial responsibility if it determines that acceptance was procured by fraud or misrepresentation; or that a change of circumstance has occurred which warrants revocation under regulations issued by the department."

Marathon Oil Company Comments on House Committee Substitute for Committee Substitute for Senate Bill 29

Recently, concern has been expressed over possible hazardous waste problems resulting from development of an in-state petrochemical industry. Concern has also been voiced that nuclear wastes from the "Lower 48" may be disposed in Alaska. In response to these concerns, legislation has been introduced in both the House and Senate. Apparently, HCS CSSB 29 represents an attempt to combine three bills dealing with control of hazardous materials (SB 239); transportation, storage, and disposal of hazardous wastes and nuclear materials (HB 72); and control of nuclear materials (SB 29).

Management of hazardous wastes and control of nuclear materials involve two entirely different areas of expertise and, in our opinion, should not be addressed in the same bill. For this reason, our specific comments on the proposed legislation will be presented in two sections.

Nuclear Materials

Section 18.45.130 (b) of HCS CSSB 29 would require a transporter of low level radioactive wastes to obtain a permit and comply with a manifest/record keeping system implemented by the Department of Environmental Conservation. An example of how this would apply to oil industry operations would be in the transportation of radioactive scale which forms naturally in well tubing and oil field separation equipment. This material must occasionally be removed and is often sent to a laboratory for analysis. Transportation of radioactive materials, such as this scale, is already strictly regulated under the hazardous materials transportation regulations of the federal Department of Transportation. These regulations establish specific packing, labeling, manifesting, and transportation requirements for all hazardous materials. Under the federal regulations, materials with a specific activity of 2 nanocuries per gram or less are not classed as radioactive material. However, under the proposed bill, transportation of the same material would require the permit and extensive record keeping mentioned above.

Section 46.03.260 of the proposed bill would require a person who conducts an operation resulting in any discharge of low level radioactive material to obtain a permit before commencing the discharge. Oil field operations which would be affected by this section are radioactive tracer surveys in water injection wells.

Radioactive tracer surveys involve the injection of extremely small quantities (typically less than 1 gram) of radioactive materials into the well to determine the flow rate into the formation and the variation of flowrates between the zones. Common elements used in these surveys include Iridium 192 and Iodine. Both of these elements are extremely low level radiation sources and have halflives of 75 days and 8 days, respectively.

Use of both of these materials is controlled and permitted under a license issued by the United States Nuclear Regulatory Commission. The license specifies terms and conditions for storage, transportation, and leak testing of radioactive materials and equipment, and establishes training requirements for personnel. HCS CSSB 29 would require the operator to obtain an additional permit each time this equipment is used.

This bill would have a pervasive effect upon the oil industry, and many other industries as well, because of the all inclusive definition of low level radioactive wastes. According to section 18.45.170 and section 9. AS 46.03.900 a low level radioactive waste would be any radioactive waste which has an atomic number of 92 or less and emits less than 10 nanocuries per gram. The definition establishes no lower limit for radioactive activity and therefore would include all radioactive wastes no matter how innocuous. Under the present definition disposal of a smoke detector or a wrist watch with a luminous dial could be considered low level radioactive waste disposal. It would seem obvious that the definition of low level radioactive waste should contain a reasonable lower limit.

Despite the fact that each of the previously mentioned areas is already adequately controlled by federal regulations, the proposed bill gives authority to the Department of Environmental Conservation to also govern these activities. In addition, the bill gives the Department of Environmental Conservation the discretion to determine what levels of radioactivity would constitute a threat to public health. It is difficult to understand how the Department of Environmental Conservation would have a greater level of expertise in nuclear science and nuclear waste management than both the U.S. Nuclear Regulatory Commission and the Department of Transportation Hazardous Materials Office. How would the department be more qualified than these other agencies to define the levels of radioactivity which would constitute a threat to public health? If, on the other hand, the Department of Environmental Conservation simply adopts the present federal regulations, what is the need for establishing a state permitting and regulatory system?

Hazardous Wastes

The second portion of HCS CSSB 29 would apply to handling, treatment, storage, transportation and disposal of hazardous wastes.

In its present form the legislation could apply to many oil field wastes. One such waste would be excess drilling fluid. Another example would be the water which is produced from the formation along with the oil. Discharge of both of these materials is already controlled under permits issued by either the state or federal government.

Regulations to implement the Resource Conservation and Recovery Act (RCRA) were promulgated by the United States Environmental Protection Agency in May of 1980. During development of these regulations there was some question as to their applicability to drilling fluids and produced waters. To clarify the matter, a provision was placed in the regulations to specifically exclude these materials. Congress has directed the Environmental

Protection Agency to conduct research to determine if drilling fluids and produced waters do present any hazard to the environment. The results of this study will be reported back to Congress, at which time it will be determined what hazardous material regulations, if any, should apply to these wastes. Since this information is not yet available, HCS CSSB 29 should include a provision requiring that the resulting state regulations not be more stringent than the federal regulations. Failing that, the bill should contain the exact exclusion as the federal regulations. This exclusion reads:

> "The following solid wastes are not hazardous wastes: drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas or geothermal energy."

Other solid wastes exempted by the same section in the federal regulations include household wastes, wastes used as fertilizers for agricultural crops, wastes resulting from the raising of animals, mining overburden returned to the mine site, and wastes generated from emission controls on facilities combusting coal or fossil fuels. Presently, none of these wastes are specifically exempted in this bill.

Section 10 AS 46.03.020(10)I provides the Department of Environmental Conservation with the authority to adopt regulations for the disposal of hazardous wastes. Presumably these regulations would be similar to the Resource Conservation and Recovery Act (RCRA) regulations which were promulgated after more than five years of intensive research and study by the EPA. Identification and classification of hazardous wastes alone required years of research, vast resources of man power, and millions and millions of dollars. Yet the authority for just such a massive program is granted to the Department of Environmental Conservation by the proposed bill. Additionally, section 46.32.030 authorizes the department to establish and implement a system to record by manifest the movement of hazardous waste within the state. This program would be duplicative of the manifest and record keeping requirements established by the federal RCRA regulations.

The federal hazardous waste (RCRA) regulations promulated in May of 1980 consist of more than 500 pages which are constantly being revised and supplemented. The Department of Transportation's hazardous material transportation regulations promulgated in September of 1978 contain 1,050 pages which are also being revised regularly. Is this the type of system you would want to establish in Alaska? Hazardous waste regulation is an extremely complex area that, to accomplish the stated goals, would require extensive expertise, research, and funding. A state hazardous waste program, to be nearly as effective as the federal program, would require a huge increase in the staff and budget requirements of the Department of Environmental Conservation. If the objective of this legislation is only to allow the department to adopt the program established by EPA, we fail to see the need or benefit to the state. In addition, such action definitely would not be in keeping with the philosophy of eliminating duplicative and burdensome regulations and permits.

The proponents of this bill would have you believe that all sorts of hazardous waste "nightmares" may result in Alaska if this bill is not passed. That is just not true. The lack of this bill and state hazardous waste regulations does not mean hazardous waste disposal will be unregulated. In fact, hazardous wastes are regulated quite stringently. The RCRA regulations are some of the most comprehensive regulations ever promulgated by a federal agency. They will provide more than adequate protection from hazardous waste storage, transporation, and disposal in Alaska.

STATE STATUTORY AUTHORITY

REQUIREMENTS FOR

HAZARDOUS WASTE CONTROL

For Assumption of
Federal Programs Under the
Resource Conservation and Recovery Act

FEDERAL LEGAL REQUIREMENTS	ALASKA AUTHORITY
I. Identification and Listing of Hazardous Wastes	AS 46.03.020
A. General Authority for Control	AS 46.03.020
II. Setting of Standards for Generators	
A. Application to all types of Generators	AS 46.03.020
B. Storage and recordkeeping	AS 46.03.020
C. Reporting of quantities	AS 46.03.020
D. Require compliance with safety and health stds	AS 46.03.020, 760, 765, 790 822, 850, 710,
E. Establishment of manifest system	AS 46.03.020, HCS CSSB-29
III. Setting of Standards for Transporters	
A. Application to all types of Transporters	AS 46.03.020, HCS CSSB-29
B. Recordkeeping	AS 46.03.020, HCS CSSB-29
C. Use of a manifest system	AS 46.03.020, HCS CSSB-29
D. Transported wastes accompanied by manifest	AS 46.03.020, HCS CSSB-29
E. Notification and cleanup requirements for spills	AS 46.03.020, 755, 822,
IV. Setting of Standards for Storage, Treatment and Disposal	
A. Prevention of accidental release	AS 46.03.020, HCS CSSB-29
B. Closure and post-closure requirements	AS 46.03.020, HCS CSSB-29

FEDERAL LEGAL REQUIREMENTS (CONT)	ALASKA AUTHORITY
IV. Standards for Storage, Treatment and Disposal (cont)	
C. Security	AS 46.03.020, 110
D. Training	AS 46.03.020, 110
E. Inspection, monitoring, recordkeeping, Reporting	AS 46.03.020, 110
V. Powers of Inspection	AS 46.03.020, 820, 850, 860 710
VI. Enforcement Authority	
A. Emergency orders, court orders	AS 46.03.020, 820, 850, 860 765
B. Authority to enjoin a threatened/continuing violation	AS 46.03.820, 850, 860, 765
C. Authority to bring suit for civil and criminal penalties	AS 46.03.710, 760, 765, 790, 850
VII. Public Participation in the Enforcement Process	
A. Intervention by public in civil or administrative enforcement action by dept.; or	-
B. Assurances that state will	
a. Investigate and provide written responses to citizen complaints	AS 46.03.020
b. Not oppose intervention of any citizen where permissive intervention is authorized	AS 46.03.020
c. Publish and provide 30 days for public comment on any proposed settlement of state enforcement action	AS 46.03.020
VIII. Sharing of Information with EPA Upon Request and Without Restriction	AS 46.03.020, AS 09.25.110-120
IX. Authority Over Indian Lands (if Sought)	-

Original sponsor: Kerttula

Offered: 3/18/81
Referred: Judiciary

IN THE SENATE BY THE RESOURCES COMMITTEE

HOUSE CS FOR CS FOR SENATE BILL NO. 29 (Resources)

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWELFTH LEGISLATURE - FIRST SESSION

A BILL

For an Act entitled: "An Act relating to ~~nuclear~~ radioactive materials and (extremely hazardous and hazardous wastes;) and providing for an effective date."

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

* Section 1. AS 18.45 is amended by adding a new section to read:

Sec. 18.45.100. NUCLEAR FACILITIES PROHIBITED. A person may not construct a nuclear fuel production facility, a nuclear ~~utilization~~ power reactor facility, a nuclear reprocessing facility, or a nuclear enhancement facility in the state.

* Sec. 2. AS 18.45 is amended by adding new sections to read:

Sec. 18.45.110. HIGH LEVEL NUCLEAR WASTE DISPOSAL FACILITY SITING PERMIT REQUIRED. (a) A person may not construct a high level nuclear waste disposal facility in the state unless he has first obtained a permit from the department to construct the facility on land designated by the legislature under (b) of this section.

(b) The legislature shall designate by law the land in the state on which a high level nuclear waste disposal facility may be located.

(c) The department shall adopt regulations governing the issuance of permits required by (a) of this section. However, a permit may not be issued by the department unless

(1) the governor has approved the permit;

(2) local approval has been obtained; local approval is obtained

(A) if the municipality with jurisdiction over the

proposed facility site has approved the permit; and

(B) if the facility is to be located in the unorganized borough, a majority of the registered voters who live within 100 miles of the proposed facility votes to approve the issuance of the permit for the facility at a general or special election of the state called for the purpose; and

(3) issuance of the permit is approved by a majority of the registered voters at a general or special statewide election.

Sec. 18.45.120. PROOF OF FINANCIAL RESPONSIBILITY REQUIRED FOR FACILITY OPERATION. (a) A person may not operate a high level nuclear waste disposal facility unless he has furnished proof to the commissioner of financial ability to care in perpetuity for the nuclear material which will be used in the facility. Financial responsibility may be demonstrated by self-insurance, insurance, surety, or guarantee, under terms the department may prescribe.

(b) Acceptance of proof of financial responsibility under this section expires

(1) one year from its issuance for self-insurance;

(2) on the effective date of a change in the surety bond, guarantee, or insurance agreement; or

(3) on the expiration or cancellation of the surety bond, guarantee, or insurance agreement.

(c) The person whose proof of financial responsibility is accepted by the department under this section shall notify the department at least 30 days before the effective date of a change, expiration or cancellation in the surety bond, guarantee, or insurance agreement. Application for renewal of acceptance of proof of financial responsibility under this section must be filed at least 30 days before the date of expiration.

(d) The department, after notice and hearing, may revoke acceptance of proof of financial responsibility if it determines that

(1) acceptance was procured by fraud or misrepresentation; or

(2) a change of circumstance has occurred, other than a change specified in (b)(1) - (3) of this section, which would have warranted denial of the application.

* Sec. 3. AS 18.45.110(a) is amended to read:

Sec. 18.45.110. FACILITIES [HIGH LEVEL NUCLEAR WASTE DISPOSAL FACILITY] SITING PERMIT REQUIRED. (a) A person may not construct a nuclear fuel production facility, nuclear utilization facility, nuclear reprocessing facility, nuclear enhancement facility, or high level nuclear waste disposal facility in the state unless he has first obtained a permit from the department to construct the facility on land designated by the legislature under (b) of this section.

* Sec. 4. AS 18.45.110(b) is amended to read:

(b) The legislature shall designate by law the land in the state on which a nuclear fuel production, utilization, reprocessing, enhancement, or high level nuclear waste disposal facility may be located.

* Sec. 5. AS 18.45.120(a) is amended to read:

(a) A person may not operate a nuclear fuel production facility, a nuclear utilization facility, a nuclear reprocessing facility, a nuclear enhancement facility, or a high level nuclear waste disposal facility unless he has furnished proof to the commissioner of financial ability to care in perpetuity for the nuclear material which will be used in the facility. Financial responsibility may be demonstrated by self-insurance, insurance, surety, or guarantee, under terms the department may prescribe.

* Sec. 6. AS 18.45 is amended by adding new sections to read:

Sec. 18.45.130. TRANSPORTATION OF NUCLEAR WASTE MATERIAL. (a) The transportation of high level nuclear waste material, except for purposes of disposal outside the state, is prohibited.

(b) A person may not transport low level nuclear waste material in the state unless he has first obtained a permit from the department. The department shall adopt regulations governing the issuance of permits required by this subsection, and shall establish and implement a system to record by manifest the movement of low level nuclear waste materials which are transported.

(c) The provisions of (a) and (b) of this section do not apply to the transportation of nuclear waste material by the federal government. When the federal government proposes to transport nuclear waste material in the state, the agency of the federal government shall notify the commissioner and the Department of Public Safety of its plans. When notification is received from the federal agency, the commissioner and the commissioner of public safety may take any action they regard as necessary to protect the health and safety of persons in the vicinity of the route used to transport the nuclear waste material. The notification provisions of this subsection do not apply if advance notice to the commissioner would represent a threat to national security.

Sec. 18.45.140. STORAGE AND DISPOSAL OF NUCLEAR WASTE MATERIAL. (a) The storage and disposal in the state of nuclear waste material which would constitute a threat to the health or safety of the public is prohibited.

(b) The provisions of (a) of this section do not apply to

(1) material of a kind or quantity which, when stored or disposed, would not constitute a threat to the health or safety of the public as determined by the department under AS 46.03.250 by regulation;

(2) radioactive materials used in medicine; and

(3) radioactive materials, not exceeding an amount determined by the department by regulation under AS 46.03.250, used in education, x-ray or photographic process testing, security screening, or scientific research which are stored or disposed of in conformity with procedures established by the department by regulation.

Sec. 18.45.150. PROOF OF RESPONSIBILITY FOR DISPOSAL OF HIGH LEVEL NUCLEAR WASTES REQUIRED. (a) A person may not dispose of high level nuclear wastes in the state unless he has furnished proof to the commissioner of financial ability to care for the disposed nuclear waste material. Financial responsibility may be demonstrated by self-insurance, insurance, surety, or guarantee, under terms the department may prescribe.

(b) Acceptance of proof of financial responsibility under this section expires

(1) one year from its issuance for self-insurance;

(2) on the effective date of a change in the surety bond, guarantee, or insurance agreement; or

(3) on the expiration or cancellation of the surety bond, guarantee, or insurance agreement.

(c) The person whose proof of financial responsibility is accepted by the department under this section shall notify the department at least 30 days before the effective date of a change, expiration or cancellation in the surety bond, guarantee, or insurance agreement. Application for renewal of acceptance of proof of financial responsibility under this section must be filed at least 30 days before the date of expiration.

(d) The department, after notice and hearing, may revoke acceptance of proof of financial responsibility if it determines that

Uranium Mine Tailings ⇒ Nuclear Work

(1) acceptance was procured by fraud or misrepresentation; or

(2) a change of circumstance has occurred, other than a change specified in (b)(1) - (3) of this section, which would have warranted denial of the application.

Sec. 18.45.160. PENALTIES. (a) A person who violates a provision of AS 18.45.130 - 18.45.140 is guilty of a class C felony.

(b) In addition to the penalty prescribed for a class C felony under AS 12.55.035(b)(2) and (c), a corporation which violates a provision of AS 18.45.130 - 18.45.140 is subject to

(1) a penalty of $50,000 for each offense; each day that the violation continues constitutes a separate offense;

(2) the payment to the state of expenses incurred by the state in removing, correcting, or abating the adverse effects of the violation; and

(3) actual damages resulting from the violation.

Sec. 18.45.170. DEFINITIONS. In AS 18.45.100 - 18.45.170,

(1) "commissioner" means the commissioner of environmental conservation;

(2) "department" means the Department of Environmental Conservation;

(3) "high level nuclear waste" means

(A) used nuclear reactor fuel;

(B) waste produced during the reprocessing of used nuclear reactor fuel; and

(C) elements having an atomic number greater than 92 and emitting 10 or more nanocuries per gram;

(4) "low level nuclear waste" means a radioactive waste other than a high level nuclear waste; and

(5) "manifest" means a shipping or storage document containing a list of the contents, value, origin, carrier, and destination of the nuclear waste materials to be transported, required to be carried by the person providing transportation of the wastes.

* Sec. 7. AS 46.03.250 is amended to read:

Sec. 46.03.250. AUTHORITY. The department shall adopt regulations

(1) establishing standards governing the discharge of low level radiation [RADIONUCLIDES] to the air, water, land, and subsurface land of the state;

(2) defining nuclear waste material which does not constitute a threat to public health or safety and which may be stored or disposed in the state; and

(3) establishing procedures for the storage and disposal of radioactive materials used in medicine, education, x-ray or photographic process testing, security screening, or scientific research.

* Sec. 8. AS 46.03.260 is amended to read:

Sec. 46.03.260. USE OF NUCLEAR [ATOMIC] RADIATION. A person who conducts an operation which results in the discharge of low level radiation [RADIONUCLIDES] to the air, water, land or subsurface land of the state must obtain a permit from the department before commencing the discharge.

* Sec. 9. AS 46.03.790(a) is amended to read:

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

* Sec. 10. AS 46.03.790(b) is amended to read:

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

* Sec. 11. AS 46.03.900 is amended by adding a new paragraph to read:

(30) "low level nuclear waste" means a radioactive waste other than

(A) used nuclear reactor fuel;

(B) waste produced during the reprocessing of used nuclear reactor fuel; and

(C) elements having an atomic number greater than 92 and emitting 10 or more nanocuries per gram.

* Sec. 12. AS 46.03.020(10)(H) is amended to read:

(H) any other purpose which [SUCH OTHER PURPOSES AS] may be required to implement [FOR THE IMPLEMENTATION OF] the policy declared in AS 46.03.010;

* Sec. 13. AS 46.03.020(10) is amended by adding a new subparagraph to read:

(I) procedures required to handle, transport, treat, store, and dispose of extremely hazardous wastes and hazardous wastes;

* Sec. 14. AS 46 is amended by adding a new chapter to read:

CHAPTER 32. WASTES.

Sec. 46.32.010. DISPOSAL OF EXTREMELY HAZARDOUS WASTES. (a) It is unlawful to dispose of extremely hazardous wastes in the state without a permit issued by the department.

(b) A permit may be issued by the department only for the disposal of extremely hazardous wastes which, when disposed of, will ensure the

protection of human health, livestock, wildlife, property, and the environment.

Sec. 46.32.020. DISPOSAL OF HAZARDOUS WASTES. (a) It is unlawful to dispose of hazardous wastes in the state unless

(1) the waste has been processed to remove its harmful properties to the maximum extent feasible; or

(2) it is disposed of in a manner which will ensure the protection of human health, livestock, wildlife, property, and the environment.

(b) The department shall adopt regulations in accordance with the Administrative Procedure Act (AS 44.62) for the disposal of hazardous wastes to ensure the protection of human health, livestock, wildlife, property, and the environment.

Sec. 46.32.030. TRANSPORTATION OF EXTREMELY HAZARDOUS WASTES. (a) The transportation of extremely hazardous wastes, except for purposes of disposal in accordance with AS 46.32.010(b), is prohibited.

(b) A person may not transport extremely hazardous wastes in the state unless he first obtains a permit from the department. The department shall adopt regulations governing the issuance of permits required by this subsection, and shall establish and implement a system to record by manifest the movement of extremely hazardous wastes which are transported.

(c) The provisions of (a) and (b) of this section do not apply to the transportation of extremely hazardous wastes by the federal government. When the federal government proposes to transport extremely hazardous wastes in the state, the agency of the federal government shall notify the commissioner and the Department of Public Safety of its plans. When notification is received from the federal agency, the commissioner and the commissioner of public safety may take any action

No permit authority storage, treatment, & transportation of wastes

they regard as necessary to protect the health and safety of persons in the vicinity of the route used to transport the extremely hazardous wastes. The notification provisions of this subsection do not apply if advance notice to the commissioner would represent a threat to national security.

Sec. 46.32.040. TRANSPORTATION OF HAZARDOUS WASTES. (a) The department shall establish and implement a system to record by manifest the movement of hazardous wastes in excess of 1,000 kilograms per month which are transported.

(b) A person may not transport hazardous wastes in excess of 1,000 kilograms per month in the state unless he transports the hazardous wastes in accordance with (a) of this section.

(c) The provisions of (a) and (b) of this section do not apply to the transportation of hazardous wastes by the federal government. When the federal government proposes to transport hazardous wastes in the state, the agency of the federal government shall notify the commissioner and the Department of Public Safety of its plans. When notification is received from the federal agency, the commissioner and the commissioner of public safety may take any action they regard as necessary to protect the health and safety of persons in the vicinity of the route used to transport the hazardous wastes. The notification provisions of this subsection do not apply if advance notice to the commissioner would represent a threat to national security.

Sec. 46.32.050. DEPARTMENT TO DEFINE EXTREMELY HAZARDOUS WASTES AND HAZARDOUS WASTES BY REGULATION. The department shall, by regulations adopted in accordance with the Administrative Procedure Act (AS 44.62), classify substances as extremely hazardous wastes and hazardous wastes.

Sec. 46.32.060. PENALTY. (a) A person who violates this chapter

or a regulation adopted under this chapter is guilty of a class A misdemeanor.

(b) In addition to the penalty prescribed for a class A misdemeanor under AS 12.55.035(b)(3) and (c), a corporation which violates this chapter or a regulation adopted under this chapter is subject to

(1) a penalty of $50,000 for each offense; each day that the violation continues constitutes a separate offense;

(2) the payment to the state of expenses incurred by the state in removing, correcting, or abating the adverse effects of the violation; and

(3) actual damages resulting from the violation.

Sec. 46.32.070. DEFINITIONS. In this chapter

(1) "department" means the Department of Environmental Conservation;

(2) "extremely hazardous waste" means a hazardous waste or combination of hazardous wastes which will likely cause the death of, or result in disabling personal injury or serious illness to, a person who has been exposed to it;

(3) "hazardous waste" means a waste, or combination of wastes, which because of its quantity, concentration, or physical, chemical or infectious characteristics may

(A) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or

(B) pose a substantial present or potential hazard to human health, livestock, wildlife, property, or the environment when improperly disposed of;

(4) "manifest" means a shipping or storage document containing a list of the contents, value, origin, carrier, and destination of

the extremely hazardous and hazardous wastes to be transported, required to be carried by the person providing transportation of the wastes.

(5) "waste" means material for which no use or reuse is intended and which is to be disposed of; the term does not include nuclear waste subject to AS 18.45.

* Sec. 15. AS 18.45.010 - 18.45.080 are repealed.

* Sec. 16. Sections 1, 2, 6 - 11, and 15 of this Act take effect immediately in accordance with AS 01.10.070(c).

* Sec. 17. Sections 3 - 5 of this Act take effect on the date of a final court order ruling AS 18.45.100 as enacted by sec. 1 of this Act invalid or unconstitutional.

* Sec. 18. Sections 12 - 14 of this Act take effect July 1, 1981.

Alaska State Legislature

House of Representatives

Committee on Judiciary

Official Business

Pouch V
State Capitol
Juneau, Alaska 99811

To: Representative Fred Brown
Chairman
House Judiciary Committee

Date: May 12, 1981

From: Michael Ford M.F.
Counsel
House Judiciary Committee

Re: House CS for CSSB 29(Judiciary) Teleconference

Please note that the above legislation, presently before the committee in workdraft form, deals with both nuclear and hazardous waste disposal. The teleconference is intended only to address the hazardous waste portion of this bill. (which begins on page eight of the work draft)

The teleconference agenda is designed with the following key issues in mind:

A. Federal Resource Recovery and Conservation Act - In 1976 congress passed comprehensive legislation governing the disposal of hazardous waste. The effect of this law upon the State of Alaska will be addressed by Mr. Bulanowski of the NCSL.

B. How should the individual States regulate the disposal of hazardous waste? Arkansas is the first and to date only state to receive E.P.A. approval of their hazardous waste law. Dr. Phyllis Garnett will discuss the Arkansas approach and implementation of their program.

C. How should "hazardous waste" be defined? The State of Washington uses a two level definiton, dangerous and extremely dangerous waste.

AGENDA

TELECONFERENCE ON HAZARDOUS WASTE LEGISLATION
ALASKA HOUSE JUDICIARY COMMITTEE
May 12, 1981
2:00 - 4:00 p.m. PST

2:00-2:10 Introduction and Welcome
Representative Fred Brown, Chairman,
Alaska House Judiciary Committee

2:10-2:25 Gerard Bulanowski, Senior Research Associate
National Conference of State Legislatures

This presentation will describe:
- o The Resource Conservation and Recovery Act of 1976 (RCRA);
- o The opportunities for state action; and
- o The requirements of a RCRA state hazardous waste program;

2:25-2:35 Questions and Answers for Mr. Bulanowski

2:35-2:50 Dr. Phyllis Garnett, Director, Arkansas Legislative Science Information Liaison Office, and Chairperson of Technical Advisory Committee on Hazardous Waste

This presentation will describe:
- o Arkansas enabling legislation for a RCRA State hazardous waste program;
- o Arkansas' method for implementing their hazardous waste legislation; and
- o Views of the benefits of a state vs. EPA controlled hazardous waste program.

2:50-3:00 Questions and Answers for Dr. Garnett

3:00-3:15 Tom Hanna, Alaska Department of Environmental Conservation

This presentation will describe:
- o Alaska's current hazardous waste efforts.

3:15-3:25 Questions and Answers for Mr. Hanna

3:15-3:40 James C. Knudson, Hazardous Waste Section Washington Department of Ecology

This presentation will describe:
- o Washington's degree of hazard definition of hazardous waste; and
- o Current negotiations with the EPA concerning changes in the definition so as to comply with the EPA state program requirements.

3:40-3:50 Question and Answers for Mr. Knudson

3:50-400 General Discussion

HAZARDOUS MATERIALS & WASTE IN ALASKA--SUMMARY

HAZARDOUS MATERIALS IMPORTED INTO ALASKA

Air freight- 1,350 tons/year - transported to Alaska by airlines

Vessel- 3,195 tons/year - shipments to Anchorage port only

Alaskan RR- 11,911 tons/year

Motor carrier - 1,012 tons/year

TOTAL 17,468 tons/year

PRESENTLY IN INVENTORY AWAITING DISPOSAL

PCB's - 2,831 tons

Military - 3,787 tons

WASTE GENERATION IN STATE (tons/year)

Industrial generators	3,420 tons/year
Small Generators	500 tons/year
Military (from Dept. of Defense publication)	21,460 tons/year
Total	25,380 tons/year

HARDOUS WASTE EXPORTED FROM ALASKA TO DISPOSAL FACILITY

Chem-Security (Oregon) - 2-4 tons (23 shipments) over the last 2 years

HAZARDOUS WASTE GENERATED IN ALASKA* (TONS/YEAR)

LARGE INDUSTRY

Waste	Approximate Amount
Combustible/flammable liquid	1,403
Corrosives	941
Poison	736 (including 317 pounds/year of acute hazardous waste)
Oxidizer	192
Other regulated material (ORM)	147
	3,420 tons/year
SMALL GENERATORS **	500 tons/year
MILITARY	21,460 tons/year
Total:	25,380 tons/year

*Information gathered from Alaskan companies which notified U.S.EPA that they are generators of hazardous waste. Since no data on volumes generated was required by EPA, volumes used in this report are the minimum amount required for notification by EPA. Therefore, actual volume generated could be much higher than amounts shown. This waste requires disposal in approved disposal facilities.

