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STATE OF ALASKA

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HOUSE SPECIAL COMMITTEE ON OIL AND GAS

April 24, 1985

Hazardous Substances Public Hearing

The role of the House Special Committee on Oil and Gas is to examine issues of concern to the state within the full context of oil and gas activities. An issue of particular concern is the disposal of hazardous materials related to the oil and gas industry; specifically, used drilling muds and fluids and wastewater discharge.

Today's public hearing is intended to provide an overview regarding these materials, and an understanding as to what extent existing problems are not being adequately met. This hearing will focus primarily on the following topics:

1. Expected DEC actions following the completion of a report by Tetra Tech, Inc. in December, 1984 that evaluated potential hazardous waste sites in Alaska.

2. A status update on Union Oil Company's request to bury 126,000 barrels of used drilling muds and fluids in existing reserve pits in the Kenai and Cannery Loop gas fields.

3. Status of drilling mud disposal guidelines being drafted by DEC.

4. The question as to which agency, DEC or the AOGCC (Alaska Oil and Gas Conservation Commission) is ultimately responsible for the clean-up of abandoned drilling sites.

5. Effects upon Alaska's environment resulting from both state and federal exemptions of used drilling muds and fluids from hazardous waste regulations.

6. Status of hazardous waste disposal on the North Slope.

7. Status of wastewater discharge from oil tankers in Prince William Sound.

This hearing will be teleconferenced to Anchorage, Kenai, and Fairbanks. Expected participants are as follows:

Commissioner Bill Ross, DEC
Steve Torok, EPA
Julie Athens, ARCO
David Wigglesworth, Alaska Health Project
Larry Weiss, Alaska Health Project
Jeff Mach, DEC
David Sears, AOGA
Mary Core, Alaska Center for the Environment
Bill Bobrick, Laborers Union
Sue Flemming, Anchorage Hazardous Waste Task Force
Bob Sizemore, Kenai resident
Ursula Barell
Exxon representative

INDEX OF PACKET MATERIALS

ALASKA STATE LEGISLATURE
HOUSE OF REPRESENTATIVES
RESEARCH AGENCY

Pouch Y, State Capitol
Juneau, Alaska 99811
(907) 465-3991

April 24, 1985

MEMORANDUM

TO: Representative Mike Davis

ATTN: ~~Jonathan Sperber~~

FROM: Eric Laschever, Legislative Analyst

RE: Regulation of Toxic and Hazardous Wastes in Alaska
Research Request 85-294

At your request, I have prepared the following information regarding the disposal of hazardous and toxic wastes:

- an overview of the types, quantities, location and disposal of hazardous wastes in Alaska;
- a summary of the laws and regulations which apply to these wastes; and
- a brief discussion of the disposal of petroleum drilling muds in other states and provinces.

HAZARDOUS WASTES IN ALASKA

The distinction between hazardous and toxic wastes is a legal one which is discussed later in this memorandum. Aside from this legal distinction, there is little difference between the two. In this memorandum, the term "hazardous waste" is generally used to refer to both hazardous and toxic wastes generated by Alaska businesses, government and individuals.

Information on the types, quantities and location of wastes is limited. In addition, sources often use different terms and measurements in presenting their findings. The following data are neither comprehensive nor complete, but they do provide a sense of the status of hazardous wastes in Alaska.

Types of Hazardous Wastes

In 1980, the Environmental Protection Agency (EPA) surveyed 322 industrial, commercial, and institutional facilities in Alaska to determine what types of hazardous wastes they were generating. The responses identified 75 different waste types.[1]

The most common way of grouping these wastes is by the following characteristics: ignitability, corrosivity, chemical instability (reactivity), and toxicity. Certain wastes are considered to be acutely hazardous. These include pesticides, halogenated hydrocarbons, carcinogens, and inorganics such as cyanide, arsenic, mercury and other heavy metals.[2]

In 1982, the EPA funded an assessment of hazardous wastes in Alaska. This assessment grouped hazardous wastes into the following four categories:

Solvents--chemicals or petroleum distillates used for degreasing metal parts, cutting and finishing fluids, varnish, laquer and paint thinner. Solvents are generally ignitable.

Petroleum sludge--contaminated petroleum wastes that are either a by product of a recovery or refining process or have accumulated in storage tanks. Petroleum sludge often contains toxic heavy metal contaminants.

Acids and corrosives--liquid wastes from pickling liquors, electroplating baths, battery manufacturing, and boiler descaling processes.

Other sludges and solids--electroplating sludges, spent containers, waste pesticides and herbicides, and outdated chemicals.[3]

A final category of hazardous wastes is poisons. Attachment A contains two lists which provide specific hazardous wastes. Attachments B, C and D, which present information on the quantities and location of hazardous waste, also illustrate types of hazardous wastes.

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[1] Evaluation of Collection, Treatment, and Disposal Alternatives for Hazardous Wastes for the State of Alaska, JRB Associates, September 1982, p. 2.

[2] Ibid., p. 3.

[3] Ibid., p. 14, 18.

Quantities of Hazardous Wastes

The EPA study estimated that 350 to 400 tons of hazardous wastes were generated annually in Alaska. It estimated that there were 25 to 40 industrial and commercial facilities which generate more than 2,200 pounds per month. The study estimated that 58 percent of these wastes were solvents, 18 percent were petroleum sludges, 18 percent were acids and corrosives, and 6 percent were other sludges and solids. According to the study, the military accounts for 65 percent of these wastes.[4]

A report recently prepared for the city of Anchorage estimates that the amount of hazardous wastes disposed of statewide each year is 154 tons.[5] Corrosives and petroleum wastes accounted for approximately 54 percent and 46 percent of the total, respectively. Solvents accounted for less than one percent of the total.

Another indication of the quantities of hazardous wastes generated each year is provided by the results of the spring cleanup sponsored by the Department of Environmental Conservation (DEC). Under this program, the State pays to ship wastes which are generated by households and businesses out of the state. During the 1983 cleanup, 1,059 pounds of corrosives, 2,852 pounds of flammables and 3,352 pounds of poisons were collected in Anchorage alone.[6] According to Marilyn Heiman, of the Alaska Center for the Environment, 61,000 pounds of wastes were collected statewide during the 1984 clean up.

Attachment B contains information on the quantities of different types of hazardous wastes generated in Alaska.

Location

According to the EPA study, the majority of Alaska's hazardous wastes are generated in the Matanuska and Tanana Valleys. Sources which generate more than 220 pounds per month are all in the vicinity of Anchorage, Kenai, Fairbanks or Prudhoe Bay. Elmendorf and Eielson Air Force Bases and Fort Richardson and Fort Wainright account for 60 percent of

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[4]Ibid., p. 48.

[5]Hazardous Waste Management Plan Elements 1, 2, & 3, CH2M Hill, March 1984, p. 2-18.

[6]Ibid., p. 2-7.

the statewide production.[7] The first table presented in Attachment B also lists the location of hazardous waste generators throughout the state. Attachment C contains a figure which further illustrates the distribution of hazardous waste generators in Alaska.

Current Disposal Practices

Until recently, the disposal of hazardous wastes was regulated only for generators who produced more than 2,200 pounds of wastes per month. The EPA study concluded that while this regulated waste was shipped to Arlington, Oregon, the majority of hazardous wastes generated in Alaska were stored or disposed of on-site, or disposed of in local landfills, sewers or incinerators. The study notes that reliable figures were unavailable, but estimated that only 20 percent of the 178 tons of nonsolvent wastes were shipped out, while most of the solvents were disposed of in Alaska.[8] Attachment D illustrates the major disposal method for several types of waste.

The DEC recently completed an assessment of 45 potential hazardous waste disposal sites. This assessment provides further examples of disposal practices in recent years. Attachment E contains a summary of the study's findings and the detailed reports from the three sites which the study identified as having the greatest need for further action.

LAWS AND REGULATIONS

Currently, three federal laws influence the management of hazardous wastes in Alaska. The State passed legislation in 1984 which outlines the State's role in hazardous waste management. Regulations to implement these laws must be adopted by July 1, 1986. Federal and State laws are examined below.

Federal Laws and Regulations

The Resource Conservation and Recovery Act (RCRA). The RCRA has been the primary vehicle for managing hazardous wastes in Alaska since 1980. In November 1984, the RCRA was reauthorized and amended. These changes will alter the management of hazardous wastes in Alaska. The following discussion first examines the current program and then reviews some of the recent changes.

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[7]Evaluation of Collection, Treatment, and Disposal Alternatives for Hazardous Wastes for the State of Alaska, p. 12.

[8]Ibid., p. 17.

The RCRA contains three main elements. It defines hazardous wastes, specifies the quantity of wastes which will be regulated and establishes a management system for hazardous wastes. Hazardous wastes are defined in two ways. First, a waste is hazardous if it is ignitable, corrosive, reactive, or leaches toxic substances such as heavy metals. Second, a number of specific wastes are listed. These listed wastes are by definition hazardous. It is important to note that drilling muds are specifically exempted from the definition of hazardous waste in the RCRA. Provisions of the RCRA apply only to generators who produce more than 2,200 pounds per month of most hazardous wastes or 2.2 pounds of acute wastes. Some of the components of the management system are discussed below.

The management system for hazardous waste is designed to track these wastes from their generation to their disposal. Under the RCRA, all businesses must know what their wastes are and whether or not they are hazardous under the law. Those businesses which are generating hazardous wastes must notify the EPA, which assigns them an identification number.

The EPA uses this identification number for tracking the waste through the system. The regulations specify procedures for labeling and dating the drums in which the wastes are stored and limits on-site storage in most cases to 90 days. A manifest which specifies the types and quantities of waste must be filled out. This manifest accompanies the waste through each stage of transportation, treatment and disposal. This record system ensures that there is documentation that the waste is properly disposed of.

The RCRA outlines specific procedures for the storage, treatment and disposal of hazardous wastes. Storage, treatment and disposal must be performed at licensed facilities which are designed for this purpose. There are no licensed disposal facilities in Alaska. According to all of the sources I interviewed, the absence of disposal facilities and licensed collecting stations greatly increases the costs of hazardous waste disposal.

Under the RCRA, the EPA is responsible for implementing the program. Implementation includes inspecting known and suspected generators, reviewing permit applications for storage, treatment and disposal facilities, and educating producers of hazardous wastes about the requirements of the law. A state may be authorized to perform this function if it develops a program which satisfies the law. Alaska is currently developing such a program. A cooperative agreement between the EPA and DEC assigns DEC certain responsibilities in the interim. This approach increases the EPA's resources for administering the program and provides training to the DEC staff so that they will be ready when the program is turned over to the State.

During FY 84, the DEC conducted 19 RCRA inspections of EPA-regulated facilities. In FY 85, 40 inspections are planned. The EPA will continue to review permit applications until the State is authorized to take over the program.

The recent amendments to the RCRA greatly increase the number of waste generators subject to the law. As noted earlier, the current regulations apply only to sources which generate over 2,200 pounds of waste per month. The amended law requires the EPA to develop regulations for generators of over 220 pounds per month by March 31, 1986. By July 1985, waste generated in quantities of greater than 220 pounds must be accompanied by an EPA manifest if shipped off-site. This new requirement is likely to promote the demand for licensed collection or disposal facilities in Alaska because shipping wastes out-of-state is extremely expensive for small generators.

Other amendments of the RCRA broaden the restrictions on land disposal. By specified dates, the EPA must decide whether it is safe to continue land disposal of such hazardous wastes as solvents and dioxin. If no determination is made by these dates, then land disposal of the substances is automatically prohibited. This regulation may effect the on-site disposal practices of some Alaska generators.

The Toxic Substances Control Act (TSCA). All hazardous wastes in Alaska are regulated by the RCRA with the exception of polychlorinated biphenyls (PCBs). PCBs were already regulated under the TSCA and were therefore excluded from regulation under the RCRA. For legal purposes, PCBs are classified as toxic wastes rather than hazardous wastes. According to Steve Torok of the EPA, PCBs are the only toxic wastes.

PCBs are part of the family of organic chemicals known as chlorinated hydrocarbons. Most PCBs were sold for use as insulating liquids in electrical transformers and capacitors. PCBs have been shown to cause toxic effects such as reproductive defects, gastric disorders, skin lesions and cancerous tumors.[9] The TSCA prohibits the manufacture, processing and distribution of PCBs and provides a time table for phasing out PCBs which are already in use.

In Alaska, the EPA regulates PCBs which are in use by requiring the user to keep records on the equipment which contains the PCB and by inspecting these facilities on a regular basis. According to Steve Torok, the EPA has performed 10 to 20 inspections annually in recent years. The regulations for disposing of PCB-contaminated fluids vary according to the concentration of PCB. If the fluid has under 50 parts

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[9] EPA Toxics Information Series, Polychlorinated Biphenlys, July 1983, p. 1 and 2.

per million (ppm), it may be disposed of in a local landfill. A fluid containing more than this amount must be disposed of in either a licensed incinerator or licensed landfill. Because there are no licensed facilities in Alaska, most contaminated equipment is shipped to Oregon for disposal.

According to Mr. Torok, there are no summaries which list the location or quantities of PCBs which are present in Alaska. He notes that PCBs are likely to be present anywhere that there is electrical generating equipment. Examples of users of PCB-contaminated equipment are rural utilities, the University of Alaska and the military. He adds that rural utilities are of particular concern at this time, because recent inspections detected several severe violations. Mr. Torok estimates that the military shipped over one million pounds of contaminated equipment and soil to Oregon last year. He said that the amount of nonmilitary waste which was shipped was significantly less.

Comprehensive Environmental Response Compensation and Liability Act (CERCLA). The CERCLA provides funds to assist states inventory hazardous waste sites and (if they qualify) clean them up. The preliminary assessment of 45 sites in Alaska (which was mentioned earlier in this memorandum) was funded through this program.

State Laws

In 1981, the legislature passed SB 29, which instructed the DEC to seek EPA authorization to administer and enforce a hazardous waste program. Regulations were drafted to implement the law, but in 1983 it became clear that the statute would have to be amended to meet EPA specifications. In 1984, the legislature passed SB 503, which combined the amendments proposed by the governor in SB 498 with those proposed by the Senate Resources Committee, Senator Vic Fischer and Senator Josephson in SB 503, SB 450, and SB 486, respectively. The major provisions of SB 503 are summarized below. (Attachment F contains a copy of the version of SB 503 which was adopted.)

Section 1 of the bill authorizes the Department of Environmental Conservation to develop regulations for managing hazardous wastes. These regulations, when approved by the EPA, will enable the State to assume the responsibility for hazardous waste management under the RCRA by July 1, 1987. Regulations would apply to amounts of 220 pounds per month or greater, and acute wastes of 2.2 pounds per month. Mining wastes and those generated by oil and gas operations would initially be excluded.[10]

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[10]The sectional analysis is taken from a memo by Edward Hein to Senator Fahrenkamp dated April 18, 1984.

Section 2 requires transporters of hazardous waste to first send a copy of the manifest for those wastes to the DEC. The DEC must send copies to all state and local public safety agencies in the areas through which the waste is transported.

Sections 3 and 4 require the DEC to set up temporary collection stations for hazardous wastes and to evaluate and select potential sites for permanent disposal sites in Alaska.

Sections 5 through 7 establish civil penalties of $500-$100,000 for violations, with additional fines of up to $10,000 per day if the violations continue. Section 8 establishes criminal penalties of up to $10,000 per day and up to one year imprisonment.

DISPOSAL OF OIL AND GAS DRILLING MUDS IN OTHER STATES

I obtained brief descriptions of disposal procedures used by California, Texas and Louisiana. The Department of Environmental Conservation recently completed a survey of disposal practices used by other states and their findings supplement the following descriptions. In addition, Dan Wilkerson of the DEC will be sending a selection from the materials he received from these and other states which I will forward to you upon receipt.

California

In California, the type of disposal required for drilling muds is based on the level of toxicity of the waste. According to Stanford Lau of the California Department of Health, drilling muds are covered by California's hazardous waste laws and are tested for toxicity, corrosivity and ignitability to determine whether a given set of waste is hazardous. He notes that the tests and criteria are similar to those used by the EPA under the RCRA; however, the restrictions for heavy metals are more stringent than the EPA's restrictions.

Drilling muds which are determined to be hazardous by the above standards must be disposed of in Class 1 disposal sites. These sites are double lined to prevent leaching and must be located in areas with stable geology. There are less than five Class 1 sites in the state. A manifest system similar to the one described for the RCRA is used to track these wastes from their source to their disposal site.[11] Non-hazardous drilling muds are disposed of in the following ways: on-site

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[11] Survey of Drilling Mud Use and Disposal, Alaska Department of Environmental Conservation, September 1984, p. 28.

dumps, sanitary land fills (Class 3 disposal sites), and other double-lined containment pits (Class 2 disposal sites).

Texas

The Texas Railroad Commission regulates the disposal of drilling muds. Rule 8 prescribes the procedures for such disposal and covers such topics as authorized disposal methods, authorized pits, prohibited disposal methods and permits. Attachment G contains a copy of Rule 8. Texas also uses a manifest system to document the handling and disposal of its drilling Muds.[12]

Louisiana

According to Steve Colpepper, of the Office of Conservation, drilling muds are not classified as hazardous wastes in Louisiana. He indicated that much of the drilling waste has been stockpiled with little supervision or safeguards, but that incineration is becoming more common. Landfarming is also used as a disposal method. A survey completed by the DEC notes the following procedures used in Louisiana: the use of pits lined with three to five feet of materials with low permeability, monitoring of pits to detect seepage, and a manifest system for tracking the disposal of drilling muds.[13]

Please contact us if we can be of further assistance.

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Attachments

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[12]Ibid.

[13]Ibid., p. 27 - 29.

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ardous waste which is subject to this chapter and which the department, on a case-by-case basis, determines is achievable for the hazardous waste by application of production processes and available methods, systems and techniques, taking into account energy, environmental, and economic impacts and other costs; and

(2) the waste is disposed of in a manner that 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. (§ 10 ch 93 SLA 1981)

Sec. 46.03.299. Control of hazardous wastes. (a) The department shall, by regulations adopted under the Administrative Procedure Act (AS 44.62), establish a state hazardous waste program.

(b) The state hazardous waste program shall, consistent with and substantially equivalent to the Federal Resource Conservation and Recovery Act of 1976 (P.L. 94-580, 42 U.S.C. 6901 — 6987),

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

(2) enumerate specific hazardous wastes (within the meaning of AS 46.03.900(32)) subject to the provisions of AS 46.03.302 and 46.03.305; however, the department may not list as hazardous a waste that has not been listed as a hazardous waste by the United States Environmental Protection Agency under 42 U.S.C. 6921, unless the commissioner first determines that the waste is hazardous as defined in this chapter;

(3) identify the sources of hazardous wastes enumerated under (2) of this subsection;

(4) qualify the department to receive authorization from the administrator of the Environmental Protection Agency to administer and enforce a hazardous waste program in accordance with the Federal Resource Conservation and Recovery Act;

(5) determine the amount of a hazardous waste that is so small as to not present a hazard to public health, livestock, fish, wildlife, and the environment of the state when disposed of;

(6) exempt a person who generates, treats, 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 (5) of this subsection; and

(7) establish

(A) criteria for identifying appropriate hazardous waste disposal site locations;

(B) procedures by which the public shall have opportunity to

(i) participate in hazardous waste disposal site locations; and

(ii) review and comment on issuance of hazardous waste disposal permits by the department. (§ 10 ch 93 SLA 1981)

Revisor's notes. — In subsection (b), the word "Resource" was added preceding "Conservation and Recovery Act" and in paragraph (2) of that subsection, a reference to AS 46.03.900(32) was substituted for a reference to AS 46.03.900(31) by the revisor of statutes under AS 01.05.031.

Sec. 46.03.300. Exceptions.

Repealed by § 12 ch 172 SLA 1978.

Revisor's notes. — Section 6, ch. 172, SLA 1978 would have added a new subsection (b) to AS 46.03.300 (repealed by Sec. 12 of that same Act), but as the language of the new subsection (b) refers solely to AS 46.03.270, also repealed in Sec. 12 of ch. 172, the amendment purportedly made by § 6 has been considered to be of no effect, and consequently dropped.

Editor's notes. — The repealed section derived from § 3, ch. 120, SLA 1971.

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. 46.03.302. Hazardous waste permit. (a) A person may not treat, 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 that 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 treats, transports, stores, or disposes of the hazardous waste. (§ 10 ch 93 SLA 1981)

Sec. 46.03.305. Hazardous waste reports and manifests. A person who generates hazardous wastes shall submit to the department reports or manifests that the department may require for handling the hazardous wastes. (§ 10 ch 93 SLA 1981)

Sec. 46.03.308. Transportation of hazardous wastes. Hazardous wastes may not be transported to a hazardous waste disposal site unless the wastes are accompanied by a report or manifest that the department may require for handling hazardous wastes. (§ 10 ch 93 SLA 1981)

Sec. 46.03.310. Conflicting laws.

Repealed by § 12 ch 172 SLA 1978.

Editor's notes. — The repealed section derived from § 3, ch. 120, SLA 1971.

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

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Sec. 46.03.311. Public records. (a) Permits, permit applications, records, reports, and information and documentation obtained under AS 46.03.302 — 46.03.308 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 that 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 — 46.03.311.

(c) The provisions of this section do not limit the department's authority to release confidential information during emergency situations. (§ 10 ch 93 SLA 1981)

Article 6. Pesticide Control.

Section

320. Authority
330. Public pesticide programs

Collateral references. — 61A Am. Jur. 2d, Pollution Control, §§ 293-295, 299, 300, 305-406.

39A C.J.S., Health and Environment, § 47.

Constitutionality of statutes for protection of vegetation against disease or infection. 70 ALR2d 852.

Liability for injury caused by spraying or dusting of crops. 37 ALR3d 833.

Sec. 46.03.320. Authority. (a) The department is authorized to

(1) regulate the transportation, testing, inspection, packaging, labeling, handling and advertising of pesticides and broadcast chemicals offered for sale, or placed in commerce for use in the state;

(2) regulate and supervise the distribution, application or use of pesticides and broadcast chemicals in any state project or program, or by a public agency under the jurisdiction of the state;

(3) regulate or prohibit the use of pesticides and broadcast chemicals.

(b) The department may provide by regulation for the licensing of private applicators of restricted-use pesticides and for persons engaged

(23) "restricted-use pesticides" means pesticides that are classified for restricted use under section 3(d)(1)(C) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended (7 U.S.C. 136a (d)(1)(C));

(24) "facility" means any offshore or onshore structure, improvement, vessel, vehicle, land, enterprise, or endeavor;

(25) Repealed by § 116 ch 59 SLA 1982.

(26) "resource recovery" means the recovery of materials or energy from solid wastes for industrial use, agriculture, heat production, power production, or other processes or purposes and includes the reuse of materials or products to conserve natural resources;

(27) "solid waste" means all unwanted, abandoned, or discarded solid or semi-solid material whether or not subject to decomposition, originating from any source;

(28) "solid waste disposal facility" means a facility for the discharge, deposit, injection, consolidation, or placement of solid waste into or onto the land and includes transfer stations and sanitary landfills;

(29) "solid waste processing facility" means a facility for the extraction of materials from solid waste, volume reduction, conversion to energy, or other separation and preparation of solid waste for reuse or disposal and includes incinerators, shredders, balers, and transfer stations;

(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;

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

(32) "hazardous waste" means a waste or combination of wastes that 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 present or potential hazard to human health or the environment when improperly managed, treated, stored, transported, or disposed of;

(33) "manifest" means the form used for identifying the quantity, composition, origin, routing, and destination of a hazardous waste when the hazardous waste is transported;

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

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TC-3924

PRELIMINARY ASSESSMENT OF 45 POTENTIAL HAZARDOUS WASTE SITES IN THE STATE OF ALASKA

by

Tetra Tech, Inc.

for

Alaska Department of Environmental Conservation
Juneau, Alaska 99811

December, 1984

Tetra Tech, Inc.
11820 Northup Way, Suite 100
Bellevue, Washington 98005

ACKNOWLEDGEMENTS

This report, "Preliminary Assessment of 45 Potential Hazardous Waste Sites in the State of Alaska," was produced for the Alaska Department of Environmental Conservation (ADEC), Juneau, Alaska, under a cooperative agreement with the Environmental Protection Agency (EPA). Tetra Tech wishes to thank the following individuals who supplied information and comments for this study and subsequent report:

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Debbie Flood	U.S. EPA (Seattle)
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Jeff Mach	ADEC (Fairbanks)
Simon Mawson	ADEC (Nome)
Glenn Miller	ADEC (Juneau)
Steve Torok	U.S. EPA (Juneau)
Steve Zrake	ADEC (Anchorage)

For Tetra Tech, the gathering of information, site visits and assessments, and preparation of this report were conducted by Scott Ferris and Warren Hansen. Project management and assistance was provided by Lary Marx, Warren Hansen, and Tom Johnson.

INTRODUCTION

This report is a preliminary assessment of 45 potential uncontrolled hazardous waste sites in the state of Alaska. It was prepared by Tetra Tech, Inc. for the Alaska Department of Environmental Conservation (ADEC) and represents Alaska's response to Section 3012 of the Resource Conservation and Recovery Act (RCRA). Project activities included gathering background information, conducting site visits, and acquiring supplemental data from federal, state, and local sources. All data for each site were then reviewed and summarized on EPA Form 2070-12, "Potential Hazardous Waste Site Preliminary Assessment." These assessments are presented in Appendix A, and constitute the majority of this report.

HISTORICAL OVERVIEW

With geophysical and industrial characteristics unlike all other states, Alaska is a unique location for hazardous waste evaluations. In most regions, Alaska is still a vast, undeveloped frontier, and human activities have been limited primarily to commercial resource exploration and military outposts.

The development of the North Slope-Prudhoe Bay oil fields and construction of the Alyeska oil pipeline in the 1970s presaged industrial expansion and an increase in oil production capacity. Mining and ore refining have also been conducted on a large scale. These and other industries have produced significant volumes of waste, including smelting and mining residues, drilling muds, and waste oils. The latter two are exempt from regulation as hazardous wastes, per se, but can contain metals, halogenated hydrocarbons, or polychlorinated biphenyls (PCBs), and must therefore be closely monitored.

The physical conditions throughout the state have a direct impact on hazardous waste management and containment. In the permafrost zones of the north, groundwater migration from land disposal sites is limited.

The stratigraphy of glacial deposits is unknown in many areas, and makes it difficult to predict groundwater location or flow. Surface water flow is limited to periods of thaw and is often difficult to trace in the tundra. Low temperatures influence the hazardous chemicals directly by reducing vapor pressure, changing viscosity, and affecting other characteristics.

The logistics of conducting commercial activities has also had a direct bearing on the management and types of wastes in Alaska. The stockpiling of fuels, drilling mud additives, solvents, explosives, and other materials is a regular practice at remote locations. This has resulted in the accumulation of large numbers of drums that may then be reused to store wastes. When a remote site is abandoned, these products are often left behind. Major oil companies operating on the North Slope have conducted regular cleanups of such inventories, and have deposited waste materials in nearby landfills. These sites do not always meet RCRA standards for hazardous waste disposal, and must be closely monitored.

Sites in and around the metropolitan centers are more typical of those found in other states. These include battery operations, tanneries, metal plating shops, municipal landfills, and other sites. Wastes generated at these sites include waste oil, dilute acids, miscellaneous solvents, wastewater, and general refuse. Drinking water contamination is the most prevalent hazard posed by these sites.

In October, 1982, Congress appropriated 10 million dollars from the trust fund established under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) of 1980 to implement Section 3012 of the Resource Conservation and Recovery Act. In the conference report for the appropriation, the committee indicated that it was:

> aware that in many areas delays have been experienced in the discovery, inspection and evaluation of hazardous waste sites. This $10,000,000 is a one-time, non-recurring appropriation to assist States in completing the site survey and inspection process. Since this will not be a continuing program, the conferees expect the Agency to allocate these funds to the States as expeditiously

as possible, without establishing unduly complex administrative mechanisms or requirements. [CERCLA/RCRA 3012 Guidance Document, March 8, 1983]

On February 7, 1983, the Environmental Protection Agency (EPA) published a notice in the Federal Register which finalized the guidelines implementing Section 3012 of the RCRA program. This notice provided a mechanism for allocating funds to states, waived state cost-sharing responsibilities, identified and defined allowable uses of the funds, discussed the priority of the allowable activities, and established general procedures for obtaining the funds.

The RCRA 3012 program was designed to integrate with existing CERCLA implementation efforts. The CERCLA remedial response program begins with site discovery and, depending on the results of each subsequent phase, progresses through preliminary assessment, site inspection, National Priority List nomination, remedial investigation, feasibility study, and design and implementation of the selected remedial action.

RCRA SECTION 3012 OBJECTIVES

ADEC and EPA have jointly compiled an inventory of potential hazardous waste sites in the state of Alaska. This list, in addition to the RCRA Interim Status Inspections, provides the basis for the list of potential hazardous waste sites in Alaska, which, in turn, makes up the federal Emergency and Remedial Response Information System (ERRIS). Presently, there are approximately 100 reported uncontrolled hazardous waste sites in Alaska. The number of sites listed may be reduced as new data confirm the absence of threats to human health or the environment.

The Hazard Ranking System (HRS) is designed to assist in quantifying potential hazards at waste disposal sites. If a site's HRS score is high, the site may be included on the CERCLA National Priorities List (NPL). EPA defined five activities for states to undertake under RCRA Section 3012. In order of priority, these activities are:

- Preliminary assessments
- Site inspections
- Responsible party searches
- Discovery
- Site inspection follow-up.

Preliminary assessments and site inspections reduce the number of sites for further investigation, and allow more efficient use of available resources. Responsible party searches provide support for enforcement action. Discovery of additional sites ranks lower than assessment and inspection because of the pressing need to learn more about identified sites and because it is thought that earlier efforts located the majority of potentially hazardous sites. Follow-up site inspection is costly and requires highly trained staff.

PRELIMINARY SITE ASSESSMENTS

Tetra Tech's role under the EPA-State of Alaska cooperative agreement was to perform preliminary assessments of 45 potential hazardous waste sites on the ERRIS list and to recommend priorities for future actions that would better characterize each site.

EPA defines a preliminary assessment as the process of collecting and reviewing readily available information about a known, suspected, or potentially hazardous waste site; and using this information to determine the degree of the hazard to public health and the environment, the source and nature of a release or potential release, and the identity of the responsible party. Potential hazardous waste sites are then ranked or grouped into one of the following four priority action groups:

- "None" - no further action recommended
- "Low" - inspection recommended on a time-available basis
- "Medium" - inspection recommended on a scheduled basis
- "High" - inspection recommended promptly.

Sites rated "Low", "Medium", or "High", should then be inspected in order to fully characterize the hazards. Sites with a "None" priority assessment may be removed from the ERRIS list because it has been determined that no problem exists at the site, or that a problem exists and steps have been taken to resolve it. Sites must be placed in one of the following backlog reduction categories in order to be removed from the ERRIS list:

- No problem, no further action required.

  1. No hazardous substances exist at the site.

  2. Hazardous substances exist but are fully controlled.

  3. Hazardous substances exist, but in quantities and concentrations which do not pose a threat to health or the environment. This determination is difficult to make, and requires a "risk/safety" decision. Risk is an objective measure of the probability of an undesirable event occurring. Safety is a judgment of what level of risk is acceptable. Risk/safety decisions are based on one of the following, in order of priority:
     - Approved standards: WQS, NAAQS, PDWS, etc.
     - Formally published criteria: WQS, SNARLS, etc.
     - Other standards and guidelines: OSHA, NIOSH, etc.
     - General literature.
     - Expert opinion.

4. Site is a duplicate of another site.

5. Site does not exist.

- Problem, further action required.

1. Site included on National Priorities List.

2. CERCLA enforcement site, non-NPL.

3. Site regulated by another federal agency (e.g., military base, BLM, USFS).

4. Site regulated by another EPA program (e.g., NPDES).

5. Site regulated by state government.

6. Site regulated by local government.

7. Problems exist but no appropriate regulatory/response tool available.

8. Problems too minor for EPA or other agency attention.

RESULTS

PRIORITY ACTION RANKINGS

To use the decision flowchart, start in the upper lefthand corner at the Potential HW Site arrow. Follow the arrows to the landfill site decision/description box. Continue following the flowchart until the site is adequately described and subsequently assessed. Some sites may fit into more than one site decision/description box. For these sites, follow the decision flowchart for each site decision/description box. The site will be ranked according to the worst case priority assessment. Table 1 depicts the priority action rankings for each of the 45 sites.

SUMMARY MATRIX

The following matrix lists the 45 sites with their Priority Action Rankings. The sites are further described in terms of status (active or abandoned, landfill or dump); contents (presence of PCBs, waste oil, or drilling mud); size; and other characteristics.

Figure 2. Decision Criteria Flowchart

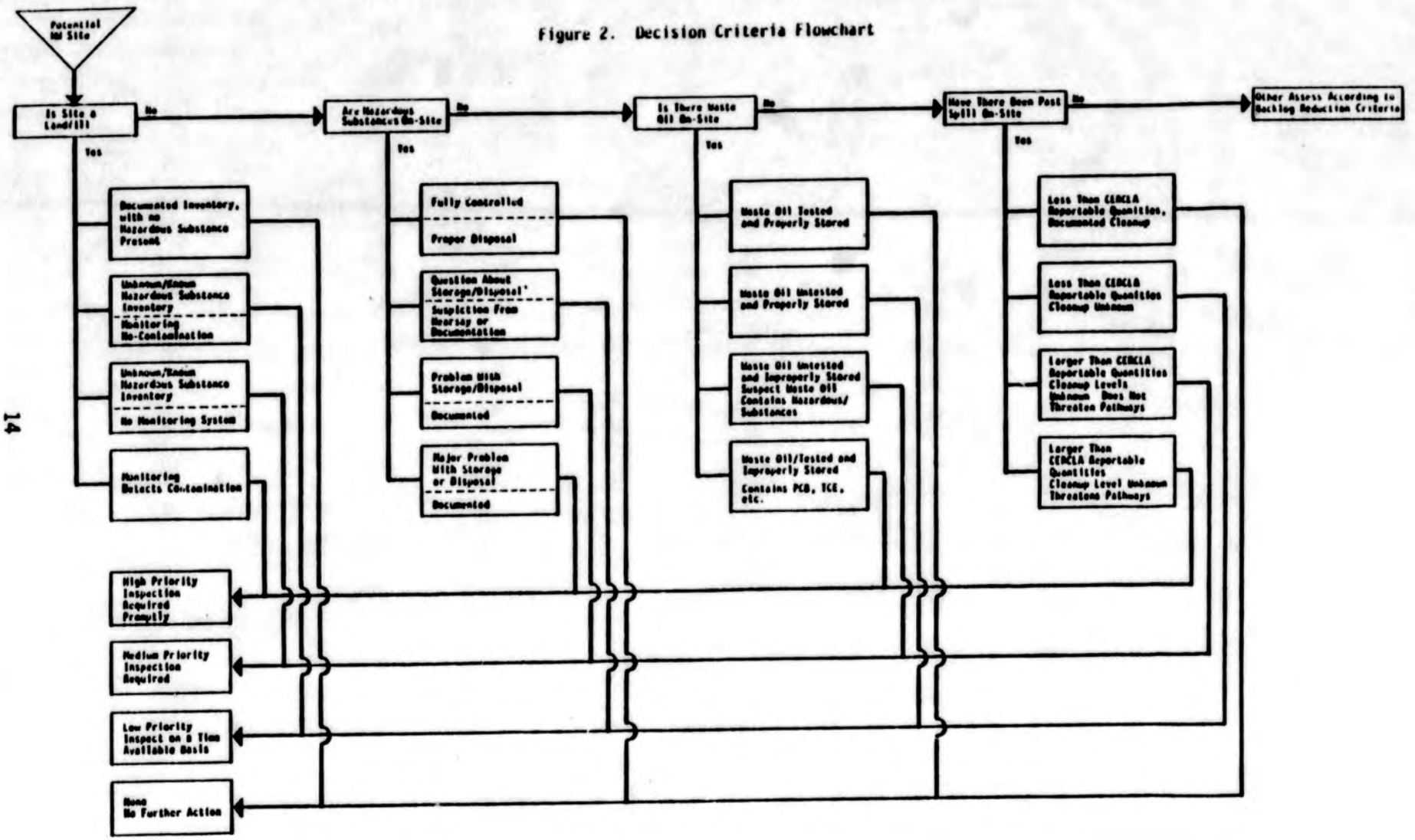
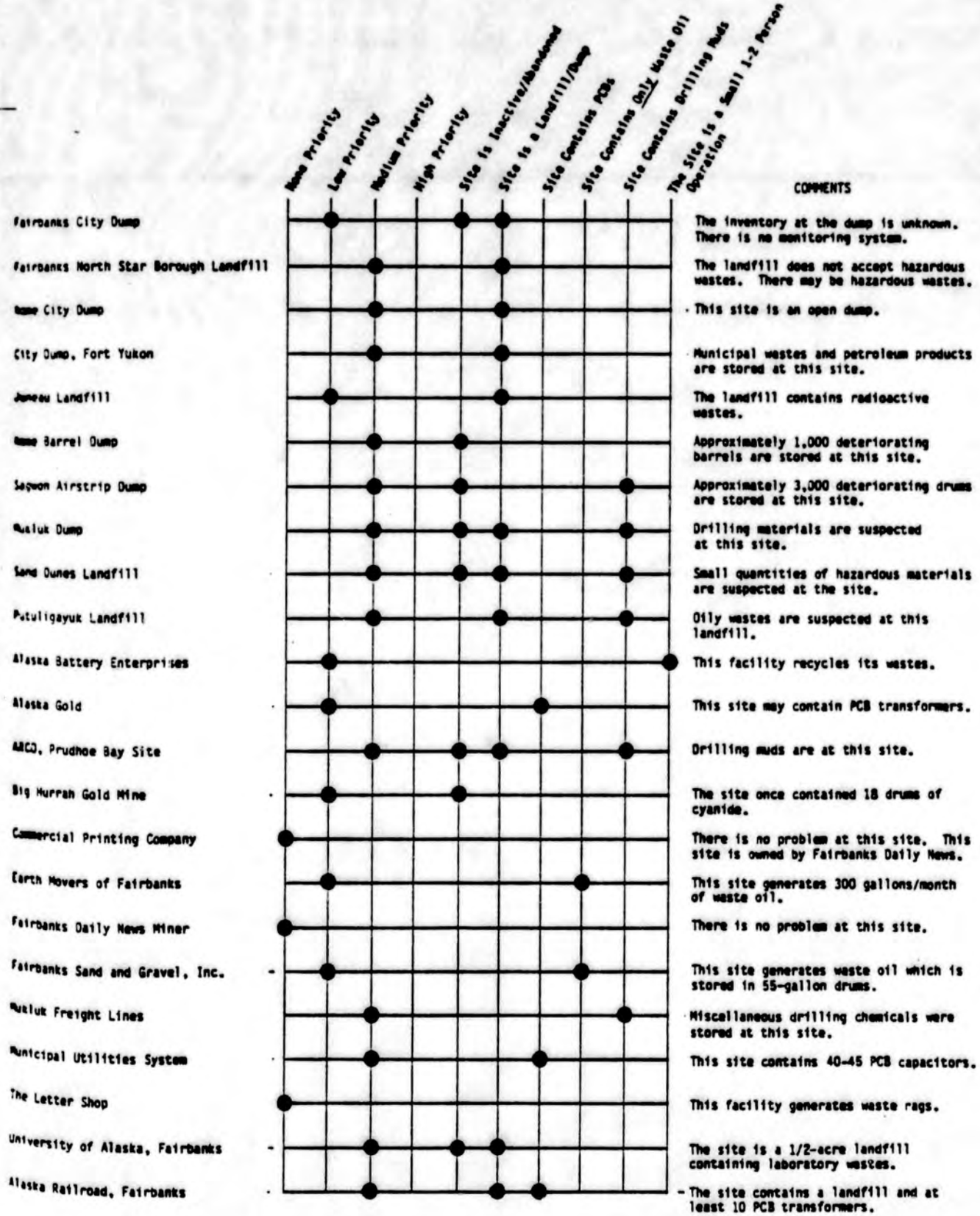


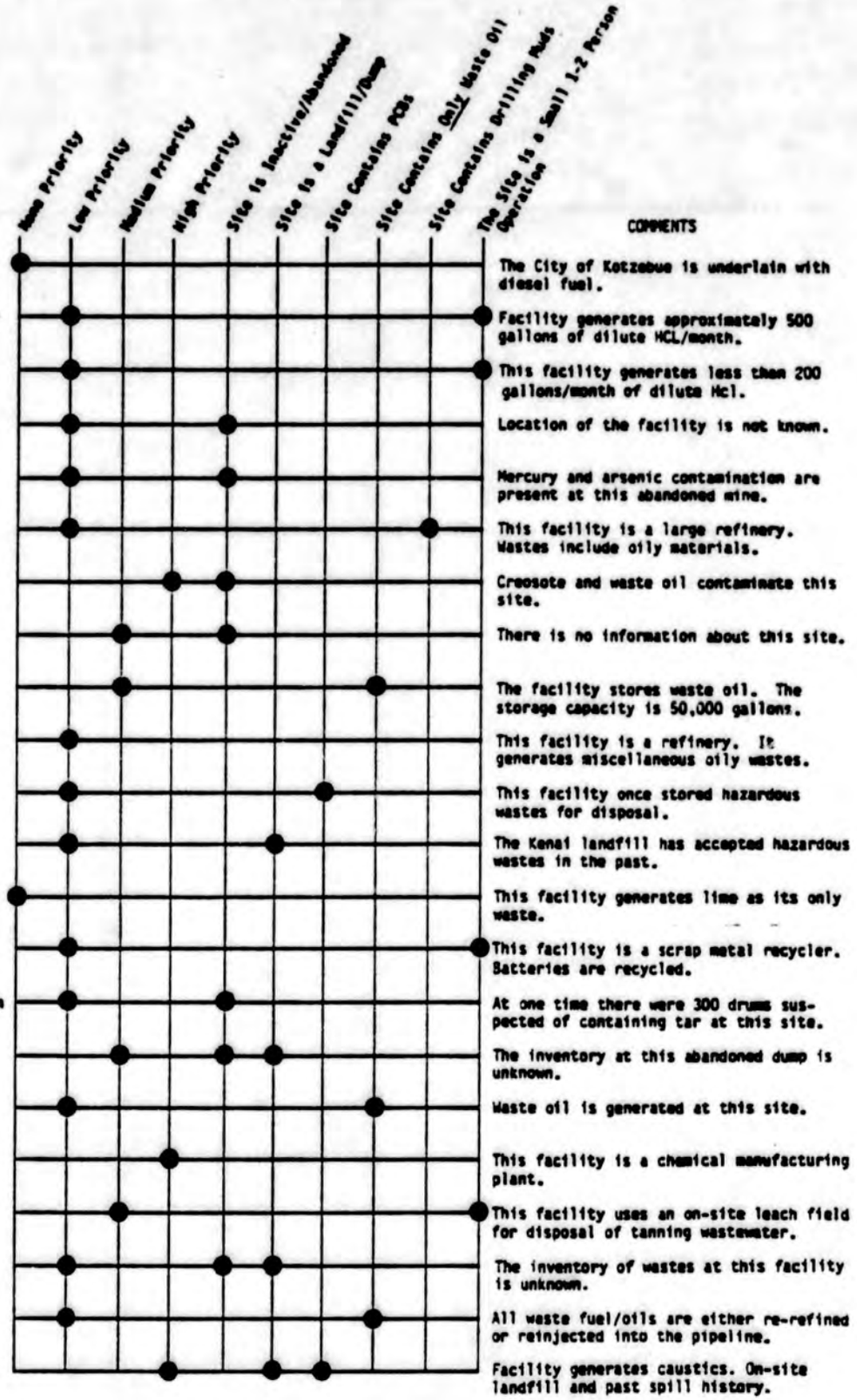
TABLE 1. PRIORITY ACTION RANKINGS

None: No further action required	Low: Inspect on a time-available basis	Medium: Inspection required	High: Inspection required immediately
• Commercial Printing Company	• Fairbanks City Dump, 2nd Ave.	• Fairbanks North Star Borough Landfill	• Old Creosote Plant
• Fairbanks Daily News-Miner	• Juneau Landfill	• Nome City Dump	• Union Oil of California
• The Letter Shop	• Alaska Battery Enterprises	• City Dump, Fort Yukon	• Alaska Railroad, Anchorage
• Diesel Fuel Dump, Kotzebue	• Alaska Gold	• Nome Barrel Dump	
• Liquid Air, Inc.	• Big Hurrah Gold Mine	• Sagwon Airstrip Dump	
	• Earth Movers of Fairbanks	• Mukluk Dump	
	• Fairbanks Sand & Gravel, Inc.	• Sand Dune Landfill	
	• Alaska Electroplating & Bumper Repair, Anchorage	• Putuligayuk Landfill	
	• Alaska Husky Battery, Inc.	• ARCO - Prudhoe Bay Site	
	• Pacific Airmotive Corp.	• Mukluk Freightlines	
	• Red Devil Mine Waste Ponds	• Municipal Utilities System	
	• Tesoro Alaska Petroleum	• University of Alaska, Fairbanks	
	• Chevron USA Alaska	• Alaska Railroad, Fairbanks	
	• Crowley Environmental Services	• White Pass/Yukon Railroad	
	• Kenai Landfill	• Alaska Pollution Control	
	• M & M Enterprises	• Old Kenai Dump	
	• Russian Creek/Bell Flats	• Frontier Tanning	
	• Rogers & Babler, Inc.		
	• International Airport Landfill		
	• North Pole Refinery		
5	20	17; 2 Anchorage	3; 1 Anchorage

SUMMARY MATRIX



SUMMARY MATRIX



RECOMMENDATIONS

As a result of this study, it is recommended that the five sites ranked "None" priority be removed from the ERRIS list. A site inspection should be performed, on a time-available basis, on the 20 sites ranked "Low" priority. The 17 sites in the "Medium" priority group should receive prompt site inspection.

