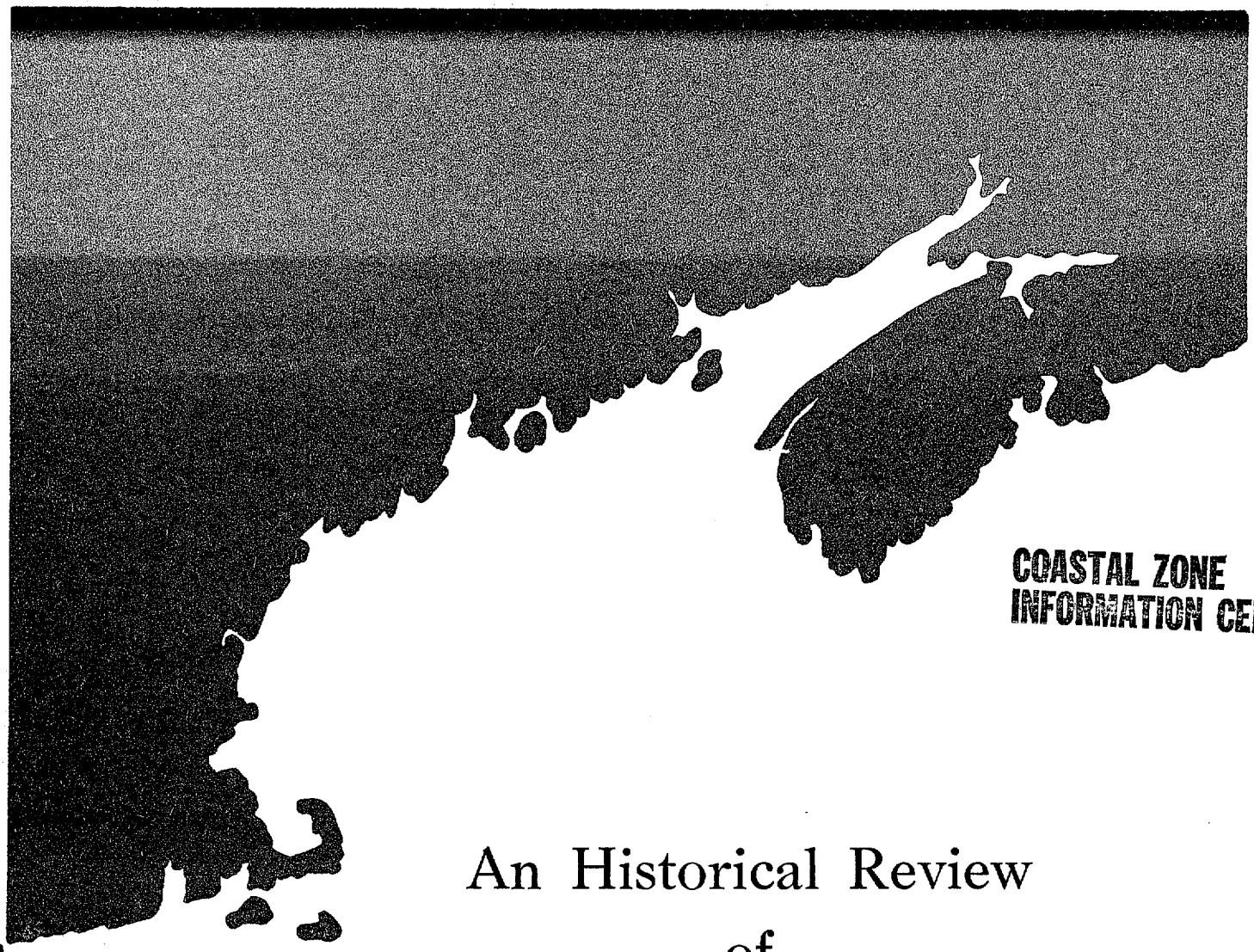

An Historical Review of Oil Spills Along the Maine Coast

The TRIGOM Research Institute of the Gulf of Maine

AN HISTORICAL REVIEW

OF

OIL SPILLS ALONG THE MAINE COAST

1953-1973

Prepared for

The Maine State Planning Office

Coastal Planning Group

and

The Research Institute of the Gulf of Maine
(TRIGOM)

by

Edward H. Shenton

U.S. DEPARTMENT OF COMMERCE NOAA
COASTAL SERVICES CENTER
2234 SOUTH HOBSON AVENUE
CHARLESTON, SC 29405-2413

August, 1973

TRIGOM Publication No. 3

ACKNOWLEDGEMENTS

The author acknowledges the kind and helpful co-operation received from a number of individuals who willingly contributed information, provided access to files, and spent time in critically reviewing this manuscript. Among those whose aid is acknowledged are: Mr. Robert L. Dow, Director of Marine Research, Maine Department of Marine Resources (formerly Sea and Shore Fisheries); Mr. Paul Sova, Chief, Division of Oil Conveyance Services, Maine Department of Environmental Protection; Lt. Michael Rashio, U. S. Coast Guard, Portland; Lt. Ernest Blanchard, U. S. Coast Guard, Southwest Harbor; and Dr. Donald B. Horton, Executive Director of TRIGOM.

The author is especially indebted to Diane Brackett for her assistance with statistical tabulation and to Virginia Roderick for the final draft typing.

This study was supported by the Coastal Planning Group of the Maine State Planning Office and by The Research Institute of the Gulf of Maine.

ABSTRACT

A one month study was conducted to assemble and document oil spill data along the coast of Maine beginning with 1953 when records were first kept. A total of 451 oil spills were found reported over a 20 year period; 336 of these occurred in the Portland vicinity. Recent data reported by the Maine Department of Marine Resources show long term oil persistence and biological impact in two cases, the NORTHERN GULF and LONG COVE. Although reporting information is only accurate after 1970, a suggested extrapolation is made for Portland Harbor showing the possible number of spills occurring since 1950 based on oil throughput. Observations of the spills and spill effects are reported on data sheets while the most important biological impacts are discussed. A complete listing of oil terminal facilities is presented. The need for a better reporting system and biological monitoring programs are suggested.