**Figures based on National averages

HAZARDOUS MATERIALS IMPORTED TO ALASKA

Type	Air Freight	Alaska RR	Vessel Shipments to Anchorage	Total
Flammable compressed gas	257	6,580	396-flammable 180-non-flammable 576-total	7,413
Combustible flammable liquid	216	1,448	1,872	3,536
Explosives	68	1,276	212	1,556
Poison	27	340	220	587
Oxidizers	27	32	188	247
Corrosives	27	1,456	116	1,599
Radioactive (RAM)	27	-	-	-
Flammable solids	13	-	8	21
Other regulated material (ORM)	689	788	-	1,477
Total	1,350 tons/yr	11,911 tons/yr	3,195 tons/yr	16,456 tons/yr
			Motor Carrier* tons/yr.	1,012
			Grand Total tons/yr.	17,468

*Motor carriers tonnage is based on the number of fully loaded shipments

ALASKA HAZARDOUS WASTE HANDLERS

	North	Central	South	Total
Generators	12	22	2	36
Transporters	1	12	-	13
TSD's	12	14	2	28
TOTAL	25	48	4	77

FEBRUARY 1981

GENERATORS OF PCB - STATE OF ALASKA
TOTAL- 522,229 Gallons or 2831 Tons

Description	Approximate Quantity	Facility	Region
Miscellaneous items	80.7 ft^3 = 604 gal.	Fort Greeley	N
PCB items in containers	13,000 kg = 2539 gal.	Forts Greely, Wainwright, & Richardson	N,N,C
10 transformers	500 gals.	Bar Main-USAF	N
1 large capacitor	1 gal.	Fairbanks Public Service, Alascom Bldg.	N
miscellaneous items	6 kg. = 1 gal.	Pedro Dome-Alascom	N
101 transformers	5,050 gals.	McGrath Light & Power	C
2 transformers in storage	100 gals.	McGrath Light & Power	C
2 contaminated transformers	100 gals.	McGrath Light & Power	C
10 transformers in storage	500 gals.	Merrill Field Complex-FAA	C
4 transformers	200 gals.	Anchorage Int'l Complex	C
PCB capacitors	220 ft. = 1,646 gals.	MAR Enterprises	C
13 drums	715 gals.	Corps of Engineers, Anchorage	C
2 transformers	100 gals.	Boswell Bay-Alascom	C
4 contaminated transformers	200 gals.	Boswell Bay-Alascom	C
6 transformers	300 gals.	Cape Yakataga-Alascom	C
11 large capacitors	11 gals.	Neklasson Lake-Alascom	C
55 transformers in service	2,750 gals.	U.S. Coast Guard-Kodiak Island	C
15 contaminated transformers	750 gals.	U.S. Coast Guard-Kodiak Island	C
62 5-gal. cans	310 gals.	U.S. Coast Guard-Kodiak Island	C
transformers and generators	240 lbs. = 22 gal.	U.S. Coast Guard-Kodiak Island	C

Description	Approximate Quantity	Facility	Region
Contaminated Oil	1,500 lbs. = 138 gals.	U.S.Coast Guard-Kodiak Island	C
6 large transformers in storage	480 gals.	Cape Sarichef - Dept. of Interior	C
2 transformers in service	100 gals.	Alaska Power Admin. Eklutna Power Project	C
2 transformers	100 gals.	Home Electric Assn.	C
5 transformers in storage	250 gals.	Kodiak Electric Assn.	C
8206 transformers in use	410,300 gals.	Matanuska Electric Assn.	C
1666 transformers in storage	83,300 gals.	Matanuska Electric Assn.	C
2 capacitors in storage	2 gals.	Matanuska Electric Assn.	C
Miscellaneous items	561 kg. = 110 gals.	Alaska Railroad	C
87 transformers & switches	4350 gals.	Alaska Railroad	C
1 transformer in service	50 gals.	Naval Security Groups - Adak	C
32 capacitors in service	32 gals.	Naval Security Groups - Adak	C
4 capacitors in storage	4 gals.	Naval Security Groups - Adak	C
36 transformers in service	1800 gals.	Naval Station - Adak	C
58 transformers in storage	2900 gals.	Naval Station - Adak	C
29 transformers in service	1450 gals.	Mt. Edgecumbe	S
4 transformers in storage	200 gals.	Mt. Edgecumbe	S
Items in service	77 kg = 15 gals.	Alaska Power Admin.- Snettisham Project	S
4 transformers in service	200 gals.	Alaska Power Admin.- Snettisham Project	S
1 transformer	50 gals.	State of Alaska - w/in Ketchikan Public Utilities System	S

TOTAL PCB IN ALASKA - 522,229 gallons

(3)(a) "General license" means a license effective pursuant to regulations promulgated by the state radiation control agency, without the filing of an application, to transfer, acquire, own, possess, or use quantities of, or devices or equipment utilizing, byproduct, source, special nuclear materials, or other radioactive material occurring naturally or produced artificially.

(b) "Specific license" means a license, issued after application to use, manufacture, produce, transfer, receive, acquire, own, or possess quantities of, or devices or equipment utilizing byproduct, source, special nuclear materials, or other radioactive materials occurring naturally or produced artificially.

(4) "Person" means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, agency, political subdivision of this state, any other state or political subdivision or agency thereof, and any legal successor, representative, agent, or agency of the foregoing, other than the United States Atomic Energy Commission, or any successor thereto, and other than federal government agencies licensed by the United States Atomic Energy Commission, or any successor thereto.

(5) "Source material" means (a) uranium, thorium, or any other material which the governor declares by order to be source material after the United States Atomic Energy Commission, or any successor thereto, has determined the material to be such; or (b) ores containing one or more of the foregoing materials, in such concentration as the governor declares by order to be source material after the United States Atomic Energy Commission, or any successor thereto, has determined the material in such concentration to be source material.

(6) "Special nuclear material" means (a) plutonium, uranium 233, uranium enriched in the isotope 233 or in the isotope 235, and any other material which the governor declares by order to be special nuclear material after the United States Atomic Energy Commission, or any successor thereto, has determined the material to be such, but does not include source material; or (b) any material artificially enriched by any of the foregoing, but does not include source material.

(7) "Registration" means registration with the state department of social and health services by any person possessing a source of ionizing radiation in accordance with rules, regulations and standards adopted by the department of social and health services.

(8) "Radiation source" means any type of device or substance which is capable of producing or emitting ionizing radiation.

[Amended by Laws 1970 ch 141 § 125, effective March 27, 1970.]

70.98.070 Advisory council on nuclear energy and radiation

Amended by Laws 2nd Ex Sess 1975-76 ch 34 § 162, effective July 1, 1976; and repealed by Laws 2nd Ex Sess 1975-76 ch 108 § 43, effective March 15, 1976.

Severability—Effective dates—1975-76 2nd ex.s. c 108: See notes following RCW 43.21F.010.

70.98.210 Recommended legislation

The agency shall study, formulate, and recommend to the legislature from time to time specific recommendations to further the purposes of this chapter.

[Amended by Laws 2nd Ex Sess 1975-76 ch 108 § 14, effective March 15, 1976.]

Severability—Effective dates—1975-76 2nd ex.s. c 108: See notes following RCW 43.21F.010.

CHAPTER 70.105—HAZARDOUS WASTE DISPOSAL

70.105.010 Definitions

The words and phrases defined in this section shall have the meanings indicated when used in this chapter unless the context clearly requires otherwise.

(1) "Department" means the department of ecology.

(2) "Director" means the director of the department of ecology or his designee.

(3) "Disposal site" means a geographical site in or upon which extremely hazardous wastes are disposed of in accordance with the provisions of this chapter.

(4) "Dispose or disposal" means the discarding or abandoning of extremely hazardous wastes or the treatment, decontamination, or recycling of such wastes once they have been discarded or abandoned.

(5) "Dangerous wastes" means any discarded, useless, unwanted, or abandoned nonradioactive substances, including but not limited to certain pesticides, or any residues or containers of such substances which are disposed of in such quantity or concentration as to pose a substantial present or potential hazard to human health, wildlife, or the environment because such wastes or constituents or combinations of such wastes:

(a) Have short-lived, toxic properties that may cause death, injury, or illness or have mutagenic, teratogenic, or carcinogenic properties; or

(b) Are corrosive, explosive, flammable, or may generate pressure through decomposition or other means.

(6) "Extremely hazardous waste" means any dangerous waste which

(a) will persist in a hazardous form for several years or more at a disposal site and which in its persistent form

(i) presents a significant environmental hazard and may be concentrated by living organisms through a food chain or may affect the genetic make-up of man or wildlife, and

(ii) is highly toxic to man or wildlife

(b) if disposed of at a disposal site in such quantities as would present an extreme hazard to man or the environment.

nicipal or private corporation, agency, or other entity whatsoever.

(8) "Pesticide" shall have the meaning of the term as defined in RCW 15.58.030 as now or hereafter amended.

(9) "Solid waste advisory committee" means the same advisory committee as per RCW 70.95.040 through 70.95.070. [Enacted Laws 2nd Ex Sess 1975–76 ch 101 § 1.]

Appropriation—1975–76 2nd ex.s. c 101 § 12: "There is appropriated to the department of ecology from the state and local improvements revolving account of the general fund out of the proceeds of the sale of bonds or notes as authorized in chapter 43.83A RCW (Referendum 26) the sum of one million three hundred fifty-three thousand dollars, or as much thereof as may be necessary, for the following purposes:

"(1) The sum of one hundred fifty-three thousand dollars for the department to develop a comprehensive plan for the adequate treatment of extremely hazardous wastes being generated in the state, and the techniques and requirements necessary for adequately disposing of such wastes and for securing and monitoring disposal sites. The objective of such a comprehensive plan shall be to determine the statewide facility requirements for the adequate disposal of extremely hazardous wastes being generated in the state and for those expected to be generated in the future.

"(2) The sum of one million two hundred thousand dollars for the purchase of real property on the Hanford Reservation by the department for the construction of a disposal site for extremely hazardous wastes and for the construction of facilities necessary for the operation of the disposal site including, but not limited to, security and monitoring facilities." [1975–76 2nd ex.s. c 101 § 12.]

Key Number Digests: Health and Environment ⇐25.5.

70.105.020 Standards and regulations—Adoption—Notice and hearing—Consultation with other agencies

The department after notice and public hearing shall:

(1) Adopt regulations designating as extremely hazardous wastes subject to the provisions of this chapter those substances which exhibit characteristics consistent with the definition provided in RCW 70.105.010(6);

(2) Adopt and may revise when appropriate, minimum standards and regulations for disposal of extremely hazardous wastes to protect against hazards to the public, and to the environment. Before adoption of such standards and regulations, the department shall consult with appropriate agencies of interested local governments and secure technical assistance from the department of agriculture, the department of social and health services, the department of game, the department of natural resources, the department of fisheries, the department of labor and industries, and the state fire marshal. [Enacted Laws 2nd Ex Sess 1975-76 ch 101 § 2.]

Key Number Digests: Health and Environment ⇐25.5.

70.105.030 List and information to be furnished by depositor of hazardous waste—Rules and regulations

(1) After the effective date of the regulations adopted by the department designating extremely hazardous wastes, any person planning to dispose of extremely hazardous waste as designated by the department shall provide the operator of the disposal site with a list setting forth the extremely hazardous wastes for disposal, the amount of such wastes, the general chemical and mineral composition of such waste listed by approximate maximum and minimum percentages, and the origin of any such waste. Such list, when appropriate, shall include information on antidotes, first aid, or safety measures

ardous waste being disposed.

(2) The department shall adopt and enforce all rules and regulations including the form and content of the list, necessary and appropriate to accomplish the purposes of subsection (1) of this section. [Enacted Laws 2nd Ex Sess 1975–76 ch 101 § 3.]

Key Number Digests: Health and Environment ⇐25.5.

70.105.040 Disposal site or facility—Acquisition—Disposal fee schedule

(1) The department through the department of general administration, is authorized to acquire interests in real property from the federal government on the Hanford Reservation by gift, purchase, lease, or other means, to be used for the purpose of developing, operating, and maintaining an extremely hazardous waste disposal site or facility by the department, either directly or by agreement with public or private persons or entities: *Provided*, That lands acquired under this section shall not be inconsistent with a local comprehensive plan approved prior to January 1, 1976: *And provided further*, That no lands acquired under this section shall be subject to land use regulation by a local government.

(2) The department may establish an appropriate fee schedule for use of such disposal facilities to offset the cost of administration of this chapter and the cost of development, operation, maintenance, and perpetual management of the disposal site. If operated by a private entity, the disposal fee may be such as to provide a reasonable profit. [Enacted Laws 2nd Ex Sess 1975–76 ch 101 § 4.]

Key Number Digests: Health and Environment ⇐25.5.

70.105.050 Disposal at other than approved site prohibited—Exception

No person shall dispose of designated extremely hazardous wastes at any disposal site in the state other than the disposal site established and approved for such purpose under provisions of this chapter, except when such wastes are going to a processing facility which will result in the waste being reclaimed, treated, detoxified, neutralized, or otherwise processed to remove its harmful properties or characteristics. [Enacted Laws 2nd Ex Sess 1975–76 ch 101 § 5.]

Key Number Digests: Health and Environment ⇐25.5.

70.105.060 Review of rules, regulations, criteria and fee schedules

All rules, regulations, criteria, and fee schedules adopted by the department to implement the provisions of this chapter shall be reviewed by the solid waste advisory committee for the purpose of recommending revisions, additions, or modifications thereto as provided for the review of solid waste regulations and standards pursuant to chapter 70.95 RCW [Enacted Laws 2nd Ex Sess 1975–76 ch 101 § 6.]

Key Number Digests: Health and Environment ⇐25.5.

70.105.070 Criteria for receiving waste at disposal site

The department may elect to receive dangerous waste at the site provided under this chapter, provided

(1) It is upon request of the owner, producer, or person having custody of the waste, and

(3) It can be reasonably demonstrated that there is no other disposal sites in the state that will handle such dangerous waste, and

(4) the site is designed to handle such a request or can be modified to the extent necessary to adequately dispose of the waste, or

(5) If a demonstrable emergency and potential threat to the public health and safety exists. [Enacted Laws 2nd Ex Sess 1975–76 ch 101 § 7.]

Key Number Digests: Health and Environment ⇐25.5.

70.105.080 Violations—Civil penalties—Enforcement—Procedure

(1) Every person who fails to comply with any provision of ROW 70.105.010 through 70.105.090 or of the rules adopted thereunder shall be subjected to a penalty in an amount of not more than one thousand dollars per day for every such violation. Each and every such violation shall be a separate and distinct offense. In case of continuing violation, every day's continuance shall be a separate and distinct violation. Every person who, through an act of commission or omission, procures, aids, or abets in the violation shall be considered to have violated the provisions of this section and shall be subject to the penalty herein provided.

(2) The penalty provided for in this section shall be imposed by a notice in writing, either by certified mail with return receipt requested or by personal service, to the person incurring the same from the department, describing the violation with reasonable particularity. Within fifteen days after the notice is received, the person incurring the penalty may apply in writing to the department for the remission or mitigation of such penalty. Upon receipt of the application, the department may remit or mitigate the penalty upon whatever terms the department in its discretion deems proper, provided the department deems such remission or mitigation to be in the best interests of carrying out the purposes of this chapter. The department of ecology shall have authority to ascertain the facts regarding all such applications in such reasonable manner and under such rules as it may deem proper. Any penalty imposed by the provisions of this section shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

(3) Any penalty imposed by this section shall become due and payable thirty days after receipt of a notice imposing the same unless application for remission or mitigation is made or petition for review by the hearings board is filed. When such an application for remission or mitigation is made, any penalty incurred pursuant to this section shall become due and payable thirty days after receipt of notice setting forth the disposition of such application. Any penalty resulting from a decision of the hearings board shall become due and payable thirty days after receipt of the notice setting forth the decision.

(4) If the amount of any penalty is not paid to the department of ecology within thirty days after it becomes due and payable, the attorney general, upon the request of the director, shall bring an action in the name of the state of Washington in the superior court of Thurston county, or of any county in which such violator may do business, to recover such penalty. In all such actions, the procedure and rules of evidence shall be the same as an ordinary civil action except as otherwise in this chapter provided. [Enacted Laws 2nd Ex Sess 1975–76 ch 101 § 8.]

CJS Health and Environment § 80.

Key Number Digests: Health and Environment ⇐38.

70.105.090 Violations—Gross misdemeanor

In addition to the penalties imposed pursuant to ROW 70.105.080, any person who violates any provisions of ROW 70.105.010 through 70.105.090, or of the rules implementing ROW 70.105.010 through 70.105.090, and any person who knowingly aids or abets another in conducting any violation of any provisions of ROW 70.105.010 through 70.105.090, or of the rules implementing ROW 70.105.010 through 70.105.090, shall be guilty of a gross misdemeanor and upon conviction thereof shall be punished by a fine of not less than one hundred dollars nor more than one thousand dollars, or by imprisonment in the county jail for not more than one year, for each separate violation. [Enacted Laws 2nd Ex Sess 1975–76 ch 101 § 9.]

CJS Health and Environment §§ 29 et seq.

Key Number Digests: Health and Environment ⇐37.

70.105.100 Powers and duties of department

The department in performing its duties under this chapter may:

(1) Conduct studies and coordinate research programs pertaining to extremely hazardous waste management;

(2) Render technical assistance to generators of dangerous and extremely hazardous wastes and to state and local agencies in the planning and operation of hazardous waste programs;

(3) Encourage and provide technical assistance to waste generators to form and operate a "waste exchange" for the purpose of finding users for dangerous and extremely hazardous wastes that would otherwise be disposed of: *Provided*, That such technical assistance shall not violate the confidentiality of manufacturing processes; and

(4) Provide for appropriate surveillance and monitoring of extremely hazardous waste disposal practices in the state. [Enacted Laws 2nd Ex Sess 1975–76 ch 101 § 10.]

70.105.110 Exceptions—Other acts not affected

(1) Nothing in this chapter shall apply to any dioactive waste or radioactive material.

(2) Nothing in this chapter shall alter, amend, or supersede the provisions of chapter 80.50 RCW, as now existing or hereafter amended, or grant to the department or to the solid waste advisory committee any authority regarding the regulation, certification, construction, or siting of thermal power plants, as defined in such acts. [Enacted Laws 2nd Ex Sess 1975–76 ch 101 § 11.]

Key Number Digests: Health and Environment ⇐25.5.

70.105.120 Authority of attorney general

At the request of the department, the attorney general is authorized to bring such injunctive, declaratory, or other actions to enforce any requirement of this chapter.

[Added by Laws 1980 ch 144 § 2.]

70.105.130 Department's powers as designated agency under federal act

(1) The department is designated as the state agency for implementing the federal resource conservation and recovery act (42 U.S.C. Sec. 6901 et seq.).

(2) The power granted to the department by this section is the authority to:

(a) Establish a permit system for owners or operators of facilities which treat, store, or dispose of dangerous wastes: *Provided*, That spent containers

of pesticides or herbicides which have been used in normal farm operation and which are not extremely hazardous wastes, shall not be subject to th permit system;

(b) Establish standards for the safe transport, treatment, storage, and dis posal of dangerous wastes as may be necessary to protect human health an the environment;

(c) Establish, to implement this section:

(i) A manifest system to track dangerous wastes;

(ii) Reporting, monitoring, recordkeeping, labeling, sampling requirements and

(iii) Owner, operator, and transporter responsibility;

(d) Enter at reasonable times establishments regulated under this section for the purposes of inspection, monitoring, and sampling; and

(e) Adopt rules necessary to implement this section.

[Added by Laws 1980 ch 144 § 1.]

CJS Health and Environment § 18.

Key Number Digests: Health and Environment ⇐6.

70.105.140 Rules implemented under RCW 70.105.130—Review

Rules implementing RCW 70.105.130 shall be submited to the house and senate committees on ecology for review prior to being adopted in accordance with chapter 34.04 RCW.

[Added by Laws 1980 ch 144 § 3.]

CHAPTER 70.106—HAZARDOUS SUBSTANCES AND ARTICLES (WASHINGTON POISON PREVENTION ACT OF 1974)

70.106.130 Technical advisory committee

For the purpose of carrying out the provisions of this chapter the director shall, within one hundred eighty days of July 24, 1974, appoint a technical advisory committee and appoint a chairman thereof, said committee to consist of one representative from each of the following:

(1) The secretary of the department of social and health services;

(2) The pharmacy board;

(3) A hospital specializing in child welfare and poison care;

(4) The packaging closures industry;

(5) University of Washington medical school;

(6) University of Washington school of pharmacy;

(7) A specialist in pesticide and chemical handling and control from Washington State University;

(8) The public;

(9) The dairy and food division of the department of agriculture; and

(10) A member of the Washington state society of pediatrics or its designee.

Members of the technical advisory committee who are not regular full time employees of a public agency or institution shall receive twenty-five dollars for each day or major portion thereof plus reimbursement for travel expenses incurred in the performance of their duties in accordance with RCW 43.0..060 and 43.03.060 as now existing or hereafter amended. [Amended by Laws 2nd Ex Sess 1975-76 ch 34 § 103, effective July 1, 1976.]

Effective date—Severability—1975-76 2nd ex.s. c 34: See notes following RCW 2.08.115.

CHAPTER 70.107—NOISE CONTROL

50 Wn LR 143 (environmental class action).

70.107.040 Technical advisory committee

The director shall name a technical advisory committee to assist the department in the implementation of this chapter. Committee members shall be entitled to reimbursement for travel expenses as provided in RCW 43.03.050 and 43.03.060, as now existing or hereafter amended. [Amended by Laws 2nd Ex Sess 1975-76 ch 34 § 104, effective July 1, 1976.]

Effective dates—Severability—1975-76 2nd ex.s. c 34: See notes following RCW 2.08.115.

CHAPTER 70.108—OUTDOOR MUSIC FESTIVALS

70.108.130 Penalty

Any person who shall willfully fail to comply with the rules, regulations, and conditions set forth in this chapter or who shall aid or abet such a violation or failure to comply, shall be deemed guilty of a gross misdemeanor: *Provided*, That violation of a rule, regulation, or condition relating to traffic including parking, standing, stopping, and pedestrian offenses is a traffic infraction, except that violation of a rule, regulation, or condition equivalent to those provisions of Title 46 RCW set forth in RCW 46.63.020 is a misdemeanor.

[Amended by Laws 1st Ex Sess 1979 ch 136 § 104, effective January 1, 1981.]

Effective date—Severability—1979 1st ex.s. c 136: See notes following RCWA 46.63.010.

CHAPTER 70.112—FAMILY MEDICINE—EDUCATION AND RESIDENCY PROGRAMS

70.112.010 Definitions

CJS Colleges and Universities §§ 24 et seq.

Key Number Digests: Colleges and Universities ⇐9.

(1) "School of medicine" means the University of Washington school of medicine located in Seattle, Washington;

(2) "Residency programs" mean community based family practice residency educational programs either in existence or established under this chapter;

(3) "Affiliated" means established or developed in cooperation with the school of medicine;

No. 246 and section 3 of Acts 1979, No. 679 were identical and have been compiled together.

82-4104. Duties. — It shall be the duty and responsibility of the Council created herein to improve and strengthen the system of home health care within the State through coordination of comprehensive planning, development and implementation of home health care programs. [Acts 1979, No. 246, § 4, p. —; 1979, No. 679, § 4, p. —.]

Compiler's Notes. Section 4 of Acts 1979, No. 246 and section 4 of Acts 1979, No. 679 were identical and have been compiled together.

82-4105. Staff and resources. — Within the appropriate laws and regulations, each Agency or Department shall commit such existing staff and resources as are available to carry out the provisions of this Act [§§ 82-4101 — 82-4106]. [Acts 1979, No. 246, § 5, p. —; 1979, No. 679, § 5, p. —.]

Compiler's Notes. Section 5 of Acts 1979, No. 246 and section 5 of Acts 1979, No. 679 were identical and have been compiled together.

82-4106. Reports — Advisory authority. — The Council shall report its findings and recommendations to the Governor. The Council's authority with respect to the above matters shall be advisory only. [Acts 1979, No. 246, § 6, p. —; 1979, No. 679, § 6, p. —.]

Compiler's Notes. Section 6 of Acts 1979, No. 246 and section 6 of Acts 1979, No. 679 were identical and have been compiled together.

Repealing Clause. Section 7 of Acts 1979, No. 246 and § 7 of Acts 1979, No. 679 repealed all laws and parts of laws in conflict therewith.

Separability. Section 8 of Acts 1979, No. 246 and § 8 of Acts 1979, No. 679, read: "The provisions of this Act shall be severable, and, if any phrase, clause, sentence, paragraph or section of this Act be declared unconstitutional, the same shall not affect the remaining portions of this Act."

Emergency. Section 9 of Acts 1979, No. 246 and § 9 of Acts 1979, No. 679, read: "Whereas, the State of Arkansas ranks second in the nation in its elderly population and it is imperative to the health and well-being of the citizens of Arkansas that immediate steps be taken to prevent premature commitments to institutions, and this Act is necessary to establish the Council and provide immediate recommendations for initial improvements in home health care, an emergency is hereby declared to exist and this Act shall be in full force and effect from and after its passage."

Acts 1979, No. 246 was approved March 1, 1979, and Acts 1979, No. 679 was approved April 2, 1979.

CHAPTER 42

HAZARDOUS WASTE MANAGEMENT

82-4201. Short title. — This Act [§§ 82-4201 — 82-4216] may be cited as the Arkansas Hazardous Waste Management Act of 1979. [Acts 1979, No. 406, § 1, p. —.]

82-4202. Purpose. — It is the purpose of this Act [§§ 82-4201 — 82-4216] and it is hereby declared to be the policy of this State (a) to protect the public health and safety, the health of living organisms and the environment, from the effects of the improper, inadequate, or unsound management of hazardous wastes; (b) to establish a program of regulation over the generation, storage, transportation, treatment, and disposal of hazardous wastes; (c) to assure the safe and adequate management of hazardous wastes within this State; (d) to qualify the Department of Pollution Control and Ecology to adopt, administer, and enforce a hazardous waste program pursuant to the Federal Resource Conservation and Recovery Act of 1976 (Public Law 94-580 approved October 21, 1976) [42 U.S.C. §§ 6901 — 6987], (e) and to afford the people of the State of Arkansas a voice in the permitting of hazardous waste facilities within their respective counties. [Acts 1979, No. 406, § 2, p. —.]

Compiler's Notes. The words in parentheses so appeared in the law as enacted.

82-4203. Definitions. — For purposes of this Act [§§ 82-4201 — 82-4216],

(a) "Department" means the Arkansas Department of Pollution Control and Ecology.

(b) "Director" means the Director of the Department.

(c) "Commission" means the Arkansas Commission on Pollution Control and Ecology within the Department.

(d) "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking or placing of any hazardous waste into or on any land or water in whatever manner so that such hazardous waste or any constituent thereof might or might not enter the environment or be emitted into the air, or discharged into any waters, including groundwaters.

(e) "Generation" means the act or process of producing waste materials.

(f) "Hazardous Waste" means any waste or combination of wastes of a solid, liquid, contained gaseous, or semisolid form which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may in the judgment of the Department (1) cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of or otherwise improperly managed. Such wastes include, but are not limited to, those which are radioactive, toxic, corrosive, flammable, irritants, strong sensitizers, or which generate pressure through decomposition, heat, or other means.

(g) "Hazardous Waste Management" means the systematic control of the generation, collection, source separation, storage, transportation, processing, recovery, disposal and treatment of hazardous waste.

(h) "Manifest" means the form used for identifying the quantity, composition, and the origin, routing, and destination of hazardous waste during its transport.

(i) "Person" means any individual, corporation, company, firm, partnership, association, trust, joint stock company, state agency, government instrumentality or agency, institution, county, city, town, or municipal authority or trust, venture, or any other legal entity, however organized.

(j) "Storage" means the containment of hazardous wastes, either on a temporary basis or for a period of years, in such a manner as not to constitute disposal of such hazardous wastes, provided, however, that storage by means of burial shall be deemed to constitute disposal within the meaning of this Act.

(k) "Transport" means the movement of wastes from the point of generation to any intermediate points, and finally to the point of ultimate storage or disposal.

(l) "Treatment" means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste, so as to neutralize such waste or so as to render such waste less hazardous, safer for transport, amenable to recovery, amenable to storage, amenable to disposal, or reduced in volume.

(m) "Facility" means any land and appurtenances, thereon and thereto, used for the treatment, storage, and/or disposal of hazardous waste.

(n) "Treatment Facility" means a location at which waste is subjected to treatment and may include a facility where waste has been generated.

(o) "Site" means any real property located within the boundary of the State of Arkansas contemplated and/or later acquired for the purpose of but not limited to landfills or other facilities to be used for treatment, storage, disposal, or generation of hazardous wastes. [Acts 1979, No. 406, § 3, p. —.]

82-4204. Powers and duties. — The Department shall have the following powers and duties:

(a) To administer and enforce all laws, rules and regulations relating to the generation, storage, treatment, transportation, recovery, and disposal of hazardous wastes;

(b) To conduct and publish such studies of hazardous waste management in this State as shall be deemed appropriate, including, but not limited to, a description of the sources of hazardous waste generated within the State, the types and quantities of such waste, a description of current hazardous waste management practices and costs, including treatment, recovery, and disposal;

(c) To develop, publish and implement plans in accordance with the provisions of this Act [§§ 82-4201 — 82-4216] for the safe and effective management of hazardous wastes within this State, including, but not limited to, the establishment of criteria for the identification of those locations within the State which are suitable for establishment of hazardous waste treatment or disposal facilities or sites and those locations which are not suitable for such purposes;

(d) To establish criteria for the determination of whether any waste or combination of wastes is hazardous for purposes of this Act and to identify and specify wastes or combination of wastes as being hazardous;

(e) To adopt, after notice and public hearing, promulgate, modify, repeal, and enforce rules and regulations for the collection, generation, storage, transportation, disposal, recovery, and treatment of hazardous wastes as may be necessary or appropriate to implement or effectuate the purposes and intent of this Act and the powers and duties of the Department hereunder, including, but not limited to, rules and regulations for:

(1) the containerization and labeling of hazardous wastes, which rules, to the extent practicable, shall be consistent with those issued by the United States Department of Transportation, the United States Environmental Protection Agency, and the Arkansas Transportation Commission;

(2) establishing standards and procedures for the safe operation and maintenance of facilities;

(3) identifying those wastes or combination of wastes which are incompatible and which may not be stored or disposed of together and procedures for preventing the storage, disposal, recovery or treatment of incompatible wastes together;

(4) the reporting of the generation, storage, transportation, recovery, treatment, or disposal of hazardous wastes;

(5) establishing standards and procedures for the certification of supervisory personnel at hazardous waste treatment or disposal facilities or sites as required under Section 5(g)(3) [§ 82-4205(g)(3)] hereof;

(6) establishing a manifest system for the transport of hazardous wastes and prohibiting the receipt of hazardous wastes at storage, processing, recovery, disposal, or transport facilities or sites without a properly completed manifest.

(f) To issue, continue in effect, revoke, modify, or deny under such conditions as it may prescribe, permits for the establishment, construction, operation, and/or maintenance of hazardous waste treatment or disposal facilities or sites as more particularly prescribed by Section 5 [§ 82-4205] of

(g) To make such investigations and inspections and to hold such hearings, after notice, as it may deem necessary or advisable for the discharge of its duties hereunder and to insure compliance with this Act, and any orders, rules, and regulations issued pursuant thereto;[;]

(h) To make, issue, modify, revoke, and enforce orders, after notice and hearing, prohibiting violation of any of the provisions of this Act or of any rules and regulations issued pursuant thereto or any permit issued thereunder, and requiring the taking of such remedial measures as may be necessary or appropriate to implement or effectuate the provisions and purposes of this Act;

(i) To institute proceedings in the name of the Department in any court of competent jurisdiction to compel compliance with, and to restrain any violation of the provisions of this Act and/or any rules, regulations and orders issued pursuant thereto or any permit issued thereunder, and to require the taking of such remedial measures as may be necessary or appropriate to implement or effectuate the provisions and purposes of this Act. In any civil action in which a temporary restraining order, preliminary injunction, or permanent injunction is sought, it shall not be necessary to allege or prove at any stage of the proceeding that irreparable damage will occur should the requested relief not be granted, nor that the remedy at law is inadequate.[;]

(j) To initiate, conduct and support research, demonstration projects and investigations and coordinate all state agency research programs pertaining to hazardous waste management, and to establish technical advisory committees to assist in the development of procedures, standards, criteria, and rules and regulations, the members of which may be reimbursed for travel expenses;

(k) To establish policies and standards for effective hazardous waste management;

(l) To establish standards and procedures for the certification of personnel to operate hazardous waste treatment or disposal facilities;

(m) In addition to the foregoing, the Department shall have and may use in the administration and enforcement of this Act all of the powers which it has under other acts administered by it, including the Arkansas Water and Air Pollution Control Act (Section 82-1901 et seq., Ark. Stats. Ann.) and the Arkansas Solid Waste Management Act (Section 82-2701 et seq., Ark. States. [Stats.] Ann.). [Acts 1979, No. 406, § 4, p. —.]