There were three sites ranked in the "High" priority group: Old Creosote Plant, Whittier; Union Oil of California, North Kenai; and the Alaska Railroad, Anchorage. Creosote and waste oil tank bottoms are present in the soil and in a pond at the Old Creosote Plant in Whittier. The Union Oil of California chemical manufacturing facility in North Kenai has had large chemical spills and has disposed of hazardous wastes on-site. The Alaska Railroad in Anchorage has discharged hazardous materials on-site and houses an abandoned on-site landfill. It is recommended that these three sites receive the highest priority for inspection.

MEMORANDUM State of Alaska

TO: Bob Martin
Special Assistant
Anchorage

RECEIVED
JAN 18 1985

DATE: January 17, 1985

FILE NO:

TELEPHONE NO: 465-2606

FROM: Judy C. Ansley
Public Information Office

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SUBJECT: 3012 Study

DEC has just completed a preliminary assessment of 45 hazardous waste sites in Alaska. The study, funded by EPA under RCRA 3012, is the first step toward locating and cleaning up uncontrolled hazardous waste in Alaska. Work on the study was done under contract by Tetra Tech, Inc. in the summer of 1984, at nonfederal locations named in the federal ERRIS list.

DEC is distributing the report now to owners of the 45 sites and to other people who express interest in it. You can expect phone calls about it. Here is a list of questions that might arise, and potential answers:

I. Q - Is there hazardous waste at these sites?

A - Yes, we assume so, at some locations, based on past activities at the sites. The 3012 study is just an inventory of where hazardous waste sites might be located in Alaska. We don't know at present whether or not disposal or spills occurred which might have contaminated soil or water.

II. Q - Where did the list of sites come from?

A - The list was compiled by the EPA over the last eight years from a variety of sources. Anyone who suspects past or present hazardous waste activity at a site in Alaska is urged to contact the EPA or the Deapartment of Environmental Conservation.

III. Q - What is DEC going to do next?

A - We're applying for a large grant from EPA to take samples to determine whether or not contamination from spills or disposal activities occurred at the sites. The present study was basically an inventory of sites, with minimal sampling at only a few sites.

IV. Q - If DEC finds hazardous waste, what are you going to do about it?

A - Federal regulations put the responsibility for cleanup on the owner of the land.

V. Q - What if the owner doesn't clean up?

A - EPA has the responsibility to enforce cleanup. If we find the business refuses to clean it up, we will turn the matter over to the EPA for enforcement. The state and federal governments can also litigate, and criminal and civil penalties can be assessed against the owner.

VI. Q - What if it is too expensive for the owner to clean up?

A - That has happened in the lower 48, and some businesses have gone bankrupt. Let's hope it doesn't happen here.

VII. Q - Are we going to shut the sites in the study down?

A - No, not based on the present report, which is basically an inventory. If, during the next phase of our study, we uncover a situation which has the potential to endanger public health or the environment, we will take steps to minimize exposure to the public based on the extent and type of contamination.

VIII. Q - When will the next phase of the study start?

A - DEC is applying for an EPA grant now. Specific site investigating could begin as early as this summer.

IX. Q - Can DEC shut down sites in the meantime?

A - No, unless the Commissioner finds immediate danger to health or irreversible damage to natural resources or the environment.

X. Q - Do you know what happened at these sites?

A - Not necessarily. Someone reported the sites because they suspected wastes were spilled or disposed of inappropriately. Whether any contamination occurred is what we are looking at in the next phase.

JCA/ne

cc: Stan Hungerford
David DiTraglia
Glenn Miller
Doug Lowery
Deena Henkins
Bill Lamoreaux
Jeff Mach
Bill MacClarence
Neve
Noah

Anchorage Daily News

ANCHORAGE, ALASKA, SATURDAY, JANUARY 19, 1985 ★ PRICE 25 CENTS

Study warns of possible health risks

Probe of 3 Southcentral hazardous waste sites recommended

By CRAIG MEDRED
Daily News reporter

Hazardous wastes could pose a threat to public health at three sites in Southcentral Alaska — including one in Anchorage, according to a study prepared for the state.

The environmental consulting firm of Tetra Tech Inc. has recommended an immediate investigation into the risks posed by chemical wastes at the Alaska Railroad yard in downtown Anchorage, an old creosote plant in Whittier and the Union Oil of California chemical plant in North Kenai.

The Bellingham, Wash., firm's "Preliminary Assessment of 45 Potential Hazardous Waste Sites in the State of Alaska" also says 17 other sites — including two more in Anchorage — should be checked for dangerous chemicals as soon as possible.

"Drinking water contamination is the most prevalent hazard posed by these sites," the report said.

Tetra Tech last summer began checking hazardous waste sites around the state. The firm summarized its findings in a report prepared for the Alaska Department of Environmental Conservation and the Environmental Protection Agency in December.

Five waste sites were judged clean by Tetra Tech, but 40 others were said to warrant further investigation. Twenty of those, the report said, could be inspected "on a time available basis."

But the other 20 — many of which are associated with early mining or oil exploration activities — need attention immediately or as soon as possible, Tetra Tech said.

State and municipal officials this week said they have already begun organizing an investigation of the most worrisome sites in Anchorage.

Jim Sweeney, hazardous waste coordinator for the municipality, said monitoring wells are being installed near three waste sites — the railroad yard, and two others called suspect in the report, Frontier Tanning and Alaska Pollution Control, both in South An-

See Back Page, HAZARDOUS

Hazardous wastes could pose serious health risks at 3 Southcentral sites

Continued from Page A-1

chorage.

The wells will tell whether any hazardous chemicals have seeped into the groundwater near those businesses, Sweeney said.

"It's hard to deal with speculation, which is all we have now," he said. "It's much better to deal with fact."

State officials began working months ago to help clean up the Union chemical plant in Kenai, and they will shortly start to work investigating other hazardous waste sites, said Bill Lamoureaux, regional supervisor for environmental conservation.

"I haven't got all the details on the report myself, yet," he said. "But there is some information that is, in my opinion, adequate for us to initiate some more investigations."

Many of the hazardous wastes sites identified by Tetra Tech trace their origins backs to the 1960s or 1970s — before anyone recognized the dangers of the wastes being dumped.

Up until 1975, for instance, the Alaska Railroad pumped its waste oil and chemical solvents into Ship Creek, and dumped various chemicals into a landfill on its property.

Tetra-Tech said the state needs to determine what is in that landfill and check oil-laden soils in the rail yard.

"There's nothing happening out there that you can physically note," Lamoureaux said. "But there's a lot of contaminated soil. The question is: contaminated with what? We're most concerned from the standpoint of what might be coming out of there into Ship Creek."

Tetra Tech indicated the soil might contain heavy metals or chemicals.

The Union Oil chemical plant in North Kenai should be checked because of old landfill operations and a history of environmental violations, Tetra Tech said.

The 80-acre chemical plant manufactures urea and ammonia fertilizer. It had an on-site landfill from 1967 to 1975.

"There have been large chemcial spills at this facility," said Tetra Tech. "There is a high potential for these spills to recur. The facility needs better prevention methods."

A chemical containing arsenic spilled at the plant in June of last year, the report said.

The report said the old creosote plant near the Whittier marina also needs to be checked for heavy metals and chemical seepage into a local stream.

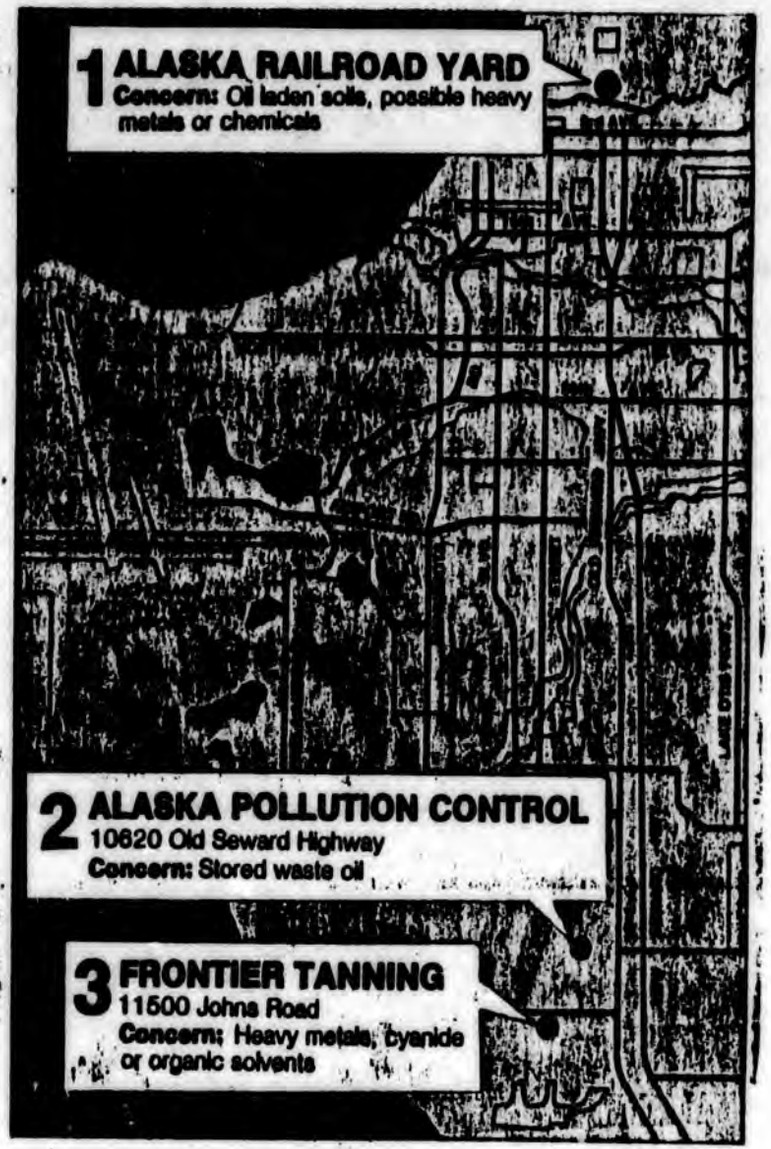
Sweeney said the two other suspected hazarodous waste sites under investigation in Anchorage — Alaska Pollution Control and Frontier Tanning — handle a variety of chemicals.

Alaska Pollution Control stores waste oil for oiling roads. There have been charges the firm has in the past handled oil contaminated with hazardous chemicals.

Frontier Tanning treats hides and as a result discharges water that may contain heavy metals, cyanide or organic solvents. The wastes are pumped into the firm's backyard.

"There is evidence that Frontier Tanning is disposing of uncontrolled hazardous wastes into the environment and that over a period of 25 years of operation, this chronic discharge may be resulting in significant subsurface contamination," Tetra Tech said.

Other sites around the state in need of inspection, according to Tetra Tech, are the Fairbanks North Star Borough Landfill, the Nome City Dump, the Fort Yukon City Dump, the Nome Barrel Dump, the Sagwon Airstrip Dump near Prudhoe Bay, the Mukluk Dump near Prudhoe Bay, the Sand Dunes Landfill on the North Slope, the Putuligayak Landfill on the North Slope, the Atlantic Richfield (ARCO) dump at Prudhoe Bay, Mukluk Freightlines at Deadhorse, the Municipal Utilities System in Fairbanks, the University of Alaska-Fairbanks, the Alaska Railroad in Fairbanks, and the White Pass and Yukon Railroad in Skagway.



Anchorage Daily News/Peter Dunlap-Shohl

Wednesday Jan. 23, 1985

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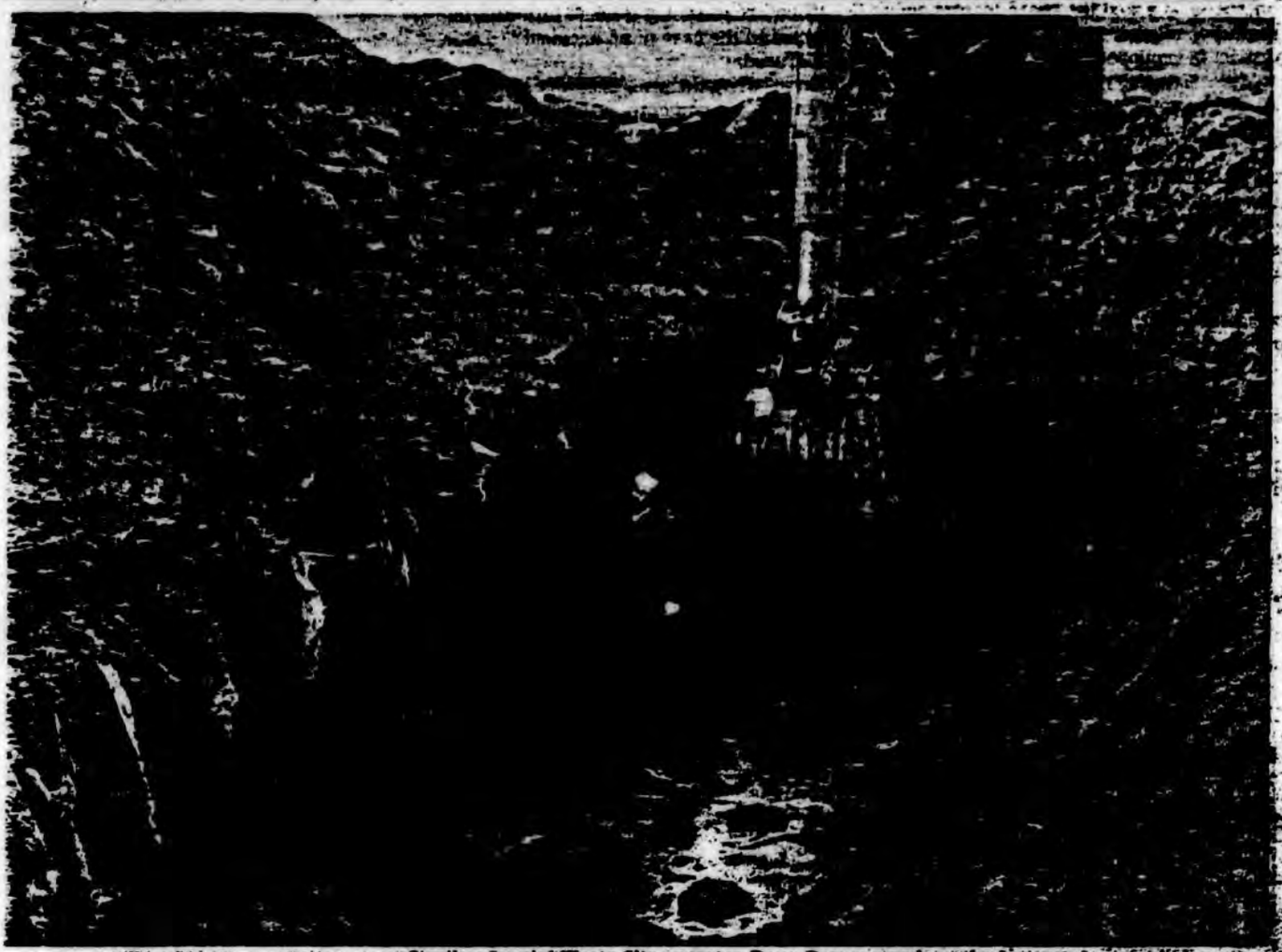

Sterling Special Waste Site operator Dave Brown stands at the bottom of a trench dug at an abandoned Union Oil well site Tuesday. He's pointing to [illegible] drilling mud, which he says was illegally left at the site. (Photo by John Quinley)

Drilling mud unearthed

Waste site operator excavates Beaver Loop site

By JAN MIRELES, Staff Writer

A local waste site operator who claims Union Oil Company illegally disposed of drilling mud on the Kenai Peninsula has uncovered the mud at one of the firm's abandoned sites.

Dave Brown, operator of the Sterling Special Waste Site, hired a backhoe to dig up a portion of Union's Cannery Loop Unit Two located off Beaver Loop in Kenai. The backhoe, digging a hole measuring approximately 30-feet long and 13-feet deep, uncovered drilling mud throughout.

Union spokesman Mark Eversole discounted the find, however, and said the company has a permit from the Alaska Corps of Engineers allowing disposal of drilling mud solids at the site.

"We've never denied that there was drilling mud there," Eversole said. "That was spelled out in the application. We stated there would be a pit, that we would pump off the pumpable liquids and bury the solids."

Pat Richardson, assistant public information officer for the corps, denied any knowledge of a Union permit. According to Richardson, the corps grants permits only for clean fill material.

"We don't regulate drilling mud," she said. "Drilling mud would have things in it that we wouldn't allow under our permit."

Although the state Department of Environmental Conservation is considering a Union permit application to dispose of drilling mud at seven sites, Cannery Loop Unit Two is not part of the proposal. The Alaska Oil and Gas Conservation Commission approved abandonment of the site in 1962.

C.V. Chatterton, chairman of the commission, said a site is approved for abandonment when the surface is clear and free of all trash and debris. Chatterton said the AOGCC is not responsible for what might be buried underneath abandoned drill sites.

"I don't know who would be," he said. "That's a good question. As far as this agen-

See AREA, back page

Peninsula Clarion, Wednesday Jan 23, 1985

...Area site

Continued from Page 1

cy is concerned the site was cleaned up. We don't worry about waste disposal. That's the turf of another state agency."

Local DEC officer Bob Cannone said he was not certain which agency bears responsibility for making sure the site was cleaned. He said he would be interested in seeing proof that drilling mud was found at the site.

"Whoever issues the permit is responsible," he said. "It would be their (AOGCC) responsibility to police the area."

In most instances the oil and gas commission issues drilling permits to oil companies and then notifies the DEC, Chatterton said. The DEC is notified, he said, so they will be aware firms may be seeking additional permits for related drilling activities.

The DEC is developing guidelines for drilling mud disposal and officials have said they expect to unveil a policy by April. Brown has argued that Union has violated solid waste disposal laws and should be forced to remove the drilling mud immediately. Brown operates the only licensed disposal site for drilling mud on the peninsula.

Brown originally estimated that 35,000 barrels of drilling mud had been buried illegally at the Cannery Loop Unit Two site. The original dimensions of the pit were 400-feet long by 80-feet wide by 15-feet deep. When a backhoe operator started digging the hole Tuesday he reached the water table at approximately 13-feet, Brown said.

Also found in the pit were plastic sheeting and bits of discarded lumber. The drilling mud, said Brown, already may have contaminated the surrounding water table.

Landowner Michael Peich of Oregon gave Brown written permission to dig up the pit. Peich has told the Clarion that he does not want drilling mud disposed of on his property.

Representatives from the Environmental Protection Agency and the Alaska Corps of Engineers were expected to visit the site this morning, Brown said.

A D E C N E W S

PRESS RELEASE FROM THE PUBLIC INFORMATION OFFICE
ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
POUCH O, JUNEAU, ALASKA 99811 (907) 465-2606

Bill Sheffield, Governor Bill Ross, Commissioner
Joe Ferguson, Information Officer

FOR IMMEDIATE RELEASE April 17, 1985

Recent tests conducted by the U.S. Environmental Protection Agency (EPA) at the Sterling Special Waste Site reveal that metals found in pits at the site are also found at low levels in the monitoring wells. The Department of Environmental Conservation (DEC) agrees with EPA that at this time the situation does not constitute an immediate threat to public health. However, both DEC and EPA also agree that the potential may exist in the future and further study is warranted to determine if this is the case.

Both DEC and EPA agree that further study is needed to more accurately determine the direction of groundwater flow and the types and amounts of naturally occurring background components in the groundwater in the vicinity of the site.

DEC and EPA have announced that they will embark this summer on a new series of tests to monitor groundwater on and off the site. At the same time that EPA installs six new monitoring wells around the perimeter of the site, DEC will begin a program to routinely test certain residential wells.

(MORE)

ADD 1-1-1

DEC Commissioner Ross said, "Testing the well water at homes located near the site is a precautionary measure which may help to alleviate undue alarm about water quality."

Ross continued, "Beginning now and through the summer, DEC will become increasingly visible and busy on the Kenai Peninsula. Data from DEC's water well testing, along with review of data from EPA's new monitoring wells, should help us answer some very basic questions about the existence of or potential for health or environmental risks."

Of particular concern to DEC are results from water samples taken from Monitoring Well #6 which lies in what is believed to be the general path of the groundwater flow from the site. Over the years, samples from this well have contained traces of hydrocarbons and metals. At this time, it is not known to what degree some of these metals occur naturally in the groundwater. Routine tests of Kenai Peninsula public drinking water systems show that arsenic, barium and lead (all metals) occur naturally in varying degrees in these systems.

These elements are also found in samples from Monitoring Well #6. Concentrations of these components, both in monitoring well samples and in the public drinking water supplies, are within health standards for drinking water with the exception of the level of lead in a singular monitoring well sample.

(MORE)

Ross stated, "The site has been in operation for a number of years under several operators and has been used for the disposal of several types of waste. Since the current permit was issued in 1982, engineering methods for industrial waste disposal pits have been refined. We now know more about safe methods to contain drill muds and sludges. Unlined pits are increasingly recognized to be inadequate. And we now know that some components of drill muds and sludges may be harmful."

Ross continued, "Since we now recognize that at this site percolation of waste liquids is not desirable, DEC will modify the permit to minimize this occurrence. While DEC takes action to bring the Sterling site into compliance with existing permit conditions, the department will make changes to correct deficiencies in the permit itself."

Ross also emphasized, "DEC has been working to develop review procedures for use in reviewing applications for solid waste disposal permits for muds and sludges. These review procedures will assure that DEC decisions on all such permit applications will result in consistent requirements."

(MORE)

Ross also stressed the need to comprehensively address the problem of drill mud disposal on the Kenai Peninsula. "The oil and gas industry is an important element of the Kenai's economy, and is an important economic resource for all Alaskans. This important industry has a by-product -- drill muds and sludges. Industry, concerned citizens, local, state and federal government all need to work together to ensure that drill muds are disposed of in a way that is both safe and economical. We all want to keep the Kenai a special place to live, work and visit for generations to come."

# # #

Sterling Special Waste Site

The Sterling Special Waste Site is an 11.9 acre disposal facility about 1 1/2 miles northwest of Sterling. This facility has an ADEC Waste Disposal Permit for the processing and disposal of drilling muds, water containing less than four percent oil, water-oil emulsions and non-toxic water conditioning sludges. The permit prohibits the disposal of hazardous wastes at this facility. This site has been the subject of continued public concern that hazardous wastes may have been disposed of on-site and that, in any case, the wastes present may pose a threat to the groundwater.

Since approximately 1980 there have been eight groundwater monitoring wells constructed around the perimeter of the facility. Four of these are still in use. Although a few samples were taken during the early operation of the site, regular quarterly sampling was not required by the permit until March 1982. Sampling of the four monitoring wells since that time has shown intermittent traces of various metals and organic compounds. Limited sampling of three nearby private drinking water wells have shown metal concentrations to be within Safe Drinking Water Act limits. One of these wells showed a trace of one organic priority pollutant at a concentration approximately 1000 times less than the level considered safe. EPA conducted additional on-site sampling in October 1984 to try to establish what was present in the ponds. A total of 44 samples were taken of liquids and sediments from the ponds and groundwater from the monitoring wells.

The samples from the ponds showed low to moderate concentrations of various metals and organic compounds. Groundwater from the monitoring wells and one private well showed no significant levels of any metals and no organic priority pollutants. In short, off-site sampling to date has been inconclusive and has not revealed any contamination that would be a threat to public health.

At this time ADEC and EPA feel that additional sampling is necessary to determine if any significant migration of contaminants from the site is occuring. EPA will return in June to construct additional monitoring wells to better sample groundwater beneath the site and determine its flow direction. In addition ADEC will begin conducting regular monitoring of nearby drinking water wells to insure that there is no public health threat while the site investigation continues.

Finally, even though the concentrations found to date have been quite low, EPA is currently evaluating this site for possible inclusion on the National Priority List to make sure there isn't a problem. If the site were to score high enough to make the list it would be eligible for federal Superfund money to conduct any additional investigations and cleanup if necessary.

In the coming months we will keep you informed of future activities and information as it is available. If you have any questions please feel free to contact:

Steve Torok EPA, Juneau
(907) 586-7619

John Meyer EPA, Seattle
(206) 442-1271

Jack DiSmAPE — Superfund person

State mulls toxic disposal permit

Associated Press

Kenai — The state Department of Environmental Conservation is considering a Union Oil Co. of California permit request that would allow burial of 126,500 barrels of toxic drilling muds in pits dug in the Kenai and Cannery Loop gas fields.

Two years ago, the state threatened to sue Union Oil for disposing of drilling muds in unlicensed pits in that area. The company responded that it was not disposing of the materials, which contain caustic chemicals, but instead was storing them in reserve pits.

Today, the reserve pits remain in the same places, filled with the same drilling muds. The difference is that Union Oil now is seeking permission to bury the material.

Approval of the permit would turn seven unlicensed reserve pits into legal disposal sites. Some of the pits are located in residential areas with high water tables or in wetlands that serve as nesting and resting areas for migratory birds, environmentalists say.

The permit application is opposed by the Alaska Center for the Environment, the Kenai Peninsula Audubon Society and Dave Brown, the operator of the only licensed special waste facility on the Kenai Peninsula.

All say they are concerned that the corrosive chemicals, salts and dangerous amounts of arsenic, lead, mercury and other substances will get into the water table.

Peter Neitlich of the Alaska Center for the Environment claims approval of the permit will endanger the city of Kenai's water supply.

"High levels of toxic metals have been reported in wetlands and water surrounding the present impoundments. Many of these levels exceed the levels set for safe drinking water," he said in a letter to the state agency.

He said those metals could get into Kenai's water.

Union Oil's application indicates only a few inches of earth and clay separate the drilling muds in some of the pits from the water table, but company officials say the clay is impermeable and will protect the ground water from contamination.

"We don't want to do any damage to the water supply, because we're using the water," said Jim Callender, a Union Oil spokesman. "We don't think we're damaging it."

A state study indicates small amounts of drilling fluid associated with the muds in three pits are being found in the environment, but testing of nearby wells has "never really shown" that the fluids are leaching through pit walls, said Bob Flint, state regional program coordinator.

Environmentalists have asked for an extension of the time allowed for public comment on the oil company's request, and have asked for a public hearing.

State may allow burial of toxic muds

Associated Press Anch. Times 9-2[illegible]

Kenai — The Alaska Department of Environmental Conservation (ADEC) is considering a Union Oil Co. of California permit request that would allow burial of 126,500 barrels of toxic drilling muds in pits dug in the Kenai and Cannery Loop gas fields.

Two years ago, the state threatened to sue Union Oil for disposing of drilling muds in unlicensed pits in that area. The company responded that it was not disposing of the materials, which contain caustic chemicals, but instead was storing them in reserve pits.

Today, the reserve pits remain in the same places, filled with the same drilling muds. The difference is that Union Oil now is seeking permission to bury the material.

Approval of the permit would turn seven unlicensed reserve pits into legal disposal sites. Some of the pits are located in residential areas with high water tables or in wetlands that serve as nesting and resting areas for migratory birds, environmentalists say.

The permit application is opposed by the Alaska Center for the Environment, the Kenai Peninsula Audubon Society and Dave Brown, the operator of the only licensed special waste facility on the Kenai Peninsula.

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See Toxic, page A-

Toxic drilling muds

Continued from page A-1

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Peter Neitlich of the Alaska Center for the Environment claims approval of the permit will endanger the city of Kenai's water supply.

"High levels of toxic metals have been reported in wetlands and water surrounding the present impoundments. Many of these levels exceed the levels set for safe drinking water," he said in a letter of objection to the state agency.

He said those metals could get into Kenai's water.

Union Oil's application indicates only a few inches of earth and clay separate the drilling muds in some of the pits from the water table, but company officials say the clay is impermeable and will protect the ground water from contamination.

"We don't want to do any damage to the water supply, because we're using the water," said Jim Callender, a Union Oil spokesman. "We don't think we're damaging it."

A state study indicates small amounts of drilling fluid associated with the muds in three pits are being found in the environment, but testing of nearby wells has "never really shown" that the fluids are leaching through pit walls, said Bob Flint, regional program coordinator for ADEC.

Environmentalists have asked for an extension of the time allowed for public comment on the oil company's request, and they also have asked for a public hearing.

Waste dump poses problem

by Tom Grenier
Special to The Times

4/18/85

Kenai — The Environmental Protection Agency and the Alaska Department of Environmental Conservation told a group of Sterling residents Wednesday that an industrial waste dump near the town could be leaking heavy metals into the surrounding ground waters, creating a potential health danger.

The EPA called the meeting in an elementary school less than two miles from the dump and said that both departments would be testing this summer to see if the site presented a hazard.

Field tests made by the EPA last fall show that traces of metals found in the pits of the dump are present in monitoring wells surrounding the site. Officials said that further study is needed to determine the direction of ground water flow and the amounts of metals in natural water that could be confused with those found in the dump.

DEC test records show that traces in the low parts per billion of volatile organic compounds have occasionally been found in the monitoring wells. While the traces were far too small to present a threat to human health, one EPA spokesman said that it could be the beginning of a problem.

"These wells have occasionally shown parts per billion of metal solvents," said John Meyer of the EPA. "These are low, but they probably shouldn't be there. It's very hard to say if these metals are natural or the very beginning of a

See Kenai, page B-3

Kenai waste dump

Continued from page B-1

problem. The site is only a few years old and sometimes migration can take decades."

Meyer said that the EPA would be drilling additional wells around the dump in June to determine the contents of the ground water and the direction of the flow. The DEC will be monitoring residential wells in the area for any potential contamination. Four of the eight monitoring wells on site have been unuseable for testing, Meyer said.

Samples from the four functioning wells have shown traces of organic compounds and heavy metals used in industry. The Sterling Special Waste Site is used as a disposal site for drilling mud from oil wells operated on the Kenai Peninsula.

One private well showed minute concentrations of an organic industrial solvent found in the dump. The trace of 1-1-1 trichloroethane was far below levels considered dangerous.

Meyer said that the EPA was concerned because current monitoring wells were not built to similar standards. A well can provide false indications in metals tests if not constructed properly.

Meyer said the dump could be placed on a national priority list for cleanup if testing revealed a potential health hazard. The EPA's list currently has more than 700 sites designated nationwide.

Bill Lamoreaux, regional supervisor for DEC, told the more than 60 people at the meeting that the DEC would sample any private wells in the area if asked, but that all metals are found naturally in the ground water. Residents should not be alarmed if testing shows minute traces of arsenic or other metals in the samples.

Lamoreaux also said that the permit that allows the site to operate would be modified by DEC.

State rejects proposed Kenai disposal sites for drilling mud

By RONNIE CHAPPELL
Daily News reporter 11-29-84

State officials have told the Union Oil Co. that they do not plan to allow the burial of used drilling mud in sensitive wetlands near the city of Kenai.

According to Bob Martin of the Alaska Department of Environmental Conservation, the state also has informed the company that four of seven proposed burial sites are not suitable for drilling mud disposal.

Union wants to dispose of 126,000 barrels of mud in existing reserve pits in the Kenai and Cannery Loop gas fields. Some of the pits are in wetlands areas and some are near residential subdivisions.

"We don't think permanent disposal at the sites out there that are really close to the water table would be appropriate," said Martin. "We've essentially ruled out four sites as of this time."

Two of the sites are in the Kenai Gas Field and two are in the City of Kenai.

"I'd like to emphasize that these are preliminary findings," Martin added. "We have not, at this date, made a final decision on the application. We have arrived at some conclusions."

DEC may allow disposal at three other pits in the Kenai Gas Field, Martin said, but a decision will not be made until after the adoption of new state guidelines governing the disposal of drilling mud.

According to Martin, those guidelines should be complete by April 15.

In the meantime, Martin said, DEC will issue a compliance order establishing a deadline for proper disposal of drilling muds contained in the four pits already "ruled out" by the agency.

The deadline has not been set, Martin said. "They will have the decision on this application before they have to move the muds. We don't want to make them move the muds to somewhere that's impractical for them if they're ultimately going to get a permit to do something on their own in the gas field."

Union spokesman Mark Eversole pointed out that the decision was a preliminary one.

"Based on that fact, it doesn't seem much has changed," he said. Eversole declined further comment.

Dave Brown, owner of Alaska Environmental Industries, said the preliminary decision was just "more delay on the part of DEC."

Brown has been leading a high pressure lobbying effort aimed at forcing Union to

See Page C-3, DISPOSAL

Disposal sites

Continued from Page C-1

dispose its spent muds at the Sterling Special Waste Site. Brown operates the site.

Environmentalists hailed the DEC announcement.

"It's a good first step," said Peter Neitlich of the Alaska Center for the Environment. "We're very excited about the preliminary findings and the fact that disposal won't be allowed at four of the pits."

"We're also very pleased that they've decided to go ahead with development of criteria (for drill mud disposal)" before taking final action on the permit application, he said.

Neitlich believes that the fight over the new guidelines "will be as big an issue" as Union's application, which drew strong opposition from Peninsula homeowners, the City of Kenai and a number of environmental groups.

"It's certainly good news," said Jeff Sauer of the Kenai Peninsula Chapter of the National Audubon Society of the DEC announcement. It is "what we asked for, and we think that it's real reasonable."

The state has asked Union to provide more information on the construction and permeability of the three remaining pits, additional chemical testing on the contents of the pits, and additional soils information on some of the sites.

The company has also been asked to produce proof that it has the right to dispose of drilling mud at the sites in question.

Union's reserve pits are located on land leased from private owners. If those landowners have not agreed to let Union bury drilling wastes on their property, the state will not issue a permit, Martin said.

Several landowners have already voiced opposition to the Union plan.

Finally, Martin said, DEC has asked for information on a reserve pit in a wetlands off Beaver Loop within sight of municipal wellhouse.

There have been allegations that Union illegally disposed of 35,000 barrels of used mud and drill cuttings at that site. Company officials acknowledge burying mud and drill cuttings at Cannery Loop 2, but say the materials were disposed of in compliance with state and federal permits.

"What happened with Cannery Loop 2 is something we're going into with Union right now. We don't have all the answers," Martin said.

"When we get to the point of making a final determination on this application, we also want to be fully knowledgeable on the history of Cannery Loop 2."

State may allow drilling mud disposal

By RONNIE CHAPPELL
Daily News reporter

KENAI — Two years after threatening court action against Union Oil for disposing of drilling muds in unlicensed pits, the Alaska Department of Environmental Conservation may be on the verge of approving those same reserve pits for drilling mud disposal.

In a 500-page permit application filed with the state, the California oil company says it wants to bury 126,500 barrels of drilling mud in the Kenai and Cannery Loop gas fields.

Drilling muds contain caustic chemicals and known carcinogens. They are used to lubricate the drill stem and to prevent well blowouts.

Approval of the permit may set a precedent for future, on-shore disposal of drilling muds in Alaska, according to DEC officials.

It would turn seven unlicensed reserve pits into legal disposal sites.

Many of the pits are located in residential areas with high water tables or in wetlands that serve as nesting and resting areas for migratory birds.