TABLE OF CONTENTS

INTRODUCTION

Purpose of the Study

Oil has been transported to Maine harbors and along the Maine coast for many years. There have been numerous small spills and several larger ones that have made their effects known upon the coast and its marine biota and not least of all to its human inhabitants. A few records, reports, and investigations of these spill events prior to 1970 exist in diverse locations, but there is no one document or location summarizing the history. This study and resulting report is a first attempt to collect, assemble, and present what is known of the history of oil spillage in Maine beginning in 1953 when the first records were kept. It is the author's hope that any events not included can be incorporated in a later revision.

Objectives

The overall object has been to review and assemble in one document all available and significant data on oil spills on the coast. Specific objectives were to:

1. Collect all available historic oil spill data for coastal Maine to show where, when, how much, and what type of oil has been spilled.

2. Assemble any information relating to observed effects on marine biota.

3. Identify pattern or trends in spill areas or any long-term impacts.

4. Make recommendations for subsequent research and if possible specific areas for hydrocarbon background sampling.

Methods and Approach

The initial method of collection used was to visit the files of various state, federal, and private agencies to examine historic records. The basic retrieval form which attempted to gather most important data is shown in Figure 1. As suspected, only in a very few cases were all the desired data available since there were no requirements for a reporting system until 1970.

The majority of the data on oil spills was collected from three agencies that have kept records of oil spill events; these are the Maine Department of Marine Resources, the Maine Department of Environmental Protection, and the U. S. Coast

Guard, Portland and Southwest Harbor. Supplemental information was gathered from the files of the Portland Press Herald. Shipping information for Portland Harbor was found to be available from the Bureau of Waterways. Charts and graphics were prepared from the original data sheets.

Key individuals who were involved in investigating some of the incidents and reporting the results have been consulted to review these portions of the report to ensure accuracy of interpretation and data transfer. Names of those visited are given in Appendix G.

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: _____

LOCATION: _____

PRODUCT SPILLED: _____ ESTIMATED QUANTITY _____

CIRCUMSTANCES: _____

_____

_____

RATE AND NATURE OF CONTAMINATION: _____

_____

_____

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

_____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

_____

_____

SOURCE OF INFORMATION: _____

_____

_____

ADDITIONAL COMMENTS: _____

_____

_____

_____

_____

Figure 1

A CHRONOLOGY OF SIGNIFICANT OIL SPILLS

Early records of oil spills near or on the Maine coast are virtually non-existent although presumably a certain small volume must have been spilled in Portland Harbor beginning in 1941 with the initiation of Portland Pipeline Company and the terminal for landing crude oil to be piped to Canada.[1]

During World War II, a number of coastal tankers were torpedoed and sunk off the Maine coast, spilling undetermined amounts of oil. No estimates of the volume, type, or extent of shore coverage by oil spilled during this period has been found during this study and it is doubtful if any additional data exist. While speculative, it is important to note that some oil spilled during this time may have found its way onto beaches and mud flats, thus possibly contributing to a background of oil in the sediments.

In a broad inspection of the over nearly 500 oil spill incidents documented during the study, there appear to be three more or less distinct periods. These are the early period (1952-1967), recent period (1968-1969), and present period (1970 to date). The early period is almost entirely reported by the Maine Department of Marine Resources. The second or recent period, is one where some U. S. Army Corps of Engineers records exist along with increased coverage by the U. S. Coast Guard. Finally in the present period, that is from 1970, there is a much more detailed coverage by both the Coast Guard and the Maine Department of Environmental Protection (DEP). The reason for the division of these periods is arbitrary; however, when considering the number of reported incidents these divisions are apparent as shown in Figure 2.

The first official concern on the part of the State of Maine as to the effects of oil spilled on the environment and biota was shown in 1952 when the Department of Marine Resources was authorized by the Maine Legislature in 1953 to maintain surveillance of oil pollution by monitoring shellfish growing areas already being watched for effects of other pollutants. Thus, starting in 1953 there are a number of reports covering a variety of relatively small-scale spills which the Department of Marine Resources was called on to investigate.

---

[1] From November 1941 to January 1972, 10,000 tankers delivered 2,099,000,000 barrels of crude oil for transmission to Montreal. Portland Pipeline Corporation currently handles about 160 million barrels (42 gallons per barrel) per year which is about 80% of all oil entering Portland. In 1971, 471 tankers called on the pipeline with crude oil cargo. The U. S. Army Corps of Engineers reports that a total of 1881 ships including barges with some oil product cargo arrived at Portland in 1971. (Portland Press Herald)