Compiler's Notes. The words in parentheses as appeared in the law as enacted.

The bracketed semicolons in subdivisions (g) and (l) and the bracketed abbreviation "Stats." in subdivision (m) were inserted by the compiler.

82-4205. Permits. — (a) No person shall construct, substantially alter, or operate any hazardous waste treatment or disposal facility or site, nor shall any person store, transport, treat, or dispose of any hazardous waste without first obtaining a permit from the Department for such facility, site, or activity. Persons who construct, substantially alter or operate a facility which generates hazardous wastes shall be subject to the reporting requirements of the Act [§§ 82-4201 — 82-4216], but shall not be required to obtain a permit under this Act unless such person also stores, transports, treats or disposes of hazardous wastes.

(b) Permits shall be issued under such terms and conditions as the Department may prescribe under the provisions of this Act, and under such terms and conditions as the Arkansas Transportation Commission may prescribe for the transportation of hazardous wastes.

(c) Facilities required to have a permit under this Act or, which are operating under terms of permits issued under the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended) [§§ 82-1901 — 82-1907, 82-1931 — 82-1943] or the Arkansas Solid Waste Management Act (Act 237 of 1971) [§§ 82-2701 — 82-2712] as of the date of enactment of this Act, may continue in operation until such time as a permit is issued under the provisions of this Act by the Department, provided that the owner or operator of such facility has made application on forms provided by the Department for such permit within six [6] months of the date of enactment of this Act [March 14, 1979].

(d) Permits shall be issued for a period not to exceed five [5] years, and shall be subject to renewal by the Department upon a showing that the facility has been operated in accordance with the terms of the permit, the rules and regulations applicable to such facility, and compliance with all other provisions of this Act.

(e) Any permit issued hereunder shall be subject to revocation for failure of the permittee to comply with the terms and conditions of the permit, the rules and regulations of the Department applicable thereto, or the provisions of this Act. Any person who is denied a permit by the Director or who has such permit revoked or modified shall be afforded an opportunity for a hearing by the Commission in connection therewith upon written application made within thirty (30) days after service of notice of such denial, revocation, or modification.

(f) No permit shall be issued by the Department for any facility unless the Department, after opportunity for public comment, has determined that the facility has been designed and will be operated in such manner that any emissions from the facility will comply with the provisions of this Act, the standards and regulations issued pursuant to this Act, and all applicable State and Federal standards and regulations concerning air and water quality and that the transfer, handling, and storage of materials within the facility will not cause conditions which would violate State and Federal standards concerning worker safety or create unreasonable hazards to the environment or to the health and welfare of the people living and working in or near such facility. No permit shall be issued by the Department for any commercial disposal or storage facility off the site where the hazardous waste is generated until the Department has adopted rules, regulations, standards and procedures pursuant to Section 4 [§ 82-4204]. The rules, regulations, standards, procedures or other requirements adopted and imposed by the Department shall not be less stringent than the regulations promulgated or revised by the Environmental Protection Agency pursuant

to the Federal Resource Conservation and Recovery Act of 1976 [42 U.S.C. §§ 6901-6987]. Pending the effective date of federal regulations promulgated by the Environmental Protection Agency, the Department shall use the proposed regulations published by the Environmental Protection Agency as minimum guidelines in adopting any interim rules, regulations, standards and procedures.

(g) No permit shall be issued for any commercial hazardous waste treatment, storage or disposal facility unless that facility meets such terms and conditions as the Department may direct, including, but not limited to,

(1) Evidence of liability insurance in such amount as the Department may determine to be necessary for the protection of the public health and safety and of the environment;

(2) Evidence of financial responsibility in such form and amount as the Department may determine to be necessary to insure that, upon abandonment, cessation, or interruption of the operation of the facility, all appropriate measures are taken to prevent present and future damage to the public health and safety and to the environment;

(3) Evidence that the personnel employed at the hazardous waste treatment or disposal facility meet such qualifications as to education and training as the Department may determine to be necessary to assure the safe and adequate operation of the facility. Persons charged with the direct supervision of the operation of any facility must be certified by the Department as having such qualifications after a review of the types, properties, and volume of hazardous waste to be treated or disposed of at the facility. The Department may require the recertification of supervisory personnel where there is any significant change in the types or properties of hazardous waste being treated or disposed of in any facility;

(4) Evidence of an appropriate preventive maintenance program, spill prevention plan, safety procedures and contingency plans which contingency plans have been developed in consultation with the fire department having jurisdiction and by the Mayor or City Manager of the municipality or by the County Judge of the county in which the facility is to be located.

(5) Evidence that the location of the facility is consistent with the siting criteria established by the Department as provided in Section 4(c) of this Act [§ 82-4204(c)]. The provisions of this subsection (5) shall not apply to treatment facilities which began operation prior to the date of enactment of this Act [March 14, 1979] and which have an existing operating permit from the Department, or to any subsequent modifications to such facilities, provided that the owner of such facility can demonstrate that such modifications do not materially increase the degree of hazards associated with such facility.

(6) Evidence of such forms of assurance, including full fee ownership of lands, and all mineral rights thereto, to ensure that the owner of any hazardous waste landfill has the legal authority to commit such landfill to perpetual security.

(h) No hazardous waste landfill disposal facility off the site of generation shall be located within one-half (½) mile of any occupied dwelling, unless the applicant shall affirmatively demonstrate and the Department shall specifically find that, because of the nature and amounts of the materials to be placed in such facility, a lesser distance will provide adequate margins of safety even under abnormal operating conditions.

(i) The Department shall have authority to establish a schedule of fees to recover the costs of processing permit applications and permit renewal proceedings, on-site monitoring, the certification of personnel to operate hazardous waste treatment and disposal facilities, and such other activities of Department personnel which are reasonably necessary to assure that permitted facilities are being operated in accordance with the provisions of this Act and which reasonably should be borne by the permittee.

(j) No permit shall be issued by the Department or Commission for any commercial hazardous waste treatment, storage, or disposal facility unless 30-day advance notice of a hearing has been placed in the largest newspaper published in the county in which a facility or facilities is located or proposed to be located, as well as published in the largest newspaper published in the adjoining counties. Provided, if there is no newspaper published in any of the counties so affected the notice shall be published in the newspaper(s) having the largest circulation in such county or counties.

(k) No permit shall be issued for non-commercial hazardous waste treatment, storage, or disposal facilities except under the terms of regulations of the Department which conform to the provisions of Section 3005 of the Federal Resource Conservation and Recovery Act (PL 94-580) [42 U.S.C. § 6925]. [Acts 1979, No. 406, § 5, p. —.]

82-4206. Consideration of varying conditions, coordinated procedures and integrated administration. — (a) In administering the provisions of this Act [§§ 82-4201 — 82-4216], the Department may adopt and give appropriate effect to variations within this State in climate, geology, population density, and such other factors as may be relevant to the management of hazardous wastes, the establishment of standards and permit conditions, and to the siting of permitted facilities.

(b) To the extent practicable, the rules and regulations and procedures adopted by the Department pursuant to this Act shall be consistent with other environmentally related rules, regulations, and procedures of the Department. In administering the provisions of this Act and of all other acts under the administration of the Department, the Department and Commission shall coordinate and expedite the issuance of permits required by an applicant under one [1] or more acts, to the end of eliminating insofar as practicable any duplication of unnecessary time and expense to the applicant and the Department.

(c) The Department shall integrate all provisions of this Act with the appropriate provisions of all other acts which grant regulatory authority to the Department for purposes of administration and enforcement, and shall avoid duplication to the maximum extent practicable. [Acts 1979, No. 406, § 6, p. —.]

Compiler's Notes. As enacted the section ading of this section read, "Consideration of ying conditions; and providing for coordinated procedures and integrated administration."

82-4207. Transportation of hazardous waste. — Following notice and blic hearing, the Arkansas Transportation Commission, in consultation th the Department, shall issue rules and regulations for the ansportation of hazardous waste. Such rules and regulations shall be nsistent with applicable rules and regulations issued by the United States partment of Transportation and with any rules, regulations, and andards issued by the Department pursuant to this Act [§§ 82-4201 — -4216]. The Arkansas Transportation Commission shall comply with this ction within one [1] year after the effective date of this Act [March 14, 79]. The provisions of this Section shall apply equally to those persons ansporting hazardous wastes generated by others and to those ansporting hazardous wastes they have generated themselves, or mbinations thereof. [Acts 1979, No. 406, § 7, p. —.]

82-4208. Imminent hazard. — Notwithstanding any other provisions of is Act [§§ 82-4201 — 82-4216], the Director of the Department, upon ding that the storage, transportation, treatment, or disposal of any waste ay present an imminent and substantial hazard to the health of persons to the environment and that an emergency exists requiring immediate tion to protect the public health and welfare, he may, without notice or aring, issue an order reciting the existence of such an imminent hazard d emergency and requiring that such action be taken as he determines to necessary to protect the health of such persons and/or the environment d to meet the emergency. The order of the Director may include, but is t limited to, directing the operator of the treatment or disposal facility or e, or the custodian of the waste, which constitutes such hazard, to take ch steps as are necessary to prevent the act or eliminate the practice hich constitutes such hazard and, with respect to a facility or site, may der cessation of operation. Any person to whom such order is directed shall mply therewith immediately, but, on written application to the Director thin ten [10] days of the issuance of such order, shall be afforded a hearing fore the Commission within ten (10) days after receipt of said written quest. On the basis of such hearing, the Commission shall continue such der in effect, or revoke or modify it. [Acts 1979, No. 406, § 8, p. —.]

82-4209. Procedure. — The procedure of the Department and mmission for issuance of rules and regulations, conduct of hearings, tice, power of subpoena, review of action on permits, right of appeal, sumptions, finality of actions, and related matters shall be as provided Part I of the Arkansas Water and Air Pollution Control Act, as amended, cluding but not limited to Sections 82-1904 (11) and 82-1906, Ark. Stats. nn. provided such is not in conflict with the provisions set forth in this Act § 82-4201 — 82-4216]. [Acts 1979, No. 406, § 9, p. —.]

82-4210. Department designated state agency for participation in hereby designated as the official agency for the State for all purposes of the Federal Resource Conservation and Recovery Act of 1976 (Public Law 94-580 approved October 21, 1976) [42 U.S.C. §§ 6901 — 6987], as it now exists or may hereafter be amended, and for the purpose of such other State or Federal legislation as has or may be hereafter enacted to assist in the management of hazardous wastes.

(b) The legislature of this State encourages cooperative activities by the Department with other states for the improved management of hazardous wastes, and so far as is practicable, uniform State laws relating to the management of hazardous wastes, and compacts between this and other states for the improved management of hazardous wastes. The Department may enter into agreements with the responsible authorities of the United States and/or of other states, subject to approval by the Governor, relative to policies, methods, means, and procedures to be employed in the management of hazardous wastes not inconsistent with the provisions of this Act [§§ 82-4201 — 82-4216] and may carry out such agreements. [Acts 1979, No. 406, § 10, p. —.]

Compiler's Notes. As enacted the section heading of this section read, "Department designated state agency for participation in federal program; and interstate cooperation."

The words in parentheses in subsection (a) so appeared in the law as enacted.

82-4211. Maintaining records, furnishing information, and permitting examinations and surveys. — (a) The owner or operator of any permitted facility or site shall establish and maintain such records, make such reports, install, use, and maintain such monitoring equipment or methods, take such samples, and perform such tests, and provide such other information to the Department as the Director may reasonably require.

(b) The Department, or any authorized employee or agent thereof, may examine and copy any book, papers, records, or memoranda pertaining to the operation of the facility or site.

(c) The Department, or any authorized employee or agent thereof, may enter upon any property, public or private, for the purpose of obtaining information or conduction [conducting] surveys or investigations necessary or appropriate for the purposes of this Act [§§ 82-4201 — 82-4216].

(d) Any records, reports, or information obtained under this Act and any permits, permit applications, and related documentation shall be available to the public for inspection and copying; provided that upon a showing satisfactory to the Director that such records, reports, permits, documentation, or information, or any part thereof would, if made public, divulge methods or processes entitled to protection as trade secrets, the Director shall consider, treat, and protect such records, reports, or information as confidential. As necessary to carry out the provisions of this Act, information afforded confidential treatment may be transmitted under a continuing restriction of confidentiality to other officers, employees, or authorized representatives of the State or of the United States, provided that

informed at least two [2] weeks prior to such transmittal and provided further that such information has been acquired by the Department under the provision of this Act. The provisions of this Section shall not be construed to limit the Department's authority to release confidential information during emergency situations. Any violation of this subsection shall be unlawful and constitute a misdemeanor. [Acts 1979, No. 406, § 11, p. —.]

Compiler's Notes. The bracketed word "conducting" in subsection (c) was inserted by the compiler.

82-4212. Unlawful acts. — It shall be unlawful for any person:

(a) to violate any provisions of this Act [§§ 82-4201 — 82-4216] or of any rule, regulation, permit, or order adopted or issued under this Act;

(b) knowingly to make any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained under this Act, or to falsify, tamper with, or knowingly render inaccurate any monitoring device or method required to be maintained under this Act or any rules or regulations adopted pursuant thereto;

(c) to dispose of hazardous wastes at any disposal site or facility other than one for which a permit has been issued by the Department pursuant to this Act;

(d) to store, collect, transport, treat, or dispose of any hazardous waste contrary to the rules, regulations, permits, or orders issued under this Act or in such a manner or place as to create or as is likely to be created a public nuisance or a public health hazard or to cause or is likely to cause water or air pollution within the meaning of the Arkansas Water and Air Pollution Control Act, as amended (Section 82-1902 et seq., Ark. Stats. Ann.). [Acts 1979, No. 406, § 12, p. —.]

82-4213. Penalties. — (a) Any person who commits any unlawful act shall be guilty of a misdemeanor and upon conviction thereof, shall be subject to imprisonment for not more than one (1) year, or a fine of not more than ten thousand dollars ($10,000.00), or by both such fine and imprisonment. Each day or part of a day during which such violation is continued or repeated shall constitute a separate offense.

(b) Any person who violates any provision of this Act [§§ 82-4201 — 82-4216] or commits any unlawful act thereunder shall be subject to a civil penalty in such amount as the court shall find appropriate, not to exceed twenty-five thousand dollars ($25,000.00) per day of such violation, to the payment of any expenses reasonably incurred by the State in removing, correcting, or terminating any adverse effects resulting therefrom, including the cost of the investigation, inspection, or survey establishing such violation or unlawful act, and the payment to the State of reasonable compensation of any actual damage resulting therefrom. [Acts 1979, No.

82-4214. Variances. — Where the application of, or compliance with, any rule or regulation(s) issued under this Act [§§ 82-4201 — 82-4216] would, in the judgment of the Commission, cause undue or unreasonable hardship to any person and not cause substantially adverse environmental effects, the Commission may issue a variance from such rule or regulation. In no case shall the duration of any such variance exceed one [1] year; renewals or extensions may be given only after opportunity for public comment on each such renewal or extension. [Acts 1979, No. 406, § 14, p. —.]

Compiler's Notes. The letter "s" in the word "regulations" was enclosed in parentheses by the compiler as surplusage.

82-4215. Existing rules, regulations, orders, permits, legal proceedings. — (a) All existing rules and regulations of the Department not inconsistent with the provisions of this Act [§§ 82-4201 — 82-4216] relating to subjects embraced within this Act shall remain in full force and effect until expressly repealed, amended, or superceded by the Commission provided, however, insofar as said rules and regulations do not conflict with the provisions of this Act.

(b) All orders entered, permits granted, and pending legal proceedings instituted by the Department relating to subjects embraced within this Act shall remain unimpaired and in full force and effect until superceded by actions taken by the Department or Commission under this Act.

(c) No existing civil or criminal remedies, public or private, for any wrongful action shall be excluded or impaired by this Act.

(d) The provisions of this Act, and the rules and regulations promulgated pursuant to this act, shall govern if the same conflict with the provisions of the Arkansas Water and Air Pollution Control Act, as amended (Section 82-1902 et seq., Ark. Stats. Ann.), or the Arkansas Solid Waste Management Act (Section 82-2701 et seq., Ark. Stats. Ann.), or any action taken by the Department or Commission under said Acts.

(e) Any person adversely affected by a violation of this Act or of any rules, regulations, or orders issued pursuant thereto, shall have a private right of action for relief against such violation. [Acts 1979, No. 406, § 15, p. —.]

82-4216. Venue for legal proceedings. — All legal proceedings affecting hazardous waste treatment and/or hazardous waste disposal facilities in this State shall be brought in the county in which the facility is located. [Acts 1979, No. 406. § 16, p. —.]

Repealing Clause. Section 18 of Acts 1979, No. 406, read: "All laws and parts of laws in conflict herewith are hereby repealed to the extent of such conflict. Nothing contained in this Act shall be deemed to repeal or affect the provisions of the Arkansas Solid Waste Management Act except as to hazardous wastes as defined herein and the Arkansas Solid Waste Management Act and rules and in full force and effect in respect to all wastes other than hazardous wastes."

Separability. Section 17 of Acts 1979, No. 406, read: "The provisions of this Act are hereby declared to be separable and if any provision shall be determined to be invalid, it shall not affect the validity of the remaining provisions of this Act."

Emergency. Section 19 of Acts 1979, No.

AtlanticRichfieldCompany Public Affairs
Alaska State and Local Government Relations
Mailing Address: Box 360
Anchorage, Alaska 99510
Telephone 907 277 5637

Dave Harbour
Regional Director

April 1, 1981

The Honorable Fred Brown
House of Representatives
Judiciary Chairman
Pouch V
Juneau, Alaska 99811

Dear Representative Brown:

We at Atlantic Richfield Company wish to submit these prepared comments on Hazardous Waste legislation and hope that they will be useful to you and the committee.

Sincerely,

Beverly Ward

Beverly Ward
Associate Director

Atlantic Richfield Company Position

Alaska House CS for CS for Senate Bill 29

Atlantic Richfield Company recognizes the desire of the State of Alaska to protect its citizens and its environment from the risks that can accompany nuclear facilities, transportation of nuclear materials and disposal of nuclear wastes. We also realize the State is concerned about the possible adverse effects of the transportation and disposal of hazardous wastes. With respect to the latter, it appears to be the intent of Senate Bill 29 to meet federal requirements for the handling and dispoal of hazardous wastes as mandated by the Resource Conservation and Recovery Act (RCRA) and the federal regulations that have been promulgated under that act. Atlantic Richfield Company supports efforts by Alaska to adopt a State hazardous waste program which can be authorized by the Environmental Protection Agency (EPA) under RCRA to be administered in Alaska in lieu of federal administration.

We would, however, like to comment on some provisions of the bill as proposed.

In the first place, we believe it is not appropriate to lump together nuclear issues with provisions dealing with the transportation and disposal of hazardous wastes. Nuclear installations, transportation of nuclear materials and disposal of nuclear wastes raise issues different in kind and in degree from hazardous waste management. This has long been recognized in federal law, notably in RCRA and in the recently-enacted Comprehensive Environmental Response

Compensation and Liabilty Act of 1980. Thus, while nuclear activites may be construed by the State of Alaska to necessitate highly restricted legislation, these activites should be addressed independently of hazardous waste transporation and disposal.

Secondly, we believe every effort should be made to see that State hazardous waste regulations are equivalent to and consistent with federal requirements. We are particularly concerned with the treatment of drilling fluids, produced waters and other wastes associated with the exploration, development or production of crude oil, natural gas and geothermal energy, as well as with those wastes associated with mineral extraction. RCRA specifically excludes such wastes from definition as hazardous, pending adequate scientific review by EPA as to any possible adverse health and environmental effects of such wastes. We urge the Alaska Legislature to exclude by Statute such wastes from definition as hazardous, in accordance with RCRA.

Furthermore, since EPA has developed an extensive classification system for hazardous wastes under RCRA and the Clean Water Act, we urge the State of Alaska to mandate a classification system consistent with generally accepted scientific criteria developed by EPA.

Atlantic Richfield Company enjoys experience with respect to the safe handling and disposal of both hazardous and non-hazardous wastes. We welcome any opportunity to work cooperatively with the Legislature and the Department of Environmental Conservation in Alaska to develop adequate and appropriate legislation and regulation concerning the transportation and disposal of hazardous wastes in the State.

STATE OF ALASKA
DEPT. OF HEALTH AND SOCIAL SERVICES
OFFICE OF THE COMMISSIONER

JAY S. HAMMOND, GOVERNOR

POUCH H 01 – JUNEAU 99811

April 1, 1981

Document# 83-81

Representative Fred E. Brown
Chairman
House Judiciary Committee
Pouch V
Juneau Alaska 99811

Dear Representative Brown:

Enclosed are our recommendations for changes in HCS-CSSB 29 (Res.). Our recommendations are written on a copy of the Bill itself.

Mr. Sidney Heidersdorf, our Radiological Physicist, phone 465-3019, will be representing the Department of Health and Social Services during hearings on the Bill. If you have any questions please address them to him.

Thank you for your consideration of these changes.

Sincerely,

for Helen D. Beirne
Commissioner

Enclosure

Original sponsor: Kerttula

Offered: 3/18/81
Referred: Judiciary

IN THE SENATE BY THE RESOURCES COMMITTEE

HOUSE CS FOR CS FOR SENATE BILL NO. 29 (Resources)

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWELFTH LEGISLATURE - FIRST SESSION

A BILL

For an Act entitled: "An Act relating to ~~nuclear~~ RADIOACTIVE materials and extremely hazardous and hazardous wastes; and providing for an effective date."

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

* Section 1. AS 18.45 is amended by adding a new section to read:

Sec. 18.45.100. NUCLEAR FACILITIES PROHIBITED. A person may not construct a nuclear fuel production facility, a nuclear utilization facility, a nuclear reprocessing facility, or a nuclear enhancement facility in the state.

* Sec. 2. AS 18.45 is amended by adding new sections to read:

Sec. 18.45.110. HIGH LEVEL RADIOACTIVE NUCLEAR WASTE DISPOSAL FACILITY SITING PERMIT REQUIRED. (a) A person may not construct a high level RADIOACTIVE nuclear waste disposal facility in the state unless he has first obtained a permit from the department to construct the facility on land designated by the legislature under (b) of this section.

(b) The legislature shall designate by law the land in the state on which a high level RADIOACTIVE nuclear waste disposal facility may be located.

(c) The department shall adopt regulations governing the issuance of permits required by (a) of this section. However, a permit may not be issued by the department unless

(1) the governor has approved the permit;

(2) local approval has been obtained; local approval is obtained

(A) if the municipality with jurisdiction over the

COMMENT: IT IS RECOMMENDED THE WORD "RADIOACTIVE" REPLACE THE WORD "NUCLEAR" WHEREVER THE TERM MAKES REFERENCE TO WASTE. THIS IS A MORE PRECISE DESCRIPTION OF THE KIND OF WASTE UNDER CONSIDERATION.

proposed facility site has approved the permit; and

(B) if the facility is to be located in the unorganized borough, a majority of the registered voters who live within 100 miles of the proposed facility votes to approve the issuance of the permit for the facility at a general or special election of the state called for the purpose; and

(3) issuance of the permit is approved by a majority of the registered voters at a general or special statewide election.

Sec. 18.45.120. PROOF OF FINANCIAL RESPONSIBILITY REQUIRED FOR FACILITY OPERATION. (a) A person may not operate a high level ~~nuclear~~ RADIOACTIVE waste disposal facility unless he has furnished proof to the commissioner of financial ability to care in perpetuity for the ~~nuclear~~ RADIOACTIVE material which will be used in the facility. Financial responsibility may be demonstrated by self-insurance, insurance, surety, or guarantee, under terms the department may prescribe.

(b) Acceptance of proof of financial responsibility under this section expires

(1) one year from its issuance for self-insurance;

(2) on the effective date of a change in the surety bond, guarantee, or insurance agreement; or

(3) on the expiration or cancellation of the surety bond, guarantee, or insurance agreement.

(c) The person whose proof of financial responsibility is accepted by the department under this section shall notify the department at least 30 days before the effective date of a change, expiration or cancellation in the surety bond, guarantee, or insurance agreement. Application for renewal of acceptance of proof of financial responsibility under this section must be filed at least 30 days before the date of expiration.

(d) The department, after notice and hearing, may revoke acceptance of proof of financial responsibility if it determines that

(1) acceptance was procured by fraud or misrepresentation; or

(2) a change of circumstance has occurred, other than a change specified in (b)(1) - (3) of this section, which would have warranted denial of the application.

* Sec. 3. AS 18.45.110(a) is amended to read:

Sec. 18.45.110. FACILITIES [HIGH LEVEL NUCLEAR WASTE DISPOSAL FACILITY] SITING PERMIT REQUIRED. (a) A person may not construct a nuclear fuel production facility, nuclear utilization facility, nuclear reprocessing facility, nuclear enhancement facility, or high level RADIOACTIVE nuclear waste disposal facility in the state unless he has first obtained a permit from the department to construct the facility on land designated by the legislature under (b) of this section.

* Sec. 4. AS 18.45.110(b) is amended to read:

(b) The legislature shall designate by law the land in the state on which a nuclear fuel production, utilization, reprocessing, enhancement, or high level RADIOACTIVE nuclear waste disposal facility may be located.

* Sec. 5. AS 18.45.120(a) is amended to read:

(a) A person may not operate a nuclear fuel production facility, a nuclear utilization facility, a nuclear reprocessing facility, a nuclear enhancement facility, or a high level RADIOACTIVE nuclear waste disposal facility unless he has furnished proof to the commissioner of financial ability to care in perpetuity for the RADIOACTIVE nuclear material which will be used in the facility. Financial responsibility may be demonstrated by self-insurance, insurance, surety, or guarantee, under terms the department may prescribe.

* Sec. 6. AS 18.45 is amended by adding new sections to read:

Sec. 18.45.130. TRANSPORTATION OF ~~NUCLEAR~~ RADIOACTIVE WASTE MATERIAL. (a) The transportation of high level ~~nuclear~~ RADIOACTIVE waste material, except for purposes of disposal outside the state, is prohibited.

(b) A person may not transport low level ~~nuclear~~ RADIOACTIVE waste material in the state unless he has first obtained a permit from the department. The department shall adopt regulations governing the issuance of permits required by this subsection, and shall establish and implement a system to record by manifest the movement of low level ~~nuclear~~ RADIOACTIVE waste materials which are transported.

(c) The provisions of (a) and (b) of this section do not apply to the transportation of ~~nuclear~~ RADIOACTIVE waste material by the federal government. When the federal government proposes to transport ~~nuclear~~ RADIOACTIVE waste material in the state, the agency of the federal government shall notify the commissioner and the Department of Public Safety of its plans. When notification is received from the federal agency, the commissioner and the commissioner of public safety may take any action they regard as necessary to protect the health and safety of persons in the vicinity of the route used to transport the ~~nuclear~~ RADIOACTIVE waste material. The notification provisions of this subsection do not apply if advance notice to the commissioner would represent a threat to national security.

DELETE - ACCOMPLISHED BY SEC 46.03.250

Sec. 18.45.140. STORAGE AND DISPOSAL OF ~~NUCLEAR~~ RADIOACTIVE WASTE MATERIAL. (a) The storage and disposal in the state of ~~nuclear~~ waste material which would constitute a threat to the health or safety of the public is prohibited.

(b) The provisions of (a) of this section do not apply to

(1) material of a kind or quantity which, when stored or disposed, would not constitute a threat to the health or safety of the public as determined by the department under AS 46.03.250 by regulation;

DELETE

(2) radioactive materials used in medicine; and

(3) radioactive materials, not exceeding an amount determined by the department by regulation under AS 46.03.250, used in education, x-ray or photographic process testing, security screening, or scientific research which are stored or disposed of in conformity with procedures established by the department by regulation.

Sec. 18.45.150. PROOF OF RESPONSIBILITY FOR DISPOSAL OF HIGH RADIOACTIVE LEVEL ~~NUCLEAR~~ WASTES REQUIRED. (a) A person may not dispose of high RADIOACTIVE level ~~nuclear~~ wastes in the state unless he has furnished proof to the commissioner of financial ability to care for the disposed RADIOACTIVE ~~nuclear~~ waste material. Financial responsibility may be demonstrated by self-insurance, insurance, surety, or guarantee, under terms the department may prescribe.

(b) Acceptance of proof of financial responsibility under this section expires

(1) one year from its issuance for self-insurance;

(2) on the effective date of a change in the surety bond, guarantee, or insurance agreement; or

(3) on the expiration or cancellation of the surety bond, guarantee, or insurance agreement.

(c) The person whose proof of financial responsibility is accepted by the department under this section shall notify the department at least 30 days before the effective date of a change, expiration or cancellation in the surety bond, guarantee, or insurance agreement. Application for renewal of acceptance of proof of financial responsibility under this section must be filed at least 30 days before the date of expiration.

(d) The department, after notice and hearing, may revoke acceptance of proof of financial responsibility if it determines that

(1) acceptance was procured by fraud or misrepresentation; or

(2) a change of circumstance has occurred, other than a change specified in (b)(1) - (3) of this section, which would have warranted denial of the application.

Sec. 18.45.160. PENALTIES. (a) A person who violates a provision of AS 18.45.130 - 18.45.140 is guilty of a class C felony.

(b) In addition to the penalty prescribed for a class C felony under AS 12.55.035(b)(2) and (c), a corporation which violates a provision of AS 18.45.130 - 18.45.140 is subject to

(1) a penalty of $50,000 for each offense; each day that the violation continues constitutes a separate offense;

(2) the payment to the state of expenses incurred by the state in removing, correcting, or abating the adverse effects of the violation; and

(3) actual damages resulting from the violation.

Sec. 18.45.170. DEFINITIONS. In AS 18.45.100 - 18.45.170,

(1) "commissioner" means the commissioner of environmental conservation;

(2) "department" means the Department of Environmental Conservation;

(3) "high level ~~nuclear~~ RADIOACTIVE waste" means

(A) used nuclear reactor fuel;

(B) waste produced during the reprocessing of used nuclear reactor fuel; and

(C) elements having an atomic number greater than 92 CONTAINING and ~~emitting~~ 10 or more nanocuries per gram;

(4) "low level ~~nuclear~~ RADIOACTIVE waste" means a radioactive waste other than a high level ~~nuclear~~ RADIOACTIVE waste; and

DELETE - THESE ARE TRANSURANIC WASTES

SUGGEST USE OF DEFINITION GIVEN IN SEC 11. AS 46.03.900(30).

(5) "manifest" means a shipping or storage document containing a list of the contents, value, origin, carrier, and destination of the nuclear waste materials to be transported, required to be carried by the person providing transportation of the wastes.

(6) "RADIOACTIVE WASTE" MEANS HIGH LEVEL AND/OR LOW LEVEL RADIOACTIVE WASTE.