The permit application has drawn opposition from the Alaska Center for the Environment, the Kenai Peninsula Audubon Society and the operator of the only licensed special waste site on the Kenai Peninsula.

All are concerned that corrosive chemicals, salts and dangerous amounts of arsenic, lead, mercury and other heavy metals will leach out of the pits and into the water table.

In a letter of objection to the DEC, Peter Neitlich of the Alaska Center for the Environment warns that approval of Union's permit will place the City of Kenai's drinking water supply in jeopardy.

"High levels of toxic metals have been reported in wetlands and waters surrounding the present impoundments. Many of these

See Back Page STATE

State considers Union Oil application for use of drilling mud disposal sites near Kenai

Continued from Page A-1

levels exceed the levels set for safe drinking water.

"Because of the hydrogeology, there is extensive communication between these waters and the aquifers which supply drinking water to the sizeable population of Kenai," Neitlich wrote.

According to Union's permit application, only a few inches of earth and clay separate the drilling muds contained in some pits from the water table.

Company officials say the clay, a component of drilling mud known as bentonite, is impermeable and will protect ground water from contamination. Opponents claim that erosion, cracks and construction defects almost guarantee that leaks will occur.

"We don't want to do any damage to the water supply, because we're using the water," said Union spokesman Jim Callender. "We don't think we're damaging it."

A state study indicates that small amounts of drilling fluid associated with the muds in three pits are being found in the environment, said Bob Flint, Regional Program Coordinator for DEC. But testing of nearby wells has "never really shown" that fluids are leaching through pit walls.

Instead, Flint and others at DEC believe that contamination occurred when the contents of the pits overflowed the walls and spilled into surrounding wetlands. Union plans to cap the pits.

Environmental groups have requested an extension of the comment period on Union's permit application, which ends this week. They have also asked the DEC to schedule a public hearing on the permit request.

Flint said earlier this month that a public hearing could be held if one were requested.

DEC is still "four weeks" away from a decision on the application. No preliminary recommendations have been drafted by the agency, Flint said.

The Alaska Center for the Environment contends that granting the permit "would amount to sanctioning illegal disposal of hundreds of thousands of barrels of waste."

Dave Brown, operator of the Sterling Special Waste site — the only licensed existing site, agrees.

"I don't think that Union Oil Company has any right to ask for an after-the-fact permit to violate the law, and make legitimate what was never legitimate in the first place," he wrote in a letter of objection to the DEC.

Two and a half years ago, Assistant Attorney General Loni Levy threatened the company with a lawsuit after her office was notified by DEC "that Union Oil has been disposing of drilling fluids and other wastes associated with production in the Kenai oilfield in violation of AS 46.03.100, which requires a waste disposal permit."

Company officials said they had broken no laws because they had not disposed of any drilling mud. Instead, they said, all of the drilling mud was being held in reserve pits for future use.

Today, the reserve pits remain in the same places, filled with the same drilling mud. The difference is that Union has applied for the permits required to bury the mud in place.

In recent months, Flint said, DEC has been looking into whether Union was "doing things properly, other than having a permit."

On that "point of law," he said, "they were in violation."

Flint acknowledges that there are serious drawbacks associated with the granting of after-the-fact permits. It encourages companies to do as they please. Executives begin to believe that if the state has a problem with their methods of operation, the state can "come and get me," he said.

Under the plan proposed by Union, five of the existing pits will be abandoned completely. Two will be rehabilitated for future use.

In every case, however, the drilling muds they now contain will be buried. Union will remove all pumpable fluids and shape the remaining solids into a mound before covering them with bentonite, a piece of cloth and a foot or so of gravel.

In theory, the waste muds should then be enclosed in a fluid-tight capsule.

According to Flint, if Union can develop a disposal system that works, similar pits will be used during the development of the Cannery Loop gas field within the City of Kenai.

State won't allow Union Oil to dump used drilling mud

Associated Press

State officials say they have no intention of allowing Union Oil to dispose of used drilling mud at four of seven proposed locations on the Kenai Peninsula.

Union wants to dispose of 126,000 barrels of mud in existing pits in the Kenai and Cannery Loop oilfields.

But some of the sites are near rural subdivisions or are in wetlands.

"We don't think permanent disposal at the sites out there that are really close to the water table would be appropriate," said Bob Martin of the Alaska Department of Environmental Conservation. "We've essentially ruled out four sites as of this time."

Barrels of drilling wastes already are stored at several of the sites on a temporary basis.

Martin said the DEC still is studying the other three sites, but won't make a final decision on them until the state adopts new guidelines for dealing the problem. They should be complete by April 15, he said.

In the meantime, Martin said, the DEC will issue a compliance order setting a deadline for proper disposal of the muds already contained in the four pits "ruled out" by the agency.

"They will have the decision on this (disposal) application before they have to move the muds," he said. "We don't to make them move the muds to somewhere that's impractical for them if they're ultimately going to get a permit to do something on their own gas field."

Union spokesman Mark Eversole pointed out, and Martin agreed, that the decision was a preliminary one.

"Based on that fact, it doesn't seem much has changed," he said. Eversole refused further comment.

State rejects proposed Kenai disposal sites for drilling mud

By RONNIE CHAPPELL
Daily News reporter NOV 29 1984

State officials have told the Union Oil Co. that they do not plan to allow the burial of used drilling mud in sensitive wetlands near the city of Kenai.

According to Bob Martin of the Alaska Department of Environmental Conservation, the state also has informed the company that four of seven proposed burial sites are not suitable for drilling mud disposal.

Union wants to dispose of 126,000 barrels of mud in existing reserve pits in the Kenai and Cannery Loop gas fields. Some of the pits are in wetlands areas and some are near residential subdivisions.

"We don't think permanent disposal at the sites out there that are really close to the water table would be appropriate," said Martin. "We've essentially ruled out four sites as of this time."

Two of the sites are in the Kenai Gas Field and two are in the City of Kenai.

"I'd like to emphasize that these are preliminary findings," Martin added. "We have not, at this date, made a final decision on the application. We have arrived at some conclusions."

DEC may allow disposal at three other pits in the Kenai Gas Field, Martin said, but a decision will not be made until after the adoption of new state guidelines governing the disposal of drilling mud.

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See Page C-3, DISPOSAL

Disposal sites

Continued from Page C-1

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Environmentalists hailed the DEC announcement.

"It's a good first step," said Peter Neitlich of the Alaska Center for the Environment. "We're very excited about the preliminary findings and the fact that disposal won't be allowed at four of the pits."

"We're also very pleased that they've decided to go ahead with development of criteria (for drill mud disposal)" before taking final action on the permit application, he said.

Neitlich believes that the fight over the new guidelines "will be as big an issue" as Union's application, which drew strong opposition from Peninsula homeowners, the City of Kenai and a number of environmental groups.

"It's certainly good news," said Jeff Sauer of the Kenai Peninsula Chapter of the National Audubon Society of the DEC announcement. It is "what we asked for, and we think that it's real reasonable."

The state has asked Union to provide more information on the construction and permeability of the three remaining pits, additional chemical testing on the contents of the pits, and additional soils information on some of the sites.

The company has also been asked to produce proof that it has the right to dispose of drilling mud at the sites in question.

Union's reserve pits are located on land leased from private owners. If those landowners have not agreed to let Union bury drilling wastes on their property, the state will not issue a permit, Martin said.

Several landowners have already voiced opposition to the Union plan.

Finally, Martin said, DEC has asked for information on a reserve pit in a wetlands off Beaver Loop within sight of municipal wellhouse.

There have been allegations that Union illegally disposed of 35,000 barrels of used mud and drill cuttings at that site. Company officials acknowledge burying mud and drill cuttings at Cannery Loop 2, but say the materials were disposed of in compliance with state and federal permits.

"What happened with Cannery Loop 2 is something we're going into with Union right now. We don't have all the answers," Martin said.

"When we get to the point of making a final determination on this application, we also want to be fully knowledgeable on the history of Cannery Loop 2."

Union Oil Dumps on Kenai

by Peter Neitlich

If your car has ever enjoyed a fine meal of hydrocarbons at Union Oil, you might find a visit to the company's gas fields in Kenai extremely enlightening. Interest in the fields has picked up considerably over the last two month--so much so, that a few Union officials might be heard to gripe about their new unexpected position as company tour guide. During the standard tour, one makes one's way across the wetlands toward a drill rig the monstrous size of which boggles the rational mind. The company is proud to describe how the rig is able to drill as deep as three miles into an accurately located gas reserve predicted through seismic analysis and geological modeling.

As one proceeds to the well sites, it is hardly possible not to notice a number of vast, crudely construc ed pits bulldozed into the wet nds. A few of them are fully the size of several football fields. The company becomes much more reticent here. It is these "drilling mud reserve pits" and the toxic materials in them, however, that has drawn visits from a multitude of concerned parties. Thus far, the guest list has included the Alaska Department of Environmental Conservation, the Alaska Department of Fish and Game, Kenai Audubon, the Alaska Center for the Environment, Kenai Borough Mayor Stan Thompson, several groups of Kenai City Councilpersons and concerned residents, and an investigator from the Sterling Special Waste Site.

For the past six years, Union Oil has illegally disposed of what could be as many as 500,000 barrels of drilling muds in wetland pits in and around the city of Kenai, citizen groups and Department of Environmental Conservation (DEC) memos report. The company uses the tremendous volume of muds to remove cuttings from the hole, cool and lubricate the drill string, seal the sides of the drill hole and control subsurface pressures. One early memo by DEC field officer Howard Keiser (10/27/81) reports that "for some time Union Oil has been

disposing of drilling muds in somewhat of an indiscriminate manner; i.e., via burial, applying it to road surfaces or filling a pit and letting it seep away and evaporate." Union has now applied for a permit with the state to bury several of the unlicensed pits and legalize future dumping in a few others. If issued, this permit would be the first ever to legalize unpermitted on-site disposal of the controversial muds after-the-fact.

An increasingly unified coalition of environmental groups and concerned citizens have joined in opposition to the permit, raising concerns about the high potential for leaching of toxic substances into the environment, into groundwater used by the city, canneries and private residents, and the extensively fished Kenai River. Among the toxic materials found in the mud pits are lead, mercury, chromium and a number of chlorinated organic chemicals. Some of the materials are suspected carcinogens. Many of the substances are bioaccumulative, increasing in concentration on their way up the food chain. Most are confirmed in their ability to produce chronic damage.

The dangers of toxic pollution are increased by the fact that many of the pits lie in the water table or within inches of it, opponents say. DEC memos and letters to Union warn of just such dangers. One letter to Union (12/7/81) cautions that illegal disposal "could possibly cause contamination of groundwater." Another (11/15/83) explains that "the soils of the region are very porous and do not contain an impervious layer between the pit bottom and the 'shallow' aquifer." It adds, "We are also concerned with the high levels of contaminants indicated in your lab reports of pit muds and water samples." Environmentalists point to several recent studies which indicate that some leaching of toxic materials has already occurred in Kenai as well as in impoundments in other oil producing states.

Kenai and Anchorage opponents of the permit are also angered by the state's lax enforcement of environmental laws. The state has been aware of the illegal dumping for several years, they say, but has taken no action to halt the practice. In 1981, the DEC warned the company that their on-site disposal was illegal and stated that the issuance of a permit would be unlikely due to the high water table in the area. In 1982, the state threatened to file a suit against the company, but the case was dropped for reasons that are still unclear.

Union claims that they have never disposed of the muds illegally. Rather, they have asserted for the past three years that the muds were being "stored." Union's Environmental Technician Larry Cutting admitted that the muds were not going to be used again and that the company had no plans to move them, but argued that these issues had no bearing on their essential claim of "storage." Arguments over semantics accounted for a large portion of at least one afternoon tour, reported Kenai resident Bob Sizemore.

In a move that has been attacked as an attempt to legalize what has been acknowledged as illegal for at least three years, the DEC announced an agreement with the industry this summer that storage in an abandoned site would be considered as disposal, but only after July, 1984. Union cites this agreement as the basis for the disposal application they submitted in August of this year. The fact that data in the report was gathered as early as a year ago seems to indicate that the illegality of the pits was understood by both parties for quite some time, opponents say.

Asked whether Union's record of unpermitted disposal would influence the Department's consideration of the permit, DEC's regional permit coordinator Bob Flint said, "No. The company and the Department have finally reached an agreement on the need for a permit. We've worked with them in trying to arrive at a basic industry prototype, and as far as we're concerned, their permit application gives them a clean slate." The Alaska Center for the Environment expressed displeasure with this position as well as with the Department's intention not to pursue legal action. Other parties, including Dave Brown, the operator of the only licensed repository for drilling muds, have threatened independent lawsuits.

Public hearings on the Union permit are scheduled for October 29 and 30. The DEC will decide on the permit shortly after that. But there is a major issue yet unaddressed here, concerned

Continued on page 15

Continued from page 14

Union Oil

parties have said. That is, namely: How can the DEC decide on this permit in the absence of any relevant regulations. And if the permit is granted, wouldn't this essentially base the state's new industry-wide prototype and regulatory disposal criteria upon what has been an oil company's own illegal and hasty field practice? Is it proper to make such important decisions without a major inquest into the subject? Although many other states regulate drilling muds--some of them even regulate it as a hazardous waste--there are no specific regulations addressing the question of what to do with the millions of barrels of drilling muds produced each year in Alaska.

Many opponents of the permit favor a delay in the Department's consideration of the permit until a bi-partisan commission with representatives from industry, government and environment can hash out some workable compromise criteria. The commission could study the effectiveness of other states' programs in controlling pollution, construction criteria, siting, hydrology, methods to decrease mud toxicity, et. al., say the proponents of this plan. At a time when so little is known about the subject and so many questions remain as to the dangers of pollution, to grant a permit after-the-fact to an unlicensed dumper is to allow the companies to do whatever they please with their waste, environmentalists say. "What this really amounts to is letting the fox guard the henhouse," says Kenai investigator John Parker. "We'd be letting an illegal disposer write its own regulations."

The idea that drilling mud would be treated more like ordinary solid waste than the toxic material it is brought dismay but little surprise to an informal group of hazardous waste activists. The group, known as the Hazardous Waste Advisory Group, says that drilling muds were given a special exemption in the state's new hazardous waste law last legislative session. It was intense lobbying and deft committee work by the Alaska Oil and Gas Association (AOGA) which secured this provision, they say. In a recent meeting the group held with Richard Neve, Commissioner of the DEC, the Department declined to delay their consideration of the permit, and stated that no promises could be made that the drilling muds criteria the Department would eventually develop would be as stringent as progressive legislation in other states.

Union states categorically that their drilling muds pits, lined with 2-3 inches of Bentonite clay, will not leak in spite of their siting in wetlands. Other scientists and concerned citizens are not so sure. Some point to the 3-5 *feet* of clay required in some Wyoming mud pits, and the synthetic liners, groundwater monitoring requirements and leachate collection requirements mandated in other states. Scientists openly mention other concerns such as pit overflows, migration of toxins through pit fissures caused by poor construction or frost heaves, and the dangers of damaging an acidic ecosystem with caustic muds. Concerned citizens mention problems of access at the site to illegal hazardous waste dumpers, the lack of a precedent in the DEC for any on-site disposal permits and the havoc this initial precedent would wreak with any type of comprehensive, enforceable waste control program. It is conceivable--indeed, forseeable--that every company could demand an on-site and after-the-fact permit for waste pits after these precedents have been set, they say.

The Alaska Center for the Environment, which has been following this case closely, has publicly expressed their view that the permit review should be delayed until rational criteria can be developed. "If we're going to have any kind of waste disposal program which transcends a mere granting of permission after-the-fact to those who would do as they please, we need criteria first. Planned, scientifically-based criteria should form the firm basis for policy, not indiscriminate field practice," said one staff member. He comments that Union can seal the walls of their well to keep precious oil from escaping, but they won't even seal their Roman pits to contain their toxic pollution. Kenai resident Bob Sizemore adds, "During our tour of the pits, we were told by Union that we 'needed to be reasonable.' Is our right to a safe and healthy community unreasonable? Do we or do we not have the right to participate in decisions that affect our lives and those of our unwitting grandchildren? That's the real question."

Oil firm, state at odds

ADN
5/31/82

By RONNIE CHAPPELL
Daily News correspondent

KENAI — Union Oil of California has ignored state regulations governing the disposal of drilling muds, fluids and other wastes associated with its operation of the Kenai Gas Field, records obtained from the Alaska Department of Environmental Conservation (DEC) say.

"For some time Union Oil has been disposing of drilling mud in somewhat of an indiscriminate manner; i.e., via burial, applying it to road surfaces or filling a pit and letting it seep away or evaporate," wrote Environmental Field Officer Howard Keiser in an Oct. 27, 1981 memorandum to his supervisor.

"In some cases," he said, "drilling mud has been buried in areas of extremely high water tables, in the water table itself and in wetlands."

Union denies that it has improperly disposed of any drilling mud and contends that the reserve pits cited by the DEC in the Kenai Gas Field are merely being used for the storage of reusable drilling muds.

"We've got a difference of opinion between us and ADEC over the way we interpret their regulations," Union spokesman Bob Anderson said last week. "The Kenai Gas Field is a field that is still under development and those pits are used continuously. Those pits are a permanent part of each one of those (drilling) pads."

According to the DEC, Union may have illegally disposed of more than 250,000 barrels of drilling mud at sites within the gas field and

See Back Page, OIL

Oil company, state environmentalists disagree on drilling mud used in Kenai area

Continued from Page A-1

at exploratory wells inside the city of Kenai.

The state has threatened to file suit against the oil company if it refuses to haul those wastes to a licensed special waste site.

There is only one such facility on the Kenai Peninsula. It is located off Swanson River Road near Sterling. While water-based drilling muds are not classified as toxic or hazardous wastes, they can contain condensate (a petroleum byproduct of most drilling operations), dyes, and diesel oil which is sometimes used to lubricate the drill stem during drilling operations. They also can contain traces of heavy metals such as lead and mercury.

"It's not something you want in the water table," said DEC District Supervisor Bill Lamoreaux.

Union's position that it is legally storing the drilling muds versus illegally disposing of the mud appears to have been recently adopted.

In his Oct. 27 memorandum to his supervisor, Keiser said that Union Oil officials informed him "that drilling mud is nothing and that there is no reason why it cannot be buried on site of the drilling rigs as they are doing now." Keiser said he told Union officials they would need a disposal permit to bury it, and they said they would apply for one.

"The mud may or may not be safe to bury," the memo said, "but in the cases I have mentioned it is in the water table. The odor alone is sufficient to cause a water supply to be unfit for human consumption. The area is residential with shallow wells. In my opinion, we may have a problem."

According to field officer Mike Lucky, he and Keiser discovered Union personnel, earlier this year, covering up a reserve pit that was filled with drilling fluids and drilling muds. Lucky said the operation was halted when gas field supervisors were called to the scene.

"They told us it was a mistake," Lucky said.

In an April 7 memo to DEC sanitarian Tim Rumfelt, Keiser wrote, "although this may appear to be an environmentally sound method of handling drilling muds and fluids, observations and experience has demonstrated otherwise."

Keiser wrote that Union has one pit "that in reality is a seepage pit for disposal of drilling fluids. Over a two-week period, approximately 75,000 to 85,000 gallons of fluids leached into the water table. Three private residences are within 1,200 feet from this seepage pit. The ground water's flow is most likely towards these residences."

Keiser discussed the problem with Vicky Lytle of Union's Anchorage office at a meeting in Kenai Feb. 24. Two days later, Keiser reported on that session in another memo to Lamoreaux.

Keiser wrote that Lytle "did admit that maybe Union Oil was in the wrong in the methods of mud and fluid disposal. When I mentioned that we would like to sample the three private wells located on the bluff, she didn't like the idea and suggested that since Union Oil had wells we could just sample them.

"I understand her concern here, as if we go to these three homes to collect samples even if the samples are negative, the people will become concerned. I don't know what we can do about this, but I feel that we should include these three wells in any sampling that we do."

According to Anderson, samples taken from company wells indicate that the presence of the reserve pits has not adversely affected water quality in the area. DEC is still waiting for test results on the water samples it took from the three homes located on the bluff.

Anderson, the Union Oil spokesman, said the company would have a difficult time making the claim that the firm is just storing mud and not disposing it if the Kenai Gas Field was not in production and under development.

Yet, that's exactly the situation that exists inside the city of Kenai at Union Oil's exploratory wells in the Cannery Loop operating unit.

In July 1979, Union shut in Cannery Loop No. 1 because of market conditions. Today there is still a reserve pit there with drilling mud in it.

The pit is inside a fenced compound within 700 feet of the nearest residence.

A similar situation exists at Cannery Loop No. 3. It too was closed, and there is a fenced reserve pit with drilling mud in it.

Although oil and gas drilling permits issued by the city normally require that drilling muds, fluids and other wastes be stored in a steel slush tanks, Union Oil asked and received from the Kenai City Council an exemption from this requirement.

The council gave Union permission to use earthen reserve pits. The change was the subject of hearings before the City Council and the Kenai Advisory Planning and Zoning Commission.

At meetings on Nov. 29, 1978 and Oct. 8, 1980, commission chairman Phil Bryson questioned Union officials about operation of the reserve pits. On both occasions, the minutes of those meetings indicate, he was assured that the company would be sealing the pits to prevent seepage. At the Oct. 8 meeting, Union landman Richard Boyle told the commission the contents of the pit at Cannery Loop No. 3 would be trucked to a dump site.

According to Anderson, the drilling muds at Cannery Loop 1 and 3 are being stored in anticipation of future drilling operations at each of those sites. Anderson hinted that another exploratory well might be drilled from the pad at Cannery Loop 1 this summer.

Union does hold active city drilling permits for both of those sites even though both wells have been shut in.

It does not hold an active permit for Cannery Loop No. 2 which is located in a wetlands area just off Beaver Loop in the vicinity of Ames Road. The exploratory well drilled there was a dry hole and the well was abandoned.

There is no open reserve pit at Cannery Loop No. 2. The mud used in the drilling of that well have been disposed of. According to Lucky, 15,000 barrels were hauled to the Sterling Special Waste Site while another 35,000 barrels were buried, in violation of state regulations, at the drill site.

Anderson disagrees with DEC's contention that the muds were improperly disposed of. At that site, Anderson said, Union "pumped off the liquids" which were disposed of at the Sterling Special Waste Site. "The (drill) cuttings and residue were buried pursuant to our Corps (of Engineers) and state permits."

Anderson said DEC and other state agencies signed off on the wetlands permit issued to the company by the Corps. According to Mayor Vince O'Reilly, "Our primary concern is whether the pits pose any hazard at all to the water table." Two of the three wells are located in the vicinity of residential subdivisions and one, Cannery Loop 2, is located in a wetlands area less than half a mile from one of the wells used to supply the city water system.

In the meantime, DEC's is hampered by a lack of manpower and a shortage of lab facilities. Keiser, the man who spearheaded the agency's initial investigation retired in mid-May and a successor has yet to be employed.

Union continues to insist that it has done nothing wrong, that the reserve pits and their contents pose no hazard to the environment.

The company is giving consideration to altering its method of operation as a result of pressure from DEC. In a Feb. 23 letter to Keiser, Union Drilling Superintendent Jim Callender said, "to resolve the problem of future mud disposal and storage, we are working with the mud supply companies to determine the toxicity of the drilling fluids and their potential harm. We are also considering monitoring the water around the gas field to establish that there is no effect on the ground water."

Peninsula Clarion

MONDAY, Oct. 22, 1984 — Vol. 15, Issue 3, Central Peninsula Edition

Drilling mud agreement hard to find

Informational meeting Tuesday at KCHS

By JAN MIRELES, *Staff Writer*

Editor's note: This is part of a series of articles addressing the questions surrounding the issue of drilling mud disposal on the peninsula.

There is no one answer to questions of safety when it comes to drilling mud.

Union Oil claims its proposal for drilling mud disposal is environmentally safe. Environmentalists and some engineers are skeptical. And the Alaska Department of Environmental Conservation says it just doesn't know.

Though composed mostly of a non-toxic oil called bentonite, there are many types of drilling muds. Each drilling mud contains chemical additives which may or may not be toxic. While the state requires special disposal methods at licensed sites, it is considering a Union application for on-site disposal. Union wants to dispose of the solid drilling mud in reserve pits coated and sealed with bentonite. The oil firm maintains that bentonite is impermeable and will prevent any drilling mud waste from escaping the pit and entering the environment.

Some local residents and state environmentalists, however, claim drilling mud already has leached out into the wetlands adjacent to Union's Kenai Gas Field, endangering the water table and area wildlife. Peter Neitlich of the Alaska Center for the Environment said he hopes to present his findings tomorrow evening at a meeting in the Kenai Central High School cafeteria at 7 p.m. Neitlich said the center has a hydrologist examining water samples from the wetlands and is making arrangements for a chemist to study drilling mud samples.

Don Rice, a partner in the engineering firm Dowling-Rice Associates, has been following Union's drilling mud application with some concern. A civil engineer with geotechnical experience, Rice once ran a monitoring program on the Sterling Special Solid Waste Site where oil firms are re-

See STATE, back page

Winter has arrived

Joseph Zerbe gets ready for the season's first snowball fight Sunday outside of Grace Brethern Church in Kenai. (Photo by Ralph Thomas)

...State considers Union Oil permit

Continued from Page 1

quired to dispose of drilling mud.

"In large part you're dependent upon the honor system of people using the site," Rice said. "Honor systems, when it comes to solid wastes, are notorious."

Rice questioned Union's claim that bentonite is impermeable and the proposed sites' proximity to wetlands.

"It's a question of calls as to whether you say bentonite is impervious," he said. Rice compared bentonite to insulation saying that the more insulation you use the less likely heat is to escape. Bentonite serves as insulation between drilling mud and the outside environment, Rice said, but is not a guarantee of protection.

"I don't th[illegible] it is accurate to say that bentonite clay is impervious," Rice said. "It's a very fine-grained mineral-type soil. Water will work through the clay."

Depending upon the thickness of the clay, he said, water may eventually erode the seal. Union oil has proposed a 3-inch thick wall. Rice said that given the proposed disposal sites, it may not be enough. He acknowledged bentonite's use elsewhere in the country but said that area soils may rule out its use.

"If we put a bentonite pit down there and there's some movement to the water table ...then sooner or later that water is going to migrate into that site and out the other and mix with the water table," Rice said.

Industry officials say the only toxic portion of the drilling mud is the liquid portion. The liquid drilling mud typically is pumped off and disposed of in injection wells (which the state licenses) or hauled to the Sterling Special Solid Waste Site. Rice said that as the reserve pits are allowed to sit while drilling continues, some of the additives drift to the bottom of the pit and are trapped between the rock cuttings. Even if all the liquid is siphoned off, the drilling mud proves thick enough to prevent removal of all the additives, he said.

Rice said it would require extensive testing to determine several sites' safety. He suggested the state would find it easier to monitor one site instead.

"It's poor form to create landfills helter skelter all over the countryside," he said. "If we haven't done the tests then I don't think it's safe to assure that there won't be an adverse impact on the environment."

In the past, Rice said, the state has kept close watch of the Sterling site yet has allowed oil firms greater leeway. "Basically on a drilling site the sump is a garbage pit," he said. "The operators of that site, (the Sterling Special Solid Waste Site) have been sat on pretty rigorously. The ADEC is not making the same requirements of oil firms."

State officials admit that is difficult to monitor oil firms. Much of the state's information on disposal methods come from the industry.

"We have had in the past to rely on the integrity of the persons conducting the analyses," said Mike Lucky, an ADEC field officer in Soldotna.

Lucky said the state will use the firm's information and that gathered by employees or submitted by the public to evaluate Union's permit application. A public hearing on Oct. 29, has been set aside to explain the permit application and hear public opinions, he said. "If the public has some information that we don't have," he said, "well, that's what we're after."

Still, questions remain. Did Union deliberately break state law and dispose of the drilling mud? Union officials say 'no, the mud was only being stored.'

If Union violated the law why hasn't the state taken it to court? The state says it has not filed suit, "because we've gotten what we wanted out of Union without going to court," said Bob Martin, special assistant to the ADEC commissioner. Martin said it has taken the state two years to get Union to sign a compliance order agreeing to clean up the pits if their disposal permit is denied. But at least one Union official said the firm may take the matter to court if the permit request is rejected.

Is there danger posed by drilling muds? The state agrees that drilling muds contain some toxic chemicals but say they are still in the process of setting criteria for drilling mud disposal. In the meantime, Union's permit is under consideration.

"I just don't have all the answers," Martin said. "I will say that the kinds of things that they are proposing are typical of what's going on in other state."

Martin said the state has conducted its own tests but discounted a 1983 department study that suggested two Union pits were leaking into wetlands area. "So far there is no problem with the Kenai gas wells," he said. "There is no evidence of drill muds with leaching."

Martin said the state may do more testing and is talking to wildlife officials about environmental concerns. "We are concentrating our review (of the Union appliication) on particular sites in wetlands," he said. "Those are the areas we want to be particularly careful on. There are still questions that exist. There may be some more higher level reason for concern."

Next:One man's attempts to draw attention to drilling mud disposal practices.

Woman seriously hurt in crash

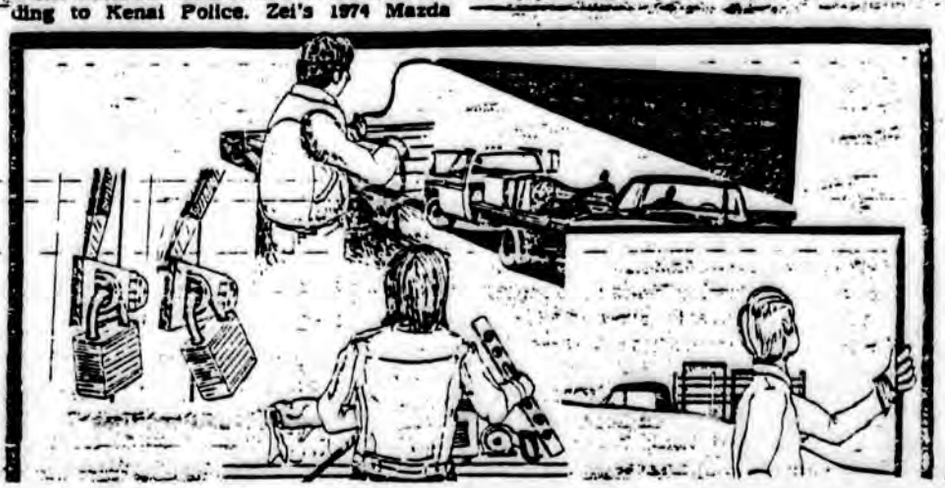
A young Kenai woman was seriously injured early Saturday morning when the pickup truck she was driving collided with another pickup on the Kenai Spur Highway near Larry's Club.

Lisa Zei, 21, suffered head and back injuries, according to Kenai Fire Department personnel, who transported her to Central Peninsula General Hospital. They said she was later flown to an Anchorage hospital.

The accident occured at 1:16 a.m., according to Kenai Police. Zei's 1974 Mazda pickup collided with a 1970 Chevrolet pickup driven by Robin E. Holt, 21, Kenai. Both trucks were totaled.

No information was available Saturday afternoon about the events leading to the accident. Holt was cited on suspicion of driving while intoxicated. He suffered bumps and bruises, according to the fire department.

The police said neither Zei nor Holt had any passengers.



Peninsula Clarion

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Drill mud issues coming to public attention

Editors note: This is the first of a series of articles addressing the questions surrounding the issue of drilling mud disposal.

By JAN MIRELES, *Staff Writer*

In 10 days the Alaska Department of Environmental Conservation will ask Kenai Peninsula residents what they think of a Union Oil plan to dispose of drilling mud.

The question will be posed at a public hearing Oct. 29 in the borough building in Soldotna. The hearing begins at 7 p.m.

Earlier this year, public comments were successfully targeted when the state required Tesoro Alaska to use the most stringent air pollution control devices at its Nikiski refinery.

Since its arrival on the peninsula in 1958, the oil industry has ridden the roller coaster of public opinion. The industry is praised for creating jobs and criticized for threatening the environment. More recently Union Oil has been riding the roller coaster careening to the latter view.

At issue this time: the alleged illegal dumping of drilling mud.

"When the oil field started nobody cared about drilling mud," said Bob Delaney, U.S. Fish and Wildlife's manager of the Kenai National Wildlife Refuge. Those were the boom days; when drilling mud didn't contain "fancy chemicals," Delaney said, and there were few regulations restricting oil companies.

But that has changed. The Alaska Department of Environmental Conservation was formed in part in the early 1970s to address environmental concerns raised by oil industry operations. Citizen groups also have joined state and federal agencies in their attempts to monitor the ever-evolving oil industry.

Currently, Union Oil of California has fallen under the gun. The company has filed a permit application with the ADEC requesting permission for on-site disposal of thousands of barrels of drilling mud. State regulations, however, require disposal be handled by a licensed waste site.

To date, the only licensed solid waste site on the Kenai Peninsula is the Sterling Special Waste Site operated by Dave Brown. Brown has said Union is not using the waste site and has charged Union with illegally

See STATE, back page

$3.5 million city center tops wish list

By JOHN QUINLEY, *Managing Editor*

A $3.5 million community center will top the list of capital projects for which the city of Kenai hopes to receive state funding.

The Kenai City Council Wednesday approved a list of 30 items, primarily road im-

State considers Union request

Continued from Page 1

disposing of the drilling mud. Union officials deny the charge.

In a permit application several inches thick, Union officials admit to the existence of seven drilling mud reserve sumps, but maintain that the sumps merely represent storage pits until a disposal method can be developed, according to Union spokesman Bob Anderson.

An ADEC ruling earlier this year defined drilling mud disposal as occuring when a drill rig leaves a site. Letters from department officers dating back to early 1979, warned Union officials about possible civil and criminal penalties for any illegal dumping. Union has acknowleged no wrongdoing and said there is no basis for any prosecution.

"It all turns around the definition of disposal," said Anderson. "We assured the ADEC that it was only storage."

The state is reviewing the Union application. Union has signed a department compliance order to clean up the pits if the disposal permit is denied, but Anderson indicated the matter could go to court.

"We'll just have to wait and see," Anderson said. "Both sides are going to reserve to themselves the options open to any citizen of the United States."

The department has extended the public comment period in conjunction with its review. Local citizens also are holding an informational meeting at 7 p.m. Tuesday, Oct. 23, in the Kenai Central High School cafeteria to discuss the possible effects of drilling mud on the environment. Peter Neitlich of the Alaska Center for the Environment is the guest speaker.

There seems to be little agreement between industry and public officials as to what drilling mud would do to the environment. In the early days, drilling mud consisted primarily of bentonite, a natural fine-grained soil, and water. The mud facilitates the drilling process. When the drill digs deeper into the earth, the mud is used to suspend soil and rock clippings so that the drill can plunge still deeper in search of oil.

As oil technology improved, scientists learned that by adding different chemicals the drilling mud would be more effective. Drilling mud now contains numerous chemicals some of which may be toxic in certain amounts. Each company uses a number of different drilling muds and carefully guards its recipes.

In making its disposal permit application Union revealed the mud compounds it uses, but not the proportions. Other firms also have refused to release similar information to the public on the grounds that it would endanger their ability to compete.

Though drill sites vary, handling of drilling mud waste is fairly uniform throughout the industry. Next to each drilling pad is a reserve pit. The pit dimensions for Union's Cannery Loop 1 are 556 feet long by 107 feet wide by 13.4 feet deep. The permit said bentonite was applied to the bottom and sides of the pit prior to use. Union officials say the bentonite is impermeable and prevents any drilling mud from seeping out of the pit and into surrounding soils.

The pit holds drilling mud while the gas well is being used. Once site work is completed, the ADEC requires that the mud must be disposed of according to ADEC regulations. The liquid portion of the mud may be pumped into tankers and injected into the ground in disposal wells (companies need permits to operate the wells) or stored in barrels and transported to the Sterling Special Waste Site.

The solids that remain consist of soil and rock formation cuttings. Union said the cuttings are not toxic. The cuttings, according to ADEC regulations, are drilling mud and are supposed to be part of the package sent to the special waste site.

"Drilling muds are not a hazardous waste," said ADEC field officer Mike Lucky. "But we consider them to be a solid waste that requires special disposal."

What Union proposes is to seal the reserve pits with a cap of bentonite to prevent seepage. Anderson said there is no danger of the cuttings contaminating the environment.

"There is nothing to be concerned about," he said. "There is residual mud, but it's not toxic."

Monday: Are Union's proposed disposal methods safe? Do drilling mud reserve pits pose a threat to peninsula wildlife and residents?

Soldotna council opens hunt
[illegible]person to fill seat

Witness at hearing suggests oil payoffs

By RONNIE CHAPPELL
Daily News reporter 10-3084

KENAI — At a public hearing in Kenai Monday a witness suggested that payoffs from the oil industry had influenced the handling of drilling mud disposal permits by the Alaska Department of Environmental Conservation.

Valdez attorney Bill Bixby played a taped interview at the hearing in which Carl Harmon, a department employee, said he'd been told by two anonymous callers that the industry had obtained favorable permit decisions by paying "great amounts of money" to people within the department.

Two years ago, the state agency was threatening to take Union Oil of California to court for illegally disposing of drilling muds in open reserve pits in and around the city of Kenai. The department is now considering a permit application that would make those same pits retroactively legal.

At the time he received the calls, Harmon said he was handling drilling mud disposal permits on the Kenai Peninsula. "They asked why they couldn't come to some kind of agreement with me," Harmon said during the taped interview.

Harmon wrote a memo describing the calls for his files and delivered a copy to his immediate supervisor. Later that day, Harmon said, Regional Supervisor Bob Martin "directed me not to deal with oil companies or drilling muds ever again."

Late Monday, Harmon told the Daily News that private investigator John Parker had obtained the interview under false pretenses.

"Parker said he was repre-

See Back Page, DRILLING

Drilling mud plan debated

Continued from Page A-1

senting the A.G.'s (attorney general's) office. He was not. He misrepresented himself," Harmon said.

Harmon said he could not authenticate the tape played by Bixby at the hearing until he had had a chance to listen to it.

Harmon told the News he received the calls, that he reported them to his supervisors and that he was taken off drilling mud permits the same day.

"I hope these are the musings of a disgruntled employee," Bixby said. "But given the inaction of the agency, we feel they should be investigated by an independent body."

"We are aware of the allegations," said Deputy Commissioner Christopher Noah. "The state attorney general is looking into the matter and trying to figure out what actions to take."

Martin termed the tape the "prattling of a disgruntled employee.

"The anonymous calls were followed up on," Martin said, and no evidence of wrongdoing was ever uncovered. Harmon, he said, had no idea who called him.

Speaking to Bixby, Martin said, "you've slurred a lot of people's names with that recording. I'll not slur any others by speculating" on who made the calls.

In the past, Martin has said he is comfortable with the agency's decision to negotiate with, rather than prosecute the oil company.

A lawsuit would still be tied up in the courts, he has said, and the drilling mud would still be in the ground. It could remain there for years if the case is appealed.

By negotiating, Martin said, the agency was able to prod Union into action. The company is now submitting proposals for disposal of the mud.

The agency will not approve a proposal unless it is environmentally acceptable, Martin said.

More than 100 people turned out for the hearing.

Union Oil wants to bury the drilling muds in existing reserve pits in the Kenai and Cannery Loop gas fields.

Environmental groups, like the Kenai Peninsula Chapter of the National Audobon Society, opposed issuance of the necessary permit. They warned that caustic chemicals, salts and dangerous amounts of lead, mercury and other heavy metals contained in the muds would leach out of the pits and into the water table.

During the hearing Bob Anderson of Union Oil said the method proposed by the company — burial in an envelope of waterproof bentonite clay — would protect the environment.

Others, however, weren't so sure.

Carol Boudreaux complained about a "lack of definite assurances that the chemicals won't leach out into the environment."

Denial of permit to bury drilling mud urged

Daily News 11/11/87

From our Peninsula Bureau

KENAI — Kenai Mayor Tom Wagoner has asked the state to deny a permit application that would allow Union Oil to bury 126,000 barrels of used drilling mud in and around his city.

Union wants to dispose of the mud in seven existing reserve pits in the Kenai and Cannery Loop gas fields. Some of the pits are located in wetlands areas and some are located near residential subdivisions.

In a letter to Gov. Bill Sheffield, Wagoner opposed use of existing pits for drilling mud disposal. He requested, instead, that the company be required to "dispose of all drilling muds at one site within the Kenai gas field."