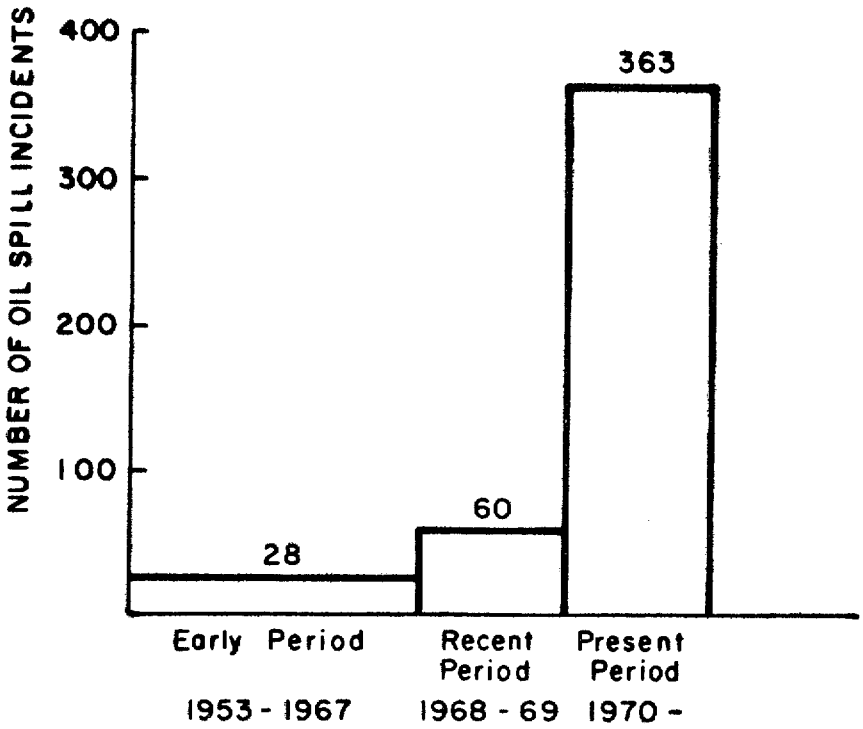

Figure 2. Number of Oil Spills Grouped by Period for Maine

Early Period (1952-67)

The first period spans about 15 years in which over 30 surveys of oil pollution were made along the southern to central Maine coast. Abbreviated information on these spills is presented in Appendix A, and additional data appear in the Oil Spill Incident Data Sheets, Appendix B. Five incidents were considered to be significant and each contains supplemental data. Two events are results of tanker groundings, an infrequent cause of oil spills in Maine, but nonetheless decidedly significant.

The first recorded grounding found in the present study was that of a small Gulf Oil Company tanker that ran aground on a ledge between Orr's and Bailey Islands on December 1, 1953. To refloat the tanker the captain had 3,000 to 4,000 gallons of regular and high-test gasoline pumped overboard to lighten the ship. Northeast winds held the gasoline in Water Cove for several hours; then the gas spread out and finally went out to sea. The local waters were reported to have smelled of gasoline for two days. After seven days no visible effects remained.

The second reported grounding incident in the period involves the largest spill ever recorded along the coast. Due to the volume and particular oceanographic conditions, it is one of the most significant spills in this study. The Liberian tanker NORTHERN GULF of Gulf Oil Company ran aground in clear weather November 25, 1963, on West Cod Ledge, Casco Bay, spilling from 20,000 to 25,000 barrels of Iranian Agha-Jari crude oil. This incident is one of the best documented of those investigated by the Department of Marine Resources. Northwest winds of 11 mph with gusts to 29 mph rafted large quantities of crude oil to sea and into an anomolous, "small clockwise eddy south of Casco Bay" that carried the oil along the coast eastward off Penobscot Bay. (Dow, 1971). Ocean current data to support this theory were provided by Dr. Joseph Graham of the National Marine Fisheries Service. The mass of oil was then blown ashore by a strong southeast gale on November 30, stranding on some 412 miles of beach in the Friendship-Bristol area, a distance of over 80 miles from the spill point. Effects of this oil and the oil's persistence are described in the following section on biological effects. The record of the spill movement along the coast (Figure 3) although one of the only ones documented, shows the way in which oil can be moved great distances along the coast by prevailing meteorological and oceanographic conditions.

During this early period (1953-1967) only one other spill was documented well enough to show the adverse effects of oil on the marine biota. This was one in which the Maine Maritime Academy ship pumped her bilges on October 23, 1953, discharging bunker C, a heavy grade of oil, on the adjacent clam flats.

Of the approximately 25 remaining spills reported in the early period, in only six were any estimates made of the volume of oil spilled. One of these, the tanker ULYSSES, reportedly