* Sec. 7. AS 46.03.250 is amended to read:

Sec. 46.03.250. AUTHORITY. The department shall adopt regulations

(1) establishing standards governing the discharge of low level RADIOACTIVE WASTE radiation [RADIONUCLIDES] to the air, water, land, and subsurface land of the state;

(2) defining LIMITS OF RADIATION EXPOSURE FROM RADIOACTIVE A nuclear waste material which does not constitute a threat to public health or safety and which may be stored or disposed in the state; and

(3) establishing procedures for the storage and disposal of radioactive WASTES materials used in medicine, education, INDUSTRY x-ray or photographic process testing, security screening, or scientific research.

* Sec. 8. AS 46.03.260 is amended to read:

Sec. 46.03.260. USE OF NUCLEAR [ATOMIC] RADIATION. RADIOACTIVE MATERIALS. A person who conducts an operation which results in the discharge of low level RADIOACTIVE WASTE radiation [RADIONUCLIDES] to the air, water, land or subsurface land of the state must obtain a permit from the department before commencing the discharge.

* Sec. 9. AS 46.03.790(a) is amended to read:

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

* Sec. 10. AS 46.03.790(b) is amended to read:

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

* Sec. 11. AS 46.03.900 is amended by adding a new paragraph to read:

(30) "low level ~~nuclear~~ RADIOACTIVE waste" means a radioactive waste other than

(A) used nuclear reactor fuel;

(B) waste produced during the reprocessing of used nuclear reactor fuel; ~~and~~

(C) URANIUM MINE OR MILL TAILINGS; AND

~~(b)~~ (D) elements having an atomic number greater than 92 and ~~emitting~~ CONTAINING 10 or more nanocuries per gram.

* Sec. 12. AS 46.03.020(10)(H) is amended to read:

(H) any other purpose which [SUCH OTHER PURPOSES AS] may be required to implement [FOR THE IMPLEMENTATION OF] the policy declared in AS 46.03.010;

* Sec. 13. AS 46.03.020(10) is amended by adding a new subparagraph to read:

(I) procedures required to handle, transport, treat, store, and dispose of extremely hazardous wastes and hazardous wastes;

* Sec. 14. AS 46 is amended by adding a new chapter to read:

CHAPTER 32. WASTES.

Sec. 46.32.010. DISPOSAL OF EXTREMELY HAZARDOUS WASTES. (a) It is unlawful to dispose of extremely hazardous wastes in the state without a permit issued by the department.

(b) A permit may be issued by the department only for the disposal of extremely hazardous wastes which, when disposed of, will ensure the

protection of human health, livestock, wildlife, property, and the environment.

Sec. 46.32.020. DISPOSAL OF HAZARDOUS WASTES. (a) It is unlawful to dispose of hazardous wastes in the state unless

(1) the waste has been processed to remove its harmful properties to the maximum extent feasible; or

(2) it is disposed of in a manner which will ensure the protection of human health, livestock, wildlife, property, and the environment.

(b) The department shall adopt regulations in accordance with the Administrative Procedure Act (AS 44.62) for the disposal of hazardous wastes to ensure the protection of human health, livestock, wildlife, property, and the environment.

Sec. 46.32.030. TRANSPORTATION OF EXTREMELY HAZARDOUS WASTES. (a) The transportation of extremely hazardous wastes, except for purposes of disposal in accordance with AS 46.32.010(b), is prohibited.

(b) A person may not transport extremely hazardous wastes in the state unless he first obtains a permit from the department. The department shall adopt regulations governing the issuance of permits required by this subsection, and shall establish and implement a system to record by manifest the movement of extremely hazardous wastes which are transported.

(c) The provisions of (a) and (b) of this section do not apply to the transportation of extremely hazardous wastes by the federal government. When the federal government proposes to transport extremely hazardous wastes in the state, the agency of the federal government shall notify the commissioner and the Department of Public Safety of its plans. When notification is received from the federal agency, the commissioner and the commissioner of public safety may take any action

they regard as necessary to protect the health and safety of persons in the vicinity of the route used to transport the extremely hazardous wastes. The notification provisions of this subsection do not apply if advance notice to the commissioner would represent a threat to national security.

Sec. 46.32.040. TRANSPORTATION OF HAZARDOUS WASTES. (a) The department shall establish and implement a system to record by manifest the movement of hazardous wastes in excess of 1,000 kilograms per month which are transported.

(b) A person may not transport hazardous wastes in excess of 1,000 kilograms per month in the state unless he transports the hazardous wastes in accordance with (a) of this section.

(c) The provisions of (a) and (b) of this section do not apply to the transportation of hazardous wastes by the federal government. When the federal government proposes to transport hazardous wastes in the state, the agency of the federal government shall notify the commissioner and the Department of Public Safety of its plans. When notification is received from the federal agency, the commissioner and the commissioner of public safety may take any action they regard as necessary to protect the health and safety of persons in the vicinity of the route used to transport the hazardous wastes. The notification provisions of this subsection do not apply if advance notice to the commissioner would represent a threat to national security.

Sec. 46.32.050. DEPARTMENT TO DEFINE EXTREMELY HAZARDOUS WASTES AND HAZARDOUS WASTES BY REGULATION. The department shall, by regulations adopted in accordance with the Administrative Procedure Act (AS 44.62), classify substances as extremely hazardous wastes and hazardous wastes.

Sec. 46.32.060. PENALTY. (a) A person who violates this chapter

or a regulation adopted under this chapter is guilty of a class A misdemeanor.

(b) In addition to the penalty prescribed for a class A misdemeanor under AS 12.55.035(b)(3) and (c), a corporation which violates this chapter or a regulation adopted under this chapter is subject to

(1) a penalty of $50,000 for each offense; each day that the violation continues constitutes a separate offense;

(2) the payment to the state of expenses incurred by the state in removing, correcting, or abating the adverse effects of the violation; and

(3) actual damages resulting from the violation.

Sec. 46.32.070. DEFINITIONS. In this chapter

(1) "department" means the Department of Environmental Conservation;

(2) "extremely hazardous waste" means a hazardous waste or combination of hazardous wastes which will likely cause the death of, or result in disabling personal injury or serious illness to, a person who has been exposed to it;

(3) "hazardous waste" means a waste, or combination of wastes, which because of its quantity, concentration, or physical, chemical or infectious characteristics may

(A) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or

(B) pose a substantial present or potential hazard to human health, livestock, wildlife, property, or the environment when improperly disposed of;

(4) "manifest" means a shipping or storage document containing a list of the contents, value, origin, carrier, and destination of

the extremely hazardous and hazardous wastes to be transported, required to be carried by the person providing transportation of the wastes.

(5) "waste" means material for which no use or reuse is intended and which is to be disposed of; the term does not include ~~nuclear~~ RADIOACTIVE waste subject to AS 18.45.

* Sec. 15. AS 18.45.010 - 18.45.080 are repealed.

* Sec. 16. Sections 1, 2, 6 - 11, and 15 of this Act take effect immediately in accordance with AS 01.10.070(c).

* Sec. 17. Sections 3 - 5 of this Act take effect on he date of a final court order ruling AS 18.45.100 as enacted by sec. 1 of this Act invalid or unconstitutional.

* Sec. 18. Sections 12 - 14 of this Act take effect July 1, 1981.

Alaska Department of Environmental Conservation

TESTIMONY ON HCS CSSB-29 RELATING TO
CONTROL OF RADIOACTIVE AND HAZARDOUS WASTES

April 1981
Before the House Judiciary Committee

The Department of Environmental Conservation welcomes the opportunity to review and comment on HCS CSSB-29 relating to the transportation, storage and disposal of nuclear and other hazardous wastes material in Alaska. The Department strongly supports legislation on these two important environmental concerns.

This bill passed the Senate in its earlier form as CSSB-29, which at that point was only related to radioactive waste transportation and disposal. We have actively supported the bill throughout the Senate committee hearings, and more recently worked closely with the House Resources Committee on the bill which is before you today. A substantial number of new provisions were added in the bill in radioactive and hazardous waste control. Their efforts are to be commended in attempting to consolidate into one comprehensive bill the desirable features of CSSB-29 on radioactive waste control, the earlier HB-72 relating to radioactive and hazardous waste control, and the provisions of SB 239 which was recently introduced on hazardous waste control.

In reviewing the bill, there are some modifications which if made would make it a strong and more effective bill for controlling radioactive and hazardous waste in Alaska. We would like to present these modifications all of which could be readily made, for your consideration. Five changes are recommended to clarify the intent and/or to make the bill more effective in accomplishing the purposes for which it was originally intended. The reasons for the changes are described below, and we have attached suggested language which would accomplish them:

1. AUTHORITY TO REGULATE THE STORAGE OF HAZARDOUS WASTE

Section 13 (page 8, line 14) provides authority to "handle, transport, treat, store and dispose" of hazardous wastes. However, the following sections 46.32.020-040 only cover the disposal and transportation aspects. To make these sections compatible and to clarify the intent of the legislation, the Department recommends that section 46.32.010 on 46.32.020 include the words "storage, treatment and" which would be added just before "disposal of hazardous wastes" in the section title and in subparagraph (b).

Another slight modification recommended in this section is in subparagraph (a), which places two conditions under which hazardous wastes may be disposed of in the State. If both conditions were to be met before disposal was allowed, it would minimize the amount of wastes to be disposed of in the state as well as protect the environment. We recommend that the word "or" at the end subparagraph (a)(b) (1) be replaced with "and". Suggested wording for Section 46.32.020 is attached for your consideration.

2. AUTHORITY FOR PERMITTING DISPOSAL OF HAZARDOUS WASTES

Section 46.32.010 requires the issuance of permits for the disposal of extremely hazardous wastes, but the following Section 46.32.020 on disposal of "hazardous" wastes does not mention permits. However, the disposal of large quantities of hazardous wastes could easily pose a threat to public health as well as the environment if done inappropriately. In addition, the U.S. Environmental Protection Agency will issue permits for any facility disposing of hazardous wastes in excess of 1000 kg, which they will issue if the state does not have its own permit system.

In order to adequately protect the public health and the environment, as well as to keep the U.S. EPA from being involved in Alaskan hazardous wastes control, the department recommends that the section be revised to provide permit authority for issuing permits for those facilities which dispose of over 500 kgs.

This limit is approximately equal to 2-1/2 barrels of hazardous wastes, and is expected to be the limit at which the federal requirements will be set at shortly. Suggested language is attached which will accomplish this.

3. AUTHORITY TO REGULATE THE SAFE HANDLING AND STORAGE OF HAZARDOUS MATERIAL

The bill currently includes provisions for radioactive and hazardous waste. However, there is one additional area presenting considerable hazards and threat to human health and which is not currently regulated or controlled by any agency. That area is in the long-term storage of hazardous materials.

Much concern was expressed during the recent house resources committee hearing, that the transportation and handling of hazardous materials is already being extensively regulated by the federal Department of Transportation and the Federal Aviation Administration. As a consequence there was no need for the department to duplicate what is already being effectively regulated. The Department concurs that handling and transportation of hazardous materials are very effectively and well covered, and there is no reason to become involved except on a coordinative role. However, there is no agency which is regulating or actively assuring the safe handling and storage of hazardous materials within industrial work places, governmental agencies, commercial establishments and educational facilities. Inappropriate storage can present a substantial hazard to persons working in close proximity, and to those persons who may have to respond to fires and other emergencies in areas where these materials may be.

The Department recommends that authority for establishing criteria and guidance for the safe storage of hazardous materials be added to Section 13 of the bill, as proposed in the attached draft language. If this authority is incorporated into the bill the department would work closely with those persons storing hazardous material, to assure that adequate safeguards are taken. We do not

envision this to be a major regulatory effort. Rather, it would allow the department to provide effective and helpful aid to Alaskans working with these types of materials.

4. AUTHORITY TO MANIFEST THE MOVEMENT OF HAZARDOUS WASTES OF LESS THAN 1000 KILOGRAMS PER MONTH

Section 46.32.040 only provides the authority to manifest hazardous wastes in excess of 1000 kilograms per month this limit was placed in the bill by House Resources, because of their concern that unnecessarily small quantities of some wastes might come under regulation. The Department shares this concern, but the 1000 kilogram per month limitation is an extremely large amount of waste. Much smaller amounts could pose a significant hazard to the public health as well as environment if they are improperly disposed of.

The Department recommends that this limit be replaced by the authority for manifesting waste quantities which may "cause detrimental effects to human health, livestock, wildlife property and the environment." The manifest system is a readily established legal means of tracking wastes from the generator to the ultimate site of disposal, and will do much to reduce the amount indiscriminate dumping which might otherwise occur. We intend to limit its use to only those wastes and quantities which warrant this level of regulation. While our proposed change does not provide a specific quantity below which we would not require a manifest, it would more clearly reflect the concern that hazards to the environment be adequately controlled by the Department. It would also remove an artifical limitation on the department's ability to provide these needed safeguards.

5. DELETION OF EXEMPTIONS FOR FEDERAL GOVERNMENT

The bill currently provides a waiver to the federal government from substantive requirements of the bill in both radioactive and hazardous waste control. This is evidenced in Section 18.45.130(c), Section 45.32.020(c), and Section 46.32.040(c). However, the federal Resource Conservation and Recovery Act of 1976 specifically requires all federal facilities to comply with state and local solid waste and hazardous waste control requirements, to the same extent as any other person or entity is subject to such requirements.

Section 6001 of this Act clearly states that exemptions may only be granted by the President. Consequently we recommend that these three sections be deleted from the bill. This deletion is particularily important in Alaska: There are a large number of Alaskan federal facilities which handle the vast majority of radioactive materials in the state. They are also some of the major generators in Alaska of hazardous wastes.

The department appreciates the opportunity to provide testimony and comment on this highly important bill. With the modifications we have recommended it should become a very effective and important means to safeguard the public health and environment from hazardous materials and wastes. We would be glad to respond to any questions, or provide any additional information which might be requested.

Attachment to

Department of Environmental Conservation

TESTIMONY ON HCS CSSB-29

Suggested changes to HCS CSSB-29

RELATING TO RADIOACTIVE AND HAZARDOUS WASTE

April 1981

1. MODIFICATION OF SECTION 46.32.010 AS FOLLOWS:

Section 46.32.010. STORAGE, TREATMENT AND DISPOSAL OF EXTREMELY HAZARDOUS WASTES. (a) It is unlawful to store, treat or dispose of extremely hazardous wastes in the state without a permit issued by the department.

(b) A permit may be issued by the department only for the storage, treatment and disposal of extremely hazardous wastes which, when disposed of, will ensure the protection of human health, livestock, wildlife, property, and the environment.

2. MODIFICATION OF SECTION 46.32.020 AS FOLLOWS:

Section 46.32.020 STORAGE, TREATMENT AND DISPOSAL OF HAZARDOUS WASTES. (a) It is unlawful to dispose of hazardous wastes in the state unless

(1) the waste has been processed to remove its harmful properties to the maximum extent feasible; and

(2) it is disposed of in a manner which will assure the protection of human health, livestock, wildlife, property and the environment.

(b) The department shall adopt regulations in accordance with the Administrative Procedure Act (AS44.62) for the storage, treatment and disposal of hazardous wastes, including permits for the disposal in excess of 500 kg, to ensure the protection of human health, livestock, wildlife, property, and the environment.

3. MODIFICATION OF SECTION 13 AS FOLLOWS:

AS 46.03.020 (10) is amended by adding a new subparagraph to read:

(I) Handling, transportation, treatment, storage and disposal of extremely hazardous and hazardous wastes, and safe storage of hazardous materials

4. MODIFICATION OF SECTION 46.32.040 AS FOLLOWS:

Section 46.32.040. TRANSPORTATION OF HAZARDOUS WASTES. (a) The department shall establish and implement a system to record by manifest the movement of hazardous waste which may cause detrimental effects to human health, livestock, wildlife, property and the environment.

5. DELETION OF FEDERAL EXEMPTIONS AS FOLLOWS:

The following subsections are deleted:

Subsection 18.45.130 (c)

Subsection 46.32.030(c)

Subsection 46.32.040(c)

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

FISCAL NOTE

I. REQUEST
Bill/Resolution No. HCS CSSB-29
Title Act relating to the disposal of radioactive and hazardous wastes
Requested by Kertulla Date

II. FISCAL DETAIL
Agency Affected Department of Environmental Conservation
Program Category Affected Environmental Conservation
BRU, Program, or Subprogram(s) Affected Env. Quality Management, Env. Quality Operations
(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

	FY 81	FY 82	FY 83	FY 84	FY 85	FY 86
100 PERSONAL SERVICES		388.8	429.4	472.4	519.6	571.6
200 TRAVEL		63.4	55.0	60.5	66.5	73.2
300 CONTRACTUAL		304.4	168.1	184.9	203.4	223.7
400 COMMODITIES		24.7	27.2	29.9	32.9	36.2
500 EQUIPMENT		28.5	31.4	34.5	37.9	41.7
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
TOTAL		809.8	711.1	782.2	860.3	946.4

FUNDING (Thousands of Dollars)

GENERAL FUND		809.8	711.1	782.2	860.3	946.4
FEDERAL FUNDS		(218.8)				
OTHER (Specify Fund Source)						

POSITIONS

FULL TIME		6	6	6	6	6
PART TIME		4	4	4	4	4
TEMPORARY						

III. ANALYSIS (See Fiscal Note Preparation Instructions, Section III)

I. BACKGROUND:

HCS-CSSB-29 will require the establishment of regulations plus controls, to assure proper disposal and handling of hazardous and radioactive wastes throughout the state. Up to now there has been no systematic state effort in controlling either type of waste.

There is very little radioactive waste in the state. Substantially larger quantities of hazardous wastes are present, with the majority of Alaskan generators being small firms and private individuals. However, there is

IV. DATE 3/17/81 PREPARED BY Thomas R. Hanna Thomas R Hanna
AGENCY Department of Environmental Conservation
PHONE 465-2666

Original: Legislative Finance
cc: Budget and Management
Prime Sponsor (First Legislator Named)

33-001 (Rev. 12/80

little widespread understanding or recognition of hazardous waste and its problems by either the general public or industry. The national Resource Conservation and Recovery Act places requirements on only the large generators, transporters, and disposers of hazardous waste, of which there are not many in the state now. Future industrial development will substantially increase the quantity of hazardous wastes.

HCS CSSB-29 requires that all hazardous waste be "processed to remove its harmful properties to the maximum extent feasible." Approximately 80-85% of all hazardous wastes can be rendered harmless through incineration and recycling. The remaining wastes would have to be disposited in a "secure landfill, which does not exist in the state now. Costs for determining acceptable locations are included in this fiscal note.

II. ASSUMPTIONS:

(1) Assume full bill to be enacted.

(2) Technical assistance, training, and public awareness will be emphasized so that general public and industry will be encouraged to use safe methods and procedures.

(3) A control effort to handle small hazardous waste users should also regulate industry covered under federal legislation, thus eliminating federal involvement at little additional cost.

(4) Program is to be 100% supported by state funds, to minimize influence of federal government.

(5) There are hazardous waste disposal site locations within the state which are accessible, capable of being developed and maintined in an environmentally safe manner for an indefinite time period, and acceptable to the public.

(6) 10% inflation assumed in all years after FY-82.

III. PERSONAL SERVICES:

A.	For the Southeast Regional Office: one environmental field officer to provide technical assistance, public awareness, training and conduct inspections (R17 for 10 months)	32.9
B.	For the Southcentral Regional Office (Including Anchorage-Wasilla-Valdez-Kenai): two environmental field officers to provide technical assistance, public awareness, training conduct inspections (One R19 and R17 for 10 months)	70.5
C.	For the Northern Regional Office (including Fairbanks and Prudhoe Bay) two environmental field officers to provide technical assistance, public awareness, training and conduct inspections (One R19 and one R17 for 10 months).	80.6
D.	For the Central Office, an environmental engineer to develop hazardous waste control guidelines, criteria, regulations, training and technical assistance to regional personnel on the proper ways to handle and dispose of hazardous wastes (R19 for 11 months).	44.8
E.	Half-time clerk-typist to support development and maintenance of regulations, plans, training and technical assistance in the	

	Central Office (R8 for twelve months, half-time)	12.3
F.	Clerk Typist support for Regional Offices	32.8
	1. Southeast Regional Office (R8 for 10 months, 1/4-time) 6.3	
	2. Southcentral Regional Office (R8 for 10 months, 1/2-time) 12.3	
	3. Northern Regional Office (R8 for 10 months, 1/2-time) 14.2	
G.	Needed: One person-year from the Dept. of Law, to support inspections and investigations as needed by regional personnel (see fiscal note from Dept. of Law)	
	SUBTOTAL, PERSONAL SERVICES:	273.9

IV. TRAVEL: In support of each field officer position and central office engineer, a total of $6,000 will be needed to provide travel, to carry out technical assistance, inspection/investigations and adequately provide for safe handling of hazardous wastes.

$36.0

V. CONTRACTUAL:

A.	Southeast Regional Office (1 position)	
	Rent	2.7
	Telephone	2.0
	Advertising	.5
	Repair & maintenance of machines	.5
	Equipment Rental (1/4 Lexitron rental)	1.2
	Subtotal	6.9
B.	Southcentral Regional Office (two positions located in the Cook Inlet area)	
	Contractual costs per position will be identical to those shown for the Southeast Regional Office above.	
	Subtotal	13.8
C.	Northern Regional Office (two positions located in the Fairbanks area)	
	Cost per position will be 1.15 times that shown for the Southeast Regional Office above.	
	Subtotal	15.6
D.	Professional Services - to provide for to investigation of specific disposal conditions and/or to provide for cleanup of environmental hazards due to improperly disposed-of wastes,or from emergency spill conditions.	
	Subtotal	$30.0
E.	Engineer and half-time Clerk/Typist in Central Office	
	Rent	4.1
	Telephone	3.0
	Advertising	1.0
	Repair & maintenance of machine	1.5
	Equipment Rental (1/2 Lexitron at $400 per month)	2.4
	Subtotal	12.0

F. Laboratory Support:

Equipment repair, maintenance service	4.0
Sample analysis	2.0
Subtotal:	6.0
SUBTOTAL CONTRACTUAL	84.3

VI. COMMODITIES:

A. In support of positions ($.5 times 6.5 positions)	3.3
B. Laboratory and sampling supplies-Regional Offices ($2.0 times 5 professional regional positions, plus $5.0 for Laboratory analysis supplies)	15.0
SUBTOTAL COMMODITIES	18.3

VII. EQUIPMENT:

A. $2.0 per professional position, to provide for sampling supplies (masks, sampling equipment, and protective devices)	12.0
B. $16.5, for equipment to identify and quantify specific hazardous substances	16.5
SUBTOTAL EQUIPMENT	28.5

VIII. SUMMARY OF NEW FISCAL NEEDS:

Personal services	273.9
Travel	36.0
Contractual	84.3
Commodities	18.3
Equipment	28.5
TOTAL, NEW COSTS NOT INCLUDED IN FY-82 BUDGET	441.0

IX. ADDITIONAL STATE FUNDS TO REPLACE FEDERAL FUNDS IN FY-82 BUDGET

In an effort to avoid unnecessary interference and harassment from the U. S. Environmental Protection Agency, this Fiscal Note replaces all federal funds associated with the hazardous waste control effort. In this way, the state will not be placed under any obligation to carry out unreasonable federal demands for fear of losing grant funds. A tabulation of the hazardous waste federal funds in the FY-82 budget is as follows:

1. Personal Services:

A. 25% of Chief, Air and Solid Waste Management Section	15.6

B.	25% of Clerk/Typist III (Air and SWM Section)	5.6
C.	100% of Hazardous Waste Engineer (Air and SWM Section)	42.6
D.	42% of Planner, Air and Solid Waste Management Section	15.5
E.	20% of Solid Waste-Landfill Engineer (Air and SWM Sec.)	9.8
F.	75% of Hazardous Waste Ecologist/Engineer position (new position)	25.8
	Subtotal, Personal Services	114.9
2.	Travel:	27.4
3.	Contractual:	70.1
4.	Commodities:	6.4
5.	Equipment:	—
	TOTAL:	218.8

X. PROJECTED EXPENSE FOR PROPERLY TREATING HAZARDOUS WASTE

Section 18.31.010 requires that hazardous wastes be rendered harmless before being disposed of in this state, "to the greatest extent feasible". The only effective ways to accomplish this objective is to recycle and/or incinerate these wastes. Through these means about 80-85% of the total hazardous wastes could be rendered harmless, thereby greatly reducing the amount of hazardous wastes to be handled and disposed. No such devices occur in the state, however, and if the state were to establish and operate such a facility it would have costs as below:

FY-82: Review of incinerator designs, location, and completion of feasibility studies. No additional expense, to be handled within program personnel projected above.

FY-83: Purchase of incinerator ($500,000), completion of site location and design, and initiation of operation ($500,000). This cost is not included in fiscal note, because of the possibility that private enterprise might fund and operate this facility.

FY-84: Annual operating expenses of approximately $150,000 per year. This expense would be covered by fees collected from industrial/commercial users.

XI. SECURE LANDFILL FEASIBILITY STUDY

HCS CSSB-29 allows for in-state disposal of those wastes which could not be recycled or rendered harmless. The only way to safely dispose of those wastes which cannot be recycled is in a "secure landfill", which is a carefully located, designed and operated facility which will assure that the deposited wastes will have no adverse effects on the public health or environment. Oregon currently operates a secure landfill in which Alaskan hazardous wastes are disposed.

However, other states are becoming increasingly reluctant to accept out-of-state hazardous wastes, and this reluctance will be more pronounced in years to come, particularly as the quantities of waste increase as will happen in Alaska. As Alaskan industry develops, there will be a critical need to provide for in-state disposal of hazardous wastes.

During FY-82 a feasibility study to identify suitable sites for a secure landfill is needed. This study would be conducted by consultant under contract from the department, to have several alternative sites selected by January, 1982. The feasibility study will cost $100,000, plus $50,000 for sampling of groundwater and soil characteristics at the final candidate site locations (prior to announcing the results of the study).

The costs for development and operation of a secure landfill are not projected in the Fiscal Note because of the possibility that private enterprise and/or industry may operate and fund this facility. The costs are presented for informational purposes only, to provide a full perspective of hazardous waste disposal costs. However, if state funds are needed, a detailed plan of developing the site, including the types of wastes expected to be handled, the means of transportation of the wastes and the associated costs, will be presented to the legislature in the next legislative session.

XII. TOTAL FY-82 COSTS FOR STATE HAZARDOUS WASTE CONTROL PROGRAM

	New Funds	Feasibility Study	State funds to replace federal funds	Total
A. Personal Services	273.9	---	114.9	388.8
B. Travel	36.0	---	27.4	63.4
C. Contractual	84.3	150.0	70.1	304.4
D. Commodities	18.3		6.4	24.7
E. Equipment	28.5			28.5
Total	441.0	150.0	218.8	809.8

League of Women Voters of Alaska

8926 Birch Lane
Juneau, AK 99801
April 1, 1981

The Honorable Fred Brown, Chairman
House Judiciary Committee
Alaska Legislature
Juneau, Alaska 99811

Re: Nuclear and Hazardous Chemical Wastes,
HCS CS SB 29 (Resources)

Dear Representative Brown and Committee Members:

The League of Women Voters of Alaska hartily endorses the present version of SB 29, as passed by the Senate and further amended by the House Resources Committee. We ask that the Judiciary Committee recommend enactment of the bill in its present form, without further amendment.

We do suggest, however, that the siting criteria given in Exhibit A (attached) be considered whenever disposal sites are being approved or permitted. A letter from your Committee, made part of the legislature history, would be an adequate indication of such intent.

Sincerely,

Margaret E. Holland

Margaret E. Holland
Action Chair
League of Women Voters of Alaska

MEH:DEC:rm

Enclosures:
(1) Criteria for Evaluating Suitability of Storage on Disposal Sites for Hazardous and Nuclear (Including Law-Level Radioactive) Wastes
(2) "Nuclear Waste Primer, "League of Women Voters Education Fund, 1980.

Criteria for Evaluating Suitability of Storage or Disposal Sites for Hazardous and Nuclear (including Low-Level Radioactive) Waste

These criteria, developed in April 1980, are an arrangement of national Environmental Quality and Land Use positions to help Leagues judge both the proce is employed in site determination and the suitability of a proposed site.

To ensure safe disposal:

☐ No disposal or storage sites shall be located in natural hazard areas such as floodplains, areas with high seismic or volcanic activity, areas of unstable geologic, ice or snow formations, or areas subject to extensive damage from hurricanes.

☐ There should be an examination of alternative sites, methods of storage and methods of treatment.

☐ Both on and off site monitoring for contamination of ground and surface waters and soils are of the utmost importance.

☐ Containers should be designed to prevent leakage of the material stored or disposed of.

☐ When containers are stored there should be regular inspections for possible leakage.

Siting of waste disposal or storage facilities should not take place in areas of critical concern, which include:

☐ Drinking water supply sources such as reservoirs and other storage facilities and sole source aquifers and watersheds.

☐ Fragile land areas such as shorelines of rivers, lakes and streams; estuaries and bays or wetlands.

☐ Where there are rare or valuable ecosystems or geologic formations, significant wildlife habitat or unique scenic or historic areas.

☐ Areas with significant renewable resource value, such as prime agricultural lands, aquifer or aquifer recharge areas, significant grazing and forest lands.

The waste siting decision-making process should provide for:

☐ Ample and effective public participation, including adequate funding for such participation.

☐ Economic, social and environmental impacts statements so that both decision makers and the public have information on which to base a decision. Secondary land use demands, in addition to the actual site, should be considered — roads, sewers, water, etc.

☐ Site selection in conformance with any adopted comprehensive plan — an example would be an adopted Coastal Zone Management Plan.

☐ Participation and review by all governmental levels to assure conformance with comprehensive plans at each level of government.

☐ Procedures for mediation of intergovernmental conflicts.

Exhibit A

improve the accommodations for the traveling public. (§ 40-10-5 ACLA 1949)

Sec. 18.40.070. Damages for destruction of or injury to shelter cabins. A person who violates § 50 of this chapter is liable in damages for injury sustained by another as a result of the wilful destruction of or injury to a shelter cabin or its contents. (§ 40-10-6 ACLA 1949)

Chapter 45. Atomic Energy.

Article
1. Atomic Energy Development (§§ 18.45.010—18.45.080)

Article 1. Atomic Energy Development.

Section
10. Declaration of intent
20. United States licenses or permits required
30. Conduct of studies concerning changes in laws and regulations with a view to atomic industrial development
40. Appointment of coordinator of atomic development activities
50. Coordination of studies and development activities
60. Injunction proceedings
70. Cooperation
80. Definitions

Sec. 18.45.010. Declaration of intent. (a) The state endorses the action of the Congress of the United States in enacting the Atomic Energy Act of 1954 to institute a program to encourage the widespread participation in the development and utilization of atomic energy for peaceful purposes to the maximum extent consistent with the common defense and security and with the health and safety of the public, and declares that the policy of the state is

(1) to cooperate actively in the program instituted; and

(2) to the extent that the regulation of special nuclear, by-product, and radioactive materials, of production facilities and utilization facilities and of other forms of radiation, and of persons operating these facilities is within the jurisdiction of the state, to provide for the exercise of the state's regulatory authority to conform, as nearly as may be, to the Atomic Energy Act of 1954 and regulations issued under it, so that there may, in effect, be a single harmonious system of regulation in the state.