This would "ensure that a new pit is constructed to exact specifications" determined by the Alaska Department of Environmental Conservation.

Finally, Wagoner asked the state to force the company to clean up and remove all drilling muds remaining in the Cannery Loop field, which is located entirely within the city.

Wagoner's letter could signal a change in attitude on the part of local officials towards the oil industry. Two years ago, at Union's request, the city council modified the city drilling ordinance.

The first change allowed Union to substitute earthen reserve pits for steel tanks. A second made it retroactively legal for Union to bury used muds in the city.

DEC will not decide on Union's permit application until later this year. The agency will accept written comment on the request until Nov. 13.

Memo about payoffs at agency not released

By RONNIE CHAPPELL
Daily News reporter

A Valdez attorney who publicized allegations of payoffs within the Alaska Department of Environmental Conservation (ADEC) has failed to release a two-year-old ADEC memo on "threats and bribe offers" that cast his own client in a bad light.

Bill Bixby, an attorney for Alaska Environmental Industries, defended the decision not to release the memo, saying it was obvious that department officials knew of it and had an opportunity to bring it up at the meeting.

"We were just calling for an investigation," Bixby said. "We're not saying the allegations are true or false. We're saying 'please investigate.' We don't have the means or the authority to find out what's been going on."

Two weeks ago in Kenai, Bixby played a taped interview in which Carl Harmon, a department employee, said he was told "not to deal with oil companies or drilling muds again" after he told his superiors about threats and bribe offers he had received.

Bixby, citing "the inaction of the agency" on a pending mud disposal permit, added that "we feel they should be investigated by an independent body."

See Page C-3, ATTORNEY

Attorney refuses to release memo about bribes, threats

Continued from Page C-1

Union Oil Co. is asking to be able to bury toxic drilling muds at their temporary sites instead of at approved locations.

In a June 10, 1982, memo which Bixby also had, Harmon describes a conversation held one month earlier with Bixby's client, Dave Brown, the owner of Alaska Environmental Industries and the operator of Sterling Special Waste site. Harmon quotes Brown as saying "he did things for his friends" at the department, such as taking them on free hunting and fishing trips.

Brown acknowledges meeting with Harmon but denies that he ever gave free trips to department employees. Brown has questioned the authenticity of the memo and has suggested that it is a recent forgery.

Ten days after talking with Brown, Harmon wrote in the memo, he received two phone calls from two anonymous men trying to influence a state decision on drilling mud disposal.

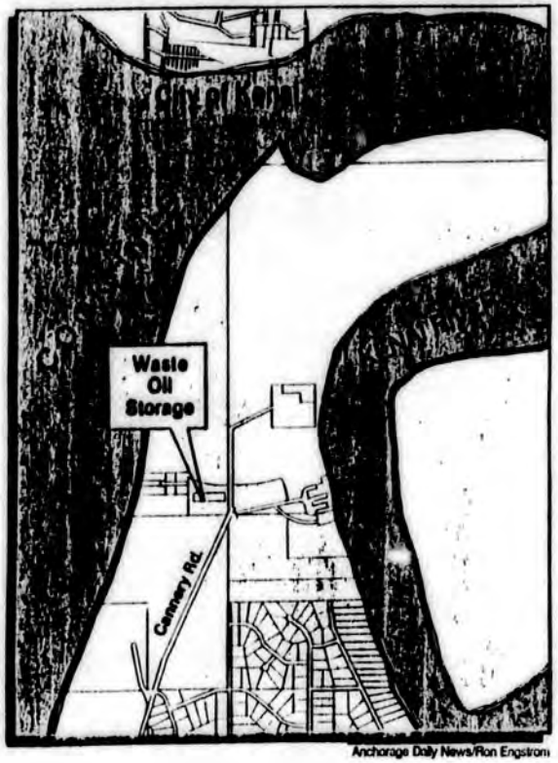
Harmon said one of the callers threatened to break both of his legs. The other, he said, told him "it could be worth as much as $100,000 to get this situation cleaned up."

"I felt as if I had been intimidated," Harmon's memo concludes. "I do not know whom to believe. I felt Mr. Brown was trying to use me to put pressure on the oil companies, to get them to haul drill water and muds to his site. I do not believe the calls made to me on May 29 were from the oil companies. At this time I am not sure from whom they came."

As operator of a waste site, Brown could profit if the oil companies are not permitted to bury the muds at their present sites.

Sunday Business J
Anchorage Daily News Sunday, December 9, 1984

Drilling muds mire Kenai in controversy



Anchorage Daily News/Ron Engstrom

Residents want safe mix of oil and water

By RONNIE CHAPPELL
Daily News reporter

KENAI — A few people in this community that once proclaimed itself the "Oil Capital of Alaska" are having second thoughts about oil and gas development literally in their backyards.

The subject of their concerns is an increasingly controversial goopy mixture of water, clay and naturally occurring minerals known as drilling mud.

Drilling mud is present wherever oil and gas are sucked from the earth. The mud is used to lubricate the drill stem, flush cuttings to the surface and prevent blow outs.

By itself, the "mud" generally is thought to be harmless.

But barite and bentonite — the naturally occurring minerals — can be contaminated with trace amounts of arsenic, chromium, lead, mercury and other heavy metals, and that can be extremely dangerous.

Drilling muds also can contain hundreds of chemical additives that serve as sealants, thinners, weighting agents, foaming agents, defoamers, lubricants, corrosion inhibitors, bactericides and more.

In the past, few Alaskans worried about the handling and disposal of millions of barrels of used drilling mud and other oil field wastes.

But that is changing on the Kenai Peninsula, where the distance between people and oil development is growing shorter and shorter all the time.

Residents are concerned they could be poisoned by toxic chemicals leaking from unlicensed disposal pits into the water they drink.

No where is this concern greater than along Cannery Road, south of downtown Kenai across the Kenai River.

When Union Oil of California spudded a gas well at the end of Cannery Road in 1979, few people lived nearby.

But in the last five years the road has been paved and more than 100 homes have been built in the area.

City officials expect residential development to spread toward the drill pad. Next to the drill pad is a pit containing about 13,000 barrels of used drilling mud.

Union wants to bury another 70,000 to 80,000 barrels of drilling mud and other waste in the pit.

Two major canneries are located within shouting distance of the pit, which sits next to a wetlands that extends to the mouth of the Kenai River.

The nearest house is about 200 yards from the pit. A new subdivision lies perhaps a third of a mile away. Area residents depend on private wells for drinkable water.

According to Union, the water table is just inches below the bottom of the pit.

All told, Union wants to bury 126,000 barrels of drilling mud and associated waste as it develops the Cannery Loop and adjacent Kenai Gas fields in the next few years.

Union wants to rehabilitate one reserve pit and bury five others in the area.

Despite company assurances that the disposal plan poses no threat to the environment or human health, many Kenai area residents remain unconvinced.

More than 100 people turned out for a hearing in Kenai to oppose the issuance of a drilling mud disposal permit to Union.

At the hearing, opponents passed out hundreds of reprints of a recent Wall Street Journal story about the possible link between high cancer rates and waste disposal practices in the oil regions of Louisiana.

"The arrogance of the oil companies really bothers me," said Kenai attorney Kevin McCoy, who lives a half mile from the Cannery Road reserve pit.

"The sites that are close to homes or in wetlands are just totally inappropriate. I'm just not satisfied that the stuff won't leak into the water."

Kenai City Hall generally has been accommodating to the

See Page J-6, ENVIRONMENTAL

Kenai ordinance may stifle Union Oil disposal plans

By JAN MIRELES, Staff Writer

A little-known Kenai city ordinance may prevent Union Oil Company from disposing of drilling mud at two of seven proposed disposal sites that are up for approval with the state.

The two sites, Union's Cannery Loop Unit 1 and 3, are part of permit application on file with the state Department of Environmental Conservation. The permit seeks permission to dispose of drilling mud at seven company drilling sites.

The city ordinance addresses the issue of solid waste and its management. In it, all authority and power to manage, maintain, operate or construct a solid waste site is transfered to the Kenai Peninsula Borough.

Since the state currently classifies drilling mud as solid waste, City Manager Bill Brighton interpreted the ordinance as prohibiting Union from disposing of drilling

See PENINSULA, back page

mud within the city limits. Both Cannery Loop Unit 1 and 3 are inside city boundary.

Brighton said if Union could contract with the borough to operate the locations as disposal sites they would not violate the ordinance.

"I wouldn't say that's beyond the realm of possibility, but that's the only way they could," dispose of drilling mud inside the city, Brighton said.

Borough Mayor Stan Thompson declined to comment on the matter until he could consult with attorneys about the borough's position.

"Off-hand, I would say I don't know what we'd do," Thompson said.

Meanwhile, state officials say they still are reviewing Union's permit application. Bob Martin, special assistant to the DEC commissioner, said the state is interested in cooperating with the city's wishes.

Martin said he was not aware of any city ordinance against drilling mud disposal but added, "If that is the city's position then we'd want to honor that."

Kenai Mayor Tom Wagoner said he already has asked the state to deny Union permission to dispose of drilling mud at Cannery Loop Unit 1 and 3.

In an October letter sent to the governor's office and the DEC, Wagoner asked that Union be required to remove all drilling mud currently at the sites.

"I feel that they should be removed," Wagoner said.

In addition to Wagoner's efforts to address the issue of drilling mud disposal, Councilman John Wise will introduce a related ordinance at tonight's City Council meeting. Wise hopes it will keep drilling operations from troubling the city again.

The ordinance would amend an existing ordinance and further restrict drilling site operations. Oil companies would be required to remove drilling mud reserve pits and their contents "within 60 days after completion of a well or drilling activity," according to the proposed ordinance.

The proposed ordinance also asks that all storage pits and reserve pits be constructed of steel. Earthen reserve pits would be allowed only if permitted by the city manager after receiving approval from the state DEC.

Wise is introducing the ordinance because, "I don't want reserve pits in the city of Kenai that are just sitting there idle and possibly contaminating the soil and water supply."

Wise said the Cannery Loop wells have been finished for years and that Union's "story about holding the drilling mud in reserve is simply not true."

If the first reading of Wise's proposed ordinance is approved a second reading will be set for the council's Dec. 5, meeting. If that reading is approved, the ordinance will go into effect Jan. 5, 1985.

...Peninsula landowner opposition

11/27/84

Continued from Page 1

with Union to allow permanent disposal of drilling mud.

"I am very unhappy with Union Oil," she said. "I would never, never grant permission."

Equally vocal is Cook Inlet Region Inc. CIRI Vice President Frank Klett is irritated that Union has not contacted his group about the permit proposal. Klett said it is unlikely permission will be granted.

"We're not in the business of disposing of drilling mud," Klett said. "And we don't intend to be."

While the borough has not been contacted for permission to dispose of drilling mud on its land, Borough Mayor Stan Thompson said there is no ordinance prohibiting the borough from allowing disposal. Thompson did say Union would have to meet all DEC requirements and that the borough would consider public opposition to the proposal before making a decision.

Union's application has met with widespread opposition from the public as well.

Residents living near the gas fields fear the drilling mud may contaminate drinking wells. Environmentalists and conservationists say the proposed disposal sites are within the Kenai wetlands and pose a danger to wildlife.

Dave Brown, operator of the Sterling Special Solid Waste Site, claims the application is illegal because his is the only site licensed to handle drilling mud disposal. Union's refusal to use the Sterling facility has placed Brown's business in peril, said Brown. Brown has filed for partial bankruptcy -- asking the court for time to reorganize his business.

Also in question are Union's proposed disposal sites Cannery Loop Units 1 and 3. The units are located inside Kenai city limit and are subject to a city ordinance addressing management and construction of solid waste sites.

The Clarion reported last week that the ordinance may prohibit Union from disposing of drilling mud at those sites. The ordinance grants the borough complete authority in contracting for solid waste sites. Kenai City Manager Bill Brighton said the only way Union could dispose of drilling mud inside the city would be to get approval from the borough.

While Thompson said the borough might agree to such an arrangement, he said it would depend upon the city's preferences.

"If the city opposed them then I'm sure the borough would, too," he said.

In October, Kenai Mayor Tom Wagoner sent a letter to the DEC and the governor requesting the state deny Union permission to dispose of drilling mud at either site.

Despite the strong opposition, Union's Alaska representative, Bob Anderson, said the firm still hopes to have its permit approved.

Anderson denied trying to side-step regulations calling for landowners permission to dispose of drilling mud. "I don't think that's the case at all. Obviously not," he said.

He said the people putting together the application must have believed the information was not yet needed by the state.

"I think we're going to have to wait and see," he said. "And if additional steps are needed, obviously we'll do it. Union is hopeful that they'll approve the permit and we can get back to business."

PENINSULA CLARION 11/27/84

Kenai, Alaska 25 cents

Landowner opposition hits Union

Drilling mud disposal unlikely without consent

By JAMES HOLLAND, Staff Writer

A hammer may be chipping away at Union Oil Company's bid to dispose of drilling mud in the Kenai wetlands.

Early this fall, Union filed a two-inch thick permit application with the state Department of Environmental Conservation proposing to dispose of drilling mud at seven sites. Five of the sites are located in the Kenai Gas Fields off Kalifornsky Beach Road. The other two are Cannery Loop Units 1 and 3. Both are inside the Kenai city limit.

While Union holds the mineral lease on the gas field sites, it does not own the land. According to state regulations, Union's permit cannot be granted until the firm produces written statements from each landowner granting permission for the drilling mud disposal.

Union has produced no such letters, say state officials. Without the letters Union will have to forego the proposed disposal sites, said Bob Cannon, district manager for the DEC.

"There's no question that if the landowners don't grant permission then that's that. They've got the final hammer," he said.

The hammer is held by the Salamatof Native Association, Leonard A. Kesner, Doris M. Lashley, Cook Inlet Region Inc. and the Kenai Peninsula Borough. All own proposed disposal sites in the Kenai Gas Fields. Kesner shares ownership of one of the sites with the borough.

All have questioned Union's application, saying the oil firm has yet to approach them for permission to dispose of drilling mud on their land. Only the borough has said it would consider giving approval.

Six gas wells have been drilled at site 14-6 in the Kenai Gas Fields. The land is owned by the Salamatof Native Association. Andy Johnson, the group's president, said the association would deny any request from Union to use the land as a disposal site.

Johnson said the agreement with Union requires the firm to return the land to its original condition when drilling operations are completed. Drilling mud disposal is not part of the bargain, he said. He also said telegrams were sent to the DEC and to the governor's office protesting the proposed site.

Kesner owns a portion of site 34-31. The borough owns the rest. He fears the drilling mud may contaminate local groundwater.

"They haven't approached me and I wouldn't sign it (a letter of permission) if they did. I'd feel bad if they polluted the water," he said.

Lashley is adamant about her opposition to drilling mud disposal on her land. Three gas wells have been drilled at site 33-30, but Lashley said she has made no agreement

See PENINSULA, back page

Kenai Natives join drill mud protesters

The public comment period for Union Oil Co.'s drilling mud disposal application ended quietly Tuesday. But public concern over Union's request to dispose of drilling mud in the Kenai wetlands has not abated, said a state official.

"There are a lot of people on the Kenai concerned about this," said Bob Flint, regional director for the state Department of Environmental Conservation.

That's not always true of other areas," he added.

Tuesday the Kenai Native Association joined the list of groups opposing the disposal request. The association sent telegrams to the governor's office and to the DEC asking that the permit be denied, according to an association worker.

Originally the public comment period was to have ended in October. The deadline was extended, however, following requests from concerned residents. The state also held a hearing in Kenai on Oct. 29 and another in Anchorage on Oct. 30. During the hearing state and Union officials explained both the permit application and the review process.

Flint estimated more than 25 people addressed the department during the hearing. A crowd of about 125 people attended the 3½-hour meeting. Added to other letters received before or after the hearing, Flint said, more than 50 people have voiced concern about the safety of drilling mud disposal.

Bob Martin, special assistant to the state DEC commissioner, said he is aware of only two or three letters received since the hearing. He would not say when the state might reach a decision concerning Union's permit application.

"We are still reviewing the permit information," Martin said.

The state also is working on developing a set of guidelines for drilling mud disposal, he said. Despite urgings from environmentalists to postpone any permit decisions until a set of guidelines is in place, Martin said there has been "no decision to act one way or the other."

"It's probable in fact that we will get back to Union Oil with a request for more information," Martin said. "And it's also possible that we'll delay a decision until we do develop a more comprehensive policy on the disposal of drill muds."

Martin said the state will keep the public informed on its progress concerning the department's review findings.

"It's obvious that people are concerned and interested," he said. "We're not just going to sneak a decision by."

SALAMATOF NATIVES JOINED PROTEST ALSO

Denial of permit to bury drilling mud urged

From our Peninsula Bureau

KENAI — Kenai Mayor Tom Wagoner has asked the state to deny a permit application that would allow Union Oil to bury 126,000 barrels of used drilling mud in and around his city.

Union wants to dispose of the mud in seven existing reserve pits in the Kenai and Cannery Loop gas fields. Some of the pits are located in wetlands areas and some are located near residential subdivisions.

In a letter to Gov. Bill Sheffield, Wagoner opposed use of existing pits for drilling mud disposal. He requested, instead, that the company be required to "dispose of all drilling muds at one site within the Kenai gas field."

This would "ensure that a new pit is constructed to exact specifications" determined by the Alaska Department of Environmental Conservation.

Finally, Wagoner asked the state to force the company to clean up and remove all drilling muds remaining in the Cannery Loop field, which is located entirely within the city.

Wagoner's letter could signal a change in attitude on the part of local officials towards the oil industry. Two years ago, at Union's request, the city council modified the city drilling ordinance.

The first change allowed Union to substitute earthen reserve pits for steel tanks. A second made it retroactively legal for Union to bury used muds in the city.

DEC will not decide on Union's permit application until later this year. The agency will accept written comment on the request until Nov. 13.

Sterling dump suspected as metals pollutant source

by Tom Gressler
Special to The Times

4/18/

Kenai — The Environmental Protection Agency and the Alaska Department of Environmental Conservation told a group of Sterling residents Wednesday that an industrial waste dump near the town could be leaking heavy metals into the surrounding ground waters, creating a potential health danger.

The EPA called the meeting in an elementary school less than two miles from the dump and said that both departments would be testing this summer to see if the site presented a hazard.

Field tests made by the EPA last fall show that traces of metals found in the pits of the dump are present in monitoring wells surrounding the site. Officials said that further study is needed to determine the direction of ground water flow and the amounts of metals in natural water that could be confused with those found in the dump.

DEC test records show that traces in the low parts per billion of volatile organic compounds have occasionally been found in the monitoring wells. While the traces were far too small to present a threat to human health, one EPA spokesman said that it could be the beginning of a problem.

"These wells have occasionally shown parts per billion of metal solvents," said John Meyer of the EPA. "These are low, but they probably shouldn't be there. It's very hard to say if these metals are natural or the very beginning of a problem. The site is only a few years old and sometimes migration can take decades."

Meyer said that the EPA would be drilling additional wells around the dump in June to determine the contents of the ground water and the direction of the flow. The DEC will be monitoring residential wells in the area for any potential contamination. Four of the eight monitoring wells on site have been unuseable for testing, Meyer said.

Samples from the four functioning wells have shown traces of organic compounds and heavy metals used in industry. The Sterling Special Waste Site is used as a disposal site for drilling mud from oil wells operated on the Kenai Peninsula.

One private well showed minute concentrations of an organic industrial solvent found in the dump. The trace of 1-1-1 trichloroethane was far below levels considered dangerous.

Meyer said that the EPA was concerned because current monitoring wells were not built to similar standards. A well can provide false indications in metals tests if not constructed properly.

Meyer said the dump could be placed on a national priority list for cleanup if testing revealed a potential health hazard. The EPA's list currently has more than 700 sites nationwide.

Special waste site could become health threat

By RONNIE CHAPPELL
Daily News reporter

STERLING — State and federal officials Wednesday told residents that a licensed special waste site in this rural community east of Soldotna could one day be a threat to public health.

"Additional sampling is necessary to determine if any significant migration of contaminants from the site is occurring," said the U.S. Environmental Protection Agency in statement distributed at a crowded public hearing in the Sterling School.

The federal agency will return in June to construct six additional monitoring wells at the special waste site. They will be used to sample ground water beneath the site and to determine its flow direction.

According to EPA spokesman John Meyer, limited sampling of three nearby wells has been inconclusive and has not revealed any contamination that would be a threat to public health.

Samples from four existing monitoring wells over the past three years have shown traces of heavy metals and organic compounds commonly associated with oil production.

Another sample taken from a private well contained .4 parts per billion of 1-1-1 trichloroethane, an organic solvent that was also found in a waste site disposal pit. Trichloroethane is not believed to be hazardous to human health at that concentration.

"It's difficult to make a correlation between what we found in the well and what is at the site," Meyer said. "Those sorts of things concern us and we want to look further."

The Sterling Special Waste Site is owned by the Kenai Peninsula Borough, but is leased and operated by Alaska Environmental Industries. It is primarily used for the disposal of used drilling mud, waste water/oil emulsions and other "non- hazardous" wastes.

In addition to monitoring private wells, said DEC Regional Supervisor Bill Lamoreaux, the state also intends to modify the permit under which the site is operated.

ANC Daily News 4/18/85

ARCO fined $75,000 for waste fluids

By RONNIE CHAPPELL
Daily News reporter

KENAI — ARCO Alaska Inc. has been fined $75,000 for disposing of waste drilling fluids before obtaining the necessary state permit.

Superior Court Judge Charles Cranston levied the fine Thursday after ARCO pleaded no contest to charges stemming from the violation.

Cranston suspended $25,000 of the fine on the condition the company have no similar violations on the Kenai Peninsula for two years.

"I believe it is the biggest criminal fine ever assessed in a criminal case on the Peninsula," said District Attorney Tom Wardell. "It's a fine that I felt was appropriate."

Cranston could have assessed ARCO $100,000.

In the past, courts in Kenai have gently treated oil companies accused of violating state environmental laws. The ARCO fine "is indicative of a change in community thinking," Wardell said.

"I guess its time to give a message to these firms that the state is taking (enforcement of its environmental laws) seriously and that in appropriate situations, large fines will be sought and secured."

ARCO applied for the permit state permit necessary to dispose of waste drilling fluids generated during the drilling of an unsuccessful exploratory well nine miles north of Sterling.

But disposal of the waste liquids began before the permit was issue.

"We goofed," said ARCO spokeswoman Susan Andrews when the violation was discovered. The company ceased injection of waste fluids and hauled those left at the Wolf Lake 2 drill pad to the Sterling Special Waste site.

Last year, ARCO drilled a similar well from the same pad and received permisssion from the state to inject waste drilling fluids down the well annulus.

Deep well injection of waste fluids is standard operating procedure in the oil industry and state officials say the procedure is environmentally sound.

Andrews declined comment on the size of the fine, which was part of a plea/sentence bargain negotiated with the state before Thursday's hearing.

DEC Regional Supervisor Bill Lamoreaux said the fine was appropriate given the serious nature of the procedural violation that occurred.

By disposing of the fluids before issuance of the permit "they circumvented our ability to do our job," Lamoreaux said. "We weren't able to do a complete environmental assessment of what they proposed to do."

4/14/85

Peninsula Clarion, Kenai January 23, 1985

Boro enacts toxic waste disposal law

Oil and chemical companies and others planning to dispose of hazardous waste materials on the Kenai Peninsula now have one more governmental body to deal with.

Tuesday night, the Borough Assembly passed an ordinance which prohibits burying, dumping or incinerating of hazardous wastes without Assembly approval.

The ordinance calls for public hearings and recommendations from both the borough's planning and waste disposal commissions before the Assembly vote.

Kenai Assemblyman Phil Nash sponsored the ordinance. He said that it "may not be perfect," but was better than the borough's present regulations, which don't deal with hazardous wastes

There is an exemption in the ordinance for materials which are intended solely for household or hospital use. The ordinance passed by a vote of 12-3, with John Crawford,

See BORO, back p

...Boro hazardous waste law

Continued from Page 1

Dave Carey and Gary Fandel voting no. Assemblyman Jim Skogstad of Hope was absent.

Mayor Stan Thompson spoke against the ordinance, saying the borough lacks the expertise to deal with hazardous wastes and lacks power to enforce the ordinance.

Nash disagreed, saying that the borough has recourse through the court system. "The borough can go to court and ask for injunctive relief," Nash said. "That is often more effective than having fines" to ensure compliance, he said.

Only one person testified during a public hearing on the ordinance. Brad Bradney of Soldotna spoke in favor of tighter controls on industrial waste disposal. Citing a series of newspaper articles revealing industrial pollution in Alaska, Bradney urged the Assembly to consider daily fines for violators.

Bradney told Assembly members he would "interpret a vote against this ordinance as a vote for pollution."

No one from the borough's Resource Development Commission testified Tuesday night. Earlier the commission sent a letter to the Assembly, asking that the ordinance be defeated.

Arco seeks permit for hazardous wastes

by Jeff Berliner
Times Writer

The first hazardous waste disposal site in Alaska is being planned by Arco-Alaska Inc. at Prudhoe Bay, according to the U.S. Environmental Protection Agency.

Alaska EPA hazardous waste coordinator Steve Torok confirmed that Arco has applied for a permit to inject hazardous wastes down well holes drilled at the North Slope oilfield.

Although there now are 11 hazardous waste storage areas in Alaska, EPA permits no dumping of hazardous wastes now.

In addition to the requesat for waste disposal, Arco is seeking federal permission to use its site for hazardous waste storage.

Arco recently sought an EPA permit, Torok said, but the application was returned because the company had not obtained approval from the State of Alaska, which owns the land and leases it to Arco.

The state Department of Environmental Conservation has not made a formal recommendation on Arco's request.

However, department environmental field officer Jeff Mach said, "I don't see any hang-ups on the part of the state."

As the landowner, the state would appear to be ultimately responsible, Torok said. But he added that he expects the company and the state to come to an agreement over responsibility and liability for the site before Arco submits its completed application to EPA.

Disposal of toxic wastes is governed by federal law. The state has been debating putting its own regulations into effect under a 1981 state law, but the Sheffield administration delayed imposing hazardous waste rules following objections from the oil industry last fall.

The closest federally licensed hazardous waste site is in Arlington, Ore., and Arco says it is too expensive to ship waste from the North Slope to the Lower 48.

Although most oilfield waste products are excluded from regulation, an EPA inspection last summer found wastes considered hazardous, said Arco environmental conservation manager Thomas R. Fink.

DEC estimates that about 5 percent of all liquid oily wastes generated by Arco could be considered "hazardous" under EPA regulations, but Fink would not confirm that figure.

DEC has permitted Arco to inject all wastes down two injection wells which, Fink said, are about 1,500 feet deep. The 1,200 foot permafrost layer above the wastes acts as a natural seal, he said.

Although the wastes may contaminate ground water, Mach said, "no one uses the ground water for drinking and everything in between is frozen."

Mach noted that although DEC has permitted Arco's use of the injection wells for its oily wastes, the state may not regulate the disposal of hazardous wastes. That is EPA's job, he said.

Fink said the company has been injecting these wastes into the earth for years, and is merely seeking official EPA approval now.

The wastes deemed hazardous by EPA are considered highly flammable, but Fink said Arco and EPA are not in total agreement about which wastes should be regulated.

"It's a question of what we think are hazardous wastes and what Arco thinks are hazardous wastes," Torok said.

Fink said other North Slope firms have approached Arco about disposing of their wastes.

Arco, Fink said, has taken other companies' wastes without knowing whether they are hazardous. That is a matter between EPA and the waste generator, he said, adding, "We're doing this to take care of our problem, not everyone else's."

Ironically, The North Slope hazardous waste issue came to a head when Arco agreed to dispose of about 1,000 drums of another company's waste.

The firm charged with disposing of the drums, North Slope Salvage Co., mismanaged the job, Torok said, causing a spill and additional waste disposal problems. At the time, the drums were thought to be empty, but many were not, Torok said.

Arco and Sohio Alaska Petroleum agreed to dispose of the drums, Fink said, which included 700 barrels of flammable hydrocarbons.

When Arco sought permission to dump the wastes down a reinjection well, EPA entered the picture, Torok said. Meanwhile, Arco had found a buyer that converted the waste into boiler fuel.

Fink said Arco first sought EPA permission to dump its wastes in late 1980.

State aide sees need for hazardous waste compromise

By TOM KIZZIA
Daily News reporter

A last-minute compromise on the state's new hazardous waste regulations may be necessary to get the controversial rules past the state legislature, Sheffield administration chief of staff John Shively told environmentalists Wednesday.

The state's 1981 hazardous waste law is taking an unexpected detour through the legislature for minor revisions required by federal law. Administration officials expressed fear Wednesday that some legislators may use the chance to try and overturn regulations that have been proposed for enforcing the law.

The oil industry and other business groups have opposed the regulations as tougher than necessary. State officials have said in the past that Alaska needs a strong program now to prevent toxic waste pollution problems that other states have faced.

But now the administration is weighing a compromise, Shively said, because the legislature may try to scrap the administration's rules and adopt less strict federal standards. He said it would be several weeks before the administration reaches a decision.

Several environmentalists at the Anchorage meeting, which was called to discuss Sheffield's environmental record, said administration officials discussed a compromise that would exempt the oil and mining industries from the new state laws.

"That would reduce the whole thing to a political bargain. Why these two industries?" said Jeff Eustis of Trustees for Alaska.

Shively said the administration had no specific compromise in mind, and said he suggested none. But he said the opportunities for compromise were limited.

Disposal of toxic chemicals and other hazardous wastes in Alaska is currently governed by federal law only. In 1981, the state legislature passed its own law, and the Department of Environmental Conservation began drawing up regulations to put the law into effect. In some ways, these rules were stricter than the federal ones.

"The federal program was written to address all 50 states with a broad-brush approach," said Steve Torok, hazardous waste coordinator for the federal Environmental Protection Agency in Juneau. "Alaska is not a very industrialized state, and the state program is designed to be more preventive than curative."

In September, the state decided not to adopt an interim program for hazardous waste management. The state denied that it was backing off because of industry pressure, however, and pushed ahead with its original plan.

Three months later, the EPA said criminal penalties in the 1981 state law were too low to satisfy federal requirements. Unless Alaska's law is approved by the federal government, the state cannot take over management of hazardous wastes.

The increase in penalties, along with other revisions that the EPA calls minor, will require the legislature to amend the 1981 law. At that point legislators could raise questions about the regulations as well.

"The hazardous waste regulations are reaching a crisis right now," said Mary Core of the Alaska Center for the Environment.

Federal rules provide a list of toxic wastes requiring special handling. Rules proposed by the Department of Environmental Conservation would require industry to decide which wastes require special treatment, and to test any questionable waste for toxicity.

Shively said Wednesday he had some concern about the cost of enforcing such a program, which has been criticized by businesses.

The state regulations provide only a two-year exemption for toxic muds and fluids used in drilling oil wells, while studies are made of

See Page D-3, HAZARDOUS

Hazardous waste compromise seen by aide

Continued from Page B-1

possible damages. These wastes are fully exempted under federal rules.

Shively joined Commissioner of Environmental Conservation Richard Neve in the meeting with representatives of environmental groups in Anchorage. It was held in response to a letter from the groups that criticized Neve's efforts to protect Alaska's clean air and water.

At the Wednesday meeting, environmentalists said Neve acknowledged several private ex-parte meetings with industry officials early in his term of office. On Tuesday, in response to allegations of such meetings, Neve had said, "Anything with reference to ex-parte meetings I deny categorically."

"He conceded that early in the administration he didn't understand all the administrative requirements concerning the adjudicatory process, and he blundered into a couple of things early on," said Bob Martin, deputy director of DEC operations, who acted as Neve's spokesman after the meeting. "But the subject of those meetings wasn't substantive, and he corrected the problem."

Both sides said the meeting was frank and helpful, but environmentalists said no new policy changes were discussed.

Municipality prepares to enforce toxic waste rules

By TOM KIZZIA
Daily News reporter

Small businesses in Anchorage may generate 400 tons or more of toxic wastes every year, and much of it is flushed through the sewers into Cook Inlet, according to a new municipal survey.

Municipal officials say the toxic wastes are not a problem at present. They are so diluted that they cannot even be measured by the time they reach salt water.

But the officials say the presence of the toxic materials points up the need for a program designed to handle hazardous by-products of homes and small businesses.

The municipality is finally preparing to enforce a 1981 ordinance that bars businesses from flushing certain materials into the city sewer system, said Jim Sweeney, municipal manager of environmental services.

Hazardous waste disposal will be the subject of a workshop in Anchorage from 1 p.m. to 5 p.m. Saturday. Sen. Joe Josephson, D-Anchorage, will be keynote speaker at the conference, which will be held in room 215 of the University of Alaska, Anchorage library.

In addition to the toxic wastes dumped directly into the city sewers, small traces of toxic wastes have been detected leaching out of the municipal landfill, where hazardous materials are not supposed to be dumped, Sweeney said.

The leachate from the landfill is channeled into the sewers, and the small quantities do not pose a hazard, Sweeney said. The toxic materials include dry cleaning solvents and such heavy metals as copper, lead, and arsenic.

"It points to the need to find a safe and approved place for people to take these wastes," he said.

A recent survey of nearly 1,000 small businesses in Anchorage found that they generate between 36,000 and 69,000 gallons of toxic waste a year, or 200 to 400 tons. Sweeney said questionnaires had been mailed to 2,100 businesses, so the total waste generated in Anchorage may be higher.

"These are the small generators who would not be covered by the proposed state regulations," he said.

According to the municipal survey, automotive waste oil is the waste generated in the biggest volume in Anchorage. Much of that goes to waste oil dealers, who use it for oiling dirt roads, Sweeney said.

Sweeney cited Environmental Protection Agency studies saying that 70 percent of the oil used on dirt roads winds up in surface or underground water. "Whether that kind of practice can continue in Anchorage is something we will have to look at," he said.

The new survey will help the municipality inform businesses about how to dispose of their wastes properly, Sweeney said. "At this point we're not trying to find somebody to nail to the wall," he said.

The hazardous waste regulation program put together by the state is currently being debated by the state legislature. Some legislators have proposed cutting back the regulations so that they are no stronger than federal regulations, while others say Alaska should have a stricter system aimed at local problems — particularly the so-called small generator.

Saturday's meeting is being staged jointly by the municipality and the Alaska Center for the Environment. Details of the waste survey will be released at the workshop.

Speakers will discuss household and small business wastes, health effects, and disposal and treatment options.

Joe Clauduhos of the state Department of Environmental Conservation will discuss the state's proposed program.

A city-wide cleanup of hazardous materials is scheduled for May 5-12.

Hazardous waste program postponed for 3 years

By ANN CONY
Daily News reporter

Industry, government and environmental representatives have agreed to compromise legislation that would postpone for three years a state-developed program controlling hazardous waste disposal.

Under the compromise, the state Department of Environmental Conservation in the next two years would reevaluate hazardous waste regulations it proposed last year. DEC also would be required to start looking for places in Alaska where a hazardous waste dump could be built.

Disposal sites in Alaska would reduce transportation costs by eliminating the necessity of shipping wastes to federally approved dumps in the Lower 48.

The proposal advanced through state House and Senate committees Thursday.

Although a task force appointed to study the issue agreed to the compromise, nobody is completely satisfied with the bill and several provisions are likely to cause controversy for at least two more years, sources said.

State officials have said in the past that Alaska needs a strong control program as soon as possible to prevent toxic waste problems that have come to haunt other states. The legislature in 1981 directed the Department of Environmental Conservation to develop hazardous waste disposal regulations tailored to Alaska.

The oil industry and other business interests opposed disposal regulations DEC proposed last year, saying they would be too costly and that less stringent federal regulations are adequate.

The compromise legislation calls for the state to postpone its own regulatory program and continue operating under federal rules — with some modifications — for the next three years.

Controversial issues that remain unsettled include the method for determining what wastes are considered hazardous and a provision that would exempt mining wastes and drilling muds from regulation.

The compromise bill made it through the House and Senate resources committees Thursday, and was sent to the House judiciary and Senate finance committees.

In testimony before the Senate Resources Committee Thursday morning, a spokesman for the Alaska Environmental Lobby said environmentalists consider it essential that the state adopt regulations to test chemicals, rate their "degree of hazard" and control disposal accordingly.

"Without it, the hazardous waste program is incredibly weak," said Jay Nelson, executive director of the environmental lobby.

Federal regulations apply to chemicals the Environmental Protection Agency has listed as hazardous. But the list has not been updated in four years, in which time thousands of new chemicals have come into use.

The list does not, for example, include dioxin, designated one of the most dangerous chemical wastes.

Nelson was the only person to testify in a hastily called public teleconference hearing before the Senate Resources Committee in Juneau.

The compromise bill would exempt mining wastes and drilling muds from regulation at least until the EPA completes studies on whether those wastes are hazardous.

Other provisions of the legislation call for:

- The state to gain experience managing a hazardous waste program by getting involved with EPA in enforcing the federal regulations for the next three years.
- The state to inform local public safety agencies when hazardous wastes are transported through their area, though the bill does not specify that notification must be received before the shipment occurs.
- Regulation under the federal program to apply to any entity that generates more than 220 pounds of hazardous wastes, or 2.2 pounds of acutely hazardous waste, a month.

opinion

2/24/84

Anchorage Daily News

Winner, 1976 Pulitzer Prize Gold Medal for Public Service

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Hazardous wastes: a chance to learn

There is progress to report in the municipality's efforts to deal with hazardous wastes in Anchorage. But don't take our word for it; take theirs — at a workshop on hazardous waste issues Saturday at the University of Alaska, Anchorage. The public is urged to attend.

Speakers from the state and municipality will describe what is known already, and what is being done to learn more, about hazardous waste problems in Anchorage and around the state. The Alaska Department of Environmental Conservation has been working for years on statewide hazardous waste regulations that are now before the legislature. The Anchorage Public Utilities department, meanwhile, is in the midst of a two-phase study of the dimensions of the problem in our community and what should be done to manage it.

All of that and more will be on the agenda for Saturday's workshop. State Sen. Joe Josephson, D-Anchorage, will give the keynote address. Panel discussions will explore health, household waste, impacts on business and waste disposal issues. Public input will be sought by those developing waste management plans for Anchorage. And information will be available about how a household or small business — known in the trade as a "small generator," and responsible for most of Anchorage's toxic wastes — can dispose of hazardous substances safely.

Anchorage's major formative experience in confronting hazardous wastes, unfortunately, was a painful flap last summer over a proposal to burn PCBs in a specially modified municipal incinerator. That experience was not pleasant, but considerable work has been done since then to address the much wider issue of all hazardous substances comprehensibly and responsibly. Saturday's workshop, which takes place from 1 p.m. to 5 p.m. in room 215 of the UAA library building, is another step in the right direction.

Knowles ponders city's waste problem

By DON HUNTER 2/26/84
Daily News reporter

Mayor Tony Knowles is convinced Anchorage shouldn't try to foist off its problems on somebody else, but that doesn't mean he's in favor of siting a hazardous waste dump within municipal boundaries, top city officials said Saturday.

The remark was delivered at an afternoon workshop focused on budding state and municipal plans for identifying and disposing of hazardous wastes, a term that encompasses materials ranging from motor oil to polychlorinated biphenyls (PCBs).

The meeting was jointly sponsored by the municipality, the Alaska Center for the Environment and the League of Women Voters.

Bob Smith, general manager of Anchorage's water and wastewater utilities, said Knowles "strongly feels that Anchorage ought to solve its hazardous waste problems within Anchorage.

"Shipping the Anchorage problem off to other areas only puts the problem off, to be dealt with by others," he said.

Later, Smith and Jim Sweeney, the city's hazardous wastes expert, said their remarks should not be interpreted as meaning Knowles wants to locate a hazardous waste dump within municipal boundaries — just that the city should find a way to solve its own problems.

"Hazardous wastes are being used in households by every one of us every day and by businesses every day," Sweeney said. "We're trying to get on top of a issue before it gets on top of us."

Joe Cladouhos, director of the state's division of environmental quality management, said Alaska has a better crack at dealing with the problem than most other states.

About 400 to 600 tons of materials considered hazardous under federal guidelines are generated in Alaska annually, he said. That amounts to about three/ten thousandths of the 275 million tons of hazardous wastes generated nationwide each year.

"Alaska has an excellent chance to have a preventive approach, instead of a curative, after-something-has-gone-astray approach," Cladouhos said.

Four bills addressing hazardous wastes are circulating in the state legislature this session, Sen. Joe Josephson told the 60 to 70 people who attended the workshop.