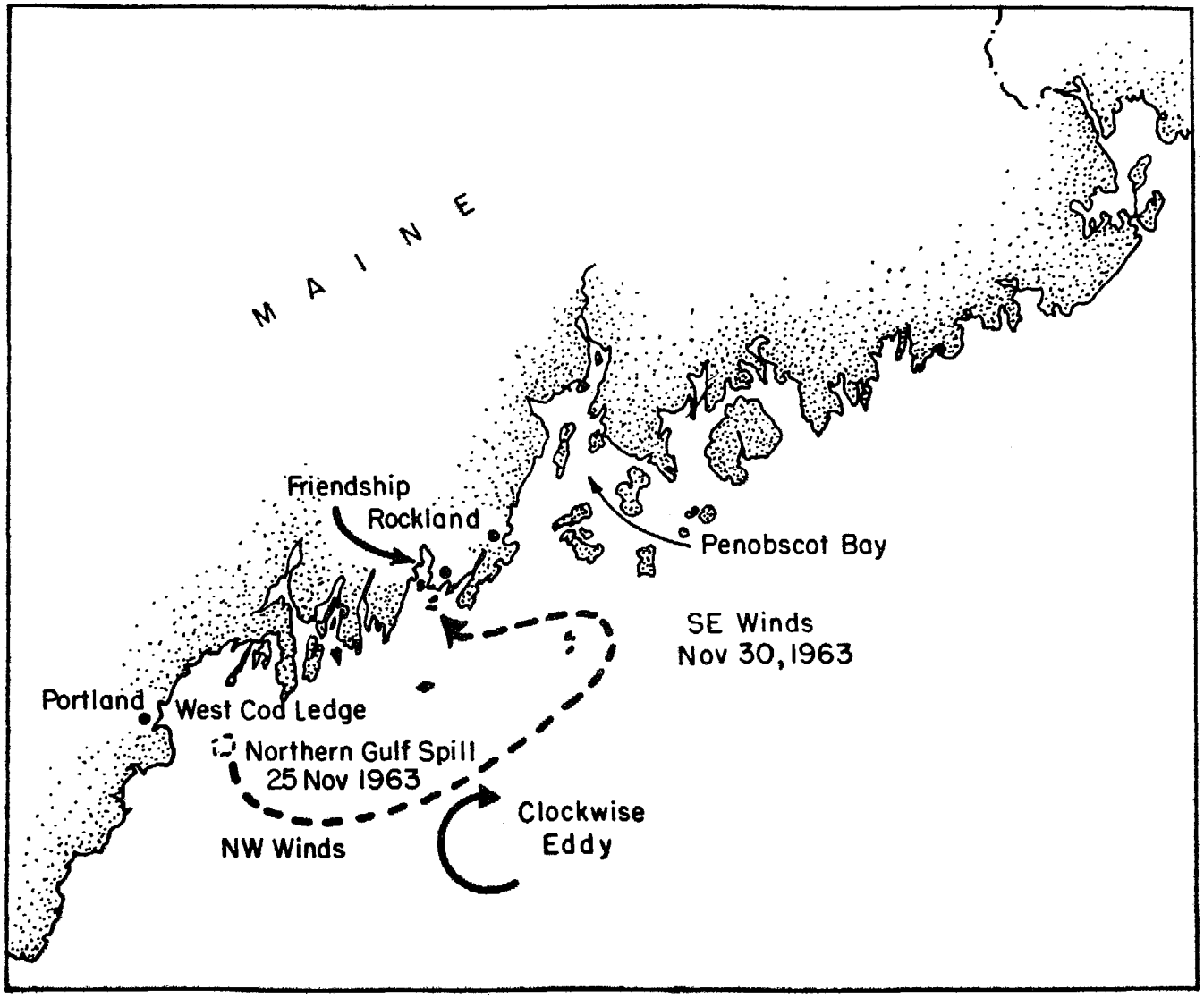

Figure 3. Estimated Track of Northern Gulf Spill 25-30 Nov 1963

spilling up to 10,000 barrels of an undertermined oil in Portland Harbor; no other data were reported. The rest concerned six ships, nine shore facilities where oil is normally handled, and five spills of unknown origin. The probably frequent spills in Portland Harbor do not show up in the reports at this time but are judged to have occurred routinely. The section on spill statistics (page 16) suggests an estimate of the volume spilled. Although statistical data are insufficient, certain industrial ports where oil is used begin to show up in this early period. Some of these areas are Searsport, Wiscasset, Cousins Island, Bucksport, and Rockland. During this period there was no law that required an operator who spilled oil to report such a spill, so presumably more could have been spilled than was reported by the Department of Marine Resources.

Second Period (1968-69)

The second period of oil-spill incidents is referred to as the "recent" period from 1968 to 1969, in which the record-keeping showed improvements for the areas of Portland and vicinity. During this time the U. S. Army Corps of Engineers and the U. S. Coast Guard kept records. Records still available at Portland as retined by the Coast Guard show that in these two years 60 spills were reported. Fifty-four were in the Portland area. While the number of spills reported increased noticeably, the details of each spill decreased. Only 11 contained any information on probable cause of the spill. Only three are cited as describing additional data concerning environmental conditions or effects. Two of these three were investigated by the Department of Marine Resources. The majority of spills were small. Twenty-nine were greater than one barrel although only six were greater than ten barrels. One of the two incidents in 1969 with a reported environmental impact occurred January 7, at West Bath, where a tank truck hauling 4,000 gallons of range oil overturned, spilling this oil into tidal waters. Several subsequent investigations of this site were made by the Department of Marine Resources. This type of spill by land vehicles has made a decided impact on several areas. According to the Maine Department of Environmental Protection, (Paul Sova, personal communication) spills by land vehicles appear to show a definite increase in the last few years. The other spill investigated and documented by the Department of Marine Resources was a small quantity of bunker C oil from an unidentified tanker that went ashore August 9, 1969, on Little Diamond Island in the Portland area. In this report damage is cited as being caused by the use of 5,200 gallons of highly toxic emulsifiers to clean up approximately 210 to 840 gallons of oil.

Present Period (1970-72)

The year 1970 begins a third period, called here the "present", in which the Maine Department of Environmental Protection has taken a leading role in reporting and enforcing its law,

Title 38, subchapter 11-A, Oil Discharge Prevention and Pollution Control. These regulations, established in 1970, set out a statewide plan of compulsory reporting which augments the contingency plans of the U. S. Coast Guard and the U. S. Environmental Protection Agency.[2]

At the beginning of this period there is a jump from about 34 incidents in 1969 cited by the U. S. Coast Guard to 112 incidents for 1970 for the entire Maine coast found in our study as a result of combining several sets of records. While the statistics of spills are vastly improved beginning 1970-71, the amount of observational data relating to spill behavior and effects on the environment or biota are apparently lacking. There are fewer observations of the type made during the 1960's such as those by the Department of Marine Resources and many more very brief reports as required by law.

On March 24, 1970, another fuel transportation truck accidently dumped 7,500 gallons of No. 2 fuel into a tidal stream that drains into the Upper Cousins River, Freeport, leaving a noticeable effect on the marine life. Although there were 112 incidents for the entire state in 33 of which one barrel or more was spilled, only this one account of the truck spill is documented as to environmental observations.

The year 1971 showed a marked increase in total volume of products spilled, a slight decrease in number of events, and only one detailed report on environmental impacts. This one, however, has been well documented and studied because of its persistent effects on the local fisheries. This event occurred at Long Cove, Searsport, and was one of a number of nearly continuous spills of light products both before and after this date by the U. S. Air Force that may have amounted to as much as 10,000 gallons. A minor spill was reported by the Department of Environmental Protection as the result of 10-15 barrels of bunker C that stranded on Cushing Island in Portland and appeared to affect only the intertidal areas. This event was referred to as the TIBERIUS spill and is briefly described on that Oil Spill Incident Sheet, Appendix B.