(b) The state recognizes that the production or utilization of atomic energy and other forms of radiation may result in new conditions calling for changes in the laws of the state and in regulations issued under them with respect to health and safety; working conditions; workmen's compensation; transportation; public utilities; life, health, accident, fire, and casualty insurance; the conservation of natural resources, including wildlife, and the protection of streams, rivers, and airspace from pollution; and declares that the policy of the state is

(1) to adapt its laws and regulations to meet the new conditions in ways that will encourage the healthy development of industries producing or utilizing atomic energy while at the same time protecting the public interest;

(2) to initiate continuing studies of the need for changes in the relevant laws and regulations of the state by the respective departments and agencies of the state responsible for their administration; and

(3) to assure the coordination of the studies undertaken, particularly with other atomic industrial development activities of the state and with the development and regulatory activities of other states and of the government of the United States. (§ 1 ch 119 SLA 1959)

Am. Jur. reference. — 25 Am. Jur., Health, §§ 24 to 27.

Sec. 18.45.020. United States licenses or permits required. No person may manufacture, construct, produce, transfer, acquire or possess a special nuclear material, by-product material, production facility, or utilization facility, or act as an operator of a production or utilization facility wholly within the state unless he has first obtained a license or permit for the activity in which he proposes to engage from the United States Atomic Energy Commission if the commission requires a license or permit to be obtained by persons proposing to engage in the activities. (§ 3 ch 119 SLA 1959)

Sec. 18.45.030. Conduct of studies concerning changes in laws and regulations with a view to atomic industrial development. The following departments and agencies of the state are directed to initiate and to pursue continuing studies as to the need for changes in the laws and regulations administered by it that would arise from the presence within the state of special nuclear, by-product, and radioactive materials, from the operation of production or utilization facilities, and from the generation of radiation, and, on the basis of these studies, to make the recommendations for the enactment of laws or amendments to law administered by it, and the proposals for amendments to the regulations issued by it which it considers necessary:

(1) the Department of Health and Social Services particularly as to hazards to the public health and safety;

(2) the Department of Labor particularly as to hazardous working conditions;

(3) the Department of Labor particularly as to the time and character of proof of claims of injuries and the extent of the compensation allowable;

(4) the Department of Public Works particularly as to the transportation of special nuclear, by-product, and radioactive materials on highways of the state;

(5) the Department of Public Works particularly as to the transportation of special nuclear, by-product, and radioactive materials by common carriers not in interstate commerce and as to the participation by public utilities subject to its jurisdiction in projects for

commercial use;

(6) the Department of Commerce particularly as to the insurance of persons and property from hazards to life and property resulting from atomic development;

(7) the Department of Fish and Game particularly as to the hazards to the natural resources of the state, including wildlife, and as to the protection of rivers, streams, and airspace from pollution;

(8) the Department of Natural Resources particularly as to the hazards involved in the mining of radioactive minerals;

(9) departments and agencies the governor directs and for the purposes specified by him, and other departments and agencies provided by law. (§ 4 ch 119 SLA 1959; am § 6 ch 104 SLA 1971)

Effect of amendment. — The 1971 amendment substituted "Department of Health and Social Services" for "Department of Health and Welfare" in paragraph (1).

As the rest of the section was not affected by the amendment, it is not set out.

Sec. 18.45.040. Appointment of coordinator of atomic development activities. The governor shall appoint a person from the executive branch to serve ex officio as his advisor for atomic industrial development in the state and as coordinator of the development and regulatory activities of the state relating to atomic energy and other forms of radiation, including cooperation with other states and with the government of the United States. The person appointed shall have the title of coordinator of atomic development activities. (§ 5(1) ch 119 SLA 1959)

Sec. 18.45.050. Coordination of studies and development activities. (a) The coordinator of atomic development activities shall coordinate the studies, recommendations, and proposals of the departments and agencies of the state and its political subdivisions required by § 30 of this chapter. So far as may be practicable he shall coordinate the studies conducted, and the recommendations and proposals made, in this state with like activities in other states and with the policies and regulations of the United States Atomic Energy Commission.

(b) The several departments and agencies of the state and its political subdivisions directed by § 30 of this chapter to initiate and pursue continuing studies shall keep the coordinator of atomic development activities fully and currently informed as to their activities relating atomic energy and other forms of radiation.

(c) The coordinator of atomic development activities shall keep the governor and the several interested departments and agencies informed as to private and public activities affecting atomic industrial development and shall enlist their cooperation in taking action to further development consistent with the health, safety and general welfare of the state. (§ 5(2) — (4) ch 119 SLA 1959)

the governor, a person is violating or is about to violate § 20 of this chapter, he may direct the attorney general to apply to the appropriate court for an order enjoining the person from engaging or continuing to engage in the activity and upon a showing that the person has engaged, or is about to engage in the activity, the court may grant a permanent or temporary injunction, restraining order, or other order. (§ 6 ch 119 SLA 1959)

Sec. 18.45.070. Cooperation. The heads of the appropriate agencies may cooperate with the federal government in the administration of this chapter or any matter pertaining to it. (§ 7 ch 119 SLA 1959)

Sec. 18.45.080. Definitions. In this chapter

(1) "atomic energy" means all forms of energy released in the course of nuclear fission or nuclear transformation;

(2) "byproduct material" means radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material;

(3) "production facility" means equipment or a device capable of the production of special nuclear material in quantity of significance to the common defense and security, or to affect the health and safety of the public; or any important component part especially designed for the equipment or device;

(4) "special nuclear material" means plutonium, uranium 233, and uranium enriched in the isotope 233 or in the isotope 235, and any other material which the governor declares by order to be special nuclear material after the United States Atomic Energy Commissioner has determined the material to be special nuclear material; or material artificially enriched by any of the foregoing material;

(5) "utilization facility" means equipment or a device, except an atomic weapon, capable of making use of special nuclear material in a quantity significant to the common defense and security, or in a manner affecting the health and safety of the public, or peculiarly adapted for making use of atomic energy in a quantity significant to the common defense and security, or in a manner affecting the health and safety of the public; or an important component part especially designed for the equipment or device;

(6) "radiation" means gamma rays and X-rays, alpha and beta particles, high-speed electrons, neutrons, protons, and other nuclear particles; but not sound or radio waves, or visible, infrared, or ultra-violet light. (§ 2 ch 119 SLA 1959)

Sec. 18.45.010. Declaration of intent.
Repealed by § 12 ch 172 SLA 1978.

Editor's note. — The repealed section derived from § 1, ch. 119, SLA 1959.
Section 10, ch. 172, SLA 1978, provides: "Regulations adopted under authority of statutes repealed or amended by this Act shall remain in effect until repealed by the Department of Environmental Conservation in consultation within the Department of Health and Social Services."

Sec. 18.45.025. Facilities siting permit required. No person may construct a nuclear fuel production facility, utilization facility, reprocessing facility, or nuclear waste disposal facility in the state unless he has first obtained a permit from the Department of Environmental Conservation. The Department of Environmental Conservation shall adopt regulations governing the issuance of these permits; however, no permit may be issued until

(1) the legislature has approved the regulations by a concurrent resolution concurred in by a majority of the members of each house;

(2) the local government with jurisdiction over the proposed facility site has approved the permit;

(3) the legislature has approved the permit by a concurrent resolution concurred in by a majority of the members of each house; and

(4) the governor has approved the permit. (§ 8 ch 172 SLA 1978)

Cross reference. — As to radiation protection, see AS 18.60.475.

Sec. 18.45.030. Conduct of studies concerning changes in laws and regulations with a view to atomic industrial development. The following departments and agencies of the state are directed to initiate and to pursue continuing studies as to the need for changes in the laws and regulations administered by it that would arise from the presence within the state of special nuclear, by-product, and radioactive materials, from the operation of production or utilization facilities, and from the generation of radiation, and, on the basis of these studies, to make the recommendations for the enactment of laws or amendments to law administered by it, and the proposals for amendments to the regulations issued by it which it considers necessary:

(6) the Department of Commerce and Economic Development particularly as to the insurance of persons and property from hazards to life and property resulting from atomic development;

(am § 77 ch 218 SLA 1976)

Effect of amendment.
The 1976 amendment substituted "Department of Commerce and Economic Development" for "Department of Commerce" in paragraph (6).

As the rest of the section was not affected by the amendment, it is not set out.

Secs. 18.45.040 — 18.45.050.
Repealed by § 12 ch 172 SLA 1978.

Editor's note. — The repealed sections derived from § 5(1)—(3), ch. 119, SLA 1959.
Section 10, ch. 172, SLA 1978, provides: "Regulations adopted under authority of statutes repealed or amended by this Act shall remain in effect until repealed by the Department of Environmental Conservation in consultation with the Department of Health and Social Services."

Sec. 18.45.060. Injunction proceedings. When, in the opinion of the governor, a person is violating or is about to violate AS 18.45.020 or 18.45.025, he shall direct the attorney general to apply to the appropriate court for an order enjoining the person from engaging or continuing to engage in the activity and upon a showing that the person has engaged, or is about to engage in the activity, the court may grant a permanent or temporary injunction, restraining order, or other order. (§ 6 ch 119 SLA 1959; am § 9 ch 172 SLA 1978)

Effect of amendment. — The 1978 amendment substituted "AS 18.45.020 or 18.45.025, he shall" for "AS 18.45.020, he may."
Editor's note. — Section 10, ch. 172, SLA 1978, provides: "Regulations adopted under authority of statutes repealed or amended by this Act shall remain in effect until repealed by the Department of Environmental Conservation in consultation with the Department of Health and Social Services."

Chapter 50. Vital Statistics Act.

Article 3. Registration Requirements, Procedures and Certificates.

Section
280. Court reports of divorce, dissolution and annulment

Sec. 18.50.280. Court reports of divorce, dissolution and annulment. (a) For each dissolution, divorce and annulment of marriage granted by a court in the state the clerk of the court shall prepare and file a certificate of dissolution, divorce or annulment with the bureau, on forms prescribed and furnished by the bureau. The petitioner or plaintiff shall furnish the court with the information necessary to complete the certificate, and the furnishing of this information is prerequisite to the issuance of a decree.

(b) Before the 11th day of each month the clerk of the court shall forward to the bureau the certificate of each dissolution, divorce and

FEBRUARY 1981

HAZARDOUS WASTES

Information From Notifiers

	Code	Chemical	Number of Facilities				Amount of Waste Generated/ Month
			North	Central	South	Total	
1.	D000	Non-listed Toxic Wastes	12	15	1	28	28,000 kg
	D001	Non-listed Ignitable Wastes	10	18	1	29	29,000 kg
	D002	Non-listed Corrosive Wastes	8	11	1	20	20,000 kg
	D003	Non-listed Reactive Wastes	6	3		9	9,000 kg
			36	47	3	86	86,000 kg
		Hazardous Wastes from Non Specific Sources					
2.	F001	Spent halo chlorides + sludge fm gray foundri	9	8	1	18	18,000 kg
	F002	Halo solv + solv Rec still bottoms	3	5		8	8,000 kg
	F003	Non-Halgenatd solv & solv rec still bottoms		5		5	5,000 kg
	F005	Non-Halgenated solv & solv rec still bottoms		4		4	4,000 kg
	F017	Paint residues generated from industrial painting	2	1		3	3,000 kg
	F018	Wastewater treatment sludge fm industrial painting	2	2		4	4,000 kg
			16	25	1	42	42,000 kg
		Petroleum Refining					
3.	K048	DAF fm oily water sewer petro refin		2		2	2,000 kg
	K049	Slop oil fm oily water sewer petro refin		6		6	6,000 kg
	K050	Petro refin exc. bundle cleanup solv		3		3	3,000 kg
	K051	API sludge fm oily sewer petro refin.		5		5	5,000 kg
	K052	Bottoms (leaded) fm petro refin Industry		4		4	4,000 kg
				20		20	20,000 kg

Information From Notifiers (continued)

	Code	Chemical	Number of Facilities North	Central	South	Total	Amount of Waste Generated/ Month
		Acute Hazardous Wastes (small quantity exclusion)					
4.	P001	3-(alpha-acetonybenxyl) 4- hydroxycoumarn	1			1	1 kg
	P008	4-aminophyridine or avitrol, Phillips 1861		1		1	1 kg
	P022	Carbon Disulfide		1		1	1 kg
	P030	Cyanides		1		1	1 kg
	P035	2,4 Dichlorophenoxyacetic	2	1		3	3 kg
	P037	Dieldrin*		1		1	1 kg
	P098	Potasium Cyanide	2			2	2 kg
	P105	Sodium Azide or Smite	5	2 7		2 12	2 kg 12 kg
		Toxic Waste					
5.	U002	Acetone (I) Amitrole or 3-aminos 5-IH-1	6	4		10	10,000 kg
	U011	Amitrol or 3-amino 5-IH-1,2,4-Triazole, Hydrate		1		1	1,000 kg
	U012	Aniline (1)		1		1	1,000 kg
	U013	Asbestos		4		4	4,000 kg
	U022	Carbon Disulfide		2		2	2,000 kg
	U031	N-Butyl Alcohol		2		2	2,000 kg
	U036	Chlordane		2		2	2,000 kg
	U038	Chlorobenzilate		1		1	1,000 kg

(Continued)

Code	Chemical	Number of Facilities				Amount of Waste Generated/ Month
		North	Central	South	Total	
U043	Chloroethene or vinyl Chloride ether		1		1	1,000 kg
U044	Chloroform (I,T)		3		3	3,000 kg
U061	DDT		1		1	1,000 kg
U066	1,2 Dibromo-3-Chloropropane		1		1	1,000 kg
U069	Di-N-Butyl-Phthalate		1		1	1,000 kg
U072	1,4-Dichlorobenzene		1		1	1,000 kg
U080	Dichloromethane		2		2	2,000 kg
U081	2,4-Dichlorophenol		1		1	1,000 kg
U092	Dimethylamine		1		1	1,000 kg
U102	Dimethyl Phthalate		1		1	1,000 kg
U112	Ethyl Acetate		1		1	1,000 kg
U117	Ethyl ether (I,T)		1		1	1,000 kg
U122	Formaldehyde	1	6		7	7,000 kg
U123	Formic Acid (C.T)		1		1	1,000 kg
U127	Hexachlorobenzene		1		1	1,000 kg
U132	Hexachlorophene		1		1	1,000 kg
U133	Hydrazine		1		1	1,000 kg
U134	Hydrofluoric Acid (C,T)		3		3	3,000 kg
U140	Isobutyl Alcohol		1		1	1,000 kg
U144	Lead Acetate		2		2	2,000 kg
U148	Haleic Hydrazide		1		1	1,000 kg
U151	Mercury	1	3		4	4,000 kg

(continued)

Code	Chemical	Number of Facilities				Amount of Waste Generated/ Month
		North	Central	South	Total	
U154	Methanol or Methyl Alcohol		3		3	3,000 kg
U158	4,4'-Methylene-BIS-1 (2-chloroaniline)		1		1	1,000 kg
U159	Methyul Isobutol Ketone	1	2		3	3,000 kg
U161	Methyl Ethy Ketone		1		1	1,000 kg
U162	Methyl Methacrylate	1			1	1,000 kg
U165	Naphthalene		2		2	2,000 kg
U169	Nitrobenzene (I,T) or Nitrobenzene (1)		1		1	1,000 kg
U170	4-Nitrophenol		1		1	1,000 kg
U188	Phenol or carbolic acid, hydroxybenze		3		3	3,000 kg
U196	Pyridine		1		1	1,000 kg
U201	Resorcinol		1		1	1,000 kg
U210	Tetrachloroethane		1		1	1,000 kg
U211	Tetrachloromethane or carbon tetrachloride		1		1	1,000 kg
U218	Trioacetamide		1		1	1,000 kg
U220	Toluene	1	6		7	7,000 kg
U222	D-Toliudine Hydrochloride		1		1	1,000 kg
U223	Toluene Diisocyanide		1		1	1,000 kg
U225	Tribromomethane		1		1	1,000 kg
U226	1,1,1-Dichloromethane	6	4		10	10,000 kg
U227	1,1,2-Trichloroethene		2		2	2,000 kg
U228	Trichloroethene		3		3	3,000 kg

U233	2,4,5-Trichlorophenoxyprionic acid alpha, alpha, alpha-trichlorotoluene (see U023)Triclene see U228	2			2	2,000 kg
U239	Xylene	1	2		3	3,000 kg
	Total Toxic Waste	20	91	0	111	111,000 kg
	Total Wastes	77	190	4	271	259,012 kg/month or
		(28%)	(70%)	(2%)	(100%)	569,826 lbs/month or 285 tons/month or 3,419 tons/year

"high level radioactive waste" means used reactor fuel or the radioactive wastes produced during the reprocessing of used reactor fuel, including transuranic elements of 10 of more nanocuries per gram.

"low level radioactive wastes" means wastes other than uranium mine or mill tailings, spent fuel, or high level wastes. Low level wastes contain radionuclides emitting primarily alpha, beta and gamma radiation, and less than 10 nanocuries per gram of transuranic elements.

"transuranic element" means any element having an atomic number greater than that of uranium (92).

League of Women Voters of Alaska

8926 Birch Lane
Juneau, AK 99801
February 12, 1981

The Honorable Terry Gardiner and
Fred Zharoff, Co-Chairmen
House Resources Committee
Alaska Legislature
Juneau, AK 99811

Re: House Bill 72 (Hazardous and Nuclear Wastes)

Dear Representatives Gardiner and Zharoff & Committee Members:

The League of Women Voters of Alaska supports enactment of House Bill 72, especially proposed new AS 46.03.844 (prohibiting in-state storage of high level nuclear waste material).

We do ask, however, that the Committee consider incorporating into the legislative history, as guidance to the Department of Environmental Conservation when drafting its facility siting permit regulations pursuant to AS 18.45.025, the League's "criteria for evaluating suitability of storage or disposal sites for hazards and nuclear (including low-level radioactive) waste." A copy of these criteria is attached as Exhibit A. As the title implies, these criteria are applicable not only to to nuclear waste storage and disposal sites, but also to hazardous chemical waste storage and disposal sites. Presumably the only nuclear waste storage facilities which could be permitted (under the legislation written) would be for storage of <u>low level</u> radioactive waste and the League's "criteria" apply to those facilities as well.

With respect to hazardous chemical waste storage and disposal facilities, the League has not attempted, in preparing these comments, to analyze House Bill 72 for consistency with the federal Resource Conservation and Recovery Act (RCRA) and pertinent regulations thereunder (e.g., 40 CFR Part 123, State Programs), so that the resulting Alaska statutes would enable the State to take over the

implementation of RCRA in Alaska if that is desired. Such an analysis is recommended, and the Department of Environmental Conservation (based on studies it has under way) may be able to provide valuable comments in that regard. We would not wish to see the nuclear waste provisions of the bill delayed, however, awaiting lengthy analysis of the chemical waste portions.

The Committee's attention is invited to a possible problem posed by proposed AS 46.03.842, which prohibits transportation of all nuclear waste material in this state except for purposes of disposal outside the state. We question whether it was not the intent to prohibit in-state transportation of high level nuclear waste material in the state. The present wording will prohibit all in-state transport of even those low level radioactive materials used in medicine, education or scientific research, which presumably should be taken away from the Alaskan institutions or hospitals where they have been used and stored in a suitably permitted Alaskan disposal facility limited to low level radioactive materials storage. Do Alaskans prefer to continue storing our low-level radioactive wastes in the State of Washington indefinitely, or should we be taking responsibility ourselves for storage of the low-level radioactive wastes we generate?

Finally, the Committee should be aware that since the A.L.I.V.E. decision, statutory provisions for the Legislature to approve regulations by the mechanism of a concurrent resolution no longer have any legal effect. State v. A.L.I.V.E. Voluntary, 606 P.2d 769 (Alaska 1980). We are referring specifically to AS 18.45.025(b)(1). It may be that Subsection (b)(3), concerning legislative approval of a facility permit by concurrent resolution, has also been affected by the A.L.I.V.E. decision. Probably Assistant Attorney General Jon Tillinghast could answer this question.

We are pleased that the present statute as amended will afford opportunities for meaningful citizen participation; first, when the regulations to be issued by the Department have been drafted and are out for public comment; and second, when municipalities hold their public hearings to develop the municipality's decision on a permit for a specific proposed facility (site).

Under these regulations, the Department will decide whether these facility permits are Class 1 or Class 2 permits. As the procedural regulations are presently drafted, Class 1 permits can be issued without any public notice nor notice to local government. Furthermore, some of the facility sites may be located in the unorganized borough, where there is no municipality involved under AS 18.45.025(b)(2). For the sake of obtaining adequate interagency and public participation in the individual siting permit decision, we believe that permits for hazardous chemical waste storage facilities and for radioactive (even low level) waste storage facilities should be Class 2 permits.

Thank you for considering our comments.

Sincerely yours,

Elizabeth Cavadra
for Margaret E. Holland, Action Chair
League of Women Voters of Alaska

MEH:DEC:rm

Enclosure ("Nuclear Waste Primer," League of Women Voters Education Fund, 1980, 2 copies)

Criteria for Evaluating Suitability of Storage or Disposal Sites for Hazardous and Nuclear (including Low-Level Radioactive) Waste

These criteria, developed in April 1980, are an arrangement of national Environmental Quality and Land Use positions to help Leagues judge both the process employed in site determination and the suitability of a proposed site.

To ensure safe disposal:

☐ No disposal or storage sites shall be located in natural hazard areas such as floodplains, areas with high seismic or volcanic activity, areas of unstable geologic, ice or snow formations, or areas subject to extensive damage from hurricanes.

☐ There should be an examination of alternative sites, methods of storage and methods of treatment.

☐ Both on and off site monitoring for contamination of ground and surface waters and soils are of the utmost importance.

☐ Containers should be designed to prevent leakage of the material stored or disposed of.

☐ When containers are stored there should be regular inspections for possible leakage.

Siting of waste disposal or storage facilities should not take place in areas of critical concern, which include:

☐ Drinking water supply sources such as reservoirs and other storage facilities and sole source aquifers and watersheds.

☐ Fragile land areas such as shorelines of rivers, lakes and streams; estuaries and bays or wetlands.

☐ Where there are rare or valuable ecosystems or geologic formations, significant wildlife habitat or unique scenic or historic areas.

☐ Areas with significant renewable resource value, such as prime agricultural lands, aquifer or aquifer recharge areas, significant grazing and forest lands.

The waste siting decision-making process should provide for:

☐ Ample and effective public participation, including adequate funding for such participation.

☐ Economic, social and environmental impacts statements so that both decision makers and the public have information on which to base a decision. Secondary land use demands, in addition to the actual site, should be considered — roads, sewers, water, etc.

☐ Site selection in conformance with any adopted comprehensive plan — an example would be an adopted Coastal Zone Management Plan.

☐ Participation and review by all governmental levels to assure conformance with comprehensive plans at each level of government.

☐ Procedures for mediation of intergovernmental conflicts.

Exhibit A

TO: House Resources Committee

FROM: League of Women Voters of Alaska

RE: H.B. 72: Erratum for LWVAK Letter of February 12

DATE: February 12, 1981

In the final text of our letter of February 12, we unintentionally omitted some lines on page 2, last paragraph. The first sentence of that paragraph should read:

"We are pleased that the present statute as amended will afford opportunities for meaningful citizen participation; first, when the regulations to be issued by the Department have been drafted and are out for public comment; and second, when municipalities hold their public hearings to develop the municipality's position regarding a permit for a specific proposed facility site."

The underscored portion is the part we unintentionally omitted.

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

TESTIMONY ON HB-72

RELATING TO THE DISPOSAL OF RADIOACTIVE AND HAZARDOUS WASTES

FEBRUARY 13, 1981

The Department of Environmental Conservation welcomes the opportunity to review and comment on HB-72, relating to the transportation, storage, and disposal of nuclear and other hazardous waste material in Alaska. The Department strongly supports legislation on these two important environmental concerns.

Before getting into our detailed testimony, we would like to indicate that there is other legislation relating to hazardous and radioactive wastes. SB-29, which is now in the Senate Judiciary Committee, covers the transportation and disposal of nuclear waste - our comments today on nuclear wastes will be similar to our earlier testimony on SB-29 which we also support. In addition, the Administration is about to submit a hazardous waste bill within the next one to two weeks. We hope that all of these bills will be made compatible with each other, and possibly consolidated into one comprehensive bill which is suggested by HB-72. We would like to now present our testimony on the bill (HB-72), first discussing the portions dealing with ardioactive wastes, and then discussing that portion dealing with hazardous wastes.

Radioactive wastes:

The portion of the bill relating to radioactive wastes (Section 18.45.025 and 45.03.842-844) is similar to SB-29, which has undergone several hearings

already in this legislative session. These sections require that any new facility producing, using, or disposing of high level nuclear waste material must first obtain a permit from the department. It also requires that the department adopt regulations governing issuance of these permits and that these regulations and any permits cannot be issued unless the legislature, local government, and governor have given approval. As written, this portion of the bill will clearly state the legislature's intent that these highly toxic wastes should not be disposed of in Alaska. The Department supports this policy, and would like to recommend several relatively minor changes in wording, to avoid potential problems which are otherwise likely to result:

(1) As written, Section 18.45.025 may be in conflict with the recent State Supreme Court decision concerning legislative review and approval of regulation and permits, in particular subsections (1) and (3). We have attached SB-29 which eliminated these two conditions, along with a copy of our testimony on that bill. We understand that the Senate Judiciary Committee is now considering language which would be compatible with the court case and yet still provide for legislative oversight on this important environmental issue. This Committee might want to consider changes to this portion of the Act to make it compatible with the court decision.

(2) Section 46.03.842 covers transportation of "nuclear wastes". As it is now written, it will also prohibit nuclear materials used for medicine, industry, and research, much of which is low-level material which could adequately transported and safely deposited in properly constructed landfills without posing a threat to health or the environment. Especially considering the likely increase in growth in the state and the need for

these activities, we recommend that this section refer only to high-level nuclear wastes, by including "high-level" in front of "nuclear wastes" in the section. This wording is included on the attachment to this testimony.

(3) The Committee should be aware that there are other existing statutes relating to the disposal of radioactive wastes: AS 46.03.250 and AS 46.03.260 also cover the adoption, regulation, and issuance of permits for disposal of radioactive wastes. In an effort to clarify the jurisdiction of these statutes with those proposed in HB-72, the department recommends that a slight housekeeping amendment be added to the bill to make these statutes to apply only to low-level radioactive wastes. The suggested changes to these statutes are also included on the attachment, which would then allow the department to regulate the disposal of low-level radioactive wastes through regulation and permit, whereas high-level nuclear wastes would come under the considerably more stringent requirements of other sections in this bill.

Hazardous Wastes:

The portion of the bill dealing with all hazardous wastes would provide the department explicit authority to adopt regulations for the safe disposal of hazardous wastes in the state. At this time there are no detailed standards or criteria established in Alaska covering hazardous materials, yet these substances can easily cause a threat to public health and environment if improperly handled, transported, or disposed of.

Hazardous wastes are generated by virtually every part of the Alaskan economy. Not only does major industry generate these materials, but they also are generated by small businesses and commercial establishments, government operations, and virtually every individual in the state. These wastes can include anything which is ignitable, reactive, toxic or corrosive, and would include such common substances as paint thinners, wood preservatives, acids, and a wide variety of chemicals and petroleum substances which can be hazardous if not properly handled and disposed of. However, there is very little widespread knowledge of how these materials should be handled. Worse yet, there are few adequate disposal facilities (none in Alaska) which can handle these substances without eventually causing a hazard to the environment.

The department very strongly supports the need for regulations and safeguards in this environmental effort, and to have specific legislative intent defined in the Alaska statutes. This currently does not exist except for general environmental protection authorities as stated in AS 46.03.020(10).

One concern on HB-72 is that Section 18.31.010 would make it unlawful to dispose of hazardous waste in the state unless "the waste has been processed to remove its harmful properties". The department strongly supports the need to reduce these hazardous to the maximum extent possible, and this can be done through recycling and/or incineration. Through these means about 80-85% of the total volume of hazardous wastes can be eliminated or rendered harmless, provided that proper facilities are available. However, the remaining 15-20% of the wastes will still need some means

ATTACHMENT TO

DEPARTMENT OF ENVIRONMENTAL CONSERVATION'S

TESTIMONY ON HB-72

SUGGESTED CHANGES TO HB-72

RELATING TO RADIOACTIVE AND HAZARDOUS WASTES

ADDITION OF "HIGH-LEVEL" TO SEC. 46.03.842 AS FOLLOWS:

Section 46.03.842. TRANSPORTATION OF NUCLEAR WASTE MATERIAL. The transportation of high level nuclear waste material in the state, except for purposes of disposal outside the state, is prohibited.

MODIFICATION OF SEC. 18.31.010 AS FOLLOWS:

Section 18.31.010. DISPOSAL OF HAZARDOUS WASTE PROHIBITED. It is unlawful to dispose of hazardous waste in the state, unless it has been subjected to best available disposal techniques and cannot be rendered harmless, its harmful properties cannot be removed or the wastes recycled. Disposal shall be in accordance with regulations adopted by the department, and done in such a manner as to protect the public health, property, livestock, wildlife and the environment.

ADDITION OF THE FOLLOWING NEW SECTIONS:

Sec. 46.03.250. AUTHORITY. The department shall adopt regulations establishing standards governing the discharge of low level radiation (RADIONUCLIDES) to the air, water, land and subsurface of the state.

Sec. 46.03.260. USE OF Nuclear ATOMIC RADIATION. A person who conducts an operation which results in the discharge of low level nuclear radiation (RADIONUCLIDES) to the air, water, land or subsurface land of the state must obtain a permit from the department before commencing the discharge.

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Testimony on SB-29

Relating to the Disposal of Radioactive Wastes

February 4, 1981

The Department of Environmental Conservation welcomes the opportunity to review and comment on SB-29, relating to the disposal of radioactive wastes in Alaska. We support this bill, and feel that it will provide much-needed clarification to existing Alaska Statutes relating to the handling and disposal of nuclear wastes.

As written, SB-29 will accomplish four things. First, it will eliminate certain aspects of the currently existing Alaska Statute 18.45.025 which would be found to be unconstitutional under the terms of a recent state supreme court decision. These changes would take the legislature out of the formal process of reviewing and approving regulations and permits relating to the disposal of nuclear wastes. However, the Department would still have to obtain local government and governor approval to either activity. These conditions are retained from the present AS 18.45.025, and are supported by the Department as desirable preconditions for issuing permits for high level nuclear activities.

The second thing accomplished by the bill will be to prohibit the disposal of high level wastes. This portion of the bill will clearly indicate the legislature's intent that these highly toxic wastes should not be disposed of in Alaska.

The third part of the bill, which was added in the Senate Resources Committee, will amend AS 46.03.250 and AS 46.03.260 to apply to low level radiation only. This change will eliminate overlapping jurisdictions which currently exist between these statutes and AS 18.45.025, which is included in the first part of this bill. The Department supports this change, which will clarify the legislature's intent on regulating low level radioactive waste disposal.