Anchorage Daily News SAT. OCT. 15, 1983

Poll finds toxic waste site favored

By CRAIG MEDRED
Daily News reporter

Most Anchorage residents favor development of a hazardous waste disposal site in Alaska, but they don't want it in their community, according to a poll released Friday.

Pollster Marc Hellenthal found over 55 percent of the city's residents favor a disposal site, but almost 66 percent of them opposed creation of such a site in Anchorage.

The poll was commissioned by the Alaska Center for the Environment. Hellenthal said the poll has a margin of error of plus or minus 5 percent.

Interest in how hazardous wastes are handled in Alaska has been sparked by a proposal to burn oil laced with toxic PCBs in the municipal incinerator at Point Woronzof.

More than half the respondents to the poll — 58.7 percent — said they oppose that idea. Only 21.7 percent supported the plan, and the rest were undecided.

Municipal plans now call for a test burn in the incinerator to see if the PCB oil can be safely disposed. But even if a test-burn of PCBs at Point Woronzof indicates the toxic chemical can be eliminated without pollution, 53.8 percent said they would oppose the program.

An even greater number — 62.2 percent — said they want a say in what happens.

Less than 5 percent favored leaving a decision on PCB burning to Mayor Tony Knowles. About 30 percent said they would accept the mayor's decision if approved by the assembly, but the majority wanted a say in the decision via a referendum in the 1984 municipal election.

The poll "shows the people don't just want to sit back and watch this happen," said David Wigglesworth of the Alaska Health Project. "They want to be included in part of the process."

The health project contends hazardous waste plans are needed for both the state and the city.

Wigglesworth said the most significant findings he noted in the poll were:

> **'Alaska is unique among a lot of other states in that it has a chance to do something before it has problems.'**
>
> **— David Wigglesworth, Alaska Health Project**

- Overwhelming support for state funds to investigate hazardous waste disposal in Alaska. Over 82 percent of the respondents supported that idea.
- Strong support for a municipal hazardous waste management program. That idea drew favorable responses from 74.4 percent of the people polled.
- Nearly unanimous support for a hazardous-waste right-to-know law in Alaska. Of those polled, 92.5 supported such a law; 4.1 percent objected to it.
- Strong public backing for a state fund, financed through fees on industries that use hazardous wastes, to cover the cost of hazardous waste cleanups and compensate victims of such spills. Such a fund had the support of 85 percent of those polled.

The poll, Wigglesworth said, indicates "people really are in favor of developing an overall system." Wigglesworth said the health project expects to push for action on a hazardous waste fund and a right-to-know law in the 1984 Alaska Legislature.

Sen. Joe Josephson, D-Anchorage, has already said he plans to introduce the right-to-know law. Josephson sponsored a workers' right-to-know law last year requiring employers to notify employees of toxic or hazardous substances that might be at use in their workplace.

Josephson now wants to expand that law to ensure that all citizens are notified of any hazardous or toxic substances they might be exposed to in their community.

"It is unfortunately apparent that we also need some form of law to protect the average citizen from accidental exposure to toxic and hazardous substances in the community," Josephson said in a prepared statement released Friday.

He cited cancer-causing asbestos in local schools and potential toxicants from a PCB burn as the types of hazardous or toxic wastes citizens could be exposed to without their knowledge.

The Alaska Center for the Environment, in a prepared statement, concluded the survey shows Alaskans want strict controls on wastes.

"This interest should encourage the state and municipality to move ahead with their hazardous waste management plans and to look to the community for support," said Mary Core of the center.

"Hopefully, something can be done," said Wigglesworth. "Alaska is unique among a lot of other states in that it has a chance to do something before it has problems."

Usually, he said, hazardous waste programs are not discussed until people are sick or dying from toxic chemicals.

That might have happened in Alaska, too, had it not been for revelation of the plan to burn PCBs in Anchorage. Plans for toxic and hazardous waste disposal in the 49th state had been dragging along for several years until the PCB burn erupted into a public controversy.

Since then, Wigglesworth said, there has been a renewed public interest in doing something about the chemicals.

"For that we can be thankful," he said.

Groups fight rule change for hazardous wastes

2/21/84

By CHUCK KLEESCHULTE
Daily News business reporter

Alaska environmentalists have started a campaign to counter an attempt to ease regulation of hazardous waste disposal.

Responding to criticism of pending waste disposal requirements, the Alaska Center for the Environment collected several hundred signatures on petitions during Fur Rendezvous celebrations over the weekend in support of draft regulations unveiled last year by the state Department of Environmental Conservation.

Industry groups, led by the Resource Development Council, earlier this month criticized the regulations. Business groups called them needlessly strict, difficult and expensive to meet and broader than permitted by state law.

Environmental and health groups, however, say the proposed state regulations are necessary to prevent Alaska from having the chemical waste problems experienced by other states.

"Alaskans don't want to have a Times Beach develop here. These regulations are geared to the type of problems Alaska might realistically face," said Sara Juday, co-director of the environmental center in Anchorage. She was referring to the dioxin contamination of a Missouri community that forced the abandonment of the town last year.

"With these regulations we have a chance to prevent the state from having future serious problems," she said.

Environmental groups specifically are concerned with a bill introduced in the Alaska Senate by Sen. Bettye Fahrenkamp, D-Fairbanks. In part the bill would modify the state's 1981 law that gives DEC the right to

See Page B-7, CHANGE

Change in rules is opposed

Continued from Page B-6

draft regulations to control the dumping of hazardous wastes.

Under the modification the state could set standards no more strict than federal law.

Under federal law no firm that produces less than 2,200 pounds of waste a month can be regulated, while the state's proposed regulations would cover firms that produce more than 400 pounds monthly.

While the federal law lists substances and gives a maximum amount that can be disposed without oversight, state law requires firms, beside disposing of the listed hazardous substances, to have all wastes suspected of being hazardous tested to see if they are toxic, long-lasting in the environment or likely to cause cancer.

Environmental groups call the current state regulations the best hope of preventing pollution problems.

Mary Core, co-director of the Alaska Center for the Environment, said state law is much better because it prevents the long delays found in Environmental Protection Agency regulations in adding hazardous substances to the federal list.

Waste cleanup bills' defeat 'victory for toxic polluters'

By WILLIAM KRONHOLM
The Associated Press

WASHINGTON — Sponsors of bills to expand the "superfund" hazardous waste cleanup program Wednesday called a Senate vote against them "a victory for toxic polluters" and blamed Reagan administration lobbying for killing the measures this year.

Rep. James Florio and Sen. Bill Bradley, both New Jersey Democrats, said a vote by the Senate late Tuesday night against considering a superfund expansion bill left too little time in the congressional session, which is scheduled to end Friday.

Florio, sponsor of a House-passed bill expanding the superfund to $10.2 billion, said the 59-38 Senate vote was "a victory for toxic polluters and a loss for the American people and the environment."

Bradley, who earlier supported a $7.5 billion expansion bill and Tuesday night proposed a trimmed down $6 billion program as a compromise, said sponsors "feel outrage and a sense of betrayal. But those who are truly disappointed, outraged and betrayed are those who live next to toxic waste sites."

He added: "I can't imagine that those who voted against it realize how serious a threat toxic waste poses for the health of families across this country."

Both men, together with Sen. Frank Lautenberg, D-N.J., a co-sponsor, told a news conference that Reagan administration lobbying was the reason for the defeat, noting that Senate Republicans voted almost on a party line against a procedural motion to consider the bill.

The administration has opposed congressional action on the superfund this year, saying studies to determine what changes are needed are still under way. The administration says it will support an expanded program next year.

Republican leaders who urged defeat of the program Tuesday night said they were not opposed to superfund itself, but they complained Bradley's bill was premature and being rushed through.

"It isn't as though this has to be done tonight," said Sen. Steven Symms, R-Idaho. "It doesn't make much difference whether we do this now or early next year."

Sen. Bob Dole, R-Kan., chairman of the Senate Finance Committee, called it "a very irresponsible way to proceed," since his panel had not debated the revenue provisions in the $6 billion bill.

The superfund was established in 1980 as a five-year, $1.6 billion program to clean up abandoned chemical waste dumps.

Anchorage Daily News
Winner, 1978 Pulitzer Prize Gold Medal for Public Service
Gerald E. Gray, Publisher
Howard Weaver, Managing Editor

Hazardous wastes demand attention

Hazardous wastes not only are dangerous — they are very confusing. What are hazardous wastes? What makes them dangerous? Are some chemicals hazardous only as wastes or are they also a threat before they are used? Is it better to dispose of hazardous wastes locally or send them to stateside facilities?

Scientists and the professionals who deal with hazardous waste issues spend careers pondering these questions; and they often cannot reach agreement. What should the citizen who wants to develop a reasonable understanding of hazardous wastes do?

It is important to understand that Alaska does not have a tremendous quantity of hazardous wastes compared to other states. Our people also are scattered. This does not diminish the significance of hazardous wastes here, but it changes the nature of the problem. Instead of a Love Canal presenting an immediate overpowering threat to the public, we have a variety of chemical users — most small, many unregulated — creating hazardous wastes in the course of what usually are conventional activities.

Many hazardous wastes sites derive from sloppiness and a lack of environmental concern years ago. The Air Force, for example, walked away from a number of White Alice radar stations in the 1970s, leaving behind transformers and fuel tanks filled with hazardous materials. These now have to be cleaned up. Similarly, there are caches of barrels on the North Slope containing potentially hazardous wastes that date back to the 1960s. These barrels once were intended for use in oil exploration — but they were forgotten.

It also is important to remember that the amount of hazardous wastes in Alaska could increase if Congress reduces the threshhold for declaring a particular material hazardous. In 1982, a state consultant estimated that Alaska produces 400 tons of hazardous waste a year. That figure obviously will become larger if the threshhold is lowered to declare smaller amounts of a particular material hazardous.

The threat of hazardous wastes may be confusing. But there are some commonsense measures that the public can take. Businesses should review their products and review the processes that create wastes. Perhaps they can find new processes that will eliminate the hazardous wastes they have been producing. Businesses also should be clear about hazardous waste regulations.

The state and municipalities should encourage clean-up programs to pick up small amounts of hazardous wastes. These programs have been very effective in the past because they have presented people with an outlet for their wastes.

Individuals should be as informed as possible before buying hazardous materials, and they should never speculate in them. Alaska has too many examples of small backyard hazardous waste sites created by people who intended to sell their bargain barrels of chemicals and gasoline to a future buyer who never materialized.

Public discussion of hazardous wastes has three major themes: what are they, what will it cost to remove them and whose backyard will become their permanent home. Every Alaskan can master the fundamentals of these themes whatever the complexity of the debate over hazardous wastes.

Industrial disaster

Could it happen here?

United Press International
Gas victim in Bhopal, India

By PATTI EPLER
Daily News business reporter

Techno death. Eco doom. Catch words in a world that depends on chemicals and industrialization for its quality of life.

Headlines tell how thousands of people are killed or injured when poisonous gases leak from a chemical plant in India. A fuel storage facility explodes in Mexico killing hundreds. A truck carrying live torpedoes overturns on a Denver freeway, blocking traffic for hours while emergency crews gingerly clear the road. A truck carrying liquified petroleum gas explodes on a road in Spain, killing 200 and severly burning 100 more.

So how safe are Alaskans?

More than 90 million gallons of gasoline, fuel and other flammable liquids are stored in tanks at the Port of Anchorage, just below the homes on Government Hill.

Oil refineries operate near Kenai and Fairbanks.

Alaska's lone chemical plant produces fertilizer in an industrial complex a few miles north of Kenai, near a growing residential area.

In Anchorage, local stores in local neighborhoods hold thousands of gallons of paint, solvents and cleaning fluids on their shelves.

Tons of toxic chemicals and hazardous materials often travel through town on railroad cars or on trucks, bound for all parts of the state.

Alaskans are lucky in the sense that — with the exception of the Union Chemical fertilizer plant on the Kenai Peninsula, a handful of tank farms and a couple refineries — there are no industrial plants of the kind that have caused major problems in the Lower 48 or other countries.

Still, state, federal and local officials are keeping a close eye on the few facilities in Alaska.

And there is increasing concern over the transportation of hazardous materials and waste.

No one really knows when, where or how much hazardous material passes through Anchorage each day.

To resolve that dilemma, officials want a "community right-to-know" law, an established transportation route and a system that would require carriers of hazardous material to clearly mark their cargos. They also want buildings where such materials are stored to be labeled.

"There are hundreds of tons of hazardous materials here," says Van Quinn, a senior fire department captain who heads Anchorage's hazardous materials team.

"Just because there's not a situation where they'd level half the town doesn't mean we don't have a problem. We will have a problem with them," he said.

Jim Sweeney, hazardous waste coordinator for the city, agrees that future problems could arise if steps aren't taken now to prevent them. "There has been no serious problem from hazardous waste or hazardous material, but the potential is there," he said.

What is considered a hazardous material?

The list is long. And some items are as simple as the small bottle of white liquid that secretaries use to correct typing mistakes.

But even seemingly harmless items, when stored in large quantities, can pose a danger if a fire or other accident occurs, officials say.

Other items frequently found in or around Anchorage that have made the hazardous list include all types of fuel and petroleum products, urethane foams that give off dangerous vapors when heated, acids like hydrochloric acid or sulfuric acid, ammonia that is used to refrigerate large facilities like canneries or grocery warehouses, insecticides, and bottles of compressed gas like those used by welding or repair shops.

Twelve tons of chlorine cylinders regularly travel through Anchorage on their way to a treatment plant in Seward.

Paints, solvents, lighter fluid, household cleaners that are stored under many a kitchen sink or in a home utility closet also present potential hazards.

Take the Port of Anchorage, for instance. On an average day, more than 90 million gallons of flammable liquids — a variety of fuels, gasoline and petroleum products — are stored in giant tanks or move through pipeline networks.

Perched on the bluff behind the port are homes in one of the oldest neighborhoods in town — Government Hill.

See Page D-4, TASK FORCE

Daily News file photo
Environmental protection agents last summer test barrels of oil near the waterfront suspected of holding toxic PCBs.

Task force works to identify harzardous cargo in Alaska

Continued from Page D-1

But the port and its tank farms are relatively safe, officials say, due mainly to sophisticated safety systems installed by companies that wouldn't risk the multimillion dollar loss caused by an accdiental fire or explosion. Computerized systems warn of too high pressure, too much flow, ruptures in undergound lines and other hazardous situations.

Tank farms also are regulated by numerous state, local and federal laws and are regularly inspected by government agencies as well as the owners themselves.

"There isn't much of a potential for a tank farm to blow up," Quinn said.

As head of the hazardous materials team, Quinn is stationed at the Government Hill fire house, about a minute away from the port and Ship Creek industrial area.

In fact, he said recently, about the only way a fuel storage facility would explode would be if an airplane crashed into a tank farm. Even then, the resulting fire ball would have to take a sharp turn to reach the homes on the bluff, he said.

Of greater concern to the veteran fireman is a fire at the port which, he said, could burn for days.

In a worst-case scenario, the fire would be caused by an earthquake that might also knock out the overpass connecting Government Hill to town. If roads were blocked, emergency crews couldn't get in and residents couldn't get out, except through the adjacent Elmendorf Air Force Base.

To that end, Quinn said, military and local officials are coordinating evacuation routes just in case such a disaster happens.

Anchorage has been lucky, Quinn said, noting that a recent pipeline rupture in Bootlegger Cove that shot fuel 200 feet into the air could have been touched off by a spark.

Because of concern over the potential for dangerous situations, the Anchorage Fire Department formed a hazardous materials team. It has grown to an eight-man volunteer squad over the past three years.

They are trained in handling hazardous substances, Quinn said, with on-going training slated for the future.

Also, the fire department maintains special equipment like encapsulated "acid" suits and a "crash truck" with a large tank of foam that could be used to douse a fuel fire. The department is awaiting delivery of a foam tanker that will enhance their ability to snuff flammable liquid fires.

And a new computer system will provide a data base for firefighters and emergency workers who must deal with hazardous substances. The computer will contain information on buildings in Anchorage that contain dangerous materials, Quinn said. When an emergency call comes, officials will know before they arrive at the scene what is in the building and where it is.

The worker's right-to-know legislation, requiring employers to label hazardous materials in the workplace, has paid off for local officials as well. Quinn said his department has combined routine inspections with information coming from the new legislation to add to their knowledge of what's contained in various buildings around town.

Some people would like to see the right-to-know legislation taken a step further. The city's Sweeney, who works with the mayor's hazardous waste task force, said the group has drafted an ordinance they hope to propose this year that would provide for a "community right-to-know" law.

The intent, he said, is to get a grasp of just what hazardous materials are traveling through the city.

No one really knows although one group, The Alaska Health Project, has been researching the spill issue and trying to document what type of spills and how many have occurred in Alaska over a year period.

David Wigglesworth of the group said he hopes to have some preliminary findings next month.

Sweeney said the task force also will propose that a transportation route for hazardous materials be set, and that vehicles carrying hazardous cargo be clearly marked with a placard identifying their cargo.

Sweeney said his group hopes to have a program in place by spring.

Daily News file photo

This is the tank farm at the Port of Anchorage, as seen from the backyard of a home on Government Hill.

Alaska at a crossroads on hazardous waste issues

By DAVID WIGGLESWORTH

compass — points of view from our community

These incidents are only a few of the incidents involving hazardous materials that have occurred throughout Alaska within the last two years.

• The Alaska Army Corps of Engineers currently is investigating some 600 sites throughout Alaska potentially containing hazardous wastes.

• Last spring (1984), Anchorage residents and small businesses disposed of 60,000 gallons of hazardous wastes at the Hazardous Waste Spring Clean-up.

• Recently, 300 drums of hazardous wastes in the form of heavy metals and solvents were found "disposed" at the International Airport firefighter burn pit.

• A 1984 study conducted in Anchorage revealed that Anchorage could be generating as much as 4,000 tons of hazardous wastes per year. Currently, an EPA report reveals that large generators of hazardous wastes (those producing 2,200 pounds or more per month) generate approximately 307 million pounds of hazardous wastes annually.

It is apparent that Alaska has reached a turning point in the area of hazardous wastes. No longer can we say with assurance that Alaska is a vast, uncontaminated, pristine frontier. Future Alaskans will face the future consequences of our current actions. The prosperity we've enjoyed in the last two decades does not make our situation any easier. In this time period our state population has doubled and projections indicate significant growth through the end of this decade. This growth, among other issues, carries with it the increased generation of hazardous wastes.

Today in Alaska, our handling of hazardous waste and materials presents us with the same choices others have faced years ago: 1) Do little or nothing to prevent toxic exposures to the environment, residents and workers; or 2) Develop preventive health measures to protect our communities. Which option will Alaska choose?

It is exciting to see that many towns and cities in Alaska are choosing the latter approach. In the spirit of a preventive approach to maintain public health towns such as Valdez, Anchorage, Homer and Fairbanks have established hazardous waste committees to address hazardous waste problems specific to their communities. These groups have brought together in a constructive fashion the differing points of view needed to fully consider the control of hazardous wastes.

Many of these wastes for legal reasons escape regulatory safeguards at both the federal and state level. Wastes of this nature have the uncanny ability to find their way into landfills and sewer systems not designed to contain these substances. This poses management nightmares for local governments.

However, as these communities surge ahead with creative ways to control hazardous wastes, the present state administration is lagging behind in its responsibility to manage these dangerous materials. In fact, in the area of hazardous waste disposal, there exists the very real potential for local communities to shoulder a burden which rightly belongs to the state.

Currently, state efforts to address the disposal question are at a standstill. This is further reinforced by the legislature's failure to adequately fund the Department of Environmental Conservation's Hazardous Waste Spring Clean-up. In co-operation with local towns, this highly successful program may well serve as a national model for controlling "small generator" hazardous wastes. It should be continued.

The state's inaction is raising concern among local communities considering management options for disposal of these dangerous materials. As a result of state inaction and the lack of clear-cut guidelines for disposal in Alaska, local governments face the devasting possibility of becoming managers for wastes requiring state management. This could have a negative effect on some locales who might slow down their efforts and wait for the state to catch up.

On the other side of the coin, it might result in quick action on the part of local governments, perhaps resulting in a hodgepodge of local hazardous waste policies which may not mesh with future state hazardous waste policies. Alaska needs leadership in the area of hazardous wastes, and the state must provide it.

What is needed is for the state to launch a concerted Alaska-wide effort to address the issue of hazardous materials management and in particular the disposal question. Failure to act on this issue threatens public health in Alaska. The 1984 Alaska Legislature attempted to provide solutions for this looming crisis by adopting Senate Bill 503, yet the legislation does not go far enough and its time frame is too loose.

For example, SB 503 allows the DEC until 1989 to make recommendations to the governor and the legislature regarding the types and the locations of hazardous waste facilities proposed for Alaska. In the meantime, where and by what methods will our hazardous waste be disposed? The disposal of hazardous wastes at the nearest approved site in Oregon costs several hundred dollars for one 55-gallon drum. As a result, the prospects are great that much of our waste will remain in Alaska and be disposed of in unsafe, unsound ways.

The state of Alaska cannot wait until 1989 to recommend disposal guidelines. It must act now to avoid the future consequences of its present inaction in this area. In an effort to spur this discussion, the following is a list of ideas addressing some of the programs needed to create a comprehensive hazardous waste disposal system in Alaska:

• Hazardous Materials/Waste Inventory: Current data bases on the types and quantities of hazardous materials/wastes in Alaska are inadequate at best. In cooperation with local towns, Native corporations, businesses and others, the state should orchestrate a statewide inventory. This inventory will allow the state to develop appropriate wastes programs specific to the needs of Alaska.

• Hazardous Waste Disposal Siting Board: The governor should mandate the immediate creation of a board representing all of Alaska to develop state disposal policies and guidelines for facility siting.

• Alternative to Land Disposal: Landfills provide minimal protection against hazardous wastes. The siting board's policies should promote alternative forms of disposal and establish incentives for businesses to reduce the amount of hazardous wastes generated in Alaska.

• Indemnity Fund: Such a fund would be used to clean up many of Alaska's hazardous waste sites not supported by the federal Superfund and in situations where there is no culpable party. The indemnity fund could be used to offset the cost associated with managing these sites.

☐ David Wigglesworth is an occupational health specialist with the Alaska Health Project.

High PCBs found in waste oil

Times Staff ANC TIMES 4/3/85

An official with Chevron USA Inc. Tuesday said that testing of samples from roads and in a waste oil dump in the Kenai National Wildlife Refuge showed a heavier concentration of toxin PCBs than earlier federal agency tests had indicated.

The PCBs (polychlorinated biphenals) were first discovered in early March after the U.S. Fish and Wildlife Service took samples from the Swanson River Oil Field. Tests then showed 35 parts per million (ppm) on the roads and 10 ppm in the waste dump.

Chevron spokesman George Day said Tuesday that company testing last month revealed 166 ppm of PCBs in one Swanson River Oil Field sample taken from an employee parking lot, and another sample from the dump showed 82 ppm of the toxic chemical.

Concentrations of 50 ppm of PCBs are considered hazardous under federal statutes.

PCBs are believed to cause skin and reproductive disorders and may also cause cancer, research has shown. The chemicals are classified as hazardous by the federal government and their disposal must be handled under strict government guidelines.

Day said the company is awaiting orders from federal and state officials on how to dispose of the chemicals.

But independent federal test results have not been forwarded to Anchorage, said EPA official Jack Gusmano. They are expected any day, he said.

Neither Day nor officials of the federal Environmental Protection Agency have determined the origin of the PCBs, a man-made chemical used as electrical insulation.

Officials have speculated that the contaminating material came from a transformer that either was dumped or drained in the area, but Day said Chevron was unsure of the PCB's origin.

The company in 1983 was given a permit to dump crude oil at the site and to spread oil on the roads to control dust, Day said. Alask Department of Environmental Conservation official Bob Martin said last month the permit gave the company permission to apply small amounts of crude oil on the roads.

Testing of crude oil, since it is not a waste product, is not required by federal and state agencies, Martin said.

Meanwhile, Chevron has sent a toxicologist and an industrial hygienist to the area to collect air and dust samples to determine the extent of the contamination, Day said.

Federal wildlife agents have expressed concern about seepage of toxic chemicals into the nearby Swanson River, a popular salmon stream within 100 yards of the dumping area.

Any plan to remove the PCBs from the area will target, besides the contamination clean-up, prevention of the PCBs from entrance in the food chain of animals in the wildlife refuge.

Chevron sampling also did not show the presence of DDT.

Tests show higher PCB concentrations in Kenai Wildlife Refuge

By RONNIE CHAPPELL
Daily News reporter

Analysis of a second set of soil samples taken from roads in the Kenai National Wildlife Refuge has confirmed the presence of toxic chemicals there, George Day of Chevron USA said Tuesday.

Tests conducted for the oil company by an independent laboratory showed higher concentrations of polychlorinated biphenyls than reported last month by the U.S. Fish and Wildlife Service. Results of a third test are expected soon.

The Fish and Wildlife service found PCB concentrations of 10 and 35 parts per million in two samples taken from refuge roads last summer.

But the analysis of one Chevron soil sample, taken from an employee parking lot near a compressor building in the Swanson River oil field, revealed a PCB concentration of 166 parts per million.

According to Day, a pile of oil-contaminated sand and gravel used for dust control and road repair tested at 62 parts per million, while other samples taken from refuge roads contained PCB concentrations of less that 50 parts per million.

Drinking water from a well in the area was free of contamination.

The manufacture of PCBs, which accumulate over time in living organisms and in the environment, has been banned by the federal government. The toxic chemical is a suspected carcinogen and federal law requires concentrations of 50 parts per million or more to be disposed of in licensed hazardous waste sites.

The USFW samples also indicated that the road had been contaminated with DDT. Tests performed for the oil company did not reveal the presence of the deadly insecticide, Day said.

Chevron collected soil samples last month with the U.S. Environmental Protection Agency. Each sample was split so that the oil company and the regulatory agency could conduct their own tests.

"We are expecting our results by the end of the week," said EPA spokesman Steve Torok.

If the high concentrations are confirmed by the EPA, the agency could require Chevron to undertake an expensive process to remove and properly dispose of the contaminated soils.

Access to the compressor building parking lot — where PCB concentrations reached 166 parts per million — has already been restricted, Day said.

In addition, the company has started collecting dust and air samples to determine the level of exposure to which oil field workers have been subjected.

Finally, additional samples will be taken in the field, Day said, as the company begins — under EPA direction — to determine the extent of contamination.

The PCB-contaminated sand and gravel was used primarily for dust control on heavily traveled roads near the compressor building and in the oil field's administrative compound, Day said.

Sheffield orders DEC to study drill mud danger

Immediate action promised

2/11/85

By RONNIE CHAPPELL
Daily News reporter

Gov. Bill Sheffield has ordered the Alaska Department of Environmental Conservation to immediately determine whether drilling mud pits in and around the city of Kenai pose a danger to the environment or human health.

Sheffield also announced that a DEC staff member would be assigned to monitor the Kenai petroleum and chemical industries on a full-time basis.

"If any unsafe conditions exist, we'll begin cleanup efforts promptly and find out who is responsible," Sheffield said in a Sunday speech to the Alaska Environmental Assembly. "We'll also take whatever enforcement action is necessary. If we have to issue citations and levy fines, we'll do it."

Union Oil of California has applied for permission to bury 126,000 barrels of used drilling muds in existing reserve pits in the Kenai and Cannery Loop gas fields. Some of the pits are located in wetlands areas and some are near residential subdivisions.

Residents fear that heavy metals, caustic and hazardous chemicals trapped in the mud will contaminate local drinking water.

Two-and-a-half years ago, the state threatened to take Union Oil to court for illegally disposing of used drilling mud in unlicensed reserve pits. The case was never prosecuted. Instead, DEC negotiated a settlement under which the company agreed to apply for a state disposal permit.

Union's efforts to win retroactive approval of the reserve pits has so far been unsuccessful.

Last November, DEC informed the company that four of seven proposed burial sites were not suitable for drilling mud disposal. Action on the other sites has been delayed, pending adoption of new state regulations governing the disposal of drilling muds.

"There's a lot of uncertainty and fear, actually, about what's going on there," said Sheffield aide Molly McCammon. "The governor realizes that it's important to find out as soon as possible if there is any hazard from these drilling muds, what it is exactly, and get it taken care of.

"He is making this a priority," McCammon said.

Sheffield also announced that he had ordered newly

See Page C-3, SHEFFIELD

Sheffield orders decision on mud safety

Continued from Page C-1

appointed DEC Commissioner Bill Ross to "look at his budget, reallocate some money and assign a DEC staffer full time to monitor the Kenai petroleum and chemical industries."

"In the past," Sheffield said, "the DEC staff in that office has been unable to completely address the impacts of those major, long-standing industries. Instead, their time has been consumed" in checking water supplies, sanitary sewage systems and other public health concerns.

"With this order, that situation will change," Sheffield said.

Sheffield spoke to about 125 delegates representing organizatitons like the Alaska Center for the Environment, Trustees for Alaska, the Sierra Club and the Northern Alaska Environmental Center.

The governor highlighted his own environmental record, reminding listeners that his administration had:

- Worked for a 10-year moritorium on mineral entry in Bristol Bay;
- Sued the U.S. Army Corps of Engineers over relaxed enforcement of the federal Clean Water Act;
- Opposed the Chuck River timber sale near Petersburg because of possible adverse impacts on local fisheries;
- Worked for establishment of the Kenai River Special Management Area and critical moose habitat area in the Matanuska Valley.

Sheffield said his administration was committed to resource development in Alaska.

"But where it occurs, we will protect the environment," he said.

Port of Valdez called 'waste dump'

Shipper levels charges at Alyeska Pipeline company in letter to EPA

4/5/85

By PATTI EPLER
Daily News business reporter

A Virginia oil shipper who has threatened to file suit against operators of the trans-Alaska oil pipeline said Thursday Port Valdez has become a dumping ground for hazardous substances shipped from the West Coast to Alaska.

Charles Hamel alleges in a letter filed with the federal Environmental Protection Agency that Alyeska Pipeline Service Co. allowed tankers coming to Valdez from the Lower 48 to bring up loads of contaminated water that should have been emptied in federally approved facilities Outside.

In a strongly worded response, Alyeska president George M. Nelson denied Hamel's new allegations, saying the company has always met or bettered environmental permit requirements.

"Typically, Mr. Hamel's allegations are not specific but rather are deliberately vague and unspecific to prevent any immediate effective response," Nelson said.

On at least four occasions, Hamel said, oil tankers leaving shipyards on the West Coast received loads of water contaminated with petroleum products such as diesel fuel and leaded gasoline.

The tankers brought the contaminated water to the Alyeska terminal in Valdez, where it was run through the ballast water treatment facility and deposited in the bay, he said.

Nelson said he could not comment on those four alleged instances without more specific information.

Hamel said Alyeska's ballast water treatment plant was not designed to handle those kinds of products.

"The potential for environmental damage to Prince William Sound from the introduction into the system of hazardous substances shipped from West Coast ports is very real," Hamel said in a letter to EPA administrator Lee Thomas.

He said the Valdez facility has become the "liquid waste dump" of the West Coast.

Nelson took exception with all of Hamel's statements. The ballast-water treatment facility is designed to handle any oil, not just North Slope crude, he said.

The Alyeska facility is "known in the industry as one of the finest of its kind anywhere," Nelson said.

Last week, Hamel notified EPA he would file suit in 60 days to force Alyeska to stop discharging toxic wastewater in Valdez bay. He must wait 60 days to fulfill federal rules covering citizens with no other standing in the case.

Hamel said Alyeska has consistently violated state and federal environmental permits since the pipeline began operating in mid-1977.

Alyeska consistently has denied Hamel's allegations, saying the company has the records to prove it is not violating its permit.

Government officials are investigating Hamel's charges.

On Thursday, a team of state and federal officials began inspecting Alyeska's terminal in Valdez.

Bob Martin, special assistant to the commissioner of the Department of Environmental Conservation, said DEC and EPA officials are going through the ballast water treatment facility basically "to see what's there and how it's working."

He said they would be examining records and testing procedures.

Scientists seek to explain decline of clams in Valdez mudflats

By PATTI EPLER
Daily News business reporter

Clams picked as aquatic guinea pigs for the study of oil pollution in Valdez Bay have been steadily disappearing since the opening of the trans-Alaska pipeline and marine terminal at Valdez.

But scientists say they won't know for a couple of months whether years of dumping treated wastewater into the bay has anything to do with the steady decline of clams in the Valdez mudflats.

What they do know is that the population of macoma clams — a tiny clam no bigger than a thumbnail — has dropped as much as 85 percent since 1978, about a year after pipeline operations began.

Most studies conducted in the early years of the pipeline's operation have not turned up any significant evidence of damage to the marine environment, scientists say.

But many people who have worked on the study projects believe more work needs to be done before any conclusions can be reached.

"The main problem, as I see it, is that with the information currently available, we can't say a hazardous condition exists, but we also can't say everything is fine," said George Perkins, a biologist and teacher who has been involved in the clam study for several years.

State and federal environmental agencies are investigating allegations by oil shipper Charles Hamel that Alyeska Pipeline Service Co. has for years been violating environmental permits by improperly discharging toxic wastewater into the port.

Alyeska has strongly denied those allegations. Company officials say they have the records to prove no violations have occurred.

At issue is the discharge of treated ballast water into the port. Ballast water carried by tankers coming to Alaska mixes with residual oil in the tankers and must be cleaned before it can be put into the bay.

Alyeska runs the oily water through a treatment plant and removes the oil before the water is discharged into the bay. Hamel alleges toxic sludges from the bottom of storage tanks also are going through the treatment facility and into the bay, but without being properly treated.

In the early 1970s, before the pipeline was built, scientists from a variety of agencies began collecting informa-

See Back Page, CLAM

Clam decline at Valdez studied by scientists

Continued from Page A-1

tion about the port area to get a picture of what the marine environment was like before the Alyeska terminal began operating.

At the time, scientists expressed concern about the effect of ballast water discharge on the bay. A 1973 report by the National Marine Fisheries Service noted that a major oil spill from a tanker, while obviously catastrophic, was less of a concern than continual discharge from the terminal.

Through the years, the state Department of Environmental Conservation, the federal Environmental Protection Agency, the University of Alaska and Alyeska itself have conducted monitoring studies about the effects of oil on the bay. Except for the clam study, other work was wrapped up about three years ago.

Alyeska paid for many of the studies, including most of the ones conducted by the university, as a requirement of its federal permits.

In 1983, a workshop for researchers was held to discuss their findings. Basically, scientists found that six kinds of environmental alterations have occurred since the pipeline operation began, ranging from hydrocarbons in the sediment to the decline of clams to changes in barnacles and mussels.

"The workshop participants agreed that the available scientific data do not indicate that the current levels and duration of petroleum discharge into Port Valdez have led to major or widespread environmental alterations," Dr. David Shaw, of the University of Alaska-Fairbanks Institute of Marine Science, wrote on behalf of the researchers.

"The participants felt that there is not an adequate basis for predicting how additional pollution sources might affect the port. Neither can we predict whether or not chronic low-level alterations which may now be occurring will in the future become significant."

DEC and EPA officials have said staff cuts and lack of funding in recent years have prevented them from monitoring Alyeska's activities as closely as they would like.

Perkins' clam study is the only one that has continued. It is a program that was started about 14 years ago by the National Marine Fisheries Service and is now funded by an EPA grant.

Macoma clams were picked for the study because biologists believed the clams would be sensitive to oil and would thus be a good indicator of the effect of oil pollution on the ecosystem, Perkins said.

From 1971 to 1977, the number of clams in the mudflats of the bay stayed about the same — about 1,000 large clams per square meter and 1,800 small clams per square meter.

But in 1978, the year after Alyeska began operations, the number of clams began to decline. In November 1984, when the most recent count was taken, 150 large clams and 1,000 small clams remained.

The study "has shown a definite decline in that population," Perkins said. "Coincidentally or otherwise, it began about that time. But that doesn't establish a cause-and-effect relationship."

This year, the clam study was expanded. Instead of simply counting clams, Perkins has sent clams to Battelle Laboratories in Richland, Wash., for testing that will determine whether hydrocarbons from the ballast water discharge are present in the clams. Results are expected in about two months.

"The purpose of it is to help determine whether or not there is a relationship between the decline of the population and the terminal operations," Perkins said.

Alyeska has simplified its ballast water treatment process in recent years, Perkins said, and most of the chemical analyses of the bay waters were done before the changes to the treatment process were implemented.

And environmental changes caused by oil pollution could occur quite slowly and not be apparent for many years, he said.

"The best I can describe it is that because of changes in conditions and the scarcity of data we've obtained, there are a lot of open questions that we don't have answers to," Perkins said.

Dr. D.K. Button of the Insitute of Marine Science, under contract to Alyeska, conducted microbiological studies of the bay water until about 1979.

Button pointed out that certain components of the oil — toluene, benzene and ethyl benzene that can be toxic in high concentrations — dissolve in the tanker's ballast water during the long voyage from the Lower 48 to Valdez.

Because those components dissolve, they are unaffected by the ballast water treatment process and are discharged into the bay at the rate of about one ton per week, Button said.

A portion of the oil, including the toluene-benzene components, undergoes a process similar to fermentation — bacteria turns the oil into products like creosote that are then discharged into the bay, adding a dfferent type of material to the discharge than what is commonly expected, he said.

"So basically, we found that these things really escape the ballast water treatment process, float up and spread in the bay," Button said.

They are eventually flushed out into Prince William Sound by tidal action, he said.

What Button still doesn't know is what the effect of the aromatic hydrocarbons and their oxidation products might be on the marine environment.

"We're not completely sure exactly what they are," he said. "From a scientific standpoint, that's not very comforting."

Ron Morris, field office supervisor for the NMFS in Anchorage, said if oil from the ballast water treatment facility is polluting the bay, researchers will be able to tell.

"Each oil has its own fingerprint," he said. "We can tell from the hydrocarbons in the ground where it came from."

So far, Morris said, "there's certainly no evidence that we've found that the bay has gone foul."

"Our studies don't indicate anything drastic," he said.

Cancer rate rises in areas with petroleum industries

By GARY LANGER
The Associated Press

NEW YORK — An "alarming" increase in cancer deaths has shown up in rural counties where employment in petroleum and chemical industries has risen in the past 25 years, a research group said Sunday.

The finding suggests a stronger link between toxic waste and cancer than previously shown, the Council on Economic Priorities, a private research center on public policy, said in a preliminary report on a five-year study.

Cancer deaths increased 265 percent from 1950 to 1975 in 59 rural counties with large concentrations of chemical and petroleum industries, the council said. The increase was 148 percent in 71 industrialized urban counties.

Further, cancer deaths in both the urban and rural industrialized counties evened to about 1,134 per 100,000 people from 1970 to 1975, the council said. From 1950 to 1955, there were more cancer deaths in the urban areas — 456 per 100,000 people, compared with about 304 per 100,000 in the rural counties, it said.

The council said it produced the figures by comparing cancer statistics compiled by the National Cancer Institute with figures on increasing chemical and petroleum industry employment in rural areas.

An institute study on the subject 10 years ago may have missed the rise in rural cancer rates because the disease takes so long to show up, and many of the rural chemical and petroleum plants are relatively new, the council said.

There was no answer Sunday at the Washington offices of the Chemical Manufacturers' Association and the American Petroleum Institute, major trade groups called for a response.

In the past, said council director Alice Tepper Marlin, "the norm has been that major industrialized urban areas have had the highest rates" of cancer, presumably because of industrialization and stress, shown in high rates of smoking and drinking.

But she said her group's study found that in rural areas, "the increase in the incidence (of cancer) has gone up after industrial facilities that generate a lot of toxic waste have been sited there."

Under that finding, Marlin said, "The hypothesis is that there well might be a stronger link betwen toxic waste and the incidence of cancer."

Oil drilling muds can kill sea life, researchers say

Associated Press

Corvallis, Ore. — "Muds" used in offshore oil drilling operations are toxic to certain marine organisms, including shrimp, clams and lobsters, government researchers say.

The thick muds, composed mainly of clay but also including many toxic substances, not only can poison marine organisms directly, but also can hurt organisms by burying them or changing ocean floor conditions, said Rod Parrish and T.W. Duke, researchers at the U.S. Environmental Protection Agency's Sabine Island facility in Florida.

Parrish and Duck spoke Thursday at an international symposium in Corvallis on the disposal of wastes in the oceans.

"The basic mud is all right because it is natural clay, and even rivers put huge quantities of clay into the ocean," Parrish said.