Finally, during 1972, the last full year covered by the present study, there were only two significant spills. One was of major proportions and the other was of medium size. Both of these had significant impacts on the environment.

The second largest documented spill on the Maine coast occurred July 22, 1972, when the Texaco tanker TAMANO apparently hit Soldier's Ledge in Casco Bay. The U. S. Coast Guard initially

---

[2] See Appendix D with copies of existing laws.

estimated that 100,000 gallons of No. 6 fuel was discharged. Later reports indicate the possibility that the entire forward tank of 578,000 gallons may have been drained since the rupture was well below the water line (Sova, personal communication). Details of this spill are not available since all records by the Department of Environmental Protection, U. S. Coast Guard, and the Department of Marine Resources are restricted due to pending litigation. Briefly stated, the heavy oil spread under conditions of relatively light winds and little wave action both north and south of Portland. Although the Coast Guard reported that 70,000 gallons were recovered, a sizeable amount of coastline was affected. The intertidal zone was coated and over 46 miles of beach from Kittery to north of Casco Bay was affected (Portland Press Herald).

Another tanker incident, the AQUARIO, a Liberian tanker for American Oil Company, discharged a reported 3,000 to 5,000 gallons of No. 6 and No. 2 fuels from her bilges on August 12, 1972, in Casco Bay. The oil particles coated the shore of Little Diamond Island. Some spill movement data and meteorological data are available for this spill; however, since this case is also pending litigation few of the details can be obtained (U. S. Coast Guard files).

In summary, we can state that there have been relatively few cases of well-documented oil spills with even fewer assessments possible on the supposed or real damage inflicted. However, by establishing the location of the majority of the spills and the volume and type of product spilled, it may be possible to recommend what present and future background studies may be needed.

We hope that by showing how such inadequate information exists even under the present regulations and where there are conflicting data, we can define the required essentials for an improved system of reporting.

A SUMMARY OF BIOLOGICAL IMPACTS

During the first year of investigations, 1953, there are three accounts of investigations of the effects of oil spilled on the marine biota. Of these, only one appears well enough documented to be worth discussing. This incident involved the discharge by the Maine Maritime Academy ship on October 23, 1953, when an undetermined amount of bunker C oil made a significant impact on the local clam flats and clam industry near Castine and Brooksville. Subsequent observations by the Department of Marine Resources personnel determined that an estimated 3,690 bushels of clams valued at $18,432 were lost. The oil persisted for several weeks and spread along the mud flats reaching Brooksville. Clamming was prohibited for about six weeks due to an oily taste[3] preventing any marketing. The employment loss was estimated by Mr. Robert L. Dow of the Department of Marine Resources at 2,430 man days (81 clam diggers operated in the local area). Although no further study was made, it was assumed that clams were palatable the following spring. However, according to Mr. John Hurst of the Department of Marine Resources oil kept herring out of the coves and did damage to fish nets[4].

During 1954, two minor events, neither of a known volume, were reported to affect local clams in the Boothbay and Winter Harbor areas by producing an oily taste. Nothing further was reported on either of these incidents.

The next incident of biological impact was recorded during August of 1958 in Belfast at the C. H. Sprague Dock vicinity. The oil type and volume were unknown. Lobsters in a storage car were covered with oil which fishermen reported had been spilled by a tanker the day before. This is one of a number of spills in and around the Belfast-Searsport area and upper Penobscot Bay that continue into the present. (Dow, 1971)

On April 19, 1959, following complaints of heavy coatings of oil on bait in his floating car reported by a bait dealer and similar complaints from worm diggers, lobster fishermen, and small boat owners, a leak was discovered at the Maplewood Poultry Company, Belfast. A buried tank was observed leaking bunker C oil which spread over 350 yards of shore in front of the plant. Estimates indicated the spill may have been continuing for at least a month.

---

[3] The Department of Marine Resources established a "taste panel" who would sample clams, oysters, etc., for oil taste imparted by exposure to various types of oil.

[4] Open file report at the Department of Marine Resources.

One of the best documented spills is the NORTHERN GULF spill which in 1963 deposited crude oil on the Friendship-Bristol-Brewer shores. Initially, five lobster pounds with a total rated capacity of 750,000 pounds were adversely affected by the oil. Some 647,000 pounds of lobster were contaminated; while the immediate losses were 28,800 lobster weighing about 33,000 pounds. The 412 acres of shoreline covered caused substantial losses to the soft clam industry. More serious, however, over a long period is the retention of oil in the sediments and the sub-lethal effects on the resident clams. For over a two-year period clams were reported to have an oily taste as a result of oil remaining in the sediments. The Department of Marine Resources reported that 2,800,000 pounds of clams were lost. Estimates of the cost to clean up the oil as well as outright loss of marine life was from $4 million to $7 million. This did not include losses to the tanker or her cargo. No clean up was done. (Dow, 1971)

Perhaps the most interesting observation is that this site has been re-examined at periods to observe recovery. Colored photographs showed oil residue on rocks in and about Simmonds' lobster pound in 1970-71. Revisits in 1972 by the Department of Marine Resources personnel revealed that the oil odor and visible sheen were still quite evident. Samples of sediments and soft clams examined July 20, 1972, showed high contamination after 9 years. Analysis by gas chromatography indicated concentrations of 6,800 ppm in the near surface sediments. Samples were obtained during the spring of 1973 and clams in these sediments had hydrocarbon concentrations of 200 ppm. The sample area, located on Long Island, has had no other spills that could have introduced fresh oil since 1963. Further, the fractions identified match the sample of Iranian crude obtained from the NORTHERN GULF in 1963 by the Department of Marine Resources personnel.[5] Sampling and observation of this site is being continued. The unexpected persistence of certain hydrocarbon fractions in the sediments is significant after a period of 10 years.