The last effect of this bill will be to prohibit the transportation of nuclear wastes in the state, except for the purpose of disposal outside of the state. The Department supports this portion of the bill, with the understanding that its intent is to apply to high level wastes only. Low level radiation is used in numerous applications in Alaska, primarily in research, medicine and instrumentation, and transportation of these materials can be done in a safe manner as long as adequate handling procedures are followed. These low level materials were specifically excluded from the definition of "high level nuclear waste material" found in the bill. To clarify this portion of the bill, the Department recommends that the words "high level" be added to the proposed AS 18.45.027 as follows:

"Section 18.45.027. TRANSPORTATION OF NUCLEAR WASTE MATERIAL. The transportation of high level nuclear waste material in the state, except for purposes of disposal outside of the state, is prohibited."

The Department thanks the Committee for consideration of our comments, and we would be glad to respond to any questions or provide additional information.

of disposal. While it would be nice if other states would take these wastes, the trend across the country is that fewer and fewer waste disposal sites (as well as states) are willing to take on the burden of waste disposal from other states.

This trend is likely to continue, and it may be possible out-of-state disposal sites would not be available to Alaskan wastes within the next five years. Consequently, the department recommends that modifications be made to Section 18.31.010 to allow for the disposal of hazardous wastes within the state but only under very carefully prescribed conditions, and at the same time require the best available disposal practices be used so that the amount and risk of these wastes will be minimized. Suggested language is attached to our testimony which should accomplish these two objectives.

This bill will require a fiscal note, to cover the expense of field and technical personnel to help the Alakan public and industry in properly disposing of these materials. This note will be provided to the Committee no later than February 18, along with an explanation of what is covered in the fiscal note and how the Department will establish an effective hazardous waste control program under this legislation.

The department thanks the committee for consideration of our comments and for the opportunity to present oral testimony on this bill. We would be glad to respond to any questions or provide any additional information which might be requested.

A M E N D M E N T

In the SENATE BY RODEY

To: SB 29

Page 1, line 13:

After "Conservation" insert "to construct the facility on land designated by the legislature under (b) of this section".

Page 1, after line 13:

Insert

"(b) The legislature shall designate by law the land in the state on which a nuclear fuel production, utilization, reprocessing or disposal facility may be located."

Page 1, line 14:

Change "(b)" to "(c)"

The politics of nuclear waste management

As the AEC's experience in Kansas and the more recent history of WIPP plainly demonstrate, there is more to nuclear waste management than solving technical problems. The process by which decisions are arrived at and the degree of trust and mutual regard between levels of government and between citizens and their governments count just as much in determining the outcome of struggles over nuclear waste and, indeed, the future of nuclear power.

There is a natural human tendency for people to want the benefits of nuclear power without suffering the worries or discomforts or risks of coping with the nuclear leftovers. And there is an equally natural tendency on the part of federal officials to want to make decisions without hordes of citizens, or even another set of officials, looking over their shoulders and second-guessing them. But citizens and state and local governments are rightful participants in these decisions. And the principal goal of any political arrangement must be to make it possible for them to play their parts well. It is equally imperative that the net effect of these negotiations and the decisions arising from them be a public perception that risks have been assessed with care and candor and that burdens are being borne equitably.

The state-federal stand-off

While many states are still receptive to the construction of nuclear power plants, few, if any, are interested in furnishing a site for a permanent HLW (and spent fuel) repository. In fact, more than a dozen states, responding to pressure from citizens, have enacted laws that either flatly prohibit or make difficult the establishment within their borders of disposal facilities for either HLW or LLW radioactive

waste. And at least 15 more states, according to NRC, are thinking of following suit.

Why do so many state and local governments want to restrict or prohibit nuclear waste disposal (and even temporary storage)? One major reason is that they believe that the federal government has not made enough progress toward solving the management problems. If these localities are going to have radioactive wastes stored or permanently deposited within their borders, they want assurances that the facilities will be properly managed *now* and *in the future* and will pose no significant risks to citizens.

Adverse experiences with other government projects involving hazardous substances have made states extremely wary of saying yes to nuclear waste facilities. Residents of western states, which have the most favorable conditions for nuclear waste disposal—suitable geology, dry climate and sparse population—are in an especially mutinous mood. These states have been the sites for many hazardous federally sponsored activities—above-ground atomic bomb tests . . . uranium mining . . . milling and tailings disposal . . . nerve gas production, testing and storage. As one Westerner put it, "The government has used the wide open spaces as a dumping ground for almost four decades and has inflicted a lot of wounds on us. Well, we've just had enough."

And the impacts of these activities on local populations are just beginning to show up. For instance, recent investigations into the effect of atomic bomb tests conducted in the 1950s revealed that radioactive fallout may have caused an increase in thyroid cancers in southern Utah, Nevada and Arizona during the 1960s. Although these studies are inconclusive, the widespread publicity they received has made people in western states still more uneasy about the prospect of becoming disposal sites for nuclear wastes.

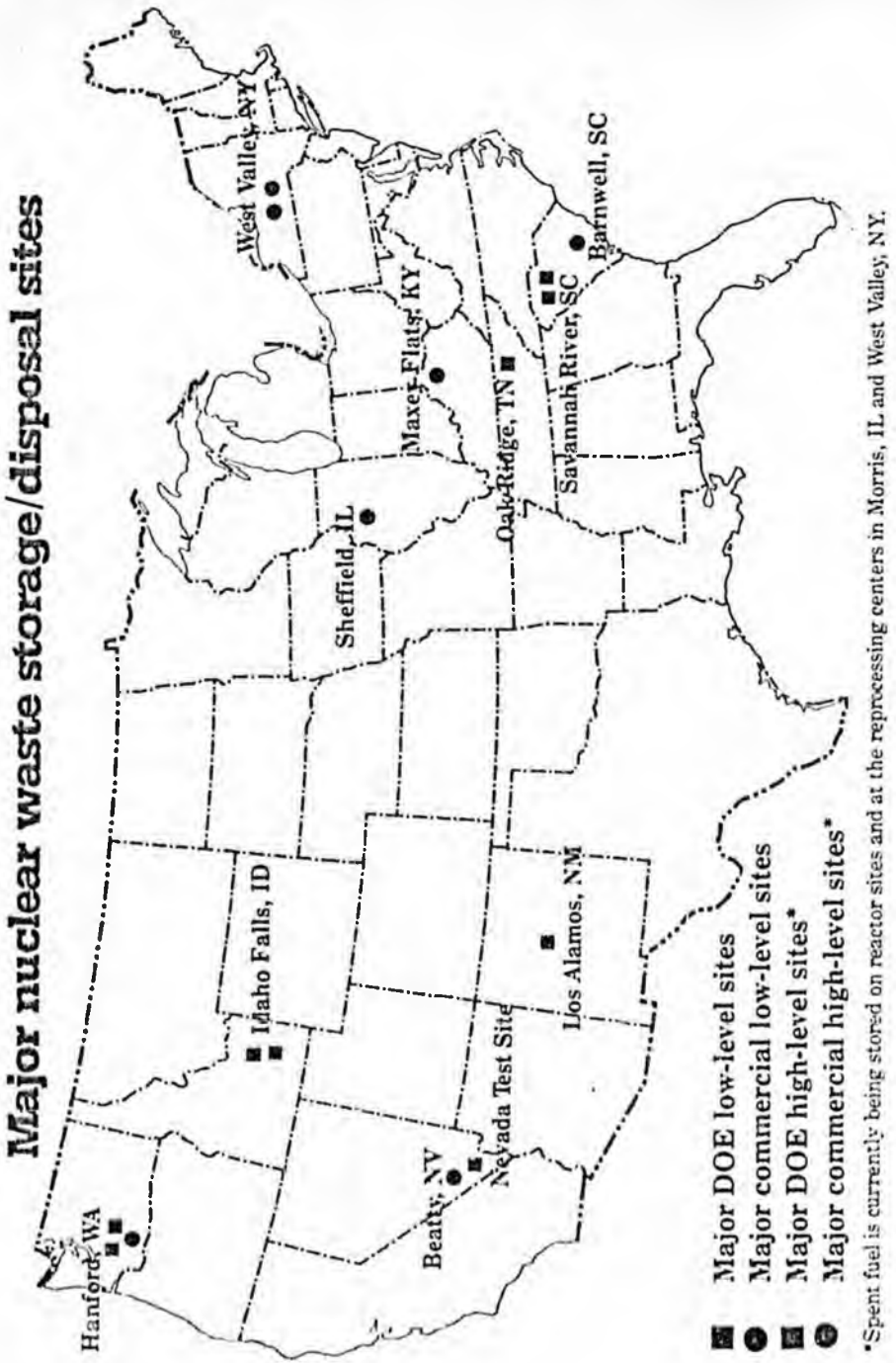
Where, then, can the U.S. government locate a repository? The General Accounting Office (GAO) reported in 1979 that the federal government could obtain land for a repository within any state without [illegible] that state's consent, a finding that calls into question the legality of state laws on the books. A bill has since been introduced in Congress to give states explicit "veto" power over waste facilities. It would require DOE to:

—notify a state of its intent to explore for a radioactive waste disposal site;

—enable state officials and citizens to review technical, environmental and safety questions during the planning process; and

—grant the state the right to refuse the repository after review, through a public referendum or vote of the state legislature.

Proponents of the legislation believe that it will force a thorough and complete examination of all technical and social issues and will be



more likely to lead to a federal decision based on these considerations rather than on what is most expedient.

Some members of Congress believe that states don't need this express veto power because they already have a "de facto" veto, since there are many different ways a state can block or delay federal activities. They want, instead, to give states incentives, such as money or tax breaks, for accepting repositories. Western states generally oppose "special incentives," while the central and eastern states like the idea. All states, however, want the federal government to pay "compensation for the direct and indirect costs of repository siting."[13]

A national policy

Recognizing the urgent need to resolve nuclear waste issues, President Carter in 1978 set up the Interagency Review Group (IRG) as a first step toward strengthening and accelerating the federal nuclear waste management program. Its job was to formulate policy recommendations for long-term management of nuclear wastes.

The final IRG report and recommendations, issued in March 1979, formed the basis of the nation's first comprehensive radioactive waste management program, announced by President Carter on February 12, 1980. Key elements, described below, reflect an attempt to give states a voice, but not an overriding voice, in federal siting decisions, to coordinate and speed federal agency actions and to give citizens, as well as lower levels of government, access points for influencing federal decisions.

■ **State Planning Council** The President created, by executive order, a State Planning Council to advise the executive branch and work with Congress in making and implementing decisions on interim waste management and permanent disposal. The council has 18 members including eight governors, five other state and local government officials, a representative from an Indian tribe, and the heads of EPA and the Departments of Energy, Interior and Transportation. Governor Richard Riley of South Carolina was appointed as its first chair. This council is expected to play a key role in helping to work out the political accommodations between "the feds" and state and local officials so that the radioactive waste management program can go forward.

■ **Consultation and concurrence** Under the framework of consultation and concurrence, a host state will have a continuing voice in the siting, design and construction of a permanent HLW repository.

■ **Interim planning strategy** Pending reviews required by the

National Environmental Policy Act (NEPA), the Administration is adopting an interim planning strategy for the disposal of HLW and TRU waste that relies on geologic repositories. Immediate attention will focus on identifying four to five potential sites for permanent repositories in a variety of different geologic environments with diverse rock types. This effort will be supported by a comprehensive research and development program. At least one site will be selected by about 1985 for development as a licensed full-scale repository. It should be operational by the mid-1990s. This program will be technically conservative—that is, experience and information gained at each stage will be reviewed and evaluated to determine if there is enough knowledge to proceed with the next stage of development. Site selection will also be governed by NEPA, which means there will be full public discussion of site conditions and alternatives.

■ **Away-from-reactor (AFR) facilities** The safe interim storage of commercial spent fuel from nuclear power reactors will continue to be the responsibility of the utilities operating these plants until a permanent geologic repository exists. However, the Administration will press for legislation to build or acquire one or more AFR facilities for those utilities unable to expand their storage capabilities and for limited amounts of foreign spent fuel. The President stressed that interim spent fuel storage is not an alternative to permanent storage.

■ **LLW disposal system** DOE will work with the states in their efforts to establish a regional network of LLW disposal sites. The State Planning Council will give LLW management early and high-priority attention.

■ **Expanded NRC licensing authority** The Administration will submit legislation to extend NRC's licensing authority to include storage of spent fuel; disposal of *all* TRU waste; and disposal of nondefense LLW in any new government owned and managed facilities that might be built. (Under existing law, NRC licenses DOE facilities for disposal of HLW and commercial facilities for disposal of HLW and LLW.)

■ **Expedite EPA, DOT and NRC regulatory actions** The President has directed EPA, DOT and NRC to speed up their development of standards and regulations applicable to nuclear waste management activities and to improve their working relationships with other federal agencies and state and local governments. The President has urged the NRC (which is an independent agency not subject to the President's control) to conduct its proceedings in a thorough and timely manner.

■ **Full citizen participation** The President is directing departments and agencies to develop and improve mechanisms to insure the fullest possible participation by the public and the technical community in all aspects of the nuclear waste management program. This includes providing technical and financial assistance to permit informed public input to programs and decisions and to support nongovernmental efforts to increase social and technical understanding and agreement on nuclear waste issues.

■ **National Plan for Nuclear Waste Management** DOE will complete a comprehensive National Plan for Nuclear Waste Management by 1981 and then update it annually. A draft of the plan is to be circulated for public and congressional review in 1980.

■ **International cooperation** Because nuclear waste management is a problem shared by many other countries and because the choice a country makes among waste management alternatives has implications for nuclear proliferation, the President will continue to encourage and support international efforts aimed at advancing our understanding of spent fuel and waste management options.

To implement this program, the President is asking for big money. The fiscal 1981 budgets for military and commercial radioactive waste management total nearly $700 million; that is almost $100 million more than is budgeted for all other civilian programs associated with nuclear fission. It is about $150 million over the 1980 waste management budget and is vastly greater than budgets of several years ago.

Initial reactions from both environmental groups and industry to the new program have been positive. Industry representatives would have preferred to see repository development on a faster track but can live with the President's schedule. Environmentalists believe that, overall, the program places priority on the protection of public health and safety.

How the President's program will be received by Congress is unclear. Some key members have put forward proposals that are compatible or reconcilable with the President's. But there are some major variances. A striking case in point is a congressional proposal that would divert spent fuel from present deep-pool storage—which has always been assumed to be short-term—to storage in vaults, under constant human monitoring and surveillance, for an indefinite length of time. Such a strategy would run counter to the President's view that radioactive waste disposal "should not be deferred to future generations and should not depend on the long-term stability of social institutions." Many congressional hearings will be held and compromises made before a final national nuclear waste management policy emerges.

The National Conference of State Legislatures is the official representative of the nation's 7,500 state legislators and their staffs. NCSL is funded by the states and governed by a 43-member Executive Committee. The NCSL headquarters are in Denver, Colorado, with an Office of State-Federal Relations located in Washington, D.C.

Executive Director: Earl S. Mackey

The National Conference of State Legislatures has three basic objectives:

- To improve the quality and effectiveness of state legislatures;
- To assure states a strong, cohesive voice in the federal decision-making process; and
- To foster interstate communication and cooperation.

A Legislator's Guide to Hazardous Waste Management

by
Jonathan H. Steele

National Conference of State Legislatures
Earl S. Mackey, Executive Director
1125 Seventeenth Street
Suite 1500
Denver, Colorado 80202

October 15, 1980

Printed on 100% Recycled Paper.

Table of Contents

Preface

This publication was made possible through Training Grant No. T900960-01-0 of the United States Environmental Protection Agency. Any opinions, findings or conclusions expressed in the report are those of the author and do not necessarily reflect the views or policies of the U.S. Environmental Protection Agency. This guide is intended to provide state legislators with a better understanding of the hazardous waste management problem and present federal and state initiatives that respond to the problem.

Several NCSL staff members have helped prepare this report including Janet Beardsley, Dan Bucks, Gerard Bulanowski, June Eisenman, Greg Lazarus, Jennifer Olson, Barbara Simcoe and Donna Wise. Additionally, the author wishes to thank Ernie Pappajohn, EPA Project Officer, Alan Magan of the National Governors' Association and Tom Todd of the Minnesota House Research Office for their thoughtful review of this document. Finally, the author would like to thank Sal Ruibal for editing this guide.

Chapter I
Executive Summary

One product of our industrial society is waste—some of it dangerous. Every year, sources such as the chemical industry, metals production, electroplating, textiles, petroleum refining and other industries pour out over 300 million metric tons of industrial waste, of which 10 to 15 percent can be classified as hazardous.

The issue is not whether we can eliminate hazardous wastes—they belong inevitably to our industrial way of life—but how well we manage them. According to the U.S. Environmental Protection Agency (EPA), we manage most of it poorly. The EPA estimates only about 10 percent of America's hazardous wastes are managed in an acceptable manner.

The consequences of improper hazardous waste management can be disastrous to the environment and public health. Damage to the environment may take many forms, including: groundwater and water supply contamination, wildlife habitat destruction, soil contamination, fish kills, loss of livestock, air pollution, fire, explosion, and crop damage. Hazards to human health, in addition to those resulting from the above list, can be devastating.

Whether through inhalation, skin contact or ingestion, the impacts on the function of the human body can be serious. Unfortunately, direct association between physical and mental disorders and exposure to toxic chemical wastes is not adequately documented. Most of these environmental and health problems are due to incidents that arise as the result of indiscriminate disposal by "midnight dumpers," improper management at treatment, storage or disposal facilities, or spills in transport.

There are technologies available for proper management of hazardous waste. Proper management means more than careful disposal. It includes consideration of the full range of options for each type of waste including:

- reducing the amount of waste generated;
- transferring the waste to an industry that may use the waste as raw materials;
- recovering material or energy from the waste stream for use somewhere else in the production process; and
- treating the waste so it is no longer hazardous.

Federal and state governments have addressed the problems associated with improper hazardous waste management. The Resource Conservation and Recovery Act (RCRA) of 1976 represents a national effort to deal with the nation's past in-

adequate management practices. RCRA requires the EPA to establish a federal regulatory program for the management of hazardous waste from its generation to its ultimate disposal. The goals of this legislation and the regulatory program established under it are to control waste management practices that endanger the public health, and to promote resource conservation and recovery.

In passing RCRA, Congress envisioned that the states would administer federally approved state waste management programs. Under RCRA and its regulatory program, each state is to develop a hazardous waste program that must be authorized by the EPA. In states that choose not to implement their own programs or fail to qualify for approval, the EPA will assume regulatory responsibilities.

The federal regulations set forth the minimum requirements for a state program. This minimum program includes requirements for identifying hazardous waste, standards for generators, transporters and treatment, storage or disposal facilities, and a permit and enforcement program.

The EPA recognizes that federal regulations are only the first step in responding to the hazardous waste problem. The states may establish a more stringent program than the federal regulations require. The states may also want to consider additional elements not required by the federal regulations. These additional elements include establishing an effective planning process, setting up a procedure for siting hazardous waste facilities, organizing an abandoned sites program and determining the public and private sectors' roles in owning and operating hazardous waste facilities.

In some states, legislative authority and a comprehensive hazardous waste regulatory program already exist. In others, new legislation may need to be enacted or existing legislation amended to effectively control hazardous waste. This legislator's guide examines pertinent federal activity, state legislation addressing the federal program, additional components of a comprehensive state program and state legislative action concerning these additional components.

The examples of state legislative action presented in this guide do not represent "model legislation," nor will they necessarily meet EPA state program requirements. They are only intended to serve as examples of state legislation in specific program areas. Although this guide separates legislation according to the components of a hazardous waste program, many

states have legislation that attempts to respond comprehensively to the most critical problems associated with hazardous waste management.[1] Among these are:

- Michigan
- Florida
- Delaware
- Arkansas
- Massachusetts

This list, which is not intended to serve as a survey of state hazardous waste laws, provides examples of comprehensive legislation. A complete survey of hazardous waste laws is available from NCSL's Washington, D.C. office.

Federal activity in the area of hazardous waste management is quite extensive. As is explained later, the EPA is interpreting RCRA to be preemptory of less stringent state hazardous waste programs. Despite this federal activity, there is room for flexibility in state implementation of the federal requirements and innovation in subjects the federal government has not acted on.

Chapter II

The Hazardous Waste Problem

Hazardous wastes are by-products of the goods and services produced in a technologically advanced society. The EPA estimates that 10 to 15 percent of the annual production of about 344 million metric tons of industrial waste is hazardous. This quantity of hazardous waste is expected to increase by 3 percent annually. These wastes include toxic chemicals, acids, caustics, explosives, and other potentially harmful materials. Major hazardous waste-generating industries include chemicals, metals production, electroplating, textiles, petroleum refining, and rubber/plastics.

Only about 10 percent of hazardous waste now is managed acceptably by controlled incineration, neutralization, secure landfills, recovery for useful purposes or other environmentally sound methods. About 80 percent is disposed of in lagoons, landfills and dumps without proper security against leaks. Ten percent is incinerated without proper controls.

Inadequate hazardous waste management is one of the most pressing environmental issues now facing the United States. James Moorman, Assistant U.S. Attorney General for Land and Natural Resources, testified before a congressional committee that hazardous waste poses "probably the first or second most serious environmental problem in the country."

EPA files contain hundreds of documented cases of damage to public health and the environment resulting from the indiscriminate or improper management of hazardous waste. The vast majority of cases involve pollution of groundwater—the source of drinking water for about half of the U.S. population—from improperly sited or operated landfills and surface impoundments.

Damage occurs in other ways, including injury resulting from direct contact with the wastes, fires and explosions, contamination of surface waters, air pollution, and poisoning via the food chain.

A recent EPA publication, *Everybody's Problem: Hazardous Waste*, provides the details of several case histories of health and environmental damage resulting from improper hazardous waste disposal practices.

- Groundwater in a 30-square-mile area near Denver was contaminated from disposal of pesticide waste in unlined disposal ponds. The waste, from manufacturing activities of the U.S. Army and a chemical company, dates back to the 1943-to-1957 period. Decontamination, if possible, could take several years and cost as much as $80 million.
- A truck driver was killed in 1978 as he discharged waste from his truck into one of four open pits at a disposal site in Iberville Parish, Louisiana. He was asphyxiated by hydrogen sulfide produced when liquid wastes mixed in the open pit.
- A bulldozer operator was killed in a 1975 explosion at a landfill in Edison Township, New Jersey, as he was burying and compacting drums of unidentified chemical waste. Of the 200 truckloads of waste the landfill received daily, about 50 were industrial waste.
- At least 1,500 drums containing waste, primarily from metal-finishing operations, were buried near Byron, Illinois, for an unknown number of years until about 1972. Surface waters (and soil and groundwater as well) were contaminated with cyanides, heavy metals, phenols and miscellaneous other materials. Wildlife, stream life and local vegetation were destroyed. The disposal site suffered long-range damage from the toxic pollutants that drained into the soil.

Although expensive, the technology for safe management of hazardous waste is available. Safe technology, discussed in greater detail in the next chapter, includes secure chemical landfills, incineration, landspreading, chemical fixation, and physical, chemical and biological treatment.

Until now, this technology has not been widely used because it has not been legally required. Unfortunately, unsafe methods are perceived as less expensive over the short run. According to EPA studies, the 17 major generating industries now spend $155 million annually for hazardous waste management. The EPA estimates that this figure will increase to $750 million when adequate hazardous waste management programs are in effect.

RCRA and state hazardous waste programs are designed to encourage the use of these technologies and minimize the danger from hazardous wastes to the public health and the environment.

Chapter III

Hazardous Waste Management Technologies

Environmental and health problems can be reduced by effective hazardous waste management. In the past, environmentally sound management practices were not used due to their relatively high cost and because there were no legal requirements for their use. The problems associated with past hazardous waste disposal practices have caused state and federal governments to require industry to manage its waste in a more environmentally acceptable manner.

Proper management means more than careful disposal. It means consideration of the full range of options for each type of waste. Ideally, the following management options, given in order of preference, will be utilized to their maximum potential by the private sector:

- waste reduction (e.g., industrial process changes);
- waste exchange;
- energy/material recovery;
- waste incineration/treatment; and
- secure ultimate disposal.

Not all methods are available for each type of waste. Some wastes are amenable only to particular management methods.

Waste Reduction

Rising material costs, uncertain supplies (petroleum, minerals, water) and increasingly stringent regulations will encourage industrial waste generators to review their production processes to determine where substitutions for unnecessary or toxic materials can be made, and where changes in manufacturing processes can reduce both resource and disposal costs.

Waste Exchange

Waste exchanges operate to transfer the wastes of one firm to other firms that may use such wastes as raw materials. As stated in a 1976 study by Arthur D. Little, the function of the transfer agent is to "identify and help bring together the generator, who views the waste as trash without further value, and the user, who views it as scrap with reuse value. In this process, the transfer agent identifies scrap materials of interest to both generators and users." Although only a small percentage of hazardous waste is suitable for transfer, waste exchanges can reduce the amount of waste requiring treatment or disposal.

Energy/Material Recovery

Increasingly stringent regulations governing disposal of hazardous waste will cause industry to review its production processes to determine where waste materials can be reused in a segment of the process line or where materials or energy can be recovered from a waste stream for use elsewhere in the production process. Based on limited data as to the extent of hazardous waste resource recovery in the nation, the EPA estimates that probably less than 3 to 5 percent of the waste stream now is subject to resource recovery.

One of the EPA's primary goals is to encourage hazardous waste recycling. The EPA hopes that such encouragement will reduce the total hazardous waste stream by as much as 20 percent. A recent report completed for the New York State Environmental Facilities Corporation by Rensselaer Polytechnical Institute identifies the greatest potential for recovery in the following areas:

- recovery of energy from concentrated organic liquid waste (e.g., incineration of waste organic oils and liquids);
- recovery of materials from concentrated organic liquid wastes (e.g., distillation and recovery of waste solvents); and
- recovery of metals from industrial sludges and metal plating wastes (e.g., recovery of chromium, copper and nickel from spent plating baths).

Waste Treatment

Heat can destroy certain hazardous wastes, concentrate them or render them less hazardous, although the process may produce a hazardous ash or solid residual, which must be disposed of.

Thermal devices include rotary kiln incinerators, fluidized bed incinerators, multiple hearth incinerators, liquid injection incinerators, and microwave plasma detoxification. Investment costs associated with incineration are fairly high and air pollution control equipment is often needed.

Treatment techniques are used to separate hazardous components from the waste stream's non-hazardous components, as well as render wastes less hazardous, reduce the volume of waste requiring ultimate disposal, and recover or reclaim energy or materials from the waste. Several of these treatment methods may be used before ultimate disposal. Treatment can be divided into:

- physical processes, which include sedimentation and flotation (gravity separation), filtration, flocculation (use of chemicals to aggregate smaller particles into larger ones removable by gravity separation or filtration), distillation, and adsorption;
- chemical processes, which include neutralization, oxidation, reduction, precipitation, ion exchange, and solidification (use of materials that will render the mixture solid to reduce or prevent leaching); and
- biological processes, which include activated sludge, aerated lagoons, and composting.

Land Disposal

Land disposal may be in general purpose landfills, sanitary landfills, and secure landfills.

General purpose landfills are constructed, according to the EPA, without regard to their possible effects on water resources. These landfills are covered intermittently, or daily, but do not have provisions for monitoring, leachate treatment, or special containment of wastes. General purpose landfills, according to studies, are the disposal method for the vast majority of industrial wastes disposed of in landfills.

Sanitary landfills are designed and built to reduce environmental hazards by the spreading and compacting of wastes and by covering the waste with other materials. These landfills do not usually monitor or treat leachate or separate incompatible wastes.

Secure landfills are designed to prevent connection with ground and surface waters and to prevent different wastes from coming into contact with each other. This is usually accomplished with liner and capping materials (e.g., clay and synthetic liners), separate cells for specific waste types, continuous monitoring, and leachate collection systems. Only a very small portion of hazardous wastes is currently placed in secure landfills.

It should be noted that many groups are working on developing new and less expensive technologies for managing hazardous waste. A staff report from the President's Office of Science and Technology Policy/Intergovernmental Science, Engineering and Technology Advisory Panel recommended several strategies for developing treatment technologies. These recommendations include:

- work to develop or adopt new manufacturing or industrial processes to reduce the amount of wastes generated by industries that produce particularly dangerous wastes and those that are not likely to be able to conduct research and development on waste reduction processes;
- develop techniques to increase the recovery of heavy metals and start a nationwide waste exchange program; and
- conduct further research and development activities on treatment, destruction and long-term storage.

State Options

State legislatures can encourage alternatives to landfilling. Incentives include expediting license review for facilities other than landfills, encouraging waste exchanges and requiring that generators treat or neutralize their waste as opposed to disposing of it in landfills.

Minnesota's Waste Management Act contains a number of provisions which expedite the licensing of hazardous waste storage and treatment facilities compared to licensing commercial landfills.[2] Kentucky recently passed legislation that requires land disposal facilities to receive local approval prior to licensing. This local approval requirement does not apply to treatment facilities.[3]

In a report to the Missouri Senate Committee on Energy and Environment, the staff recommended a statewide waste exchange service to be established to facilitate recycling.[4]

California requires that no extremely hazardous waste be disposed of without prior processing to remove its harmful properties.[5] The Missouri report mentioned above also recommends that the Department of Natural Resources be authorized to require the use of alternatives to landfills where these alternatives are economically and technically feasible.[6] Additionally, the report suggests tax credits be given for investments in waste management equipment or processes.[7]

Encouragement of waste reduction and recycling is in a very early stage in most states, but is an area where significant state initiative can occur.

Chapter IV
The Resource Conservation and Recovery Act of 1976 (RCRA)

In the past, industry has sought to dispose of its wastes at the lowest possible cost, consistent with the requirements imposed by laws and regulations. Until recently, in most parts of the United States such laws and regulations were non-existent or incomplete. Consequently, hazardous waste is causing much pollution.

Most of the pollution results from indiscriminate disposal by "midnight dumpers," improper management at treatment, storage or disposal facilities, or spills in transport. In the 1970's, state and federal governments began to impose stronger controls.

California enacted legislation establishing a state hazardous waste program in 1972. Its success was a guiding force in the creation of RCRA. RCRA represents a national effort to improve management practices, to require industry to ensure safe hazardous waste management, and to provide incentives to industry to reduce the amount of waste and develop safer technologies for managing wastes.

The RCRA Hazardous Waste Program

Subtitle C of RCRA addresses the problems of hazardous waste. This subtitle requires that the EPA establish a national program to regulate hazardous waste from "cradle to grave." The EPA and state governments share responsibility for implementing and monitoring the hazardous waste program. Each state is to develop a hazardous waste program that must be approved and authorized by the EPA. In states that choose not to implement their own programs or fail to qualify for approval, the EPA will assume regulatory responsibilities.

Section 3001 of RCRA requires that the EPA establish regulations that set forth criteria for the identification and listing of hazardous waste. The act requires that these regulations take into account toxicity, persistence and degradability in nature, potential for accumulation in tissue, and other related factors, such as flammability, corrosiveness, and other hazardous characteristics.