"But problems arise when man introduces certain fluids," which he described as "being extremely critical to the drilling operations" and "economically crucial" for the drilling companies.

From research conducted on the Outer Continental Shelf, Parrish and Duck found that exposure to various drilling fluids prevented some lobsters from finding nearby food, altered normal growth and respiration rates of other lobsters and killed up to 50 percent of local lobster populations.

Anchorage Times Sept 15

Drilling 'muds' are found to be toxic, scientists say

The Associated Press

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ADN Sept 15

Air, water aren't free

Alaska's clean air and water are gifts of God, but it takes vigilance — and money — to keep them clean. The agency we need to watchdog that effort is the Department of Environmental Conservation, and DEC deserves adequate funding to do the job.

Recent allegations that Alyeska Pipeline Service Co. dumped hazardous substances into the bay at Valdez from its ballast water treatment facility — which Alyeska vigorously denies — highlight DEC's importance, whatever the veracity of those charges.

DEC is responsible for monitoring Alyeska facilities for removing ballast water from tankers carrying North Slope crude oil to market. But the agency has only two staff members in Valdez to handle the pipeline terminal, plus an area extending from north of Glennallen to Prince William Sound. Those two people also monitor everything from restaurant inspections to subdivision sewers in their region. In the present dispute about Alyeska discharges, they cannot verify either the allegations or Alyeska's denials — much less guard against subtle but cumulative, and often inadvertent, environmental damage.

DEC officials say they do the best they can with the resources they have, but clearly the agency doesn't have the resources it needs in Valdez. Statewide, DEC's operating budget last year was less than half what the legislature spent on its own operations, and only a few million dollars more than what the legislature appropriated to the Department of Military Affairs, the smallest state agency.

DEC should get the money to do its job, unless the legislature is willing to abandon to chance and goodwill the job of protecting Alaska's air, water and environment. At minimum, that means preserving the DEC budget at last year's level.

ANC Daily News 4/18/85

Oil's Legacy

In Louisiana, Big Oil Is Cozy With Officials And Benefit Is Mutual

But as the Reserves Dwindle, Price of Giving Industry Free Rein Grows Evident

A Governor and His Friends

By Thomas Petzinger Jr.
And George Getschow
Staff Reporters of The Wall Street Journal

BATON ROUGE, La.—Huey Long built his populist political career battling the oil barons, but in 1934 he secretly threw in his lot with them. He and several friends formed a company, called Win or Lose Corp., that bought state mineral leases and resold them for large profits to out-of-state oil companies.

The biggest block ended up in the hands of the fledgling Texas Co., which sent its dredges and drilling rigs into a million acres of coastal swamps. Mr. Long's heirs began reaping millions in royalties, which are still rolling in. The driller would grow into a giant called Texaco. And the poor agrarian state was on its way to becoming the nation's leading supplier of natural gas.

Oil companies and officialdom have got along well in Louisiana ever since.

For 50 years, Louisiana has been one of the oil and gas industry's happiest hunting grounds. Producers have sucked out of its marshes and uplands more than 12 billion barrels of oil and 113 trillion cubic feet of natural gas—enough to keep New York City in electricity for five centuries.

First of a series of articles on Louisiana and the oil and gas industry

In the process, oil and related industries have become the largest employers, largest landowners and largest taxpayers in the state. Their largess, always shared liberally with politicians, has won them a broad measure of both public and official support, and the industry has gone about its business little deterred by state regulation. "Oil definitely is the golden goose, and you don't want to kill it," says Joan Houghton, a lobbyist here for the League of Women Voters.

But now, with Louisiana virtually a dominion of oil, signs abound that these legendary fields are starting to run dry. As the heady and headlong oil rush begins to wind down, it is becoming evident how much of Louisiana's natural wealth has flowed to out-of-state investors and consumers.

Losing ground

A shrinking tax base has put the seemingly resource-rich state in a fiscal bind. Local manufacturers are growing short of natural-gas feedstocks, even as they watch oil companies shipping more offshore gas through pipelines that cross the state without stopping. And Louisiana's Cajuns, thousands of whom gave up fishing and trapping in the swamps for the big money in the oil fields, increasingly find themselves unemployed and unable to return to their ancestral way of life.

For other states heavily dependent on energy development, Louisiana's troubles offer a warning of what can happen when the mine begins to play out. Louisiana's case is unusually severe, though, because it is a state that welcomed resource developers unreservedly and, relying on the bonanza they brought, took few steps to diversify its economy. Today, Louisiana "does not control its own future," says a consultant's report to the legislature. "It is extremely sensitive to the instability of world energy markets, the vagaries of federal energy policy and the investment decisions of a relatively few international energy and chemical companies."

The natural resources Louisiana depended on before hydrocarbons—the fish and furs of its coastal marshlands—haven't weathered the oil era well. In the bayous and bays, beyond public view, part of oil's legacy is a giant underwater junkyard of rusted pipelines, platforms and other well outcroppings that make commercial fishing treacherous.

Great volumes of brine and chemical sludge from drilling have contaminated some farm land and much water. In many marshland areas of the heaviest waste dumping and ground-water pollution, alarming levels of illness are showing up.

Into the Sea

Some of the marshes aren't littered or polluted, however—some are simply gone. Coastal wetlands are among the most delicate property in the world, surviving by a complex ecosystem that can break down with even slight changes in the volume of the tide or the chemistry of the water or soil. But thousands of miles of oil-field canals now crisscross the swamps, letting in ocean salt water that kills the grasses and washes away soil. Levees for flood control and navigation prevent Mississippi River silt deposits from rebuilding the wetlands.

The vast and rich marshlands, which some Louisianians regard as the state's most valuable long-term resource, are vanishing at a rate of 50 square miles a year. "A great natural catastrophe is occurring," says Sherwood Gagliano, a land-management consultant and former Louisiana State University geologist who has studied the marshes extensively.

Oliver Houck, an associate professor at Tulane Law School and former counsel of the American Wildlife Federation, has little doubt where the fault lies. "If the state of Texas came over and ripped off 50 square miles a year, there'd be a war," he says. "But there's no war in Louisiana because

everybody is getting paid by the oil industry."

The industry insists its activities are no more than a minor factor in the marshland loss, and Gov. Edwin Edwards agrees. But in any case, the governor suggests, any damage is a fair tradeoff for the rich economic benefits of oil. "Colorado plows up the woods on its mountainside ski slopes. Wyoming rips up the mountainside to get coal," he says. "We punch holes in ground."

Gov. Edwards knows the benefits of oil more than most Louisianians. He draws a total of at least $100,000 a year in oil and gas royalties from Superior Oil Co., Exxon Corp. and several others. From 1980 to early 1984, while he sat out of office to qualify for a third term, Mr. Edwards drew legal fees from a variety of oil interests. And when the time came to run for the statehouse again, Louisiana's liberal fund-raising laws enabled the oil industry to help Mr. Edwards finance a $15 million campaign, the most expensive gubernatorial victory in U.S. history.

The governor says it is only natural that he would have strong ties to the oil industry. "Practically everyone who is a mover or doer in Louisiana has been associated with me at one time or another," he explains. "A governor naturally knows the movers and doers and shakers, the lawyers and businessmen."

Take Texas International Co., an oil producer based in Oklahoma City. In 1980, at the start of his four years out of office, Mr. Edwards received a $50,000 one-year legal retainer from the Big Board company and served briefly as a director. A short time later, William Huls, who had been Mr. Edwards's secretary of natural resources, acquired a royalty interest in a state mineral lease held by Texas International.

A company owned by Mr. Huls and some other investors also acquired an ownership interest in the state lease. In addition, Mr. Huls represented Texas International as a free-lance land agent in Louisiana.

This year, shortly after Gov. Edwards and Secretary Huls returned to office, a Texas International unit bid for drilling rights on 19,000 acres of state-owned marshland. Although similar wildcat acreage fetches at least $150 an acre, the state awarded the lease for just $17 an acre, plus the usual royalties. The difference figures out to a saving of over $2.5 million for the company—and that much less for the financially strapped state government.

Mr. Huls says the state's transaction was entirely proper; the company, he notes, had promised to start exploration quickly and thus would put more people to work on the rigs. He adds that he resents any implication of a conflict of interest. The president of Texas International, James Kishpaugh, calls the low-price sale a "smart move" by the state because it will generate additional drilling. For his part, Gov. Edwards says he broke all ties with Texas International when his friend there, a former chairman, resigned.

Texaco Case

No sooner had Mr. Edwards's Texas International retainer expired (in 1981) than he was engaged by Texaco Inc., the state's largest producer, to represent it in gas-contract negotiations and other matters. But he abruptly dropped Texaco as a client after about a year and a half to handle a title suit *against* Texaco.

The suit was brought by Louie Roussel, an owner of oil land and a close friend and major campaign contributor to Mr. Edwards. Texaco paid Mr. Roussel's company $3 million to settle the suit. The governor confirms he got a "substantial" legal fee—even though, according to lawyers familiar with the case, he didn't write any briefs, make any court appearances or help negotiate the settlement.

Shortly after Mr. Edwards returned to the statehouse and Mr. Huls again became natural-resources secretary, Mr. Huls dismissed an accounting firm that was doing a state audit of Texaco's royalty payments to Louisiana. The firm, Ernst & Whinney, reported after its dismissal that it had estimated that Texaco owed the state at least $100 million.

A Texaco official, who calls the $100 million figure "outlandish," says there wasn't any connection between the settlement payment to Edwards's client and the firing of the accounting firm. The governor says he wasn't involved in the firing. Mr. Huls says he dismissed the outside accounting firm solely because the state's own accountants could do the job just as well.

The matter, however, has aroused the interest of a federal grand jury in Baton Rouge. Late last month it issued a subpoena for information on two matters: the Ernst & Whinney audit and the settlement of the suit by Mr. Edwards's client.

Colonial Past

Like Texaco and Texas International, most of the companies pumping Louisiana's oil and gas are based out of state. Harvesting of Louisiana's natural resources for use elsewhere has been a pattern ever since the region was colonized by France, England and Spain.

In the heyday of sugar cane and cotton, moneyed Northerners and Europeans bought up small Cajun farms to build plantations. After World War I, timber companies from the East and Midwest denuded entire swamps for the cypress, shipping the pump and lumber eastward to be turned into paper and furniture. The Spanish moss went too, for upholstery stuffing.

The pattern is repeated today in Louisiana's petrochemical industry, which uses the state's natural gas to produce low-value bulk chemicals that other states turn into finished items like textiles and toothbrushes. "The final production and packaging—and the accumulation of wealth—occur elsewhere," says Will Whitmore, a banker in Houma. T-shirts sometimes seen in Louisiana describe the state as a "banana republic."

To Louisiana's early swamp people, the black ooze in rice fields and the gas bubbling in water wells were just nuisances. But the Heywood brothers from Ohio, veterans of the Klondike gold rush and the Spindletop oil field of Texas, knew better. In 1901, after promising farmer Jules Clement $10 if they killed any of his rice or cattle, they drilled the state's first gusher.

Soon Louisiana was teeming with fortune hunters. Gulf quietly amassed huge tracts. Texaco, in staking out claims, touched off blowouts that blazed for days. John D. Rockefeller added a province to his growing oil empire.

Using It Up

But in less than a lifetime, oil and gas companies have drained the bulk of the state's known reserves. A state report estimates that within 16 years Louisiana is likely to be 97% depleted of oil and 90% depleted of gas. The industry points out that such predictions are inherently unreliable. But many operators nevertheless are pulling up stakes in Louisiana and moving to federal territory deep in the Gulf of Mexico.

With state production tailing off, the petroleum city of Houma has closed its own gas well and begun importing electricity generated with Wyoming coal. Texaco recently closed its sprawling office complex in Houma and donated it to the city.

Houma Mayor Edward Lyons is a bit sentimental about Texaco, where he first went to work after finishing college. "I'd have hated to think 20 years ago that's all there would be," he says. "The cruel, hard fact is that when the mine plays out, they're gone."

Sputtering production also threatens to leave the state's petrochemical manufacturers short of natural gas. Within a few years, they will be 25% to 50% short of gas, according to various company estimates. The growing gas production far offshore doesn't help much because federal policy commits that gas to the interstate market. As for newly discovered gas on land or within three miles offshore, federal rules enable operators to sell this production for more out of state than local pipelines can pay.

"It's a desperate situation" for industrial users of natural gas in Louisiana, says Ernest Edwards, a New Orleans lawyer who represents chemical companies. Some manufacturers already have cut back operations and jobs because of the in-state gas squeeze.

Public Relations

The oil and gas industry, however, continues to take every opportunity to convince Louisianians of how much it does for the state. Early this month, Shell Oil Co. used the occasion of its 35th year in offshore production here to put out a news release saying it has paid the state $600 million in lease bonuses and royalty payments so far.

Still, the state's take is quite high enough, industry lobbyists make clear. Last year, with Louisiana's government facing a budget gap due in part to falling oil-related tax revenue, three professors suggested a rise in the "severance" tax levied on all gas pumped from the ground. The industry quickly commissioned a study that concluded that oil and gas already pay half the cost of state government. It broadcast the findings widely.

Soon the legislature passed a sweeping series of consumer and business tax increases totaling nearly $1 billion—but, at Gov. Edwards's urging, didn't touch the severance tax. Fred Loy, head of a trade group representing the state's petrochemical companies, says, "It's no accident that this severance tax wasn't in the legislature; we've been talking to every civic group that will have us."

Although Louisiana's oil severance tax is relatively high, the tax on natural gas—a much more important resource in the state—remains at only about half the level of neighboring Texas. Meanwhile, drivers in this seemingly energy-rich state face one of the country's highest state gasoline taxes, 16 cents a gallon.

Loren Scott of LSU, who did the study the oil and gas industry used to campaign against higher severance taxes, won't say what the companies paid him for it. "If I had known it was going to do them this much good it would have cost them more," he says.

Benefits to the State

The industry has a succinct defense of such efforts to win favorable treatment. Lobbyist William Bailey of Mid-Continent Oil & Gas Association, a trade group, says, "In Louisiana, if you hurt the oil and gas industry, you're doing something that will cost people jobs. It's that simple."

But oil's blessings fall unevenly in Louisiana. In 1970, though the country's top natural-gas producer and No. 2 oil producer, Louisiana still ranked as the fifth-poorest state in per capita income. After a decade of surging energy prices, there were many millionaires, but the state still was 16th lowest in per capita income. The industry once boasted that its severance taxes educated 35 of every 100 Louisiana children, but the state has the nation's highest illiteracy rate.

Some communities miss out almost completely. In Plaquemines Parish (county), the all-black town of Ironton, although surrounded by some of the world's most prolific oil and gas fields and busiest pipelines, still doesn't have a natural-gas hookup. In the meantime, the truck from Gaspard's fuel service rumbles over the unpaved roads, filling tanks behind house trailers and shacks with expensive bottled gas.

"Any parish that pulls this kind of oil out of the ground shouldn't be in this condition," says Ernest Broussard, an unemployed heavy-equipment operator in Ironton. A local utility explains that Ironton doesn't have natural gas because it lies between the service areas of two utilities and wouldn't be economical to serve.

The Perez Case

In the view of Plaquemines Parish's president, Luke Petrovich, a lot of the money that might have paved Ironton's roads ended up in the pockets of the Perez family, which ruled the local government for 50 years. Judge Leander Perez in the 1930s acquired royalty interests in local public land drilled by major oil companies. In just the past 11 years, Mr. Petrovich estimates, heirs of the judge (he died in 1969) collected $21 million in royalties from Gulf alone. In 1975, Gulf said in a report to the Securities and Exchange Commission that one of its representatives had given Judge Perez an additional $50,000 in cash annually for years.

"The oil companies had to deal with certain people or they wouldn't produce anything, and these people got their cut," says Mr. Petrovich, who once was an aide to Judge Perez. Now, as parish president, he is pressing a suit by the parish to recover royalty money from the Perez family. The heirs are seeking dismissal of the suit. One of their lawyers argues that the judge's royalty interests have been known for years and that the parish waited so long to press a claim that it, in effect, "acquiesced in the alleged wrongful conduct."

Some oil-company payments to local officials have continued to recent times, such as the $60,000 (in $2,000 monthly installments) that Tenneco Inc. mailed to a sheriff who would have jurisdiction over any labor strife at a major Tenneco refinery. At a federal trial in 1978, Tenneco argued that the payments were for legal services; however, the company was convicted of mail fraud.

Most of the coziness between public officials and oil-patch operators takes a different form. Many politicians and regulators, or their friends or relatives, maintain businesses that serve the oil and gas industry. For example, a son-in-law of oil-field regulator Maurice Schmitt used to pass out business cards to oil-field customers listing the regulator as a "consultant" to his chemical sales business. Mr. Schmitt was ordered several months ago to have the business cards recalled, but he says that "there are many, many similar cases that come up every year."

In a state where oil is so dominant, it is hardly surprising that some politicians have served in the legislature while employed by the oil industry. Jesse Knowles spent 20 years as a state representative while working as a land manager for Standard Oil Co. (Indiana). "I had no problem with a conflict of interest because anything I voted on was for the whole industry," he says.

Amway Detergent

Until recently, the powerful Louisiana Mineral Board, which administers state leases, included several owners of oil-service concerns. When the Louisiana Ethics Commission investigated in the mid-1970s, a representative of Exxon testified that it was the practice at his company and several others to steer purchases toward oil-service companies owned by Mineral Board members so long as they offered equal prices and service. Exxon, Shell Oil and Texaco agreed in 1979 to quit giving business to Mineral Board members, several of whom resigned during the investigation.

Some regulators exploit contacts made in the field. Frank Gibbs, a pipeline-safety inspector, and his wife, Ollie, a secretary to Gov. Edwards's son Stephen, recruited employees of one big pipeline operator, Gulf States Utilities Co., as salesmen within his Amway household-products sales group. Although he quit the practice after the Ethics Commission looked into Amway sales to industry by other regulators, he declares that "I can't be bought for a quart of detergent."

The inspector's former boss, Henry Talley, built an even larger Amway sales group. One of Mr. Talley's distributors, C.J. Auer, says that he sold $40,000 worth of Amway products to Texaco drilling contractors and other oil-field operators in 1982 and that Mr. Talley got commissions on some of the sales; until July of that year, Mr. Talley was the state's chief of pipeline safety.

Mr. Talley says he isn't aware of any Amway sales to the oil or pipeline industries. But Mr. Gibbs and some other Amway distributors say that a few years ago, Mr. Talley helped organize a seminar in Lafayette to promote sales of Amway solvents and other products for oil-field uses ranging from washing drilling rigs to stimulating added production from aging wells.

Amway says it doesn't endorse such uses of its products, and some state inspectors are opposed. Inspector Henry Finnerty says the chemicals can break up the clay bottoms of oil-field disposal pits and lead to faster leaching of the wastes.

Other Arrangements

From time to time, oil-field regulators have been suspected of putting the arm on oil companies to personal advantage. According to Stanley Lanise, a pump operator for several companies, one state oil-field inspector, Walter Doherty, closed down a salt-water collection tank on an oil well Mr. Lanise manages until Mr. Lanise agreed to have the brine hauled to a disposal operation operated by the regulator's nephew, Louis Doherty Jr.

"I didn't have much choice," Mr. Lanise says. "If I couldn't dispose of the water, I would have had to shut down the well." Several waste haulers have filed affidavits with the conservation commissioner making similar charges against the Dohertys. The commissioner declines to discuss the case. Louis Doherty didn't return phone calls from this newspaper, and his uncle, the inspector, refused to discuss the matter.

More commonly, however, the mutual interests of the oil indstry and state officials are served without arm-twisting. State Rep.

Walter McKeithen, who is a member of the Louisiana House's natural-resources committee, owns a business that supplies cement for oil-well casings. When one of his main customers, an oil producer called SSM Partnership, wanted a variance from regulations protecting aquifers, Rep. McKeithen placed a call to the state commissioner of conservation.

An SSM executive says the partnership merely wanted the legislator to tell regulators "that we were reasonable and prudent operators." SSM recently withdrew its variance request, but Rep. McKeithen says he sees no conflict of interest in coming to his customer's aid. "I don't want to give anybody any special treatment," he says, "but if there's something they can take advantage of, I want them to have it."

Helping Hand

Gov. Edwards also seems to have adopted that rule for his friends and associates. His son Stephen, who owns 50% of a pipe company that supplies a Texaco unit and other majors, says, "My father has used his name more times in getting people on bid lists and approved lists and opportunities to compete than he has done anything else I've known him to do." Stephen Edwards adds, however, that political connections "won't sell you a damn thing if you're not competitive."

Today, many of the governor's friends are involved in an industry that continues to expand even as the oil and gas reservoirs play out: hauling away the brine and other wastes that the aging fields produce in abundance. When Edwin Edwards was a congressman running for governor in 1971, the biggest of these so-called vacuum haulers was a company called Gulf Coast Pre-Mix Trucking Inc. It was owned by Francis "Benny" Benezech, a brother of the candidate's campaign pilot at the time. After Mr. Edwards won, he named a former salesman for the waste hauler, Raymond Sutton, as state conservation commissioner.

Clyde Vidrine, who had been an Edwards aide, asserts in a book that the appointment was secured through a $125,000 campaign contribution from Mr. Benezech, given in the form of a shoebox full of cash. Mr. Benezech says the contribution was much smaller and wasn't linked to the appointment of Mr. Sutton, who is deceased. Gov. Edwards says that "it wasn't nearly that amount of money. Vidrine's story is purely a figment of his imagination."

Nowadays, vacuum-hauling is a close-knit industry that isn't easy to break into. But connections help, as Cecil Brown's case shows.

A 'Very Good Friend'

Mr. Brown, a former rodeo rider and race-track owner who is one of Gov. Edwards's hunting friends and fund-raisers, got a waste-hauling permit in 1981 after his race track failed. But a group of competitors sued to revoke it, arguing that Mr. Brown had illegally undercut regulated rates and had dumped waste in an unpermitted pit. The state's highest court eventually ordered his permit cancelled.

That didn't stop Mr. Brown. He continued hauling waste, using an illegal permit-leasing arrangement with Patrick Benezech, the former Edwards campaign pilot, who had gotten into the vacuum-truck business himself.

Last December, Mr. Brown applied for a new permit. By this time, Edwin Edwards had been elected governor again, his son Stephen had become Mr. Brown's lawyer, and Stephen Edwards's insurance agency had agreed to obtain coverage for Mr. Brown. In addition, the governor-elect had by this time promised a Mineral Board appointment to the lawyer for Mr. Brown's competitors, Janet Boles Chambers, she says. Five months later the state's Public Service Commission, on the same day it fined Mr. Brown for having operated without a permit, granted him a new one.

The competitors then filed a new legal challenge. But they dropped it when Mrs. Chambers warned the head of the haulers' group (by her recollection) that "Cecil is a very good friend of Edwin Edwards" and the suit "could possibly cause him some problems." Mrs. Chambers now represents Mr. Brown himself in some of his dealings.

Gov. Edwards says it couldn't have been his friendship that got Mr. Brown his new permit, because "if I had any influence it wouldn't have taken three years." As for Mr. Brown, he reports that "business is real good." And he allows that "it's better being a close friend to the governor than not knowing him at all."

Oil's Legacy

In Louisiana, Pollution And Cancer Are Rife In the Petroleum Area

Region Is Littered With Pits Of the Chemicals Poured In Wells During Drilling

A Small-Town Doctor's Tale

By Thomas Petzinger Jr.
And George Getschow
Staff Reporters of The Wall Street Journal

BATON ROUGE, La.—At the lake next to the governor's mansion here, "no fishing" signs have sprung up. The Department of Environmental Quality posted them. The governor's lake contains PCBs.

It isn't unusual to find contaminated water here in the state's industrial, oil-refining and petrochemical corridor. Tons of waste containing potentially toxic heavy metals and organic chemicals are generated daily, and have been for decades.

But Louisiana's water problems aren't confined to the industrial zones. In one town in the coastal marshes of South Louisiana, a test of 84 water wells found that 81 contained heavy metals. The water in another community is so briny that drinking fountains are stained white. In some swamps, groves of cypress stand dead.

These are areas of heavy oil and gas production, where thousands of open waste pits brim with brine from far underground and with the soup of chemicals poured into wells during drilling. Other waste sludge is sunk in old wells for disposal, spread over adjoining land or, if the drilling site is offshore, simply dumped into the water.

Some energy and petrochemical companies in Louisiana have begun to take more care in disposing of wastes. A few are spending millions to clean up their worst dumps. But much waste continues to be disposed of haphazardly, and cleanup efforts can do little if a decades-old waste pit has leached down to an aquifer below.

Meanwhile, unusual levels of illness are showing up in much of South Louisiana. No one can demonstrate whether any of the illness is linked to oil and gas activity or to the area's extensive water pollution. But concern is mounting, and some of the cases are striking.

The Vincent Case

The area around Kaplan, La., where Jerome Vincent lives, is a site of many old and new oil and gas wells. Superior Oil Co. sank another one, a very deep dry hole, in the rice field behind his home four years ago. It left behind some leaky barrels and three open waste pits.

In May 1983, a private laboratory tested Mr. Vincent's well water and found it contained chromium, a metal that is sometimes dumped in oil wells during drilling and that toxicology manuals link with cancer. His well's chromium level was slightly higher than the federal limit for public drinking water systems.

Tests by the state health department found chromium-rich sludge in Mr. Vincent's water-well pipe. The private lab tested sludge from one of the waste pits and found its chromium level to be more than 2,700 times the concentration in Mr. Vincent's water.

In June 1983, Mr. Vincent's 40-year-old wife died of leukemia. Two months later, his 62-year-old father, who lived next door, died of pancreatic cancer. Then this year his 21-year-old son died of cardiopulmonary arrest associated with fatty infiltration of the liver.

Superior, now a Mobil Corp. unit, eventually hired contractors to clean up its pits. It says in a written response to an inquiry that its records "do not reveal any evidence of deaths or illness" from oil-field contamination in Louisiana.

Another Cluster

In adjoining Cameron Parish (county), Annette Baccigalopi worries about an oil-waste disposal well a few hundred yards from her home, a well the state temporarily closed this year because of possible leaks. Her anxiety seems understandable; in the past several years, cancer has taken the lives of her father, her father-in-law, her brother-in-law and her daughter's father-in-law, all from the same area. Her mother-in-law has cancer now, and her mother and a cousin have had cancer operations.

Down the road, Debbie Theriot says that recently, within three weeks, her mother died of pancreatic cancer and her father of leukemia.

Statewide, cancer deaths are 9.1% higher than the U.S. average, using the figure for white males. The problem is more severe in the major oil producing and refining region of South Louisiana. Ten counties there rank in the top 5% nationwide for cancer deaths per capita among white males. A 1980 study published in the Journal of Occupational Medicine showed that pumpers, oil-field laborers and certain refinery workers were more than twice as likely to get lung cancer as other South Louisianians. (Smoking rates appeared to be similar.)

Yet the state hasn't made any systematic effort to determine whether South Louisiana's health problems are linked to the concentrations of oilfield waste. And what is known isn't always passed along to residents. For instance, state tests last year found the ground water in the town of Port Barre to be of questionable quality, but residents weren't told about the tests.

It is hardly surprising that Louisiana should have a water problem, given the volume of harsh chemicals spread about during oil and gas activity. Consider what happens whenever a new well goes in.

Chemical Cornucopia

There is much more to drilling an oil or gas well than digging a hole and lowering a pipe. Throughout the process, operators inject into the hole tons of viscous material called drilling mud, a blend of clays and weighting agents that flushes cuttings to the surface and keeps the hole from collapsing. The "mud" may contain any of 500 different chemicals that act variously as foaming agents, defoamers, flocculants, thinners, viscosifiers or emulsifiers.

The chemical cornucopia often includes such materials as asbestos, formaldehyde, carbolic acid and caustic soda (the active ingredients in Drano). Among the potentially toxic metals that drilling mud may contain are barium, chromium, arsenic, aluminum, titanium, and zinc. To prevent high-pressure formations from blowing out, lead or iron may be added to increase the weight. To reduce pipe and drill-bit friction, such lubricants as asphalt laced with phenols may be added.

If the well is a producer, for years afterward the operators administer regular doses of corrosion inhibitors, such as ammonium bisulfite and zinc chromate, and anti-bacteria agents, such as acid compounds and formaldehyde.

Nowhere is the use of these chemicals more extensive than in the deep-pocket formations of Louisiana, with their high temperatures, intense pressures and unusual strata. "There's more money in this business (here) than anywhere else in the world," says Tom Parker, a manager for a unit of NL Industries Inc., a leading maker of drilling mud.

The state's oil and gas industry spends about $1 billion a year on drilling compounds, more than the total for the rest of the country. In South Louisiana, where wells tend to be especially deep, drilling a typical one of 10,000 feet might require a million pounds of "mud." In all, oil men drill about 4,000 new oil and gas wells in the state every year.

As much as one-third of the drilling mud poured in remains underground. The rest returns to the surface for recycling or disposal. What comes up may be even harsher than what went down, as it can pick up naturally occurring substances like mercury, antimony, cobalt, cadmium, thallium, selenium and radioactive isotopes of potassium.

If a well is a dry hole, any used drilling mud that can't be recycled is commonly dumped into it. But if the well is a producer, hauling away all the waste material could easily cost $100,000. As a result, over the years much of it has simply been abandoned in earthen pits of an acre or so. In addition, oil and gas companies often use smaller pits to hold waste oil and other fluids during the life of the well. An estimated 13,000 oil-field pits litter the Louisiana landscape today, an unknown number of them leaching down to underground water supplies.

Often an oil company spreads the used drilling mud over the nearby land. "A lot of times they're spreading stuff that shouldn't be spread at all," says Jerry Fontenot of Lafayette, an agronomist who has examined hundreds of sites for farmers and oil companies alike. "They move off, and the farmer is left with infertile soil for years." Industry studies show that plants can take up heavy metals from drilling mud spread on the land.

No Federal Oversight

The federal Environmental Protection Agency once proposed to regulate drilling wastes. But lobbyists for the oil industry contended such regulation would cost it $45 billion in the first year, and Congress in 1980 exempted oil and gas waste from regulation. It instead ordered the EPA to study whether such waste posed a public health hazard, but the EPA has never done the study. The agency "doesn't consider it as high a priority as other projects," such as studies of utility or mining waste, explains John Heffelfinger, an EPA official.

Louisiana doesn't classify drilling waste as hazardous, and the industry says this only makes sense. William Bailey, an official of Mid-Continent Oil & Gas Association, a trade group, says that while he wouldn't want to "pick it up and make a sandwich" of the stuff, "I'm not aware of anything in drilling mud that's hazardous."

But another major oil-producing state, California, takes a far different view. It requires that all drilling compounds with certain levels of metals and other toxic materials be disposed of as carefully as wastes classed as hazardous. David Storm, a California state toxicologist, estimates that as much as 25% of what is in drilling mud may be hazardous. Drilling compounds, he says, "pose a very complex problem in terms of the number of chemicals used, the types of chemicals and the number of drilling sites they're generated at. The potential hazard of oil-field waste has been understudied because of the complexity of the problem."

What research the industry has done isn't especially reassuring. A study sponsored by the American Petroleum Institute sampled ground water at some drilling-waste sites around the country and found arsenic, barium, chloride, zinc, cadmium, sodium, lead and mercury in the water at every site.

At a Shell Oil Co. drilling-mud waste pit in South Louisiana, the researchers found arsenic in the ground water at roughly twice the federal limit for public drinking water, as well as lead and mercury at roughly three times the limit. The "mud" used in drilling the well contained 1,600 pounds of asbestos.

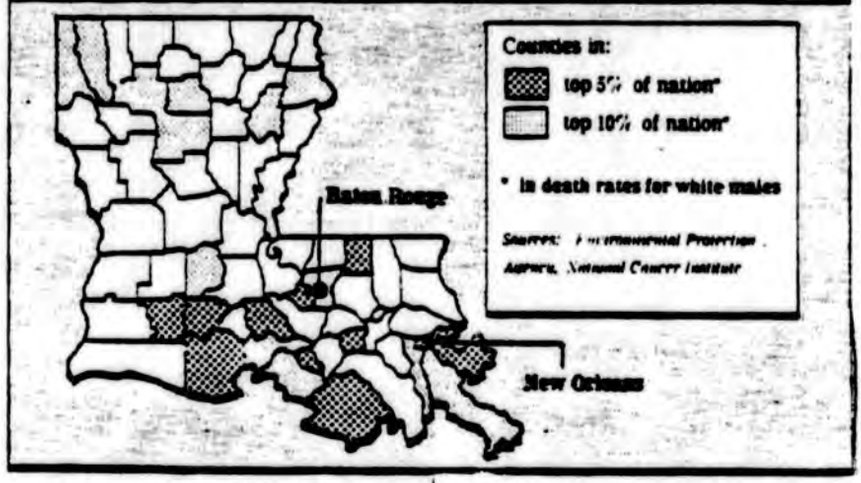
Nevertheless, the study concluded the drilling-mud pits don't present a hazard to human health or the environment. Some of the ground-water contamination occurs very slowly, and the rest usually declines to safe levels within "several hundred feet" of the pit, the study said. It also speculated that some of the heavy metals might have come from pesticides or fertilizers spread on nearby farms.

Louisiana's streams and forests are also

It also contains naturally occurring but toxic substances such as arsenic, as well as some of the organic chemicals found in crude oil; the latter chemicals "create the most significant toxicity problems," according to a report conducted for the Gas Research Institute, a trade group.

Some of this brine is dumped (illegally) into streams, marshes and roadside ditches. But most of it now is injected into disposal wells, of which the state has about 4,500. Louisiana didn't begin monitoring disposal wells until 1982 (19 years after Texas began doing so); when it did start, it found 11% of those checked to be unsound, unpermitted or in violation of the new rules. One inspection report said a certain household's drinking water was tainted by a nearby disposal well that was only a pipe in the ground, without any casing to protect ground water.

Cancer Hot Spots in Louisiana



common dumping places. In 1980, a hauler of oil-field waste was caught dumping a load into Five Mile Creek near Ruston, La. When he tried to cover up by setting fire to the waste, the blaze raced down the creek and destroyed a bridge. In another case, last year a waste-hauling firm operated by Sandra Thompson, a former head of Louisiana's Tourism Board, Trails Council and Beautification Commission, was fined for dumping drilling mud into a wooded area that drains into the West Pearl River. She says she wasn't aware of the illegal dumping.

Off the coast, drillers dump much of their used drilling mud and rock cuttings into the sea, a practice they maintain is harmless to aquatic life. But an executive of Hughes Drilling Fluids, a major supplier, writes in a recently published paper that small quantities of one common drilling lubricant, diesel fuel, can cling to cuttings even after they are washed and kill the Mysid shrimp, "a basic link in the complex food chain of marine life." Hughes and other suppliers offer special fluids for "environmentally sensitive" areas, but they cost more and make up only a small part of sales.

Louisiana's aging oil fields also produce large volumes of salt water—an average of eight times as much as oil or gas. This water from deep underground is saltier than the ocean, sometimes seven times as salty.

Cleaning Up Pits

Another brine-disposal method, the large open pit, has been regulated for 15 years in Texas but still isn't in Louisiana. Fritz Spencer, a career regulator who is holding hearings this week on a proposal to regulate the pits, says that about three-fourths of major oil companies have stopped using pits for brine except in emergencies. And some have programs under way to clean up waste pits.

Exxon Corp. says it has about 300 oil-field pits, some decades old, but when it leaves a production site it clears the pits. It says it doesn't have any abandoned pits. Standard Oil Co. (Indiana) says it has about 100 "temporarily abandoned" pits at any time but cleans them all up within a year or two. Gulf Oil Corp. says that for the past eight or 10 years it has been lining its brine pits with vinyl to prevent leaching; it says it doesn't know how many abandoned pits it has but is currently trying to find out.

Among cleanup efforts, Mobil Corp. says it has spent $450,000 to reclaim 12 old pits so far and has budgeted money to close all of its pits at production sites. Texaco Inc. said it will spend $11 million through 1985 to clean up more than 200 pits in Louisiana, all of which "could pose a potential environmental problem."

Still, Mr. Spencer, the regulator, considers the industry's efforts only a small start. "There is an extreme need of remedial action on many, many pits," he says.

Not all state officials share this level of concern. Gov. Edwin Edwards, echoing the view of many in the industry, says that "you could live a long, happy life" next to a pit of oil-field waste.

Farmers' Complaints

But W.T. Langley, a big grain and soybean farmer in South Louisiana, claims that drilling mud spread by Standard Oil Co. of California left 10 acres of his farm land useless. He has sued, asking that Socal replace the tainted dirt with new topsoil. Socal maintains in a court filing that the damage wasn't out of the ordinary.

Martin Dupre's problem was salt water. The ex-farmer from Franklin, La., says rusty pipelines that Indiana Standard uses to link oil wells with disposal wells leaked on his sugar-cane land for years, damaging more each year. Two years ago, he says, with 250 acres poisoned, he gave up and quit farming. Indiana Standard doesn't deny that saltwater damage occurred but won't comment further.

Mr. Dupre says such contamination "is all through South Louisiana where I see oil production. What kind of price did Louisiana have to pay to keep the rest of the nation warm?"

Neighbors of oil-field waste pits often tell of being left to deal with such problems after an oil company moves out. "We complain and complain about these smelly pits, but no one will take responsibility for them," says Marion Sellers of Abbeville, La. He built a two-foot-high levee around his house in an effort to keep back water runoff from an abandoned dump.

This particular site was for two years a commercial dump for waste from Exxon, Gulf, Union Oil Co. of California and more than a dozen others. Neighbors also tell of illegal "midnight dumping." Some of the neighbors have sued known users of the pit, charging them with contaminating their water wells; the companies are contesting the suit.

The EPA has found 37 toxic substances in and around the 17-acre site. Lead has been found in water from Mr. Sellers' well. Although no link has been shown, Mr. Sellers' wife suffers from memory loss, one of his children has kidney failure and his other two children have learning disabilities. Some other neighborhood residents complain of chronic diarrhea or nausea and of pets and livestock dying mysteriously.

Dr. Buller's Story

Small-town doctors often are left to grapple with such problems on their own. In Opelousas, La., surgeon Daniel Buller figures he treats enough cases of colon cancer to keep 10 surgeons busy.

Dr. Buller also says he diagnoses or treats an average of one case of pancreatic cancer a week. In fact, the densest cluster of pancreatic-cancer deaths in the U.S. is found in South Louisiana. To use the figure for white residents, the death rate from this cause rose 57% in the area between the early 1960s and the late 1970s.

Dr. Buller worries about contamination of aquifers, which supply 85% of the state's public water systems. "It's a very frightening situation," he says. "You can envision generations being exposed to carcinogens that can never be removed." But instead of warning the public, he contends, authorities often try to cover a problem up.

If so, they have precedent. Twenty-five years ago there was an underground oil-well explosion near Gueydan, La., and a local health-department employee told his bosses in Baton Rouge that ground water might be tainted for miles around. Their reply instructed him "not to make any public statement on this situation."

Port Barre's Water

A more recent case concerns the town of Port Barre, La., which lies next to a petroleum wasteland of stinking disposal pits, injection wells and rusting separation tanks. The state health department found the town's water supply to contain more salt than the EPA's recommended limits and 14 times as much as the level the EPA considers optimum. The water tests also showed nearly twice the level of dissolved solids that federal standards permit. The state health department didn't announce the results, however; officials note that they aren't required to do so.

Nor did Porte Barre officials tell residents what the tests had found. "The decision was made to keep people in the dark," says Ray Thibodeaux, a former town councilman who attended an unannounced council meeting in November 1983 when the test results were discussed. The explanation offered by Port Barre's mayor, Roy Council, is that everyone knew the water was bad anyway.

In Kaplan, the cancer-ridden area where Jerome Vincent lives, the state health department took a very different course. Tests by Wilma Subra, who runs a local water lab, found zinc or barium or both in 81 or 84 water wells. But most residents of the heavy oil-and-gas-producing area continue to drink the water anyway. One reason is that the state health department sent form letters to many of them stating that "your water is of satisfactory chemical quality for domestic use."

The department says it based the letter on its own water tests showing contaminants to be within acceptable levels. In a few cases where the tests found barium above the safety level, later tests showed lower results, the agency says.

Limited Budget

South Louisiana's health problems have put the health department somewhat on the defense, but officials say they do all they can within the budget the legislature gives them. In addition, says Sue Ellen Lewis, the head of the agency's public-affairs office, "you have to understand who calls the tune." Asked specifically about agency handling of water-contamination problems, she says, "You'll have to pose that question to someone else. The guys' name is Edwin Edwards."