A chronic type of overflow reported in 1964 at Fort Point, Stockton Springs, of oil and alum from a dumping pit covered a clam flat for an undetermined period. Although no biological survey was reported, this constitutes one of many reported spills in the area as reported by the Department of Marine Resources.

Similarly, light fuels used by the U. S. Navy at Curtis Cove, Harpswell are reported to have had an effect on marine life in the area. On May 18, 1966, an undetermined spill caused complaints which when investigated showed oil odors on the seaweed at high tide and clams oil to taste. A separate example

---

[5] Gas chromatographic work was performed by Dr. Dana Mayo, Bowdoin College.

of effects of light fuels on marine life can be seen in the January, 1969, spillage of 4,000 gallons of range oil at Berry's Mill Bridge, West Bath, when a tank truck cargo spilled into the tidal water there. The oil flowed to Belanger's Cove but due to ice conditions no sampling was possible until March. At this time from 40 to 50 percent of the shellfish were dead or dying. All clams sampled from three stations were reported by the Department of Marine Resources to have an oil taste.

A similar incident on March 20, 1970, occurred on the Upper Cousins River in Freeport where as much as 7,500 gallons of No. 2 fuel from a tank truck escaped into a tidal stream. Here all finfish, shellfish, clams, worms, and marine plants were killed. Also a water well was polluted. Six months later, in August, no plant or animal life had shown signs of returning, according to a re-survey by Maine Department of Marine Resources.

One of the few spills with documented biological effects in the Portland area took place on Little Diamond Island, August 9, 1969. An unnamed tanker spilled from 1/2 to 2 barrels of bunker C. A portion of the oil landed on the island. Unfortunately, about 5,220 gallons of emulsifiers or dispersants caused large mortalities of clams, periwinkles, and mussels along a shore intertidal area of 200 yards as well as destroying green algae according to a survey the following week by the Department of Marine Resources biologists and marine biologists from Bates College.

Culminating years of minor spills presumed common to any fuel handling facility, the LONG COVE spill at Searsport constitutes one of the outstanding examples of a chronic condition that has virtually eliminated a once normal and health clam community. A spill of volatile JP-5 (jet fuel) mixed with No. 2 fuel was discovered on March 16, 1971. Although initially reported by the U. S. Coast Guard to be "small and less than a barrel" large quantities were found by DMR personnel flowing into tidal waters at Long Cove through a culvert and a ditch. By March 22 between 5,000 and 10,000 gallons had been recovered while oil covered the Little River flats some five miles across Penobscot Bay. Aerial photographs of the slick progress were taken to show the rate of slick movement.

By March 26, the mortality area of clams in Long Cove increased from 1/3 of an acre to two acres. During the same period sampling at Little River indicated 5 to 10 percent of the clams were dead. Only three days later, Long Cove mortalities covered 10 acres or 30 percent of the standing crop while the Little River area had risen to 50 percent mortalities.

Subsequently, the U. S. Air Force, owner of the oil terminal which pipes jet fuel to Limestone AFB, contracted with the

Department of Marine Resources to conduct a detailed study of the clam mortalities at Long Cove. This study estimated that the standing crop of soft clams was 23,000 bushels prior to the spill. Sustained yield was estimated at 10,000 bushels.

By August, 1972, the reported mortality was 12,000 bushels. Oil was present in 23 percent of the 130 intertidal samples. All clams were unmarketable due to prolonged oil contamination. The Department of Marine Resources estimated that this condition may persist for many years.

As the market value of the clams in this area is estimated at $150,000 to the diggers annually on a sustained yield basis, the value of the standing crops is $345,000. Using an accepted EPA shellfish multiplier of retail value (Wong, 1969) the yearly crop would be worth as much as $4 million at 1973 values. Thus, there is a total loss of $4 million each year to the State of Maine based on the Department of Marine Resources files.

Analysis of the sediment samples at this location using gas chromotography indicates that the light fractions of oil work down into the sediments contaminating all forms of marine organisms. Also this analysis indicates that the spills have been continuing since the first spill in 1971. Unlike clams affected by sewage pollution which can be cleansed in as little as 48 hours, these clams are unsalvageable through any known techniques. Assessment of such damage to an entire community is extremely difficult since prior baseline studies rarely exist.

Histological studies of clams from Long Cove conducted by Paul Yevich of the Enviornmental Protection Agency[6] for the Department of Marine Resources, showed an incidence of abnormal growths have been reported more recently in two other locations in the state where clams have been contaminated by oil. (Dow, personal communication)

According to the Director of Research at the Department of Marine Resources experiments conducted during 1973 with planting clams in both Long Island and Long Cove and similar clam plants in uncontaminated areas show a marked increase in mortalities in the two oil contaminated sites.

A relatively small spill of bunker C occurred from the Norwegian tanker TIBERIUS June 6, 1971, when 10 to 15 barrels were spilled due to operator carelessness. Oil covered Cushing Island, Willard Beach, South Portland, and an extensive area of the channel of Portland Harbor to Fish Point near East End Beach. Some effects on seaweed and shellfish were noted.

---

[6]National Water Quality Laboratory, West Kingston, Rhode Island

Later, during an inspection by the Maine Department of Environmental Protection (previously the Maine Environmental Improvement Commission), seaweed was observed growing back, as well as some shellfish. Degraded bunker oil was observed in a weathered condition on larger rocks.

During 1972 only one spill of major proportions has been reported with biological damage. This is the well publicized TAMANO grounding, where as much as 478,000 gallons of No. 6 bunker may have escaped the torn tank. The specific reports of effects on biota have all been restricted by pending law suits and the only information at this writing is from the news media and undocumented accounts. Suffice to say, however, that with some 46 miles of shore covered and much of the intertidal zone smothered and adversely affected by oil toxicity, the damage may be considerable.