Sections 3002 and 3003 of RCRA require the EPA to issue regulations that establish standards for generators and transporters of hazardous waste. The act requires that these regulations include standards for recordkeeping, labeling, packaging, transportation and use of a waste tracking system. Section 3003 (b) specifically requires that these regulations be developed in coordination with U.S. Department of Transportation regulations.

Section 3004 of the act mandates the EPA to set forth requirements for owners and operators of treatment, storage and disposal facilities. This section mandates requirements for recordkeeping, compliance with the waste tracking system, conformance with location, design and operating standards, as well as preparation of emergency response contingency plans and any additional qualifications as to ownership, continuity of operation, training of personnel and financial responsibility.

Section 3005 of the act requires the EPA to establish permit procedures for treatment, storage or disposal facilities. This procedure must include requirements for new facilities and for those now in existence. Congress decided that existing facilities should be regulated until a final decision is made on their application for a permit.

Section 3010 requires all entities engaged in generating, transporting, treating, storing or disposing of hazardous waste to notify the EPA of their activities. The EPA assigns an identification number to the notifier who is then subject to the regulatory program.

Opportunity for State Action

Congress believes that control of hazardous wastes is primarily a state responsibility. For the most part, implementation of the federal program is intended to occur through EPA-authorized state hazardous waste management programs. Where states do not establish such programs or the programs do not meet federal standards, the EPA must assume regulatory control.

Section 3006 of the act says that states may receive either final or interim authorization of their hazardous waste programs. To receive final authorization, the state program must be "equivalent" to the federal program, consistent with federal or state programs applicable in other states, and provide adequate enforcement of compliance with the requirements of RCRA. The reason for these requirements is that Congress intended that states receiving final authorization become part of an integrated national program.

Interim authorization allows the state to administer an EPA approved program for a two-year period. To qualify for interim authorization, the state must have a hazardous waste program in existence within 90 days of issuance of the final regula-

tions. The act requires that this program only be "substantially equivalent" to the federal program. During this interim period, a state may alter its program to qualify for final authorization. It was intended that interim authorization be granted in a relatively liberal manner so as not to disrupt state activities and to encourage state efforts in reaching final authorization.

Section 3009 of RCRA preempts any state or local requirements concerning hazardous waste management that are less stringent than those contained in effective federal regulations. Thus, as of November 19, 1980 (the effective date of the federal program), states without interim authorization may not enforce requirements less stringent than those established by the federal government.

One of the most frequently discussed issues in development of state RCRA programs concerns the timing and requirements for EPA authorization. On May 19, 1980, the EPA issued the final federal regulatory program.[8] A portion of these regulations outlines the requirements state programs must meet to qualify for EPA authorization.

To receive interim authorization for a state program, the state must meet certain procedural requirements. These requirements are outlined in RCRA and its regulations. The EPA has interpreted the word "program" as used in Section 3006 of RCRA to mean only enabling legislation. Although only enabling legislation is required to meet the 90-day cutoff, the EPA will require that an entire substantially equivalent program (legislation and regulations) be in place prior to authorization.

The EPA has defined "substantial equivalence" as "to a large degree or, in the main, equal to in effect." Thus, states that wish to apply for interim authorization must have legislation that enables the state agency to establish a substantially equivalent program by August 19, 1980.

To receive final authorization, which may be applied for at any time following the promulgation of the entire federal program, the state program must be equivalent and consistent with the federal program. The EPA has defined "equivalent" to mean "equal to in effect." In terms of consistency, the EPA attempted to achieve a goal of an integrated national program which requires that final state programs do not conflict with each other. An example of inconsistency is establishment of interstate waste importation bans.

State hazardous waste programs will be expensive, although the costs will vary greatly depending on the specific circumstances. Recognizing that these programs would be expensive, Congress authorized expenditures for grants to the states. The amount available for grants in FY 1981 is approximately $35 million. Because federal grants will not finance the entire program, state legislatures should consider alternatives funding state programs.

Due to the inherently high cost of implementing a program, a question that often arises is "Why should the state pass legislation to develop a state program? Because it is a federal program, let the EPA pay for it." The disadvantage to operating a program is clear—a very high cost. However, there are a number of advantages to operating a state program. These advantages include:

- a state may design its regulatory program to suit the specific needs of the state as opposed to having a uniform federal program;
- a state may desire to regulate its own activities;
- due to the lack of necessary resources, federal control may not provide adequate protection of public health and the environment.
- industry can avoid dual regulation by both the state and the EPA;
- the regulated community may desire to work with the state agency as opposed to the EPA; and
- local governments may desire to work with the state agency as opposed to the EPA.

The next two chapters of this guide describe the components of a state hazardous waste program and provide examples of selected state legislative activity for each program component.

Chapter V

State Hazardous Waste Programs

The EPA has established detailed minimum requirements for approvable state hazardous waste programs. This chapter will discuss those program elements that are required by federal law and state legislative options to respond to federal requirements. These minimum requirements include:

- a procedure for identifying hazardous waste;
- standards for generators and transporters of hazardous waste;
- standards for hazardous waste treatment, storage and disposal facilities; and
- establishment of an enforcement program.

It must be emphasized that the federal program only establishes minimum standards and does not prevent the states from creating more stringent requirements. The federal requirements discussed in this chapter do not necessarily address all potential problems associated with hazardous waste management. Chapter VI of this guide will discuss the role of state legislatures in responding to problems that are not addressed by the federal law.

Identification of Hazardous Waste

FEDERAL STANDARDS

The initial step in establishing an effective management program is to identify which wastes are hazardous and should be subject to control. Section 3001 of RCRA, in conjunction with the EPA's final regulations, established the core of the hazardous waste management system by defining hazardous wastes.[9] The EPA regulations, guided by the general definition of hazardous waste in RCRA, specify that a solid waste will be considered hazardous if it meets any of the following three conditions:

- The waste exhibits any of the *characteristics* of a hazardous waste, i.e., ignitibility, corrosivity, reactivity, or Extraction Procedure (EP) toxicity. EP toxicity involves a test procedure that estimates the potential for hazardous constituents in a waste to cause groundwater contamination in a landfill disposal situation. The other characteristics are also identified by waste generators through separate testing procedures.
- The waste is *listed* by the EPA as a hazardous waste, or is a mixture of a solid waste and a listed hazardous waste. The EPA rules put the burden of proof on the waste generator to show that a listed waste is not hazardous. If the generator proves this to the EPA's satisfaction, the waste may still be a hazardous waste if it meets any of the characteristics mentioned above.
- The waste is a sludge, spill residue, ash, emission control dust or leachate generated from the treatment, storage or disposal of a hazardous waste.

The list of hazardous wastes published by the EPA on May 19, 1980 can be divided into four parts:

a. Sixteen hazardous wastes from non-specific sources (e.g., wastewater treatment sludges from electroplating operations);
b. Sixty-nine hazardous wastes from specific sources (e.g., emission control dust/sludge from secondary lead smelting);
c. Twenty-two commercial chemical products that are acutely hazardous wastes if: discarded in their pure form; their off-specification products are discarded; containers used to hold the products are discarded; or any spill residue or debris contains the chemical product or off-specification material; and
d. An additional 239 commercial chemical products are designated as toxic wastes if: discarded in their pure form; their off-specification products are discarded; or any spill residue or debris contains the chemical product or off-specification material.

On July 16, the EPA added 18 wastes to the lists of hazardous wastes from specific and non-specific industrial sources (e.g., solvent cleaning wastes from equipment, and tank cleaning wastes from paint manufacturing) and proposed a rule to add seven more wastes as hazardous.

Certain solid wastes are not covered in the EPA hazardous waste regulations because of RCRA statutory provisions (e.g., electric utility-generated wastes).

In addition, the EPA will initially exclude certain small quantity generators from the hazardous waste management requirements, i.e., those who produce or accumulate less than 1000 kilograms (kg) of hazardous waste per calendar month. Those generators must only ensure that their wastes are delivered to a hazardous waste facility or to a facility licensed to manage municipal or industrial solid waste. However, generators of less than 1000 kg of acutely hazardous waste must meet full EPA hazardous waste management requirements. The EPA plans to phase in a lower small generator exclusion of 100 kg/month for other wastes over the next few years in order to more fully regulate hazardous waste management practices.

The EPA expects to add to the list of hazardous wastes during the remainder of 1980 and as further information on other possibly hazardous wastes is collected.

STATE ACTION

Most states have adopted the list and criteria approach described above. For example, Utah defines hazardous wastes by certain characteristics and then, in the section setting out the duties of the regulating agency, charges the agency with specifically incorporating the EPA's regulatory definition into the state's universe of controlled wastes. Thus, the Utah Hazardous Waste Act of 1979 states:

> "'Hazardous waste' means a solid waste or combination of solid wastes which, because of its quantity, concentration, or physical, chemical or infectious characteristics may cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness or may pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed."[10]

The act mandates the agency adopt rules:

> "... identifying those wastes which are determined to be hazardous, including hazardous wastes designated under Section 3001 of the Resource Conservation and Recovery Act of 1976, 42 U.S.C. 6921, *et seq.*"[11]

An alternative has been suggested to the EPA that the regulations define hazardous waste on the basis of its degree of hazard. Under this approach, the management strategy is based on the hazard the waste poses. Those extremely hazardous wastes will be managed more strictly than other less hazardous wastes. This approach has been suggested by the Chemical Manufacturers Association, the U.S. House of Representatives Committee on Interstate and Foreign Commerce, and several states.

California and Washington are the most notable examples of states that have adopted this approach. California law describes two degrees of waste: hazardous and extremely hazardous. California defines "hazardous waste" as:

> "a waste, or combination of wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may either:
> 1. Cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness.
> 2. Pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, or disposed of, or otherwise managed."[12]

The statute defines "extremely hazardous waste" as:

> "any hazardous waste or mixture of hazardous wastes which, if human exposure should occur, may likely result in death, disabling personal injury or serious illness caused by the hazardous waste or mixture of hazardous wastes because of its quantity, concentration, or chemical characteristics."[13]

The legislation requires the agency to adopt lists of hazardous and extremely hazardous wastes and criteria for identifying hazardous and extremely hazardous wastes.

The Washington statute defines "dangerous waste" as well as "extremely hazardous waste"—considered a subset of dangerous waste. The term "dangerous wastes" refers to nonradioactive wastes "which are disposed of in such quantity or concentration as to pose a substantial present or potential hazard to human health, wildlife or the environment because such wastes . . .

1. have short-lived toxic properties that may cause death, injury, or illness, or have mutagenic, teratogenic or carcinogenic properties; or
2. are corrosive, explosive, flammable, or may generate pressure through decomposition or other means.

Extremely hazardous wastes are dangerous wastes which:

1. will persist in a hazardous form for several years or more at a disposal site and which in its persistent form:
   a. presents a significant environmental hazard and may be concentrated by living organisms through a food chain or may affect the genetic makeup of man or wildlife; and

b. is highly toxic to man or wildlife.

2. if disposed of at a disposal site in such quantities as would present an extreme hazard to man or the environment."[14]

Washington, in making its hazardous waste classifications, relies upon agency rules for specificity. Both California and Washington incorporate the degree of hazard approach into their management system, by specifying different standards of control for different types of waste.

Generator and Transporter Standards

FEDERAL STANDARDS

In order to comply with the notification requirements in RCRA, the generator must determine if its waste is hazardous. This determination is based on the lists and characteristics described earlier. Once the generator determines that it produces a hazardous waste, it must comply with the rules described below.

According to the federal regulations, the generator of the waste must ensure that the hazardous waste reaches a permitted facility. This is done through a tracking system which uses a set of shipping papers, or manifest, that follows the waste from its generation to disposal. The manifest, signed by the generator, must accompany all off-site shipments of the waste until its ultimate disposal. At that time, the owner/operator of the treatment, storage or disposal facility must return a copy of the manifest to the generator. If the generator does not receive the manifest within 35 days of shipment, he must contact the transporter and the owner/operator of the disposal facility to determine the status of the waste. If after 45 days from shipment the generator does not receive the manifest, the generator must file a report with the regional EPA office in order to alert the EPA to possible problems.

The EPA decided to require only certain information on the manifest as opposed to requiring a specific form. This allows flexibility for the generator and allows the manifest to be used to fulfill the Department of Transportation (DOT) shipping papers requirement. The manifest must contain:

- the name, address, telephone number and EPA identification number of the generator, transporter and one designated treatment, storage or disposal facility;
- a description of the wastes as required by DOT rules;

- a statement of the total quantity of each type of waste; and
- a certification of compliance with DOT and EPA rules.

The generator is required to package, label, mark and placard the waste according to DOT regulations before transporting the hazardous waste.

The regulations also require the generator to maintain extensive records on shipments; the records must be kept for three years and summarized in an annual report.

Transporters must also maintain all records for three years. Transporters must comply with the tracking system by acknowledging receipt of the waste and ensuring that the manifest accompanies the waste. Once the transporter takes delivery of the hazardous waste, he is responsible for its handling (including cleaning up discharges that occur during transportation) until the waste is delivered to another transporter or the designated disposal facility. The EPA believes this responsibility will help ensure proper handling of the wastes.

RCRA requires the EPA to consult with the DOT to ensure that the regulations are consistent with DOT regulations. Because there is regulatory overlap between the DOT and the EPA, the two agencies determined that DOT standards should apply in the area of transportation safety while EPA standards are applicable to waste management. DOT regulations apply to packaging, labeling, marking, placarding and identification of the wastes during shipment, and the EPA oversees waste management and ensures compliance with the manifest system. To implement this coordination, the EPA and the DOT have issued a Joint Memorandum of Understanding that delineates the agencies' responsibilities.

STATE ACTION

Texas was one of the first states to establish a manifest tracking system. The Solid Waste Disposal Act gives the Department of Water Resources the authority to regulate all aspects of the management and control of industrial waste.[15] Based on this broad grant of authority, the Texas Department of Water Resources established a tracking system whereby the generator must furnish the transporter of the waste a shipping ticket that, among other things, describes the waste and designates an authorized receiver to accept them. Transporters cannot transport waste unless it is accompanied by a shipping ticket. Both the carrier and the authorized receiver must fill out and sign the ticket, which must then be returned to the generator. All of the

parties must retain copies of the ticket for their records. This system ensures that the wastes reach a permitted facility.

Arkansas statutes provide another example of an authorized manifest system. The Arkansas Hazardous Waste Management Act specifically requires the regulatory agency to issue rules and regulations for "establishing a manifest system for the transport of hazardous wastes and prohibiting the receipt of hazardous wastes at storage, processing, recovery, disposal, or transport facilities or sites without a properly completed manifest."[16] Arkansas also specifically requires that rules pertaining to containerization and labeling of hazardous wastes and all other transportation rules be consistent with DOT rules.

Treatment, Storage and Disposal Facility Standards

FEDERAL STANDARDS

The next step in controlling hazardous waste management practices is to ensure that wastes identified as hazardous are managed in an environmentally acceptable manner at authorized treatment, storage and disposal facilities. As required by Section 3004 of RCRA, the EPA published standards for these facilities.

Because of the complexity of the technical and administrative requirements which the EPA must impose on the hazardous waste management industry, the agency decided to phase in facility requirements in a three-stage process. Phase I of the regulations will provide standards for existing facilities. These standards will be effective while the facility's permit is being processed. The EPA estimates that this processing will take several years. Phase II of the regulations sets out additional technical performance standards. These standards will be incorporated into the final permitting process. Phase III will incorporate more detailed technical standards. These three phases are explained in more detail below.

Phase I—These regulations use the concept of interim status contained in Section 3005 of RCRA to phase in hazardous waste facility standards. By November 19, 1980, owners/operators of existing facilities who have applied to the EPA for a facility permit must comply with the interim status standards.[17] These standards are a nearly complete set of requirements for facilities operating in interim status, and contain a limited framework of technical performance standards and most of the administrative and non-technical operating standards.

If an owner/operator of an existing facility notifies EPA under Section 3010 of RCRA and properly applies for a facility permit by indicating compliance with interim status requirements, the owner/operator is to "be treated as having been issued such permit." The interim status requirements will apply for the period between when a permit is applied for and when it is issued or denied by the EPA.

The interim status standards are designed so that hazardous waste facility owners/operators can comply within six months from publication and without significant capital expenditures. The administrative and non-technical operating standards include:

- chemical and physical analysis of wastes;
- spill preparedness and prevention arrangements;
- a contingency plan for waste releases and emergencies;
- compliance with manifest, recordkeeping and reporting requirements;
- closure and post-closure plan requirements;
- facility security requirements;
- training for facility personnel;
- separation of ignitible and reactive wastes from ignition or reaction sources;
- groundwater monitoring; and
- financial responsibility requirements.

One requirement mentioned above is that owners/operators of facilities provide assurances of financial responsibility for damages that may be incurred during the life of the facility, and assurances of financial responsibility for closure and post-closure care and maintenance of the facilities. These financial requirements are still in the proposal stage. Presented below is a short discussion of these requirements.

- Site Life Liability. Under the proposed regulations, an owner/operator of a facility seeking interim status must show evidence of at least $1 million of liability insurance per occurrence per firm (not per site) with a $2 million annual aggregate for sudden and accidental occurrences (exclusive of legal defense costs).
- Closure and Post-Closure Care. Post-closure care must be provided for 30 years following closure. The proposed regulations require the owner/operator to choose from a number of financial mechanisms to ensure there will be money available for closure and post-closure care. Separate mechanisms may be

used for closure and post-closure or one mechanism may be used for both if it meets the requirements of both. The regulations allow the following mechanisms for assuring closure and/or post-closure: trust funds, surety bonds, standby letters of credit, meeting a financial test that shows the economic conditions of the owner/operator to be stable enough to guarantee closure and post-closure, and a revenue test for municipally owned facilities.

The technical-related interim status standards include various requirements for the use of: containers; tanks; surface impoundments; waste piles; land treatment; chemical, physical and biological treatment, and underground injection.

Initially the use, reuse, reclamation or recycling of hazardous waste will be subject only to EPA requirements for storage and transportation. The EPA has deferred full regulation of wastes which are either being beneficially used or legitimately recycled, or being stored or treated prior to beneficial use or legitimate recycling. During Phase II and III of the program, the EPA will attempt to regulate resource recovery facilities while encouraging hazardous waste resource recovery in order to fulfill two separate intentions of RCRA.

Phase II—In late 1980, the EPA will publish the second phase of the hazardous waste facility standards. These will be more specific technical requirements which will be used to issue final facility permits. These permits will be issued on the basis of technical requirements and on the basis of the permit writer's "best engineering judgement."

Phase III—This will be the final phase for issuing more detailed technical requirements under Part 264. When this phase is completed, the standards issued will supplant the Phase II requirements and interim status requirements, make the permit writing process more straightforward, and may include standards for certain industries and wastes requiring special management standards.

The phased process will require the hazardous waste management industry to meet increasingly stringent standards over a period of time. By not requiring immediate adherence to complex technical standards, the closing of some existing facilities will be prevented.

The standards described above will be implemented by issuance of permits for treatment, storage or disposal facilities. The regulations issued under RCRA set forth the minimum federal requirements for a state permit program.

For existing facilities, RCRA and the regulations recognize that it may take a number of years to carry out the permit process. In order to allow existing facilities to continue operations without risking danger to the public health, the EPA set out the minimum standards, described above, for existing facilities to receive interim status. To receive interim status, the existing facility must notify the EPA and receive an identification number; submit a permit application, which defines the processes used, design capability and the hazardous waste to be handled; and comply with the interim status standards. An existing facility will maintain interim status until the final permit application is acted upon.

For proposed facilities, a complete permit application must be submitted at least 180 days before physical construction is scheduled to begin. Once a permit is submitted, the regulatory authority must decide whether to issue or deny a permit. EPA regulations require that these permits, at a minimum, are reviewed and re-issued every 10 years.

STATE ACTION

The facility standards described above cover many subjects. Included in these are technical standards, administrative standards, and financial responsibility. Generally, states have adopted an approach where, to receive a permit, the applicants must identify themselves, provide reports and be subject to inspection and controls over new construction. These states leave the details of the program to the regulatory agency.

A good example of this approach is in Illinois. Legislation which was passed during the 1979 legislative session requires that the agency adopt:

- standards for the location, design, construction, sanitation, operation, maintenance and discontinuance of the operation of hazardous waste sites;
- standards for the certification of personnel to operate waste sites;
- standards for the handling, storing, processing, transporting and disposal of any hazardous waste;
- recordkeeping requirements;
- water monitoring and equipment standards and procedures;
- standards relative to alerting and abating land pollution emergencies constituting a serious danger to health or to the environment; and

- standards for adequate and proper care and maintenance of, closure of, and post-closure monitoring, maintenance and use of hazardous waste disposal sites.[18]

The legislation requires that these standards are met by owners and operators of treatment, storage or disposal facilities.

The bill does limit the location of hazardous waste disposal facilities. Under the act, these facilities could not be located above an active or inactive shaft or tunneled mine or within two miles of an active fault in the earth's crust. In counties of a population less than 225,000, a hazardous waste disposal facility cannot be located within one-and-one-half miles of the corporate limits of any municipality without the approval of the governing body of the municipality, or within 1000 feet of an existing private well or the existing source of a public water supply.

The Arkansas Hazardous Waste Management Act of 1979 provides an approach to permitting and ensuring compliance with the act's provisions. The act sets forth the requirements for permits. It states a permit is needed for construction, substantial alteration or operation of a hazardous waste treatment or disposal facility.[19] Permits are also needed for storage, transportation, treatment or disposal of hazardous waste. These permits shall be issued under terms and conditions set by the agency and issued for five years and then subject to renewal. All permits are subject to revocation for failure to comply with permit conditions.

The bill requires certain design and operating standards be met before a permit will be issued. The legislation also requires the regulatory agency to establish a schedule of fees to cover the costs of processing permit applications, on-site monitoring, certification of personnel to operate the facilities, and other areas the agency feels are necessary to assure compliance. The act also provides for interim operational status for existing facilities that are operating under valid permits and have applied for new permits.

In order to ensure compliance, the act provides for the owner/operator of a permitted facility to maintain records, make reports, install and use monitoring equipment, take samples and perform tests that the agency requires. This section authorizes the agency to examine all records pertaining to the site and enter and inspect the facility. All records required under the act are available for public inspection unless they are limited by a confidentiality request.

Along with assuring financial responsibility during the life of the disposal facility, provisions must be made to ensure that money is available to meet standards for closure and post-closure monitoring and maintenance. States have taken various approaches to ensure these requirements are met. The states of Michigan and Wisconsin have established good examples of how this may be accomplished.

Michigan legislation illustrates a method by which a state may handle the issue of ensuring the availability of funds to respond to accidents during the facility's operating life. Michigan's Hazardous Waste Management Act requires that an application for a permit "contain the name and residence of the applicant, the location of the proposed facility or existing disposal facility, and other information considered necessary by the director *including proof of financial capability*" (emphasis added).[20] The rules proposed under this section require that the owner/operator of a disposal facility shall have and maintain liability insurance for sudden and accidental occurrences in the amount of $1 million per occurrence with an annual aggregate per firm of $2 million, exclusive of legal defense costs, for claims arising out of injury to persons or property from the operations of each hazardous waste facility.

Both Michigan and Wisconsin require the owner/operator to establish closure and post-closure plans and include these in their permit applications. The Michigan bill requires the operator to remain responsible for the site for 15 years following closure. At the end of this period, if the agency determines the site does not have a foreseeable alternative use, the state may assume responsibility for long-term maintenance and all claims for damages that may occur.[21] This section requires the owner/operator to file as part of a license application a surety bond or other suitable instrument, or establish a secured trust fund to cover the costs of closure and post-closure maintenance.[22]

In Wisconsin, the legislation requires the owner to maintain the site for a maximum of 30 years after closure.[23] The act states that no operating plan may be approved by the agency "unless the applicant submits a bond, deposit, proof of an established escrow account or other proof of financial responsibility ensuring that the applicant and any successor in interest will comply with the closure and long-term care requirements of the plan."[24]

Michigan and Wisconsin have developed trust funds funded by surcharges on owners/operators of hazardous waste

disposal facilities. These funds will be used to pay for all costs of long-term care of a site accruing after the responsibility of the owner has been terminated.

Enforcement

FEDERAL STANDARDS

The key to accomplishing the purposes of RCRA—controlling waste management practices that endanger public health or the environment and promoting resource conservation and recovery—is strict enforcement of the regulatory program. Strict enforcement will force generators to utilize permitted treatment and disposal facilities.

In the past, costs associated with disposal of wastes were artificially low. The costs associated with resource recovery and waste reduction techniques are relatively high and there have been few incentives to incorporate these techniques into the industry's waste management practices. Because of the high costs of environmentally sound waste management, market forces may cause industries to turn to resource recovery and waste reduction rather than allowing their by-products to enter the waste streams. It would become important to ensure that all wastes are properly managed.

Strict enforcement means devoting adequate financial and human resources to ensure that the waste is controlled from "cradle to grave." In addition to adequate resources there must be strict penalties for violations of the regulatory program. The federal program sets out minimum standards. For those states seeking interim authorization, legislation must provide for civil penalties or criminal fines of up to $1000 per day. The EPA regulations also require public participation in the state enforcement process. This participation may take the form of allowing the citizens the right of intervention in any civil or administrative action to obtain remedies, or some assurance that the enforcement authority will investigate and provide written responses to citizen complaints and not oppose citizen intervention where permissive intervention may be authorized by statute. Additionally, the state must have a surveillance program that ensures compliance with the regulations.

For those states seeking final authorization, their program should include a compliance evaluation program that provides for reports and notices, an independent inspection and surveillance program, entry, inspection and monitoring authority, and proper evidence-gathering procedures. The enforcement authority should allow the state to stop unauthorized activities, sue for permit violation without need for permit revocation, and provide for civil and criminal fines of up to $10,000 per day and criminal penalties of up to six months' imprisonment for each violation. Finally, the enforcement program must meet the same public participation standards discussed above.

STATE ACTION

The first step in ensuring an effective enforcement program is providing adequate resources to properly investigate irregularities in the system.

Both Arkansas and California have developed innovative ways to finance this investigation. Arkansas is statutorily authorized to recover the costs of investigating and establishing the violation from the offender in a civil action.[25] California has established a fee system which requires each operator of a hazardous waste disposal site to pay a fee to the state based on the number and weight of shipments the site receives. The fees are deposited in the Hazardous Waste Control Account which is used to pay for the administrative costs of the program.[26]

Many states have also imposed stringent penalties for violations of their hazardous waste laws. For example, the Arkansas act provides for criminal and civil penalties. The criminal penalties include a fine of up to $10,000 and/or imprisonment for up to one year. Each day of the violation is considered as a separate offense. Civil penalties include a fine not to exceed $25,000 per day of violation, payment of any expenses reasonably incurred by the state in removing, correcting, or abating any adverse effects resulting from the violation, and compensation for any actual damages resulting from the violation.[27]

Legislation in Florida provides that any person who knowingly violates the act is subject to criminal penalties of $25,000 per day for each violation, imprisonment not to exceed one year, or both for the first offense; and $50,000 per day for each violation, imprisonment not to exceed two years, or both for the second offense.[28]

Pennsylvania passed legislation during the summer of 1980 that allows any citizen with an interest in a case to intervene in all actions for civil penalties and injunctive relief. The act also declares that any violation of the act or regulations amounts to a public nuisance. Any person committing a nuisance is liable for the costs of abating any pollution caused by the violation. The act creates a presumption that any person who treats, stores or

disposes of hazardous waste is liable, without proof of fault, negligence, causation or violation of regulations, for all damages, contamination or pollution within 2500 feet of the perimeter of the area where the activities took place. Finally, the act creates absolute liability for all criminal violations of the act, excepting those requiring knowing or intentional conduct.[29]

Chapter VI
Additional State Issues

The EPA state program requirements discussed in Chapter V are minimum requirements for a state hazardous waste program. There are additional subjects that may be considered by state legislatures that go beyond implementation of the federal requirements. These subjects, key political issues in many states, include:

- the role state government will have in planning and assessing the needs of the state in the area of hazardous waste management;
- the proper procedures for choosing hazardous waste facilities;
- the establishment of a program to remedy problems associated with abandoned hazardous waste sites; and
- the respective roles the public and private sectors should have in developing and owning hazardous waste facilities.

This chapter discusses these subjects and provides examples of innovative state responses to them.

Planning

INTRODUCTION

Although no federal standards for planning were issued in the hazardous waste regulations, subtitle D of RCRA calls for comprehensive state waste management planning. The guidelines for this section suggest that the appropriate state agency assess hazardous waste management techniques. This planning serves to identify the state's hazardous waste problem and evaluates the state's needs in terms of quantity and the types of facilities necessary to manage these hazardous wastes safely.

Comprehensive planning involves agency identification of the amounts and types of wastes produced within the state—this means information concerning waste generation and disposal plans of generators currently operating in the state as well as those planning to establish operations. The information required from these generators should include general information, waste characterization, means of storage and transportation, and treatment and disposal methods. Following an examination of available management technologies, a decision may be made concerning the most appropriate technology.

There are two methods available to help identify the hazardous wastes generated within a state. One approach is to use the information obtained through the notification requirement in Section 3010 of RCRA. The information obtained through this process can be made readily available to the planning authority

which then considers what specific facility features would be most suitable to manage such wastes. A major fault in using this system as the sole means of planning is that the notification requirement only assesses most recent production. Future trends on the amount of waste produced are not identified, thereby producing incomplete information for use in the planning process.

Conducting a statewide hazardous waste survey is an alternative or additional method of gathering adequate planning data. Complete and accurate data are essential to the success of a survey. Although legislation may require a response to survey questions, many states have used a voluntary survey. Where response is not mandatory, a combination of mailed questionnaires, followed by on-site visits, has generated greater and more accurate responses.

The second stage of the planning effort involves analyzing the data to determine the best way to effectively manage the waste. In New York, for example, the Environmental Facilities Corporation has been legislatively mandated to "prepare a comprehensive program for the ultimate disposal of industrial hazardous waste in New York." The corporation is using the Industrial Hazardous Waste Generation Inventory to conduct a region-by-region analysis of the state's needs for additional waste management capacity. Among other things, the study will recommend a suitable treatment, disposal, and storage system to manage adequately the waste generated within a particular region. Once the best strategies are identified, the state may want to actively promote the development of these through financial incentives, issuance of franchises or state ownership.

STATE ACTION

A number of states have been quite active in the area of planning. A majority of states have undertaken surveys to determine the nature of their problem.

The state of Minnesota, however, has gone a step further in its legislatively required planning effort. A detailed examination of this effort is warranted. One of the main purposes of the Minnesota Waste Management Act of 1980 is to provide for systematic and coordinated waste management by integrating the planning process with facility promotion and development.[39] The act establishes a Waste Management Board (WMB) that is responsible for hazardous waste management planning, promoting better waste management practices and siting of hazardous waste facilities. A policy decision made in enacting this law was that these responsibilities should be separated from the regulatory functions of the Minnesota Pollution Control Agency. It was felt these efforts would conflict with a regulatory program.