10/23
page 5

For his part, Gov. Edwards attributes South Louisiana's high cancer rate to its Cajun residents' liking for fatty foods and cigarettes. The state's chemical industry, which sponsored a study of Cajuns' life styles, blames their smoking, drinking and low dietary fiber for the region's cancer levels. The American Petroleum Institute's medical director, Neil Weaver, says he isn't aware of any epidemiological studies focusing on health and oil-field waste.

A few Louisianians are so desperate for answers they have undertaken crude studies of their own. Evelyn Allison, an organist at a retirement home in Lafayette, has traipsed through South Louisiana communities scrawling blots and stick figures on maps to mark clusters of cancer cases. "Nobody else is doing anything," she says.

But doing something isn't easy. When the state planning office assigned Lawrence Lynch to edit the 1979 "State of the State" report, he included cancer-rate data and a warning about "serious problems of air, water and ground pollution." His bosses in Baton Rouge relieved him of his duties and never published the report.

Petrochemical Waste

Pollution concerns in the coastal marshes of Louisiana focus on oil-field pits and dumps, but there is another major source of oil-industry waste in the state—the large refineries and petrochemical plants. Much of their waste now is safely sunk in so-called injection wells, but not all of it.

In the 1960s and early 1970s, a commercial disposer dumped wastes from Exxon, Shell Oil and eight other big chemical producers into a giant pit below a bluff in the Mississippi River flood plain above Baton Rouge. Some of it migrated into a marsh called Devil's Swamp, now an expanse of dead cypress trees. Flood waters commonly cover it in the spring.

The companies' wastes are no longer dumped at the pit. In response to a suit by the EPA, they have agreed to excavate the soil there to a depth of one foot. A 1982 consultant's study, however, said that a reddish sludge had saturated some soil as deep as 25 feet.

Handling of chemical waste, which the EPA regulates as "hazardous," has improved in Louisiana, but the agency nevertheless says that 40% of the state's major hazardous-waste disposal facilities violate federal regulations. This is roughly double the average for all states. In a June letter to the state, the EPA said it had found several deficiencies in ground-water monitoring at three contaminated disposal sites in Louisiana, run by Rollins Environmental Services Inc., Tenneco Inc. and Martin Marietta Corp. All deny such shortcomings and say they are cleaning up all contaminants.

In addition, a third of the big refining, processing and industrial plants that generate wastes classed as hazardous have advised the state of possible ground-water contamination at one or more of their installations. For example, PPG Industries Inc. found that toxic wastes buried at its chemical plant one to two decades ago were migrating underground and entering a ship channel at a rate of 10 pounds a day. It says the material hasn't endangered any drinking water.

The Mississippi's Water

Even injection of chemical waste into dry wells isn't foolproof. One injection well, used by Tenneco for refinery wastes, has leaked contaminants into the underground sands from which New Orleans would draw an emergency drinking-water supply, according to reports by a Tenneco consultant and the state. Tenneco says that the well only contaminated a shallower aquifer and that a cleanup program is under way.

New Orleans's main source of water, the Mississippi River, is a dumping place for Tenneco and more than 100 other refiners, sewage plants, petrochemical producers and other industrial operators in Louisiana. It isn't known whether the river dumping is related, but a National Cancer Institute study in the mid-1970s showed New Orleans' cancer death rate to be 21% above the U.S. average and the highest among 11 metropolitan areas surveyed. More recenty, state water specialists began finding evidence of carcinogens in the river water.

Now Louisiana is asking the EPA to permit four fertilizer plants to dump into the Mississippi each year millions of tons of gypsum waste, containing uranium, radium and other toxic materials. An EPA staff memo to Administrator William Ruckelshaus recommends approval even though the dumping might cause the river, at low flow, to violate the federal government's water-quality standards.

A few years ago, a company called IT Corp. proposed to build in Louisiana the world's largest disposal plant for hazardous waste. It got $375,596 from the state to do a feasibility study and paid $53,836 to a consultant to help out. The consultant, however, happened to be working for the state government's own hazardous-waste division on the same project.

The Louisiana Ethics Commission last year fined the company $10,000 over the affair, which it declared had "led to actual illgotten gain by IT Corp. and others" and had "clouded the integrity of the state's hazardous-waste management program." IT, denying any conflict of interest, is appealing the commission's ruling. An IT official says, "We feel very genuinely clean and honest."

Oil's Legacy

Louisiana Marshlands, Laced With Oil Canals, Are Rapidly Vanishing

Sea Water Invades Wetlands, A Big Fish and Fur Source And Hurricane Bulwark

Plight of Local Governments

By George Getschow
And Thomas Petzinger Jr.
Staff Reporters of The Wall Street Journal

EASTERN ISLES DERNIERES, La.—On this barrier island off Louisiana's marshy coast stands a statue of the Virgin Mary, used in blessing the shrimp boats before they put out to sea. But in recent years the statue itself has had to be saved from the ocean. Three times the fishermen have moved the Virgin farther inland to escape the encroaching waters.

This is Terrebonne Parish, or county, and it is the state's largest. But it is getting smaller. Terrebonne Parish is largely made up of coastal marshes and islands, and every year eight more square miles of them disappear.

That hasn't always been the trend. For 7,000 years, geologists estimate, the vast coastal wetlands of southern Louisiana were the fastest growing land mass in North America. But for the past 30 years, these scientists say, the Louisiana marshes have rated as the continent's fastest *shrinking* land mass (See maps on page 26.)

It is a matter of some consequence. Louisiana has 40% of all the coastal wetlands in the country—three times as much marsh as low-lying Holland has. The state's 5.4 million acres of ecologically fragile wetlands supply almost one-third of the seafood produced in the U.S. Most of the shrimp caught in the Gulf of Mexico mature in this huge aquatic factory.

Third of a series of articles on Louisiana and the oil and gas industry

The marshes once produced more income in pelts than Alaska did in gold, and even today Louisiana supplies about half of North America's fur harvest. Counting recreational activities such as hunting, the Louisiana marshes annually generate well over $1 billion in revenue.

The wetlands also function as Louisiana's chief line of defense against hurricanes, so that every square mile lost brings potential flood waters closer to the 1.1 million residents of the coastal zone. To build flood-control structures that would protect as well as the marsh does would cost $10 billion, estimates Oliver Houck, an associate professor at Tulane law school and former counsel of the American Wildlife Federation.

But every 16 minutes, another acre of marshland disappears. Practically all the terrain south of New Orleans will be gone in 50 years if the destruction continues at its current rate. It isn't likely to stay at that rate, however; marshland loss has been accelerating year by year.

Canals and Levees

Geologists at Louisiana universities have a pretty good idea why, and nearly all the causes they cite involve the oil-and-gas stampede in the area. It started in the early 1930s, when Standard Oil, Texaco, Gulf Oil and others sent battalions of explorationists to blast the swamps for seismic readings and teams of dredgers to clear routes for floating drilling rigs. By the 1950s, pipeline navies were sinking 3,000 feet of steel in a day.

Over the years, the marshes have been sliced up by an estimated 12,000 miles of oilfield canals. The Gulf of Mexico's salty tide sweeps through these channels, killing the marsh grasses whose roots hold land in place. Meanwhile, the piles of dirt left alongside dredged canals retard drainage, so that naturally occurring substances accumulate to levels that are toxic to plants. And each trip through the canals and bayous by an oil-service boat—there are about 4,000 such trips a day—throws a wake that eats away a bit more.

The oil and gas industry doesn't agree that its activity is damaging the swamps. "You could eliminate oil and gas dredging, and the wetlands erosion problem won't go away," says William Bailey, a lobbyist for the Mid-Continent Oil & Gas Association, a trade group. He and others from the industry lay the blame on two other important factors that university geologists cite: land subsidence and the building of flood-control levees. Subsidence lets in more salt water, while levees interfere with the deposit of Mississippi River silt.

Sinking Faster

Yet these forces, too, are related to oil and gas operations. The levees, for instance, are built not just to protect settled areas but also to promote navigation by merchant ships, crude-oil tankers and other vessels.

As for land subsidence, it has been going on for centuries but apparently has accelerated sharply in recent years. Using tide-gauge records and carbon dating of sediment, some scientists have estimated that after thousands of years of sinking about eight inches a century (an amount for which silting more than compensated), the land now is subsiding at a rate of at least 24 inches a century. They suspect that one reason is the draining of oil and gas reservoirs.

But the more such scientists study marshland loss, the more of it they attribute to the dredging of canals. A 1973 study laid 39% of the loss to these canals; a 1979 study put the figure at 69%; and last year, a study by LSU's Center for Wetlands Resources concluded that canals may account for 89% of the marshland loss. The canals are "a continuing legacy that extends decades beyond the time of their construction," the study said.

The swamp's shrinkage and the sea's encroachment are grist for the academicians, but the process is real to coastal residents. At the Leeville Lounge in Leeville, La., the juke box and the cigarette machine have been put up on boxes to dodge the rising waters. Crypts at a graveyard are slipping little by little into the bayou. Debbie Billiot, who lives nearby, opened the door to her house trailer recently and the water was so high a snake slithered in.

A major navigation canal called the Mississippi River Gulf Outlet has more than doubled in width in some areas and has washed away a road and much of the land that used to be a town called Shell Beach. "We got the name but we ain't got the beach," says fisherman Frank Campo Jr., watching the wake of an oceangoing vessel cascade into intersecting bayous.

In places the protective barrier islands, once large expanses where tourists vacationed and company employees played softball, have shrunk to slender sand bars or have vanished. If the islands disappear, as is predicted in 30 years or so, it is anyone's guess what will happen to the erosion rate at the shore.

Parishes' Plight

Some local officials are growing desperate. James Edmonson, the head of Terrebonne Parish's effort to save the islands, on a recent day is inspecting some stakes he placed a month earlier on Eastern Isles Dernieres. He is shocked to find waves lapping over them. Mr. Edmonson assures a fisherman, Hebert Price, that the parish will put up more snow fence and plant more dune grass soon. "It could be gone by then," Mr. Price mutters. "The gulf is eating us alive."

Terrebonne Parish has begun preparing residents for the day when large bond issues may be needed to finance hurricane walls. Billboards teach people "what a barrier island does for you," and eighth-graders get instruction on the importance of preserving marshland.

But local governments have little power to control marsh development. When a coastal county next to New Orleans, St. Bernard Parish, tried to assume some control over dredging permits, the state sued it for overstepping its authority. Nor do local and statewide coastal advisory commissions have any clout, says John Uhl, a concrete contractor who serves on such boards. "We won't be able to manage the wetlands as long as the oil companies hold sway," he believes.

Oil and gas development could coexist with the marsh if only oil companies used more environmentally sensitive drilling procedures, argues Sherwood Gagliano, a former LSU geology professor who today helps landowners and local governments try to save their property. The problem, as he sees it, is the attitude of many companies that "you take, take, take and give nothing."

The state does have marshland regulations, but the oil and gas industry helped to draft them. As a result, the rules were held to "a lot of vague, innocuous language," says Winston Day, an LSU law professor and former state environmental regulator.

Assembly Line

Louisiana has never denied an oil company's application for permission to dredge through the marshes, people close to the process say. Dredging permits are approved by the dozen each month. "They look like McDonald's processing hamburgers," says Donald Boesch, the head of a marine laboratory in Terrebonne Parish.

Coastal dredging also has to be approved by the U.S. Army Corps of Engineers, but it, too, has apparently never denied a request in Louisiana. Promoting oil and gas development and cutting red tape are both national policies, federal officials explain. Oil companies "go through the permit procedure, but in effect they get what they want anyway," a member of the Corps of Engineers staff in New Orleans says.

The U.S. will give states $34 million for coastal-protection programs this year, including $2 million for Louisiana. But U.S. guidelines are flexible, and the National Oceanic and Atmospheric Administration, which dispenses the funds, lets states set their own preservation and development priorities. The agency's 1983 evaluation found "significant problems" with Louisiana's coastal regulatory program and took note of "deep frustration" by local governments.

The Lousiana Coastal Commission, an appeals body that overseas marshland regulation until it was disbanded recently, was for years largely made up of people whose livelihoods depended on the oil and gas industry. But last year seven members, including the chairman, were charged by the state Ethics Commission with violating the state's ethics code by having extensive business dealings with companies they regulated.

Gerald Bordelon, the chairman, acknowledged during an Ethics Commission hearing that he was affiliated with or part owner of 10 oil-field service concerns that "worked for every major oil company"—including several for which his commission approved coastal use permits. Mr. Bordelon was found guilty of violating the ethics law and told he must either leave the commission or get rid of his business interests. He and the six others choose to resign.

Shell Dredging

There is another kind of dredging in Louisiana coastal regions, called shell dredging. Operators gather tons of seashells each day by hauling 400-foot draglines through the

coastal marshes and in Lake Pontchartrain near New Orleans. They sell the shells for use in petrochemical processes and in construction, including building oil-field roads and stabilizing oil and gas production platforms. The activity is opposed by many fishermen and environmentalists on the grounds that the extensive dredging destroys shrimp and oyster habitats and promotes marshland erosion.

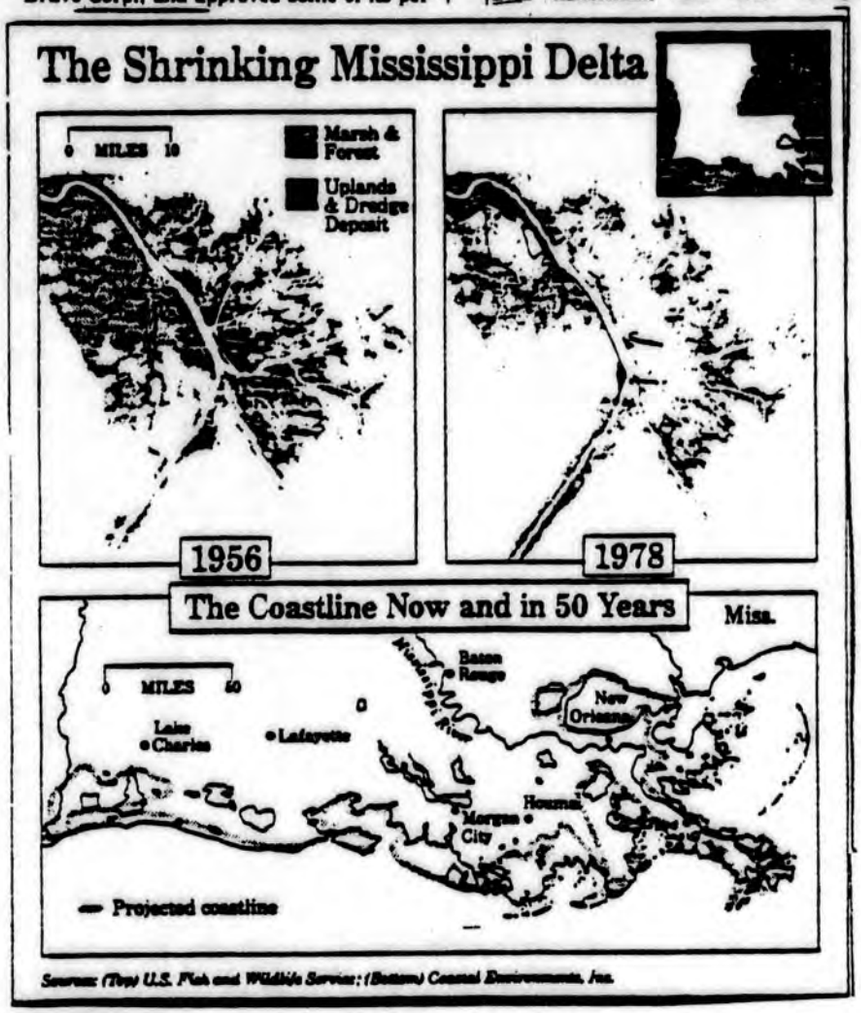
Mr. Bordelon, while he was still chairman of the Coastal Commission, did marine-transportation and machine-shop work for a shell dredger, the Radcliff Materials unit of Dravo Corp., and approved some of its permit applications. He also backed the state wildlife and fisheries secretary at the time, Jesse Guidry, in opposing an effort to restrict shell dredgers.

Mr. Guidry took an unusual step for a regulator last year when he testified before a natural-resources committee of the legislature and disputed the claims that shell dredging damages shrimp and oyster habitats (although some states have banned shell dredging to protect fish habitat). Marold Schoeffler, an environmentalist and head of a group opposed to shell dredging, says that "the shrimpers were astonished and shocked that their chief guardian would stand up and defend the shell-dredging industry."

Few realized, however, that Mr. Guidry had married the longtime former chief lobbist for the shell dredgers' association. Asked about this, Mr. Guidry says that "she stopped working for the industry quite a while before we got married," and that "I didn't know who she worked for at the time we dated."

The deterioration of the marshlands has turned some ordinary citizens into activists. Nolan Bergeron of Houma never have much thought to environmental matters during his years as an oil-field technician. But he is an avid fisherman, and while navigating through a labyrinth of marshland canals one day, he says, he was struck with the thought that "good God, this is all going to be destroyed one day." Now, as a Terrebonne Parish councilman, he is fighting to draw state officials' attention to what is happening to the wetlands.

The fight is uphill. Mr. Bergeron says he "could have filled a courthouse with people" to oppose a Tenneco Inc. dredging proposal if he had known its scope. But it was too late by the time he learned that Tenneco's dredging permit, when linked with separately issued permits, would result in a 6.7-mile pathway.



The long canal, to be created mostly by deepening existing canals and bayous, "will change the water flow of the entire area," Mr. Bergeron asserts. "Now you're going to have more salt water coming in." Tenneco says it has installed dams to prevent saltwater intrusion and has complied in all ways with state regulations.

Salt water was also a concern of another citizen-activist, Houma pharmacist Donald Landry. He spent years in a losing fight against plans to dredge a 50-mile marshland navigation channel, one wide enough to giant deep-water drilling platforms. He fears that the new marshland highway, as wide in some stretches as the Panama Canal, will worsen Houma's already-salty public water supply.

Spilled Oil

Louisiana had twice as many reported oil spills as any other state from 1980 through last year, the U.S. Coast Guard says, a total of 8,600 spills. In 1980-81, the spills dumped 15 million gallons of oil into rivers and coastal waters. When such spills occur in swamps, numberous studies show, the ill effects are long lasting because the water is shallow and slow-moving.

A state biologist's report of an inspection of some Terrebonne Parish oil fields in 1980 tells of oil and brine spewing directly into the marshes from broken pipelines and damaged waste-pit levees and storage tanks. Near a leaking brine pit of Union Texas Petroleum, wrote the biologist, Kerry St. Pe, "it is obvious that much of the adjacent fresh marsh has been destroyed." Union Texas, which is a subsidiary of Allied Corp., says it has since upgraded its saltwater disposal system to protect the marshes.

Mr. St. Pe also found a broken pipeline that formed a pool of oil and brine, but—as is often the case—the owner couldn't be determined. The difficulty of identifying owners has also hobbled fishermen who have sought to sue when their boats or nets have been snagged by a section of the thousands of miles of pipeline stems submerged in the marshes.

"It's a spaghetti bowl out there," says Mariano Hinojosa, the head of Louisiana's pipeline-regulation office. "They're sinking trawlers better than a U-boat ever could."

The U.S. Fish and Wildlife Service says total seafood production in the wetlands remains strong, but only because there are many more boats in the water; yields per boat have fallen an estimated 90% since the 1940s. The agency also believes that marshland erosion has begun to alter migration and nesting patterns of ducks and geese in the Louisiana marshes, the winter home for more waterfowl than any other spot on the continent.

But environmentalism isn't a strong movement in this state where oil pays so many. The state's Department of Wildlife and Fisheries draws nearly half of its $35 million annual budget from oil and gas royalties and collects $1.5 million in shell-dredging royalties. The Sierra Club branch in Lafayette has several members from the oil industry, and "it's definitely a limiting factor," says Paul Bickhart, a former Tenneco geologist who served on the chapter's board. Even a marshland refuge of the National Audubon Society contains oil-field canals, and the society gets $415,000 a year in oil and gas royalties from Conoco Inc.

One marsh the environmentalists have especially wanted to preserve is the Atchafalaya Basin, the largest river—overflow swamp in the country. So former Gov. David Treen and Dow Chemical Co. won a lot of good will three years ago when they negotiated an agreement under which Dow gave the state 46,000 acres in the swamp, a move Mr. Treen called "an outstanding example of corporate citizenship."

But when the property agreement arrived at the state land office months after the fanfare, "it was a shock," says Steve Zerangue, the head of the office. The bureaucrats discovered that Dow shared ownership of one-third of the gift land with other interests, some of whom were embroiled in title disputes with the company. The state inherited these disputes, along with the cost of land surveys required to settle them. With the state defending the surface rights, Dow's mineral rights (which it retained) would be defended free.

Michael Bourgeois, deputy secretary of natural resources, says it would cost $2 million to clarify the titles, and the state has already been in court 20 times defending citizens detained for trespassing on disputed lands that Gov. Treen had said were public. "It reminds me of a joke: 'Do you want to buy some swamp land?'" Mr. Bourgeois says.

Asked about the matter, Dow Chemical says it has "a workable program coming to pass that will resolve these things." A spokesman also says that the benefit of the gift to the state goes far beyond the benefit to Dow. Former Gov. Treen insists the donation was "a bonanza for the state."

Meanwhile, Louisiana environmentalists have finally obtained restrictions on timber clear-cutting in the Atchafalaya Basin, as well as curbs on the conversion of wetlands to dry. But that is as far as they got. "Oil and gas companies were given a free rein in the basin," says Foster Sanders, a lawyer who headed the Save the Atchafalaya Basin committee. He adds, "Anybody who thinks the oil and gas companies aren't omnipotent in Louisiana is just lying."

10/25
page 1

Oil's Legacy

In Louisiana Oil Rush, One Thing Left Behind Was Culture of Cajuns

Laid Off as Wells Run Dry, They Discover Fish, Fur And Traditions Depleted

Stigma of Speaking French

By George Getschow
And Thomas Petzinger Jr.
Staff Reporters of The Wall Street Journal

BAYOU BENOIT, La.—Roy Blanchard, third-generation crawfisherman, once gave up his boat and traps for a steady job on the oil rigs. The money was good, he says, but "fishing is in my blood. I always had a longing to go back to the swamp."

He did go back, but as the 44-year-old Cajun guides his boat through the bayous these days, he is painfully aware that the swamp isn't what it used to be. Besides cypress and Spanish moss, he passes oil-field crew boats and pumping stations, storage tanks and pipeline "danger" signs. Amid the occasional rumble of dynamite exploded for seismic readings, he takes solace in knowing he soon will reach Red Eye Swamp, a backwater so remote his only visitor is a hootowl he feeds from his hand.

Today, however, there is an intruder in his sanctuary. It is a thick black electric cable strung above his crawfish traps. The cable is there to tell oil men what the geology is, but what it tells Mr. Blanchard is that the drilling rigs aren't far behind.

Last of a series of articles on Louisiana and the oil and gas industry

"It looks like they're going to take over the swamp," the fisherman says, his eyes moistening. "I know we got to have oil. I got to have oil myself. But places like this—they could show more respect. This swamp was made by God, and once it's gone, it's forever."

As the swamp goes, so goes the Cajuns's way of life. For a century, these French-speaking people lived a life almost frozen in time. They had come in the late 1700s, fleeing British rule over their colony of Acadia in what now is Nova Scotia, Canada. South Louisiana's remote swamps isolated the Acadians as they pursued their self-sufficient, simple lives of fishing, trapping muskrats and catching crawfish.

Then came the oil boom.

The oil men who surged into South Louisiana in the 1930s to seek their fortunes often disparaged the swampers. They called the Cajuns "coon-asses" and ridiculed their quaint customs and clumsy English. At first the Cajuns were upset with the intruders. But, recalls J.P. Owens, an 86-year-old former Texas wildcatter, "when they found out what we were paying, the Cajuns stopped complaining."

Rig City

Like Mr. Blanchard, most of the swampers and subsistence farmers eventually welcomed the outsiders—"Texians," they called them—and Cajun workers became the backbone of the oil and gas industry's big buildup in South Louisiana in the 1950s. Many Cajuns converted their shrimp boats to crew boats and leased or sold their land, often for what now seems a pittance.

Today, the imprint of petroleum is everywhere in South Louisiana, from the veritable city of production platforms in the Gulf of Mexico to a sprawling petrochemical complex along the Mississippi River. But Big Oil is beginning to pack up and leave the Louisiana fields. With oil and gas reserves drying up, and the jobs with them, a wave of dissention and soul-searching is sweeping through Cajun society. The question many Cajuns are asking themselves is whether they gave up their heritage too hastily.

Some of them mourn the withering of their language and customs over the past half-century. Others talk of how the seven-day-on, seven-day-off work schedules pulled apart their close family ties. And as thousands of laid-off Cajun workers return from the drilling rigs, they are anguished to find their ancestral fishing grounds despoiled by years of furious oil and gas production.

Many Regrets

Many Cajuns admit that they were more than willing participants in the degradation of their land. For 31 years on the rigs, Severin Broussard keeps quiet about the marsh dredging and waste dumping while he collected a steady paycheck. Then one day an oil-field accident broke his back. Now, at 76, he is trying to supplement a $34-a-month pension from Union Oil Co. of California by pulling catfish from a polluted lake.

"I feel worse about what the oil industry did to the lake than about what they did to my back," the old Cajun says. "I can make out, but what about future generations? They can't make it fishing because the fishing grounds have been destroyed, and now the oil industry is folding up and leaving. I feel sad, very sad, because I sold my heritage to the oil industry and now it's gone."

Mr. Broussard's 50-year-old son, Max, sees the changes from the perspective of a Catholic priest. An annual autumn duty of Father Broussard's predecessors was to give the special blessing to the shrimp fleet at Morgan City's fall festival. But at last month's festivities, he blessed a navy of oil-field supply boats.

"In 30 years we went from being a self-sufficient society to one totally dependent on the oil industry," he says. "It's a shame, but none of us ever stopped to question what was happening. We just jumped in and be-

came part of the money society."

Of course, oil by itself could never have transformed Cajun society so radically. Public education, automobiles, telephones and television, those great homogenizers, also exposed Cajuns to the way people lived outside the swamps. But the oil influx meant the modern ways were not only known to Cajuns but illustrated in their midst—and, perhaps more important, affordable.

"Television and the media gave Cajuns a lot of ideas about a different and better way of life, but the oil industry made it possible," says Glenn Conrad, who heads the University of Southwestern Louisiana's Center for Louisiana Studies in Lafayette.

Nowhere is the change clearer than in Lafayette itself, once the quaint Cajun capital of Louisiana. Today the sprawling, traffic-snarled town looks more like a mini-Houston. Suburban office centers and oilfield service companies have gobbled up land where cotton gins and sugar mills stood. A 150-acre tract that once was a nursery is a cluster of hotels and office buildings called The Oil Center. Hundreds of out-of-state oil companies do business here.

The town, swollen to a city of nearly 140,000, now includes some very un-Cajun institutions, places like the posh and exclusive Petroleum Club. But Cajuns, too, are among its diners. Cajuns ski in Colorado with the Cajun Ski Club, which claims to be the largest ski club in the country. Bumper stickers proclaim that "Cajun country is oil country."

Grown Up and Gone

But Lafayette also is a town of leave-takings, a place where many spend half their lives on offshore drilling rigs and production platforms. Twenty-five years ago, Lennis Hebert lived in the country and dug potatoes for $5 a day. Then he got a job assembling and repairing wellheads, and ever since he has been on call round the clock.

"I make a lot more money than I would have if I had stayed on the farm," he says. "But my kids are grown up now and I didn't have time to enjoy them. I was always away on the job."

Mr. Hebert, who has risen to division manager of a giant oil-field supply company, knows a lot of affluent Cajuns like himself. "They've got big campers, bass boats and swimming pools, but they had to spend half their lifetime offshore to pay for them. When I was growing up on the farm, money didn't mean much to us, but oil's changed us. Now, everyone's trying to keep up with the Joneses."

The changes he speaks of occurred all across Acadiana, a loose dominion of 24 Cajun parishes, or counties, in South Louisiana. When petrodollars began flowing into French Louisiana, Cajuns accustomed to the spotty income of fishing or trapping adopted the slogan *laissez les bon temps rouler*—let the good times roll. Round-the-clock festivals of music and dance, with lots of beer and *boudin* (spicy pork sausage), became regular weekend reminders that the good times had come.

Today, local Cajun harvest festivals and *boucheries*—neighborhood pig roasts—have been transformed into slick tourist attractions, complete with souvenir stands, carnival shows and country-and-western bands. A tiny boucherie in St. Martinville, started by a Cajun butcher to keep the dying custom alive, now is called by its publicists La Grande Boucherie des Cajuns. It brings in 30,000 tourists a day to drink, to eat, drink and party.

Super Coon

"It's just a money-making thing now," says Louis Durand, who ran the bourcherie last year. Golden Meadow's Super Coon Sunday, sponsored by the oil-dominated Chamber of Commerce, is a raucous affair featuring beer-drinking and other contests for the title of Super Coon.

Lafayette's Festivals Acadiens, begun as a Cajun heritage revival, now is a cultural gumbo that mixes Cajun *fais do-dos* (dances) and *chanky chank* (music) with alien imports like Ferris wheels, craft show and Haagen-Dazs ice cream. Leona Guirard, 76, used to sit in the Cajun storytellers' booth at the festival, but not anymore. "It's become a carnival for people who have nothing in common," she says.

Before the swampers catapulted into modern society, generations of Cajun parents kept their families close by building small wooden homes next door for married children and connecting each to the main home with a wooden walkway across the marsh. The people of Cajun communities were bound together by their history of exile, their French patois by their temperament, what has often seemed to outsiders a naive, happy-go-lucky approach to life.

But such traits also left them vulnerable. Glenn Pitre, who is a Cajun from Cut Off, La., but went to Harvard, says, "Cajuns were an isolated peasant society with little or no education. They weren't equipped to deal with the sudden influx of oil companies making promises in a language that 90% of them didn't understand."

No French

The Cajuns quickly discovered that their language was a liability out on the oil rigs and supply boats. They were told that any communication mixup could mean a costly mishap, perhaps a fatal one. Until they learned English, Cajuns could only expect to get dirty, dangerous jobs as roustabouts or roughnecks.

Before long, Cajun schoolteachers were punishing Cajun children for saying *merci* instead of thank you. The shame Cajuns came to feel for their linguistic heritage lingers today in French Louisiana, and the language is rapidly disappearing.

Roman Catholicism was once as integral a part of Cajuns' heritage as their much-noted joie de vivre. The church's bazaars, card games and Mardi gras anchored Cajuns' social lives. But the oil and gas boom brought in Protestant evangelists, mostly

Baptists, from Texas, Oklahoma and other Bible Belt states. They condemned the drinking, gambling and merrymaking as sinful and challenged the Cajuns to defend their ways. Many couldn't, and today Protestant churches flourish throughout Acadiana.

Father Columban Lesquiuit, a Catholic priest in Catahoula, speaks bitterly about "those Protestants" who moved in and complained about the public schools' providing religious instruction and time off to go to Mass. "It was against the law, but no one complained before because everyone was Catholic," he says. "Then the Protestants came here and forced us to stop."

The Rev. Dore Langley, a Baptist minister in St. Martinville, says that "it's been difficult to get them to give up their good-times ethos, because it's a way of life with them." But he says he has managed to convert "a good percentage" of Catholic Cajuns to the Baptist faith. "The oil industry helped us tremendously," he says, "because it strengthened our numbers and our resolve to preach to the community."

Politics Shift

The industry also strengthened the numbers of another group foreign to Cajuns: Republicans. Acadiana had long been a stronghold of populist, Democratic politics, but after the oil influx the region in the 1950s got its first Republican officeholders. Alfred Lamson, who claims that he was the first, says proudly, "We've become homogeneous. We're not just oil people any more, or just Cajuns. We're all people of Acadiana."

Still, Cajuns sometimes feel a little like oddities in their own land. Last year Gulf Oil service stations distributed "crawgater" cups, portraying Cajuns as people hatched from the eggs of those mythical swamp creatures. Gulf halted the promotion after it was denounced as demeaning, and it says it didn't intend any slight to Cajuns.

The oil and gas industry has long sought to smooth relations with the Cajuns and to play down reports of friction. In Morgan City, the annual Shrimp Festival was years ago renamed the Shrimp and Petroleum Festival. A statue in a city park depicts a shrimp lovingly curled around a drilling rig. In Jennings, the Oil and Gas Museum displays an old Cajun cottage alongside the replica of a derrick.

As far back as the 1940s, Exxon underwrite a film called "Louisiana Story" about a Cajun trapping family's idyllic encounters with the crew of an Exxon drilling rig. The preface noted that the film showed "how the impact of industry may come gently to a land, without disturbing overmuch the harmony between land and people."

French Renaissance

James Domengeaux, a wealthy oil man and former congressman from Lafayette, sees things much the same way. "The oil industry hasn't disturbed Cajun society in the slightest," he says, adding that Anglo oil men are among the strongst supporters of a movement he heads to energize Cajun culture. The movement, called French Renaissance, imports about 200 tutors from Europe each year to teach French in public schools, and it sponsors overseas scholarships and "twinning ceremonies" between Cajun communities and French-speaking foreign towns.

But its efforts, such as teaching Parisian French to Cajuns, is viewed with skepticism by some, including Cajun radio personality Randy Whatley. "It's an elitist movement that's trying to supplant Cajun society with a wine-and-cheese-set society," he says. Mr. Whatley heads a counter-movement, dedicated to averting "cultural and linguistic genocide," that teaches *Cajun* French and publishes Cajun literature.

Neither movement, however, has much meaning to the crawfishermen and muskrat trappers out in the bayous. They are more worried about the condition of the swamps.

The deterioration of those marshlands as fish and fur habitat is evident at an 18,000-acre marsh near Golden Meadow, where oil and gas drilling has been going on for 30 years. Alex Plaisance, whose father was in charge of trapping there for the Michigan company that owns the marsh, went in the business of canal dredging in the 1950s. He helped rip up the marshes to make way for drilling rigs and supply boats from Texaco and other companies.

Today his son Alex Plaisance Jr. is the manager of the property—such as it is. One-fifth of the marsh has vanished, and salt water admitted by the canals is eating away at the rest. An area from which his grandfather and a crew of 25 trappers harvested a million muskrats and minks a year now barely supports five local trappers. "Everything that isn't dead is dying," Mr. Plaisance says.

With oil production in the marsh declining, along with royalties to the out-of-state owner, the Michigan company has decided to install dams, a marine laboratory and other projects to try to revive the population of shrimp, muskrats and frogs. It is the kind of expenditure—$2.5 million—that only a large landowner could afford.

But as the owners of the marshes seek to replace their declining oil-royalty income, some Cajun swampers suddenly are finding themselves no longer welcome. "No trespassing" signs have recently been posted on thousands of acres, and in some cases even armed guards. It is a development that angers Loulan Pitre, a retired boat captain from the town of Cut Off.

"The oil and gas is running out, and so now they want the swamp all to themselves," he says. "Bayous that my grandfather used to fish in are being blocked off for commercial fish farms. Now what are the Cajuns supposed to do? Starve to death?"

As oil-field layoffs mount, thousands of Cajuns seek to return to the marshes for a living, only to find them shrunken, polluted with drilling waste, littered with submerged steel—and frequently off-limits anyway. Tension is in the air.

Crawfish Strike

The competition for crawfish has become so fierce that fishermen are selling even the tiniest ones they catch. The volume of crawfish that the many new fishermen are bringing in has caused prices to fall. Recently, hundreds of angry fishermen struck the processing plants. Crawfish buyers faced an ugly atmosphere hitherto unknown in the bayou communities, one of slashed tires and threats.

"A lot of hard feelings came out during the strike," says Sidney Guidry, a crawfish processor in Catahoula. "People are bitter because the oil industry is dying here and it's taking the crawfishing industry down with it."

Some upwardly mobile Cajuns regret having built big brick houses with bank money. "A lot of young farmers and fishermen who found oil jobs bought fancy $60,000 homes, thinking the oil boom would last forever," says Camile Blanchard, an oil-field worker who still has his job. "But now the banks are foreclosing on some of them who've lost their jobs." Teche Federal Savings & Loan Association in Franklin, La., says its foreclosures have soared.

And in Morgan City, Father Broussard finds that divorce, drug addiction, social diseases and suicide have gone from virtually nonexistent to almost commonplace. Even those who still have their oil-field jobs are affected, he says, as neighborhood get-togethers increasingly degenerate into weekend-long orgies of gluttony, drunkenness and drugs.

"Cajuns find strange ways of expressing anger and distress," the priest says. "All the frenetic partying and pleasure-taking masks fears that their prosperity is threatened. They're saying, 'Let's enjoy it while we can because it ain't going to be around long.' "

MEMORANDUM State of Alaska

TO: Bill Ross
Commissioner

DATE: Febuary 19, 1985

FILE NO:

TELEPHONE NO: 465-2640

FROM: Keith Kelton
Director
Division of Environmental Quality

SUBJECT: Spill Expense Reserve Account
History and Status Report

In 1976, the Alaska Legislature passed its first major legislation addressing the problem of oil spills. It required oil spill contingency plans, proof of financial responsibility for cleanup efforts, as well as provisions for charges against terminal users and oil tankers based on the degree of spill risk their equipment and operations presented. Funds collected from the program were to be used to develop a contingency fund to meet cleanup costs in the event of a major spill. The fund was struck down by the courts, leaving the other two provisions intact.

In order to maintain the State's oil pollution control program, a new bill, HB 205, was introduced by the 1979 Legislature. This legislation extended the contingency plans and financial responsibility to offshore exploration and production facilities, and oil barges. The new legislation was to correct the defects in the 1976 law and ensure that Alaska had a strong program for preventing and mitigating the effects of an oil spill. Chapter 120, SLA 80, Section 53 provided $1,542,600 for HB 205 (FY 80), and provided a $1 million expense reserve and a fiscal note to start and fund the Oil Pollution Control Program. The Spill Expense Reserve was to pay costs directly involved in the abatement, containment, and removal of a discharge of oil or hazardous substances: the fiscal note provided for staff, equipment, and training.

House Journal Supplement No. 43 indicated that, "the cleanup reserve be maintained by capital appropriation at the $1 million level. The balance of the reserve should carry over from year to year. Subsequent budget requests may be less than $1 million." An additional $250,000 was appropriated in 1981 and another $250,000 in 1984.

Since the inception of the program, hundreds of spills have been cleaned up. Most of the expenses are charged directly to the spiller. When the spiller was unknown or the spill incident required immediate emergency action, the spill reserve was used to fund the cleanup work.

Some spills involve action by the courts and the Attorney General's Office. The account balance on January 31, 1985, was $410,080.74. There are several spills that are still in the litigation or pre-litigation stages and may require sizable funding. The Nome Gasoline Spill has cost over $680,000 to date.

On December 27, 1984, we received a reimbursement of $597,896.07 for spill expenses from the U.S. Coast Guard for the Nome Spill; this is the first time that the state has received federal funds for reimbursement of spill expenses.

On July 14, 1983, a settlement/agreement was reached between the State and the Alyeska Pipeline Service Company on the two spills that occurred over four years prior, the Atigun Pass Spill and the Mile Post 734 Spill. The settlement was for $350,000.

AS 46.03.758(k) states that "penalties received by the state under this section shall be deposited in the general fund and credited to a special account called the 'oil spill mitigation account.' The legislature may annually appropriate from the spill mitigation account a sum equivalent to the amount of penalties received under this section for the calendar year preceding the legislative session in which the appropriation is made, the appropriation to be made for the purpose of restoring and enhancing environments affected by oil pollution, including but not limited to the funding of aquaculture projects."

Amount expended in FY 84		$ 785,112.62
Amount expended for FY 85 to date		69,827.18
	TOTAL	$ 854,939.80
Amount recovered FY 84		354,541.73
Amount recovered FY 85 to date		608,885.58
	TOTAL	$ 963,427.31

We are asking for a capital appropriation of $550.0 for FY 86 to bring the Spill Reserve Account back up the $1.0 million level.