SPILL STATISTICS

Using the data resulting from the past five years, 1968-1972, where there are enough data to represent most of the types of occurrences such as terminal and tanker spills and the various types of products, it is hard to do more than graphically present those data. Figures 4 and 5 show the various parameters for Portland and the remainder of Maine plotted by product spilled, number of spills, and type of oil activity (i.e. shore facility, tanker, etc.). Table 1 shows these same data in tabular form.

Table 2 lists the total spills by area and number for each area. These areas are arbitrary and are more or less based on watershed boundaries. The location of each spill has not been attempted since the number were reported by general area not specific locality.

Figure 6, a general area location chart of the oil spills also shows the number of oil terminals and handling facilities which may in some cases be related to the number of spills in an area.

Figure 7, a map of oil pipelines, shows the locations of many of the terminals along the coast. The volume of these and their 1972 throughput is further listed in Appendix C.

Table 3 landing statistics for all oil products at Portland, 1959-1971, shows a definite upward trend in oil imports to Portland. These data are provided in the harbor statistics to the U. S. Army Corps of Engineers annual reports.

By plotting the number of spills when reporting began to be reliable, from 1970 forward, along with the volume of incoming crude oil and the number of incoming ships, the number of reported spills increases at the same rate as that of the ship/oil tonage amount. (Figure 8) This figure is based on the assumption that past spills are closely tied to the volumes and number of incoming ships and that at a minimum at least this volume of oil could have been spilled each year as far back as 1950. If one accepts this assumption then Figure 8 suggests that as early as 1950 Portland Harbor may have experienced from 40 to 60 spills per year. The estimated accumlative amount of oil products spilled using this approach could be as high as 1,707,000 gallons and as low as 1,228,000. Similarily the number of spills is estimated for 1950-70 as a total of 1,228 to 1,707 or an average of 1,467.