Under the act, a nine-member WMB provides the lead in the state's planning activities. The WMB must submit reports to a statutorily created Legislative Commission on Waste Management concerning:

- liability and long-term care of hazardous waste facilities;
- the issues associated with private sector investment in hazardous waste management;
- interstate cooperation in hazardous waste management;
- alternative strategies, methods and technologies for hazardous waste management; and
- compensation to local communities for the adverse effects of hazardous waste facilities.

These reports, which will include legislative recommendations, will form the basis for a proposed hazardous waste management plan.

The plan must include: a description of the types and volume of hazardous waste which will be generated through the year 2000; objectives for reducing, to the greatest feasible extent, the need for land disposal of hazardous waste; and "a conclusion as to the irreducible minimum of disposal capacity which will be needed in the state through the year 2000." By spring 1982, following public hearings, this plan must be adopted.

At the same time that the management plan is adopted, the WMB must issue, consistent with the management plan, at least one certificate of need for a disposal facility that is consistent with the management plan. This certificate of need will be based on the plan's statements concerning the projected need for a land disposal facility.

This certification and planning process is closely integrated with Minnesota's siting process. The act requires the WMB to search for sites for commercial hazardous waste processing and disposal facilities. The WMB must select at least three preferred sites in the state for each of three types of processing facilities—a chemical processing facility, a commercial incinerator, and a transfer and storage facility. The WMB must also select six "candidate sites" for a hazardous waste landfill. These sites must be certified by the Pollution Control Agency as environmentally suitable for the use intended.

The selection of the land disposal site from among the candidate sites will take approximately two years, during which

six members will be added to the WMB, one representing each of the candidate sites.

For land disposal facilities, local project review committees from the area surrounding each of the six candidate sites will be established by the governor. Each local committee, which will be entitled to technical and financial assistance to ensure effective participation in the review process, will select one representative to act as a temporary member of the WMB. Based on the five WMB reports, environmental impact statements on disposal facilities at each of the six candidate sites, the waste management plan, permits that have been issued by the regulatory agency for facilities at each site and public hearings, the WMB will make a final decision on the site or sites for the disposal facility or facilities for which it has previously certified the need. This decision is final, supersedes and preempts all conflicting requirements of state agencies and political subdivisions.

In the case of commercial processing facilities, the law does not require selection of a site. The initiative in site selection comes from a private developer. The WMB then conducts an *ad hoc* review of the proposal, with six temporary members added for this review. The temporary members come from the community where the facility is proposed. The WMB may override local government restrictions only at those sites chosen as preferred sites during the planning process.

The Minnesota Legislature, in establishing this process, recognized the need to integrate planning with the need for siting new facilities.

Siting Hazardous Waste Facilities

INTRODUCTION

With implementation of the federal and state regulatory systems it is expected there will be a shift from on-site disposal facilities to off-site commercial facilities. This, in part, will be the result of the high cost associated with permitting on-site facilities. Additionally, strict enforcement will force generators to use permitted facilities as opposed to "midnight dumping." For these reasons, and others, recent EPA estimates have determined there will be a demand for 50 to 125 new commercial off-site facilities. In order for a "cradle-to-grave" program to work and the public health and the environment to be protected, sites for environmentally sound facilities must be found.

Studies show that very few new facilities have been sited in the United States. This failure has been due to widespread—and understandable—public opposition to the establishment of nearby facilities. Public opposition to these facilities is based on fear. This fear is due to the public's lack of understanding of the technologies involved, lack of confidence in industry's or government's capability to manage wastes safely, the perception that few benefits are associated with the facility and finally, the possibility of a disaster similar to the one at New York's Love Canal.

Most state agencies are generally given authority to permit a facility at a site that has been proposed by industry. After hearings to allow for public concerns, the agency decides whether or not to grant the permit. This approach leaves the siting choice up to industry—and does little to assure a community that the facility will be safe.

Industry and the state agency do present technical studies at the hearings to show compliance with regulations, but the public often does not understand the intent of the studies or the terms used. Moreover, the community often questions the fairness of being asked to bear so large a share of the environmental costs of modern industry—a question rarely addressed by facility sponsors or the agency. There is also the question of which source to believe—if any.

One way to improve the prospects for successful siting and thereby increase the likelihood of public acceptance of a site is to allow adequate public participation in decision-making. Public participation programs usually have two functions: to keep the public informed of government activities, and to allow for substantive public input into government decisions. It is true, as a recent report prepared for the EPA stressed, that "a public consultation program, no matter how effective, cannot be expected to overcome community opposition to a hazardous waste management facility." What it can do is win public respect for the siting process by responding to public concerns. Without this respect, the siting decision may be delayed by years of political and legal battles over the site.

The EPA has issued regulations on public participation programs for RCRA activities. These regulations require the decision-making agency to conduct a continuing program for public information and participation in the development of a decision. The approaches include hearings, public meetings and the use of public advisory groups.

It is not easy to determine the best level of public participation. When there is too much, opponents may effectively

block ever legitimate and generally accepted siting attempts. When there is too little, opponents may delay siting through political or legal channels. A balance is needed that allows participation from all interested parties, while preserving the capacity to make necessary decisions.

Another option that may aid in encouraging local acceptance is to allow the community itself to determine what compensation is needed to site a facility in the area. It has been suggested that the compensation could take any one of several forms—including payments to local governments in lieu of taxes, direct payments to landowners, purchase of buffer zones or development rights of adjacent lands, and provision for recreational areas.

STATE ACTION

Table VI-A on page 36 provides examples of some innovative state approaches to establishing new hazardous waste facilities. In the interest of brevity, the details of the specific approaches have been omitted. The table provides good examples of alternatives to a permit system. It must be noted, however, that at the date of writing, no new facilities have been sited under these approaches.

Abandoned Sites Program

INTRODUCTION

The EPA estimates that perhaps 32,000 to 51,000 waste disposal sites may contain hazardous wastes. Several thousand of these sites may contain significant quantities of hazardous wastes, and as many as 500 to 800 sites have been abandoned.

The term "abandoned site" refers to an inactive hazardous waste disposal or storage facility whose owner cannot be identified or has gone bankrupt and subsequently cannot afford the cost of cleanup, or a location where illegal dumping has taken place. The cleanup of the site often becomes public responsibility.

The size and scope of environmental and public health problems presented by abandoned sites is compounded by the incremental discovery of many small abandoned sites. These sites, however, are not easily identifiable.

There is disagreement about the procedure to use in identifying abandoned sites. It has been suggested that the EPA utilize investigators trained in law enforcement techniques to identify sites, their contents, owners, operators, and former owners and operators. Others have suggested the use of aircraft

reconnaissance, organized citizen search groups, rewards provided to those who know of past chemical dumping, or partial immunity from prosecution for cooperating industries. Another approach would direct inquiries concerning the size and location of hazardous waste disposal sites to generators, haulers, storers and disposers of hazardous waste, and to state and local governments.

As abandoned sites are identified, technical, financial and legal mechanisms must be considered in responding to the problems.

The technical options for cleanup of these sites are contingent upon a determination of the public health hazard presented by the site and the chemical and physical conditions at the site. Consequently, appropriate responses may vary on a site specific basis. Contaminated material can be removed, certain chemicals at the site can be contained or removed for incineration or reburial at a secure landfill, or groundwater monitoring procedures can be instituted. While addressing the problems of chemical cleanup, it may be necessary to relocate residents who might be adversely affected by exposure to toxic substances. If contamination is irremediable, the possibility of permanent relocation of residents and compensation for loss of health and homes must be addressed.

As dangers are discovered, liability for cleanup costs must be fixed. In cases where responsible parties cannot be identified, availability and access to public monies to carry out these measures will require serious consideration. The problem is that most sites cannot be traced to a financially responsible party. Consequently, emergency cleanup costs become a matter of public responsibility.

Although RCRA does not provide funds to abate the problems at these sites, there are some federal funds available for cleanup under other laws. Section 311 of the Clean Water Act provides a limited amount of money to abate hazardous waste contamination to navigable waters. Non navigable surface waters and groundwater—the area most often contaminated by improper management techniques—are not protected under these provisions. A concept has been developed whereby federal, and/or private monies would be used to establish funds to finance emergency cleanup.

Questions have been raised concerning the source of contributions to these funds. State legislatures may not desire to increase taxes to support a new program because state budgets are currently straining to support existing programs. Never-

Table VI-A

State Hazardous Waste Plan	AZ	CT	FL	KS	KY	MD	MA	MI	MN	NE	NY	OH	OR	PA	TN	WA
Developed by:																
1 Existing department	●	●	●	●		●				●	●	●	◐	●	●	●
2 State board/committee					●		●	●	●							
3 Includes inventory of potential sites						●			●							
How Siting Process is Initiated																
4 State initiative	●			●		●			●		●			●		●
5 Developer		●	●		●	●	●	●	●	●		●	●	●	●	
Certificate of Public Necessity by:																
6 Existing department														●		
7 State siting board		●				●		●	●		◐					
Public Participation																
Local representatives participate in																
8 State siting board						●		●	●		●			●		
9 State plan and/or criteria								●	●					●		
10 Local review board required			●				●		●	●						
11 Public hearings required near site	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●
Notices of permit application sent to																
12 Local governments		●	●	●	●	●	◐	●	●	●	●	●	●	●		
13 Property owners		●				◐	●		◐		●					
14 Options for incentives/compensation		●			●		●					●				
15 Citizen suits							●		●			●			●	
Siting Impasse Resolved Through:																
16 State preemption	●	●	●	●		◐		●	●			◐		●	●	
17 Mediation/arbitration							●									
18 Local veto					●					●	◐					
Permit Approval Authority Given by:																
19 Existing department	●	◐	●	◐	●	●	●	●	●	●	●	●	●	●	●	●
20 State siting board		●				●		◐	●		●	●				
21 Local review committee					●		●			◐				●		
Siting Provisions Apply to:																
22 On-site facility only																
23 Off-site facility only		●					●		●							
24 Both on-site and off-site facility			●	●	●	◐		●						◐	●	
State Assistance for Facility Development																
25 Public financing					●							●				
26 Bonding authority									●			●				
27 Eminent domain	●						●		●							
28 State ownership/operation	●			●		◐		●	●	●		●	●			●
29 Incentives for resource recovery				●				◐	●	●		●	●	●		
Special Provisions	◐		●		●			●	◐			●		●	◐	●

theless, possible contributors to emergency cleanup funds may include direct state appropriations, taxes or fees assessed against hazardous waste generators, or surcharges on disposal. Ultimately, these costs will be passed on to consumers of those goods whose production creates hazardous by-products.

Questions of fairness in allocating cleanup costs arise. Should present producers of chemical waste be required to finance cleanup operations for their predecessors? Should taxpayers be responsible for past dumping practices of industry? Should the chemical industry be singled out as the prime contributor to any fund aiming at an equitable distribution of financial responsibility, these issues need thorough consideration.

In cases where responsible parties can be identified, alternatives in recovering cleanup costs exist. Section 7003 of RCRA empowers the EPA to file suit against parties responsible for creating imminent health hazards. This type of provision also is found in many state laws.

STATE ACTION

Many states are wrestling with the issue of what to do with legal or illegal disposal sites that are now abandoned or no longer in use and are currently potential health problems.

The first step in combating the problem is to identify the sites. Pennsylvania recently passed legislation that requires the Department of Environmental Resources to formulate a hazardous waste management plan. This plan must include an inventory and evaluation of current hazardous waste practices within the state, including existing sites.[31] Michigan has the same type of planning requirement and is currently undertaking an inventory.

Once identified, the public health and environmental problems associated with these sites can be abated. Abatement is costly; thus the issue of responsibility for cleanup costs must be resolved. The Arkansas Resource Reclamation Act of 1979 requires the Department of Pollution Control and Ecology "to adopt and enforce regulations which would require the owners of abandoned disposal sites to undertake such actions as are reasonable to prevent environmental contamination."[32] This is an example of one approach to having the responsible party pay for cleanup of the site.

Many states have an imminent hazard provision similar to Section 7003 of RCRA which allows the EPA to file suit against the parties responsible for creating imminent health hazards, and requires those parties to pay for cleanup of the site. Despite these provisions, if there is an emergency, remedying the situation cannot wait until liability is established in court. Money must be available immediately from the state or federal levels to respond to the problems.

There are several proposals for emergency cleanup funds at the federal level. The federal "super-fund" legislation is designed to provide funds for the immediate cleanup of dangerous hazardous waste situations and provide an incentive to industry to properly handle its waste. At the date of writing, two bills have been passed by the U.S. House of Representatives and one bill is pending in the U.S. Senate. It is not known whether a compromise bill will be passed by both houses by the end of the 1980 session.

NCSL supports federal legislation that would, among other things, establish a fund to pay for liability, compensation, cleanup, and emergency response for hazardous substances released into the environment, the cleanup of inactive sites, and compensation to victims who suffer damages. This fund should be financed primarily through fees or taxes on generators. In addition, NCSL supports a liability system that would encourage those responsible for the release of hazardous substances to clean them up and prevent additional releases. Liability should be established for damages and loss of real or personal property, including relocation costs, loss of use of natural resources, economic loss, and all out-of-pocket medical expenses due to personal injuries. NCSL supports a system that would require the states to pay 10 percent of the cost of remedial action for facilities that are privately owned and up to 50 percent where the facility is publicly owned.[33]

Several states have established funds to respond to hazardous waste releases. Kansas has established the Perpetual Care Trust Fund.[34] The fund would consist of fees collected from disposal and storage site operators. The fund could be used for repairing sites and environmental damage as a result of post-closure occurrences. Up to 20 percent of the fund's balance could be used on an emergency basis for investigation, engineering, equipment and construction related to removal, treatment or disposal of hazardous waste.

New Jersey has established the Spill Compensation Fund.[35] This fund, authorized to contain as much as $50 million, is created by taxes on the transfer of petroleum products and hazardous substances. The fund can be used for cleanup and

removal of hazardous substance discharges: "imminent and ancient spills"; costs of restoring, repairing or replacing real or personal property damaged by the discharge; costs of restoring natural resources damaged by the discharge; and compensation for tax revenues lost by state/local governments due to property damage.

Another example is the Wisconsin Hazardous Substances Spill Fund.[36] This fund is made up of an annual appropriation by the legislature and reimbursements from responsible parties. The fund can be used for abandoned or inactive site cleanup, procuring and maintaining equipment and supplies for cleanup, and training cleanup personnel.

Cleanup of abandoned or inactive sites is an expensive proposition. The EPA estimates the ultimate cost of cleaning up Love Canal may be $100 million. Although Love Canal is an egregious example of cleanup costs, even a fraction of that amount will seriously strain a state budget or a designated cleanup fund. The states and the federal government will have to cooperate to provide adequate resources.

Facility and Site Ownership Options

INTRODUCTION

Because of high entry costs, high risks and strict regulations, ownership of off-site facilities may be limited to large private firms or public entities. State legislatures are beginning to consider who should own and operate management facilities. This section will discuss the advantages and disadvantages of private and public ownership and how the state may implement the decisions.

Private Ownership—Private industry has advanced technology and business management expertise. Bond underwriters and pollution control financing authority directors have suggested that traditional financing may be difficult to obtain due to the high risks associated with waste management. Consequently, states might be faced with having to provide incentives to encourage private development. This may be especially true in states that do not produce large quantities of waste. Incentives that have been discussed include the creation of a comprehensive state hazardous waste plan, developing a siting process, and forcing generators to use approved facilities.

Providing financial inducements is another action the state might pursue. One type of financial assistance is a loan guarantee plan, where the state would guarantee to meet payments if the private firm defaulted. This financial incentive, which would make funds available to a private developer, would encourage facility construction. Another method of financial assistance is industrial development revenue bonds. These bonds have been traditionally used to help a private firm finance its own facility at lower interest rates. Another bonding method is issuance of pollution control bonds. Other forms of financial assistance include favorable tax structures and subsidies.

Public Ownership—The alternative to privately-owned management facilities involves public ownership. A state, local government or some form of public benefit corporation, may own either the facility or the land. Public ownership of the land and the facility may ensure perpetual care of the facility, reduce public opposition to its location and ensure that specific management goals are met.

Methods for financing public ownership include general obligation bonds issued by the state or local government, project revenue bonds, and state authority bonds. General obligation bonds, backed by the full faith and credit of the state, are the traditional method of financing public works projects. However, this would require the state to use a portion of its bonding capacity, forcing other projects to be postponed. Project revenue bonds are another financing vehicle available to publicly-owned facilities. These bonds are repaid solely from revenue generated by the project. State authority or commission bonds are yet another option available where state legislation enables the ownership agency to incur debt and to issue notes and bonds. These bonds are the obligation of the ownership agency, and debt services are paid out of the total pool of revenues and monies available to the agency.

If the state decides to own hazardous waste management facilities, two methods of operation are available. The state may design and operate the facility, which would provide substantial public control. The state must ensure that the agency empowered to operate the facility has the technical and financial expertise to manage the facility. The other option is to contract with a private firm to operate the facility.

Two methods are available for private operation. One, where the state designs and builds the facility and contracts for its operation, allows for extensive state control over methods of operation. The alternative to this approach is for the state to own the site and lease it to a private firm which would then develop and operate the facility.

STATE ACTION

Many states have considered the question of ownership. Some states have decided on private ownership while others have passed enabling legislation for state ownership.

Minnesota is a good example of a state that has thoroughly studied the problem and decided to encourage private ownership by attempting to provide incentives for it. The Minnesota Legislature charged the Minnesota Pollution Control Agency and the State Planning Agency with reporting on hazardous waste management options available to the state. This report pointed out that ownership was an issue that should be considered by the legislature, but made no recommendations. In the Waste Management Act of 1980, the legislature established a planning and siting program that will encourage private development as much as possible. The legislature, in the meantime, has required a report from the Department of Economic Development on private investment in hazardous waste management. Based on that report and on the interest private industry shows in the area of hazardous waste management, the legislature at a later time will decide if more public sector involvement is necessary. Meanwhile, the act does allow the state to acquire land, by condemnation if necessary, for commercial hazardous waste facilities.

New York is encouraging private development by issuing pollution control bonds. This option may be used for hazardous waste facilities as well. These bonds are issued by the Environmental Facilities Corporation (EFC) but are the sole obligation of the private company.

There are many examples of public ownership at the local and state level which have varying degrees of private/public cooperation. In California, a number of facilities are owned and operated by county governments or sanitation districts. These facilities are landfills that accept limited quantities and only certain types of wastes.

The Gulf Coast Waste Disposal Authority (GCA) in Houston, Texas, is a publicly chartered agency empowered to provide treatment facilities for public and private sources of waste.[37] The GCA is developing a hazardous waste facility that will be financed by four hazardous waste generating firms. The GCA intends to perform several tasks associated with design and operation of the facility while other tasks will be performed by private contractors.

Washington's law authorizes the Department of Ecology to acquire land on the Hanford Nuclear Reservation to develop an extremely hazardous waste disposal site or facility.[38] The legislation requires that all extremely hazardous waste be disposed of at this site. A suitable site has been acquired and the state is now doing further studies.

The EFC of New York is empowered to acquire interests in real property for the purposes of constructing and operating industrial hazardous waste treatment, storage and disposal facilities.[39] The EFC is now studying the possibility of acquiring hazardous waste management facilities.

Oregon requires that, as a condition for obtaining a permit to operate a hazardous waste site, the licensee deed to the state the hazardous waste site after closure.[40] This requirement implies that the state will assume responsibility for perpetual care of the site.

Arizona passed a bill in 1980 that provides for state acquisition of a site for a hazardous waste disposal facility.[41] The bill, effective July 1980, requires the Department of Health Services to select a site and then submit the site for legislative approval. Once the site receives approval, the department has the authority to take all action necessary to acquire and develop the site.

Chapter VII
Conclusion

The specific examples of state legislative activity described in this guide demonstrate that state governments have been active in the development of innovative legislation in all areas of hazardous waste management. The degree of hazard approach adopted in California, the absolute liability section in the recently passed Pennsylvania legislation, and the comprehensive planning effort called for in the Minnesota Waste Management Act are all examples of this innovation. As time goes on, state legislatures will be developing new legislation and amending existing legislation in response to the public health and safety and environmental problems associated with improper hazardous waste management.

Notes

[1] Michigan (1979 Mich. Pub. Acts No. 64)
Florida (1979 Fla. Laws ch. 80.302).
Delaware (Del. Code Ann. tit. 7, ch. 63).
Arkansas (1979 Ark. Acts No. 406).
Massachusetts (Mass. Ann. Laws ch. 21 sec. 1 *et seq.*).

[2] 1980 Minn. Laws ch. 564, Art. IV.

[3] 1980 Ky. Acts sec. 11.

[4] L. Peery, D. Valentine and L. Wright, Senate Research Staff, *Staff Report on Issues in Hazardous Waste Management In Missouri*, Senate Energy and Environment Committee, p. 21. August 28, 1980.

[5] Cal. Health & Safety Code Div. 20, ch. 6.5, Art. 5(25150).

[6] Perry, *Staff Report on Hazardous Waste in Missouri*, p. 21.

[7] *Ibid.*

[8] 45 Fed. Reg. 33063 (May 19, 1980) (To be codified in 40 CFR 261 *et. seq.*).

[9] 45 Fed. Reg. 33063 (May 19, 1980) (To be codified in 40 CFR 261.)

[10] 1979 Utah Laws, Utah Hazardous Waste Act sec. 2(c).

[11] *Ibid.*

[12] Cal. Health & Safety Code Div. 20, ch. 6.5, Art. 2(25117)(a) and (b).

[13] Cal. Health & Safety Code Div. 20, ch. 6.5, Art. 2(25115).

[14] [illegible]ish. Rev. Code sec. 70.105.010(5) and (6) (1976).

[15] Tex. Art. 4477-7, V.T.C.S. (1978).

[16] 1979 Ark. Acts 406 sec. 4(e)(6).

[17] 45 Fed. Reg. 33154 (May 19, 1980) (To be codified in 40 CFR 265).

[18] Ill. 81 st. General Assembly HB 453 sec. 22.

[19] 1979 Ark. Acts 406 sec. 4.

[20] 1979 Mich. Pub. Acts No. 64 sec. 22(2).

[21] 1979 Mich. Pub. Acts No. 64 sec. 41(1).

[22] *Ibid.*

[23] 1979 Wis. Laws ch. 144.44(2)(b) as revised by ch. 34, Laws of 1979.

[24] 1979 Wis. Laws ch. 144.44(3)(c) as revised by ch. 34, Laws of 1979.

[25] 1979 Ark. Acts 406 sec. 13(b).

[26] Cal. Health & Safety Code Div. 20, ch. 6.5, Art. 7(25174).

[27] 1979 Ark. Acts 406 sec. 13(a) and (b).

[28] 1979 Fla. Laws ch. 80-302 sec. 403.727(3)(e) and (b).

[29] 1980 Pa. Laws No. 1980-97 Art. VI sec. 606.

[30] 1980 Minn. Laws ch. 564.

[31] 1980 Pa. Laws No. 1980-97 Art. V sec. 507.

[32] 1979 Ark. Act 1098 sec. 7(a) and (b).

[33] *Goals For State-Federal Actions*. Policy Resolutions of the National Conference of State Legislatures 1980-1981, p. 109.

[34] 1979 Kan. Sess. Law ch. 202.

[35] 1979 N.J. Laws ch. 346.

[36] 1979 Wis. Laws ch. 144.76(6).

[37] Acts of the 61st Legislature of the State of Texas, Reg. Session, 1979, 409 as amended by 202 (1971) ch. 258 and 466 (1973), and ch. 443 (1975).

[38] Wash. Rev. Code sec. 70.104.040.

[39] N.Y. Pub. Auth. Law, Title 12, New York State Environmental Facilities Corporation sec. 1285(c).

[40] Or. Rev. Stat. sec. 3459.590.

[41] 1980 Ariz. Sess. Laws ch. 119 (To be codified as Title 36-2801 of Ariz. Pub. Health Title).

A Legislator's Guide to Hazardous Waste Management

Appendix

Selected References

Glossary

elected References

Arthur D. Little, Inc., *A Plan for Development of Hazardous Waste Management Facilities in the New England Region*. Prepared for the Hazardous Waste Management Program of the New England Regional Commission, September 1979.

L. Blair, C. Gerber and L. Slosky, *Scientific and Technical Needs for Hazardous Waste Management*. Executive Office of the President, Office of Science and Technology Policy, 1979.

Chemical Manufacturers Association, *A System For Management Of Hazardous Wastes By Degree Of Hazard Under Subtitle C Of RCRA*, 1979.

T. Cook and J. Knudson, *Defining Hazardous Waste: An Evaluation of Two Approaches*. Department of Ecology, State of Washington, October 1978 (Revised March 1979).

U.S. Environmental Protection Agency,
—*Everybody's Problem: Hazardous Waste* (SW-826), 1980.
—*State Decision-Makers Guide for Hazardous Waste Management* (SW-612), 1977.
—*Hazardous Waste Facts* (SW-737), 1980.
—*Attack on Hazardous Waste: The Challenge of the 1980's* (SW-845), February 1980.
—*Hazardous Waste Facility Siting: A Critical Problem*, July 1980.

G. Lazarus and J. Steeler, *Development of A State Hazardous Waste Management System: Planning, Ownership Options, Liability and Management Technologies*. NCSL, Denver, Colorado, February 1980.

R.B. Pojasek, "Developing Solutions to Hazardous Waste Problems." Environmental Science and Technology, August 1980, pp. 924-929.

B. Simcoe and D. Wise, *Management of Hazardous Substances: A Survey of State Laws 1976-1980*. NCSL, Washington, D.C., 1980.

J. Steeler
—*Overview of the Final U.S. Environmental Protection Agency State Hazardous Waste Program Regulations*. NCSL, Denver, Colorado, July 1980.
—*Overview of the Final U.S. Environmental Protection Agency Hazardous Waste Generator and Transporter Regulations*. NCSL, Denver, Colorado, July 1980.
—"Hazardous Waste: General Policy." *Legislator's Handbook of Science and Technology Issues*. NCSL, Denver, Colorado, June 1980.
—"In Whose Backyard? The Problem of Siting Hazardous Waste Facilities." *State Legislatures*, April 1980, pp. 22-24. NCSL, Denver, Colorado.

Glossary

Abandoned Site
An inactive hazardous waste disposal or storage facility which cannot be easily traced to a specific owner, whose owner has gone bankrupt and subsequently cannot afford the cost of cleanup, or a location where illegal dumping has taken place.

Certificate of Need
A declaration by a state authority that a hazardous waste treatment, storage or disposal facility is essential to meet the hazardous waste management needs of the state and that the proposed facility is environmentally, technologically and politically adequate.

Cradle-to-Grave
Tracking of the source, quantity, concentration, type, etc., of hazardous waste from the instant of waste production until ultimate storage or disposal.

Disposal
The environmentally sound incineration, long-term storage, treatment, or the discharge, deposit, injection, dumping, spilling, leaking, or placing of a hazardous waste into or on land or water.

Disposal Facility
The location, equipment, or facility where hazardous wastes are disposed of, including a disposal facility associated with or adjacent to facilities generating waste.

Dump
A land site at which waste is disposed of in a manner which does not protect the environment, is susceptible to open burning, or is exposed to the elements, vermin or scavengers.

Fluidized Bed Incinerator
An incinerator in which the waste is maintained in suspension by an upward controlled flow of air.

Generator
The person who by nature of ownership, management or control, is responsible for causing or allowing to be caused, the creation of hazardous waste.

Hauler
A person who transports hazardous waste on a public road, railroad or water to a hazardous waste facility.

Incineration
The process by which waste volume is reduced by combustion in a controlled manner.

Industrial Development Revenue Bonds
Bonds which are based only on the revenues of the project or business. They are ultimately financed by money raised from the bond issued as security.

Injection
Subsurface emplacement of fluids through a bored, drilled or driven well; or through a dug well, where the depth of the well is greater than its largest surface dimension.

Leachate
A liquid containing decomposed waste, bacteria and other noxious and potentially harmful materials that drains from landfills.

Letter of Credit
A written instrument addressed by one person to another, requesting the latter to give credit to the person in whose favor it is drawn.

Manifest System
The system used for identifying the quantity, composition, origin, routing and destination of hazardous waste during its transportation from generation to disposal, treatment or storage.

Midnight Dumping
The illegal dumping of hazardous waste in an environmentally unsound and uncontrolled manner.

Off-Site Hazardous Waste Facility
An operation involving handling, treatment, storage or disposal of hazardous waste in one or more of the following situations:
1. The hazardous waste is transported via a commercial railroad, a public road or public waters, where adjacent land is not owned by, or leased to, the producer of the waste.
2. The hazardous waste site is not owned by, or leased to, the producer of the waste.
3. The hazardous waste is at a site which receives hazardous waste from more than one producer.

On-Site Hazardous Waste Facility
An operation involving handling, treatment, storage or disposal of hazardous waste on land owned by or leased to a waste producer and which receives waste produced only by the producer. Also considered on-site are situations where the disposal site and the area where the hazardous waste are generated are on the same contiguous property.

Sanitary Landfill
A method of disposing of refuse on land without creating nuisances or hazards to public health or safety. Careful preparation of the fill area and control of water drainage are required to assure proper landfilling. To confine the refuse to the smallest practical area and reduce it to the smallest practical volume, heavy tractor-like equipment is used to spread, compact, and usually cover the waste daily with at least six inches of compacted soil. After the area has been completely filled and covered with a final two- to three-foot layer of soil and has been allowed to settle an appropriate period of time, the reclaimed land may be turned into a recreational area such as a park or golf course. Under certain highly controlled conditions the land may be used as a plot on which some types of buildings can be constructed.

Surface Impoundment
A facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials, which is designed to hold wastes containing free liquids (e.g., holding, storage settling and aeration pits, ponds and lagoons).

Surety Bond
A bond guaranteeing performance of a contract or obligation.

The Science and Natural Resources Program

The Solid and Hazardous Waste Management Project of the NCSL, conducted in cooperation with the EPA, is designed to familiarize state legislators and legislative staff with the legal, economic and intergovernmental problems associated with solid and hazardous waste management and provide technical assistance to state legislators and state legislative staff. This project is part of NCSL's Science and Natural Resources Program. The program offers several services to legislatures on issues and questions concerning science and technology, natural resources, and state-tribal relations. The Denver office privides *general information services*, including responses to state information requests, brief reports and newsletters, *in-depth policy research* that results in major reports and guidebooks on key issues, *conferences and seminars*, and *direct in-state technical assistance* tailored to the requests of state legislatures. In addition to solid and hazardous waste, current projects cover the specific topics of water quality, radioactive wastes, vehicle inspection and maintenance for air quality, resource information systems and state-tribal relations. The program also has projects that provide general research and information services on topics involving scientific and technical questions.

NCSL's office in Washington, D.C., *monitors* federal natural resources legislation and agency programs and then *represents* the concerns of state legislatures, as established by the NCSL State-Federal Assembly, to the federal government. Further questions concerning the program can be directed to the following staff members:

Denver

Dan R. Bucks, Science and Natural Resources Program Director
Larry Morandi, Program Manager, Natural Resources
Ron Hogan, Program Manager, Science and Technology

Washington, D.C.

Donna Wise, Natural Resources Staff Director