4

PROJECT TITLE: Spill Expense Reserve Account	AGENCY PRIORITY: __ __ OF __ __
LOCATION: Statewide	
ELECTION DISTRICT: 99	FISCAL YEAR: 8 6 DURATION: continuing
APPROPRIATION TO: Alaska Department of Environmental Conservation	PROGRAM: Oil Pollution Control

	FUNDING:	CAPITAL REQUEST	REVISED REQUEST	OPERATING COSTS
1002	FEDERAL RECEIPTS			
1003	GENERAL FUND MATCH			
1004	GENERAL FUND	550.0		
1005	INTER-AGENCY RECEIPTS			
1028	PROGRAM RECEIPTS			
	TOTALS:	550.0		
	POSITIONS (PFT):			-0-

PROJECT DESCRIPTION AND JUSTIFICATION:

LINE (1) To fund cleanup of oil or hazardous substance on land and inland waters of the state, account originated
LINE (2) in FY 80 by HB250 with $1 million and appropriations in FY 81 and 84 of $250.0 each. HJ Supplement 40
LINE (3) states account to be maintained at $1 million, funds to be continuing from year to year. AS 46.03.758(k)
LINE (4) states appropriations may be made annually, revenue from fines and forfeitures deposited to General Fund.

CP1 CAPITAL PROJECTS DESCRIPTION
DATA ENTRY WORKSHEET
(6/84)-cp1

WORKSHEET

FY 86

PAGE 1 OF 2
REVISED DATE

Since the inception of the program, hundreds of spills have been cleaned up. Most of the expenses are charged to the spiller. If the spiller is unknown or the spill incident requires immediate emergency action, the spill reserve account is used to fund the cleanup work.

Some spills involve action by the courts and the Attorney General's Office. The account balance at this time is $447.0. There are several spills that have not been cleaned up completely and may require sizable funding. The Nome Gasoline Spill has cost over $680.0 to date and the North Slope Salvage Spill has cost over $38.0, both are under litigation.

From July 1980 to the end of August 1984, the amount received from spillers has been more than $470.0. Reimbursement from federal funds for the major part of the Nome Spill is expected upon completion of an audit by the U.S. Coast Guard.

We are asking for a capital appropriation of $550.0 for FY 86 to bring the Spill Reserve Account back up to the $1 million level.

CP1 ADDITIONAL EXPLANATION FORM

(6/84)-ael

AGENCY Environmental Conservation

PROGRAM NRMEC

BRU Environmental Conservation

COMPONENT Oil Pollution Control

REVISED DATE

FY 86

EXPLAIN THE REMAINING FIVE YEARS OF THE SIX-YEAR CAPITAL IMPROVEMENT PLAN (FY 87, 88, 89, 90, 91). DESCRIBE THE NEEDS TO BE MET IN THE COMING YEARS AND THE PROJECTS OR TYPES OF PROJECTS WHICH MAY BE REQUESTED TO MEET THOSE NEEDS. PLEASE INCLUDE MAJOR MAINTENANCE OR REPLACEMENT PROJECTS. ESTIMATE THE APPROXIMATE COST OF THE PROJECTS. IF THE PROJECTS ARE TO OCCUR SO FAR IN THE FUTURE OR ARE OF SUCH AN INDETERMINATE NATURE THAT A COST ESTIMATE WOULD NOT BE RELIABLE, PLEASE INDICATE THIS FACT. NOTE WHETHER A SIGNIFICANT PORTION OF THE TOTAL FUNDING WILL COME FROM NON-GENERAL FUND SOURCES. MAKE SPECIFIC REFERENCE TO FORMAL PLANNING DOCUMENTS USED AS A BASE FOR THIS DISCUSSION (FOR EXAMPLE, THE LONG-RANGE STATE TRANSPORTATION PLAN). PLEASE ATTACH A COPY OF PUBLISHED MATERIALS.

During the next five years, we would like to have yearly appropriations from the general fund that would keep the account at the $1 million level. All of the projects are of an indeterminate nature since we cannot predict when a spill will occur or its severity, location, chemical composition, or the environmental implications involved.

Chapter 116 SLA 1980 states "the two main purposes of this law are to provide protection to Alaskans from damage from oil spills and to provide the ability to clean up a spill and restore damaged areas."

The increase in oil and chemical development, increase in traffic and shipment of product, increased population and land development all lead to a broader spill experience potential. Our projection for following years will be based on records, experience and continuing projects.

AS 46.04.010 states the Department shall promptly seek reimbursement, either under 46.03.760(e) or from an applicable federal fund, for the expenses it incurs in cleaning up or containing a discharge of oil. Monies received under this section shall be deposited in the general fund.

In most cases the amount of requested appropriation will be offset by revenue received from fines and forfeitures.

CP2 CAPITAL PROJECTS PLAN FY 87-FY 90 EXPLANATION

(6/84)-cp2

AGENCY Environmental Conservation

PROGRAM Oil Pollution Control

PAGE OF

REVISED DATE

FY 86

CH, SLA, PAGE, LINE, OR RP	PROJECT TITLE AND LOCATION	AMOUNT AUTHORIZED	ESTIMATED TOTAL EXPENDITURE THROUGH JUNE 1984	PLANNED EXPENDITURE THROUGH COMPLETION	EST. COMP. DATE	STATUS
CH 82/81 P 141 L7	Spill Reserve Account Statewide	250.0	25.5	224.5		These are continuing funds

CP3 STATUS OF CURRENTLY AUTHORIZED CAPITAL PROJECTS

(6/84)-cp3

AGENCY Environmental Conservation

PAGE OF

REVISED DATE

FY 86

4. State Hazardous Waste Disposal Day Campaign

- This is the third year that ADEC has conducted this service to assure proper disposal of unregulated hazardous wastes from households and small businesses. This year ADEC requested the 4 municipalities contribute a percentage toward the cleanup. Testing and disposal costs are increasing so rapidly that the state will need to request a significant amount from municipalities next year or reduce services.

II. Site Investigations of Potentially Hazardous Waste Disposal

- In Alaska there are currently 97 potential uncontrolled hazardous waste sites identified on an EPA list. 45 of those sites are being investigated by the Department of Defense, 7 sites are being investigated by EPA, and during the past year ADEC performed preliminary investigations at 45 sites.

- ADEC ranked the 50 sites as to the significance of potential hazards and will be further evaluating 15 of the high ranking sites this summer. These site investigations may disclose potential or actual environmental contamination causing the site(s) to be listed as a federal Superfund site.

- To cope with any necessary remedial action, Alaska will need to establish a state site cleanup fund and hire additional staff to manage any corrective actions required at each site.

III. Drilling Muds and Fluids

- Drilling muds and fluids are excluded from regulation as a hazardous waste under both the federal and state hazardous waste statutes.

- Drilling muds are managed in Alaska under existing solid waste regulations for land disposal. Muds and fluids generated off-shore are regulated either under a state waste water discharge permit or a federal NPDES permits. In many cases muds are stored for re-use and the fluids reinjected into the formation.

- The existing statutes are strong enough to allow development of the states resources and minimize risks to the public and the environment. ADEC is developing internal guidelines for permit review and stipulations to assure consistency as well as protection of the environment considering the diverse geological and climatalogical conditions found in the state.

IV. Waste Oil

1. Oil Spill Expense Reserve

- Established by the 1980 legislature at $1.0 million level for the cleanup and litigation of coastal, inland, and underground oil spills.

- Current balance is $385,000.

- Requested $550,000 for FY 86.

- Expenditures to date - $1.12 million.
  Revenues to date - $1.10 million.

- A major spill cleanup, such as at Nome, can cost $700,000

- Anticipated FY 86 expenditures from the reserve is $300,000.

2. Road Oiling Regulations

- New regulations will become effective May 2, 1985.

- Regulations prohibit the use of contaminated oil on roads as a dust suppressant.

- Regulations define prohibited levels of PCBs, lead, volatile aromatics, and halogenated organics in road oil.

- Analytical testing is required of all road oil and sample analysis must be submitted to DEC before road oil permit is granted.

- Approximately 2 million gallons of waste oil is generated in Alaska per year.

- Approximately 1 million gallons is applied annually to roads in Alaska.

- EPA has stated their intent to ban road oiling throughout the U.S. by May 1987.

- EPA is now reviewing the federal hazardous and solid waste amendments of 1984 to determine whether Alaska and more than 30 other states will be allowed to issue road oiling permits this summer.

- Alternate dust suppressants exist and are in use throughout Alaska.

- Alternate methods of waste oil disposal exist (e.g. burning) but unresolved and logistical problems may limit their use in Alaska.

DD9/sm

Offered: 5/16/84
Referred: Rules

Original sponsor: Resources Committee

IN THE SENATE BY THE FINANCE COMMITTEE

CS FOR SENATE BILL NO. 503 (Finance)

IN THE LEGISLATURE OF THE STATE OF ALASKA

THIRTEENTH LEGISLATURE - SECOND SESSION

A BILL

For an Act entitled: "An Act relating to hazardous waste and certain public contracts concerning hazardous waste; changing penalties for environmental pollution violations; and providing for an effective date."

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

* Section 1. AS 46.03.299 is repealed and reenacted to read:

Sec. 46.03.299. REGULATION OF HAZARDOUS WASTE. (a) The department shall develop regulations for the identification and management of hazardous waste as defined by the Environmental Protection Agency and hazardous waste that exhibits the characteristic of toxicity, persistence, or carcinogenicity. The department shall adopt these regulations not later than July 1, 1986, in accordance with the Administrative Procedure Act (AS 44.62). These regulations shall take effect July 1, 1987.

(b) Regulations adopted under (a) of this section shall exempt from their coverage mining waste and waste associated with the exploration, development, or production of crude oil, natural gas, or geothermal energy until studies required under 42 U.S.C. 6982(f) and (m) are completed. The department, after considering the findings in the reports of these studies, may terminate or amend the exemptions.

(c) The department shall take all actions necessary to receive authorization from the administrator of the Environmental Protection Agency to administer and enforce a hazardous waste program in accordance with 42 U.S.C. 6901 - 6987 (Resource Conservation and Recovery

Act of 1976).

(d) Regulations adopted under (a) of this section shall cover (1) hazardous waste, not otherwise exempted by law, that is generated in any month by a single generator in an amount of 220 pounds or more, and (2) acute hazardous wastes identified in 40 C.F.R. 261.33(e), not otherwise exempted by law, that are generated in any month by a single generator in an amount of 2.2 pounds or more. The department shall extend the regulations to manage smaller quantities of hazardous waste if the quantities specified in this subsection exceed the quantities regulated under the authority of 42 U.S.C. 6921 - 6934, as amended. The department may at any time extend coverage of regulations adopted under (a) of this section to small quantities of hazardous waste and acute hazardous waste.

(e) During the period July 1, 1986 through June 30, 1987 the department shall conduct a program to inform persons of their responsibilities under regulations adopted under (a) of this section.

* Sec. 2. AS 46.03.308 is repealed and reenacted to read:

Sec. 46.03.308. TRANSPORTATION OF HAZARDOUS WASTE. (a) Hazardous waste may not be transported in the state unless the waste is accompanied by a manifest and the generator has delivered a copy of the manifest to the department before the transportation begins.

(b) The department shall send a copy of each manifest received under (a) of this section to

(1) the state and local public safety agencies with jurisdiction over areas covered by a hazardous waste transportation route; and

(2) the highest elected local official representing each area covered by a hazardous waste transportation route.

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

Sec. 46.03.309. TEMPORARY COLLECTION OF HAZARDOUS WASTE. The department shall provide for the temporary collection of hazardous waste to be prepared for shipment to a federally approved hazardous waste disposal site. The department shall establish four periods in each calendar year during which it shall collect hazardous waste. A collection point may accept hazardous waste only from small quantity generators and household generators as defined by the Environmental Protection Agency.

* Sec. 4. AS 46.03 is amended by adding new sections to read:

Sec. 46.03.313. HAZARDOUS WASTE MANAGEMENT FACILITIES AND SITES. (a) The department shall evaluate and select potential sites for hazardous waste management facilities in the state. In evaluating and selecting sites for management facilities, the department shall consider at least the following factors:

(1) economic feasibility, including proximity to concentrations of generators of the types of hazardous waste likely to be proposed and permitted for management;

(2) intrinsic suitability of the sites;

(3) federal and state pollution control and environmental protection regulations;

(4) the risk and effect for local residents, units of government, and the local public health, safety, and welfare, including such dangers as an accidental release of waste during transportation to a facility or at a facility, water, air, and land pollution, and fire or explosion;

(5) the consistency of a facility with, and its effect on, existing and planned local land use and development; local laws, ordinances, and permits; and local public facilities and services; and

(6) the adverse effects of a facility at the site on agri-

culture and natural resources and opportunities to mitigate or eliminate the adverse effects by stipulations, conditions, and requirements relating to the design and operation of a management facility at the proposed site.

(b) By July 1, 1986, the department shall adopt regulations that

(1) interpret and clarify the factors listed in (a) of this section; and

(2) establish procedures for processing, reviewing, and approving or disapproving applications for the siting and operation of privately owned hazardous waste management facilities.

(c) The department may authorize the siting and operation of privately owned hazardous waste management facilities in accordance with factors and requirements established under this section.

(d) The department shall hold public hearings in each election district in which a hazardous waste management facility site is proposed to be located. The department shall give reasonable public notice of the time, date, and place of each public hearing at least 30 days before the hearing. The public shall be afforded an opportunity at each hearing to submit written and oral testimony concerning a potential site. The department shall consider the testimony submitted at public hearings when it prepares reports under AS 46.03.314.

(e) For purposes of this section, "intrinsic suitability" of a site means that, based on existing data on the inherent and natural attributes, physical features, and location of the site, there is no known reason why a waste management facility that may be located in the site could not reasonably be expected to qualify for a permit under AS 46.03.302.

Sec. 46.03.314. REPORTS ON MANAGEMENT SITES AND FACILITIES. (a) Not later than July 1, 1987, the department shall submit to the gover-

nor and the legislature a preliminary report that includes

(1) proposals for the siting of hazardous waste management facilities in the state;

(2) proposals for the methods of financing and operating the facilities;

(3) proposals for the types of facilities that should be constructed, such as chemical processing facilities, incineration facilities, and transfer and storage facilities; and

(4) information about private hazardous waste management sites and facilities approved by the department.

(b) Not later than July 1, 1989, the department shall submit to the governor and the legislature a final report that includes

(1) identification of sites selected by the department for hazardous waste management facilities;

(2) recommendations for the methods of financing and operating facilities at the sites listed in (1) of this subsection;

(3) recommendations for the types of facilities that should be constructed at sites listed in (1) of this subsection; and

(4) information about private hazardous waste management sites and facilities approved by the department.

* Sec. 5. AS 46.03.760(a) is amended to read:

(a) A person who violates or causes or permits to be violated a provision of this chapter <u>other than AS 46.03.250 - 46.03.314, or a provision of</u> [OR] AS 46.04, or a regulation, a lawful order of the department, or a permit, approval, or acceptance, or term or condition of a permit, approval, or acceptance issued under this chapter or AS 46.04 is liable, in a civil action, to the state for a sum to be assessed by the court of not less than $500 nor more than $100,000 for the initial violation, nor more than $5,000 for each day <u>after that</u>

[THEREAFTER] on which the violation continues, and that [WHICH] shall reflect, when applicable,

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

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

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

* Sec. 6. AS 46.03.760(b) is amended to read:

(b) Except as determined by the court under (f)(4) of this section, actions [ACTIONS] under this section may not be used for punitive purposes, and sums assessed by the court must be compensatory and remedial in nature.

* Sec. 7. AS 46.03.760 is amended by adding a new subsection to read:

(f) A person who violates or causes or permits to be violated a provision of AS 46.03.250 - 46.03.314, or a regulation, a lawful order of the department, or a permit, approval, or acceptance, or term or condition of a permit, approval, or acceptance issued under AS 46.03.250 - 46.03.314 is liable, in a civil action, to the state for a sum to be assessed by the court of not less than $500 nor more than $100,000 for the initial violation, nor more than $10,000 for each day after that on which the violation continues, and that shall reflect, when applicable,

(1) reasonable compensation in the nature of liquidated damages for any adverse environmental effects caused by the violation,

that shall be determined by the court according to the toxicity, degradability and dispersal characteristics of the substance discharged, the sensitivity of the receiving environment, and the degree to which the discharge degrades existing environmental quality;

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

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

(4) the need for an enhanced civil penalty to deter future noncompliance.

* Sec. 8. AS 46.03.790 is amended to read:

Sec. 46.03.790. CRIMINAL PENALTIES. (a) Except as provided in (d) - (f) of this section, a [A] person who negligently violates [OR WHO CAUSES OR PERMITS A VIOLATION OF] a provision of this chapter or AS 46.04, or of a regulation, lawful order of the department, or permit, approval, or acceptance, or term or condition of a permit, approval, or acceptance issued under this chapter or AS 46.04 is guilty of a class B misdemeanor.

(b) Except as provided in (d) - (f) of this section, a [A] person who knowingly [WILFULLY] violates 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 A misdemeanor.

(c) Each day on which a violation described in [(a) OR (b) OF] this section occurs is considered a separate violation.

(d) Notwithstanding (a) and (b) of this section, a [A] person who fails to provide or falsely states information required under AS 46.03.755 or AS 46.04 is guilty of a misdemeanor and, upon convic-

tion, is punishable by a fine of not more than $25,000, or by imprisonment for not more than one year, or by both. Each unlawful act constitutes a separate offense.

(e) Notwithstanding (a) and (b) of this section, a person who knowingly (1) transports any hazardous waste to a facility without a permit required under AS 46.03.250 - 46.03.314; (2) treats, stores, or disposes of hazardous waste without a permit required under AS 46.03.250 - 46.03.314; or (3) makes a false statement or representation in an application, label, manifest, record, report, permit, or other document filed, maintained, or used for purposes of compliance with the hazardous waste provisions of AS 46.03.250 - 46.03.314 or regulations adopted under those provisions, is punishable by a fine of not more than $10,000 per day or by imprisonment for not more than one year, or both.

(f) Notwithstanding the penalty provisions of (a) - (e) of this section, a defendant that is an organization is, upon conviction of a violation of any of the provisions listed in this section, subject to the penalties set out in AS 12.55.035(c).

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

(36) "mining waste" means solid waste from the extraction, beneficiation and processing of ores and minerals, including coal, and including phosphate rock and overburden from the mining of uranium ore;

(37) "waste associated with the exploration, development, or production of crude oil, natural gas, or geothermal energy" means (A) waste, including drilling muds, cuttings, hydrocarbons, brine, acid, sand, and emulsions or mixtures of fluids produced from and unique to the operation or maintenance of a well, whether naturally occurring or added for the operation or productivity of the well; and (B) waste

that is derived intrinsically from primary field operations; "waste associated with the exploration, development, or production of crude oil, natural gas, or geothermal energy" does not include spent solvents and oils from equipment maintenance activities, discarded chemical products, or fuels;

(38) "waste derived intrinsically from primary field operations" means waste produced from a well, and removed (A) at the drill site; or (B) at crude oil production facilities by crude oil or wastewater treatment process before custody transfer of the crude oil.

* Sec. 10. AS 24.60 is amended by adding a new section to read:

Sec. 24.60.045. HAZARDOUS WASTE CONTRACTS. A legislative staff member may not solicit or receive a contract concerning hazardous waste from a state agency or department other than the legislature during the interim following a session in which the person worked. This section applies to legislative staff members range 18 or higher. In this section "hazardous waste" has the meaning given in AS 46.03.900.

* Sec. 11. This Act takes effect immediately in accordance with AS 01.-10.070(c).

Neve'/Walker/Kelton/Hemphill

Alaska Oil and Gas Association

505 W. Northern Lights Boulevard
Suite 219
Anchorage, Alaska 99503-2553
(907) 272-1481

December 11, 1984

Dr. Richard A. Neve', Commissioner
Alaska Department of Environmental
Conservation
Pouch O
Juneau, Alaska 99811

Dear Commissioner Neve':

Pursuant to our meeting with Dave Walker on November 2, 1984, the attached material is intended to provide background information on the State's Hazardous Waste Program; the intent of SB503, Section 1; an explanation as to how the Degree of Hazard (DOH) approach differs from the Federal regulatory scheme; general issues associated with pursuing a regulatory approach substantially different from the Federal program; and sections of the regulations which need to be deleted to obtain a proper beginning vehicle.

Please feel free to contact me or Tom Brooks if we can provide additional information.

Very truly yours,

WILLIAM W. HOPKINS
Executive Director

WWH:TR2:211

Attachment

cc: Bob Martin w/attachment
Dave Walker w/attachment

ALASKA OIL AND GAS ASSOCIATION
DISCUSSION PAPER ON ADEC HAZARDOUS WASTE PROGRAM
DECEMBER, 1984

BACKGROUND

In 1981 the Alaska State legislature passed AS 46.03, charging the Alaska Department of Environmental Conservation with the task of developing Hazardous Waste Management regulations which are "consistent with and substantially equivalent to" federal regulations. AOGA was informed on November 24, 1981 that the Department would begin preparation of a "plan" for the State's Hazardous Waste Program. In May 1982 AOGA received the first draft of the State's proposed regulations at the May 28, 1982 Hazardous Waste Advisory Work Group Meeting (HWAWG). At this meeting, ADEC discussed its intent to establish a State program parallel to the Federal program; so convincing was ADEC that AOGA's representative reported:

> "ADEC very much wants their Program to be "consistent with and substantially equivalent to" the Federal Program. Although there was a difference of opinion regarding the interpretation of certain complex sections of the Federal Program, I am not as concerned about this difference as I was when I first reviewed the draft regulations. This is because it can be resolved with a close reading of the regulations. The important point is that the State intended to, and thought they had, interpreted the existing regulations. This significantly assuages my concern that the State had been trying to greatly expand their authority in this program, and trying to include regulatory requirements much more restrictive than the existing Federal Program. ADEC was not trying to expand their program, <u>they were trying to interpret and parallel the Federal Program</u>. Interpretation problems are resolvable with some time devoted to discussing the various sections of the regulations in detail, and utilizing the existing background documents from these same discussions which occurred at the Federal level."

It was not until February 7, 1983, that AOGA received the first draft of State regulations which reflected a "Degree of Hazard" (DOH) regulatory mechanism (a mechanism which is patterned after Washington State's program and is divergent from Federal regulations).

It is appropriate at this time to briefly reflect on Washington's Program. Their program began with passage of their Hazardous Waste Disposal Act in 1976. As a result, Washington's program and the Federal program were being developed simultaneously with the basis for Washington's Program being defined by statute.* The Act took the form of three pages of general directives regarding the identification and management of hazardous wastes. Principal among these directives was the establishment of the "two tiered" designation system or "designation-based on degree of risk". The fundamental basis for designating wastes with this early program was biological and other testing.

In late 1980, the issue was again before the Washington legislature. Unfortunately, its designation process was sufficiently complex to preclude any meaningful review by the legislators. There was no discussion at the legislative level of various alternative approaches that would satisfy the State's enabling act, nor was there any realization that the technical complexities of the State agency's program may have been overly complex to meet the need at hand. Fueling the controversy was the fact that a State site (Commencement Bay) was designated a priority cleanup site under Superfund and other examples of egregious past practices were brought to light during the public hearing process. It is likely that these past practices were illegal under either pre-existing State law or the RCRA regulations and would not have been prevented had the new regulations been in place. Nevertheless, public concern led to a demand for "an approach more stringent than the minimum federal requirements". Hence, in late 1980 the State legislature amended the original act to provide authority to bring the State regulations into federal compliance and did not allow the flexibility to parallel the federal program.

Washington State adopted on February 4, 1982, their present regulatory program. It is a combination of the original concept of waste designation based <u>solely</u> on testing and the Federal concept of designation based on rulemaking and simple testing. In its first few years of operation, the program captured 15% more wastes than the Federal RCRA program. Of the incremental wastes captured, most were designated as "dangerous" wastes; a classification not intended by the original State act to receive the comprehensive management strategy that was to be applied to State designated "extremely hazardous wastes" or Federally designated "hazardous wastes".

*NOTE: The U.S. EPA began formulating the national program (RCRA) in 1976. In 1980, RCRA was significantly amended to its present regulatory framework. At this time EPA decided that waste classification based on testing was inappropriate. For a detailed discussion as to EPA's rationale behind this decision, <u>re: FR Vol. 45, #98/May 19, 1980 pages 33164-33165, and 33105</u>.

In 1984, Washington enacted legislation which required the Department of Ecology to conduct studies regarding the "best management practices" for "dangerous" waste disposal. In the interim and until such time as "best management practices" regulations are in place (July 1, 1986) "dangerous" wastes may not be disposed of at commercial, off-site land disposal facilities. "Dangerous" wastes are now being stored or disposed of on site or must be shipped to RCRA disposal sites out of state.

In addition to the State being unable to facilitate the installation of a "dangerous" waste disposal site, the State has also been ineffective over an eight-year period in facilitating the acceptance and/or installation of an in-state disposal site for "hazardous or extremely hazardous" wastes.

Regarding the Alaska program, on March 3, 1983, AOGA informed Mr. Hungerford that the proposed rules of February 7, which reflected the DOH scheme from Washington State, were in need of in-depth technical review and notified him of forthcoming technical comments. On April 6, 1983, AOGA provided ADEC an in-depth technical review of the regulations. These comments were the culmination of extensive efforts by many engineers, marine biologists, toxicologists, attorneys and corporate management level individuals. The Department informed AOGA's representative on the Advisory Group that the ADEC could not expend the money or the manpower to consider AOGA's comments prior to release of a public hearing draft. On April 11, 1983, AOGA strongly requested that the regulations not be released until AOGA's comments could be reviewed and considered.

On April 19, 1983, the regulations were moved to public notice, with no apparent review or consideration of the technical comments provided to ADEC by AOGA. On April 25, 1983, Commissioner Neve' wrote AOGA indicating that the "comments of every member of the work group...were reviewed seriously and did help significantly in the preparation of these draft regulations". On May 25, 1983, at the Public Hearing AOGA stated that we felt that there was a lack of consideration of our industry's input in the development of the April 11, 1983, draft regulations.

By June 8, 1983, AOGA had provided ADEC with extensive oral and written testimony which was developed by the Environmental Committee in conjunction with the following industry experts:

- Joan DiNal, Senior Counsel, Environmental Affairs for Atlantic Richfield Company.
- Michael Hulse, Environmental Analyst, IMCO Services.
- James P. Ray, Ph.D., Manager of Environmental Sciences Support, Shell Oil Company.

- Robert E. Abbott, Ph.D., Coordinator of Environmental Affairs, Conoco Inc.
- Philip Dorn, Ph.D., Shell Development Company.
- Ilene Danse, M.D., Senior Advisor, Environmental Health Protection, Chevron Environmental Health Center, Inc.

The Department issued their latest draft in October 1983 which failed again to address significant concerns which have been repeatedly expressed by our industry. The Department has accepted AOGA's comments on three sets of draft regulations and failed to address the problems identified by AOGA.

AOGA next presented its case to the legislature. During this process, AOGA participated in the drafting of SB503, a piece of legislation which involved a compromise between members of the environmental community, small business, ADEC, AOGA, Labor, the Governor's Office, Sen. Fahrenkamp's office, etc., on key issues, one of which was DOH vs. the Federal Program.

INTENT OF SB503, SECTION 1

The compromise reached between the various parties for the management and control of hazardous waste in Alaska was a very delicate one. Because the legislature did not desire any confusion over the intent of this legislation, it adopted a Letter of Intent drafted by the Senate Resources Committee. The intent of the Legislature was for the Department of Environmental Conservation to "evaluate the most appropriate mechanism by which to identify a waste characteristic of toxicity, persistence or carcinogenicity and other characteristics identified as hazardous by the EPA". In order for a proper and complete analysis to be performed, no prior assumptions can be made as to the "appropriate mechanism" to be used by the State in its hazardous waste program.

Any regulations that are ultimately developed by the Department "must incorporate the results of this analysis" according to the intent letter. The Legislature, by the action of adopting this wording, instructed the Department to make an analysis and evaluation with no preconceived bias or ideas as to the appropriate mechanisms and only after the analysis is completed are the regulations to be drafted.

In summary, the Legislature has instructed ADEC to begin anew on identifying the regulatory mechanism of waste designation.

EXPLANATION OF DOH VS. RCRA

On May 19, 1980, EPA promulgated RCRA regulations that designated wastes by a formal rulemaking process (lists) and four reproducible and supportable characteristic tests. They reviewed various DOH programs and concluded a DOH approach was not an appropriate waste designation mechanism. To qualify for interim authorization, a state program had to encompass all RCRA wastes. In Washington, the two approaches were consolidated, resulting in the most complex designation system in use in the nation.

To briefly summarize, the DOH program is based on the concept that different wastes should be regulated with different procedures based on the degree of risk presented to human health and the environment, as demonstrated by existing biological and other test data or test results produced by generators. Initially, when the DOH approach was being developed it was envisioned that such data would be the sole basis for designating wastes, and that testing (bioassay, etc.) would be mandatory for all generators.

Although not specifically a designation issue, it must be kept in mind that nationally the small quantity generator exclusions are now much lower. If applied to Alaska, particularly without any special provision for small quantity generators, the combination of a much lower quantity exclusion and an extremely complex designation mechanism will result in an unenforceable program.

One of the difficulties inherent in the DOH designation procedure is that there is no adequate or simple means to describe how the federal and state universes of waste compare. No straightforward comparison can be made between a given category of federal wastes and categories defined under the state program. Consequently, the waste generator would often need to retain expert assistance. For example, professional assistance is especially recommended in instances where a waste not regulated under RCRA has "flunked" the state's proposed toxicity bioassay test. Determinations must be made regarding whether the test animals responded adversely to the potential toxic constituents or whether a physiological response to test conditions was involved. Such determinations will be subjective and inconsistent.

Technical complexities aside, the legal theory underlying the DOH regulations represents a marked departure from that embodied in the federal RCRA regulations. The federal regulations specify the criteria that the EPA administrator will consider in adding wastes to the lists in the RCRA regulations. The administrator is to consider potential wastes from the standpoint of toxicity, persistence, bioaccumulation, genetic effects, etc., and then to add appropriate wastes through formal rulemaking procedures. Thus, EPA's approach for developing hazardous waste lists inherently addresses biological considerations but centralizes the testing under EPA.

In contrast, DOH regulations place the burden on each generator to determine whether a waste not otherwise encompassed by the RCRA regulations is part of the state universe of wastes, and as previously stated, this determination may be made based on uncertain test results.

An individual generator's determination that a waste not regulated by RCRA might, for biological or other reasons, be regulated under the DOH regulations does not lead to a conclusive rulemaking. Thus, the process of identifying state regulated wastes is not accompanied by the certainty and procedural due process protections that characterize the listing process at the federal level.

A legal burden of designation is not to be confused with the cost burden of testing. Under both the federal and state regulations, the generator pays testing costs, as is typical of most environmental programs.

A major difficulty with the DOH designation system is that it creates an area of legal and technical vagueness. For example, biological test data can be inconclusive with regard to actual toxicity. The test animals may react adversely to test conditions rather than to the suspected toxic constituents, thus resulting in the over-designation of wastes. To further complicate the bioassay issue, there are no standard bioassay procedures which have been accepted by the scientific community at large. Difficulties may arise if a generator relies on an initial series of bioassay test results that show a waste to be nonhazardous. A subsequent test on the same waste yielding a positive determination of toxicity by the same or yet another generator may result in liability to the generator, who relied on the first series of tests in good faith. In either case, the uncertainties involved in the biological response of laboratory test animals to potentially toxic wastes may create a large gray area of potential liability for generators.

Under the State's proposed regulations, a generator may apply to the state agency for a determination of hazardous or nonhazardous status of a given waste. (This procedure is specific to the individual generator and does not provide notice or opportunity for comment from other generators of similar or related wastes and the scientific community at large.) However, such a certification would still not shield the generator from potential liability in the event of an erroneous certification by the state agency. Again, this ad hoc certification process cannot be viewed as a substitute for the certainty inherent in the federal designation system. In summary, the DOH generator is truly "at risk" to a degree not experienced by generators in the rest of the nation.

GENERAL ISSUES ASSOCIATED WITH PURSUING A REGULATORY APPROACH SUBSTANTIALLY DIFFERENT THAN THE FEDERAL PROGRAM

A substantial departure from the Federal and national trend in hazardous waste management by Alaska will make the State's program continually fraught with inherent technical, legal, and economic problems. Such a program will not be as readily able to take full advantage of the continued evolution or efforts of the Federal program.

The technical aspects of the national program is not the product of a few staff specialists or even the combined effort of one or two states. Rather, the Federal program has been and will continue to be the product of a concerted effort by this country's regulatory agencies, academic/scientific community, private industrial sector and environmental organizations. This effort cannot begin to be equaled by any single state.

As you are probably aware, the management of hazardous wastes is technically and legally complicated and highly controversial. Should the State embark on a program substantially different than the Federal program, Alaska will have to expend considerable amounts of time and resources in pursuing the continued development of a program which will be fraught with continuing implementation, legal, educational and enforcement problems. On the other hand, a state program that parallels the national trend can take full advantage of the billions of dollars this country has and will continue to spend in further evolving and implementing hazardous waste regulations.

Again, a state that is contemplating an approach that differs fundamentally from the Federal program should consider the following questions:

- Will the alternative program, if based on fundamentally different technical theories, isolate the state from the larger body of developing scientific expertise at the national level?
- Will the alternative program, if based on different legal theories, create the need for a divergent trend of judicial interpretation and thereby isolate the state from legal developments at the national level?
- How will a fundamentally different program that is more expansive than its federal counterpart be reconciled with related programs such as Superfund that provide mechanisms for partial federal funding for incidents involving federally designated waters?

- How will the fundamentally different state program relate to the interstate aspects of hazardous waste transport and management? This involves issues of reciprocity and the equity of burdening another state's disposal facilities if the state of origin has not provided ample sites for its own wastes.

- How will a fundamentally different state program be modified to remain consistent with evolving RCRA requirements?

- Does the fundamentally different state program exacerbate the interstate problems of hazardous waste management?

- What is EPA's enforcement interest in an incident involving a nonfederal waste that is considered hazardous in the state of origin but not in the state where the incident occurs? This issue stems from the fact that authorized state programs operate in lieu of RCRA regulations.

- To what extent would a fundamentally different program be delayed in obtaining final authorization?

- Will funding levels by the State be adequate to implement and maintain a program that is technically and legally divergent from the Federal program?

SECTIONS TO BE DELETED TO OBTAIN A PROPER BEGINNING VEHICLE

The following is intended as a list to highlight those major portions of the October 26, 1983, draft which should be deleted, pending a detailed evaluation by the Department:

- 18 AAC 62.010 Definition of Hazardous Wastes
- 18 AAC 62.030 Lists of Hazardous Wastes
- 18 AAC 62.050 Discarded Chemical Products
- 18 AAC 62.060 Characteristic of Toxicity
- 18 AAC 62.070 Characteristic of Persistence
- 18 AAC 62.080 Characteristic of Carcinogenicity
- 18 AAC 62.120 Waste Extraction Procedure (WEP) Characteristic
- 18 AAC 62.140 Exclusions
- Article 5 - Management of Moderate Risk Wastes

For a more detailed discussion, attached are both oral testimony and detailed written comments which were provided to the Department at the May, 1983 Public Hearing.

In addition, attached is an article from the October 26, 1984, Environmental Reporter, entitled EPA Staff Summary of 1984 Amendments to Resource Conservation and Recovery Act. This recent reauthorization addresses the majority of the real or perceived "loopholes" in the RCRA regulations. The reauthorization amendments only reinforce AOGA's contention that the nation's commitment to properly manage hazardous waste is real and a divergence from the Federal program is unnecessary.

tr2:220
Attachments

Alaska Health Project

Providing information about hazardous materials on the job and in the community.
417 West Eighth Avenue, Anchorage, Alaska 99501 (907) 276-2864

April 25, 1985

Representative Mike Davis
Pouch V
Juneau, Alaska 99811

APR 2 9 RECD

Dear Representative Davis:

Alaska Health Project appreciates your interest in issues concerning hazardous wastes in Alaska. As you may know, I have been directly involved with this issue for about three years at both the state and local level. Reflecting on my involvment in this area brings to mind the need for the Legislature to become more educated about the issue and for the Legislature to decide whether it deems hazardous wastes a priority concern for the future. It is my hope that the oversight hearings, or hearings of that type become the vehicle for this type of education. Further, it is my hope that the Legislature attack that hazardous waste issue in a similar fashion to the way it investigated proposals to develop a full scale petrochemcial industry several years ago. The hazardous waste issue deserves legislative commitment and coordination with state and local agencies, the public and industry.

It is important, in my opinion, that Alaska work hard to develop a preventive approach to hazardous waste, rather than falling into a dangerous trap of simply developing a program that reacts to hazardous materials incidents.

In light of this, certain testimony at the teleconference concerned me. While I agree with industry on the need for some sort of a hazardous waste disposal facility in Alaska (not necessarily a landfill) and with their concern regarding the current time frame for selecting a site, I do not wish to see the development of a site supersede development and implementation of a "total" state hazardous waste program. To develop a disposal facility without a state definition for when a solid waste becomes hazardous could result in serious technical, legal, and political problems down the road.

While I am the first to admit that management programs (such as a disposal site) are perhaps dollar for dollar better at solving problems than a regulatory approach, central to any management approach is a regulatory foundation which the state currently lacks. It is important that the state define, by regulation, when a waste becomes hazardous thus allowing Alaska to decide on hazardous waste management approaches. Determining

a state definition for hazardous wastes will also help industry with their plans to manage wastes as well as provide incentives for industry to reduce their wastes streams or investigate alternative processes which do not create a hazardous waste as defined by the State of Alaska.

Last year The Department of Environmental Conservation published a set of hazardous waste regulations which define hazardous waste by degree of hazard. While admittedly controversial, this approach provides a good starting point for future discussions. Regardless of the fact that earlier debates addressing this definition scheme resulted in a "cold war" relationship between industry and public interest organizations, it is important to confront this issue directly. Once the state can settle on a hazardous waste definition, all other aspects of the program will fall into place.

Once again, I sincerely appreciate your interest in this issue and I am available to discuss this issue with you at any time.

Cordially,

David Wigglesworth
Occupational Health Specialist

cc: Commissioner Ross
Committee Members

Statement by ARCO Alaska, Inc.
for Presentation to the
House Oil and Gas Committee
April 24, 1985

By Dr. T.R. Fink, Manager
Environmental Conservation

Waste categories

Waste materials are regulated by both Federal and State requirements. In general, the Federal requirements pertain to hazardous wastes and the State requirements to non-hazardous wastes. All wastes should be handled in an environmentally sound manner. All wastes do not require the same degree of environmental protection.

Wastes are considered hazardous if they are listed as such by the Environmental Protection Agency of if they meet certain characteristics for ignitability, corrosivity, reactivity or toxicity. Diesel fuel and acids are two examples that, when discarded, meet the hazardous characteristics. Household garbage and sewage are solid wastes, not hazardous waste. Drilling mud is a waste common in our industry which is a solid waste but not a hazardous waste.

Alaska must develop a hazardous waste disposal site in the State

There is no hazardous waste disposal site available for general use in Alaska. Even if the various entities involved in the hazardous waste issue in Alaska were to agree on the definition of hazardous waste, the procedures for regulating hazardous waste, and the means for cleaning-up abandoned hazardous waste sites, the hazardous waste problem in Alaska will not be resolved until there is a viable disposal option in Alaska. Costs, legal and technical restrictions and political considerations associated with shipping hazardous waste to the Lower 48 preclude it from being the answer for Alaska's hazardous waste.

The State of Alaska must be involved in the development of a hazardous waste management facility

NIMBYS - Not In My Back Yard Syndrome - is alive and well in Alaska. For a hazardous waste management facility to be developed in Alaska, the State of Alaska must be heavily involved. With the active involvement of the State we can take the most important step toward solving Alaska's hazardous waste problems.

The SB 503 timeframe for hazardous waste siting is too slow

SB 503 requires disposal options and sites to be selected by 1989. After disposal options and sites are selected, the permitting and construction phases will require four to five years to complete. Alaska can not afford to wait until the early 1990's to have a safe, permitted disposal option for Alaska hazardous waste.

The 1984 amendments to the Federal hazardous waste program have forced the siting issue to the forefront. The 1984 Federal amendments phase out land disposal, greatly increase the number of hazardous waste generators, require the study and listing of additional materials as hazardous waste, add a citizens's suit provision and increase the penalty provisions. The Amendments increase the cost and decease the options currently available for disposal in the Lower 48. There is no statewide hazardous waste disposal site available in Alaska.

A Governor appointed executive level committee is needed

The hazardous waste siting issue can best be resolved by a Governor appointed executive level committee with representatives from DEC, DNR, local government, environmental groups and industries. The task of the committee would be to develop a plan of action for siting a hazardous waste management facility in Alaska.