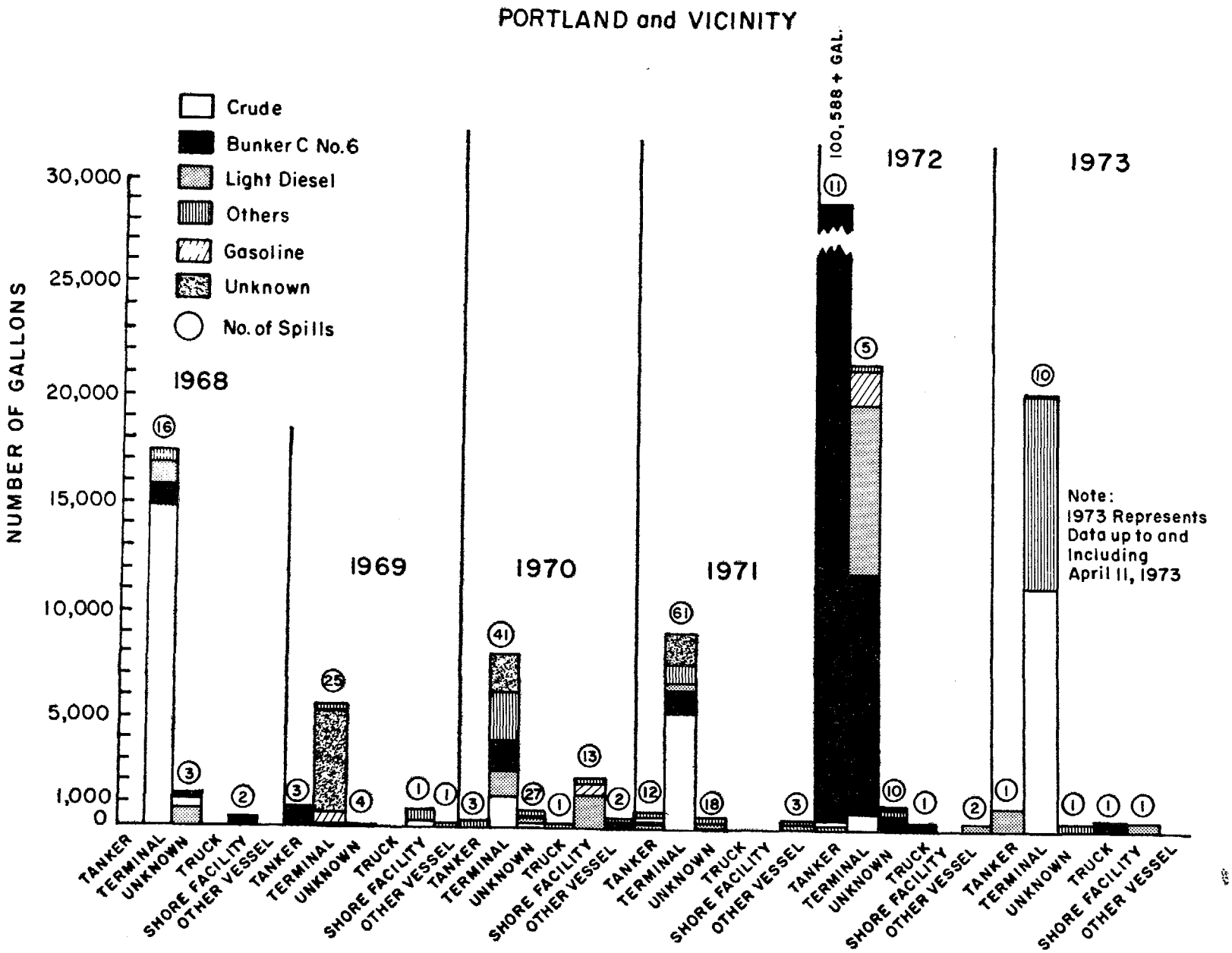

Figure 4. Summary of Oil Spills for Portland and Vicinity 1968 - 1973

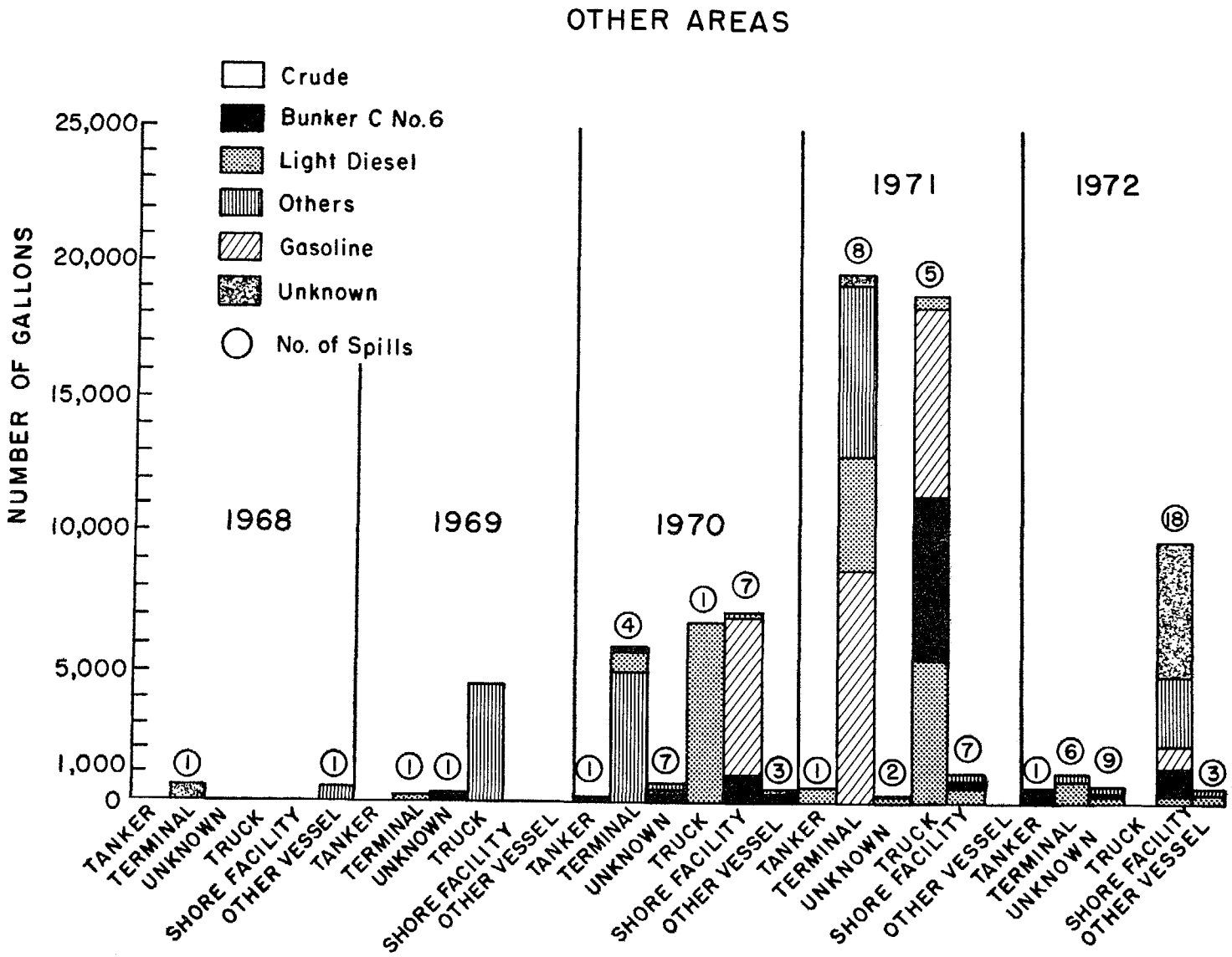

Figure 5. Summary of Oil Spills for Other Areas of Maine 1968-1972

	TYPE SPILL	1968 # spills	1968 K gal	1969 # spills	1969 K gal	1970 # spills	1970 K gal	1971 # spills	1971 K gal	1972 # spills	1972 K gal	1973* # spills	1973* K gal
PORTLAND	tankers	-	-	3	.9	3	.03	12	.4	11	100.6	1	1.0
	terminal	16	17.3	25	5.3	47	8.5	61	10.1	52	22.4	10	21.1
	unknown	3	1.3	4	.002	27	.5	18	.1	10	1.0	1	.3
	shore facility	2	.2	1	.6	13	2.7	-	-	-	-	1	.5
	other vessel	-	-	1	unk.am.	2	.1	3	.2	2	.03	-	-
	truck	-	-	-	-	1	.04	-	-	1	.2	1	.4
	total	21	18.8	34	6.8	93	11.9	94	10.8	76	124.2	14	23.3
	TYPE PRODUCT												
	crude		15.2		.1		1.5		5.4		1.4		10.7
	bunker C,#6		1.3		1.0		1.6		1.3		112.5		.5
	deisel,#2		1.8		-		3.4		.6		8.1		1.5
	gasoline		-		.6		.4		.01		2.1		-
	other		.5		.6		3.3		1.6		.1		10.6
	unknown		-		4.5		1.7		1.9		minor		-
OTHER MAINE AREAS	TYPE SPILL												
	tankers	-	-	-	-	1	minor	1	.5	1	.4	-	-
	terminal	1	unk.am.	1	.03	4	6.2	8	20.7	5	.9	-	-
	unknown	-	-	1	unk.am.	7	.1	2	.02	9	.1	-	-
	shore facility	-	-	-	-	7	7.7	7	.8	18	11.2	-	-
	other vessel	1	.2	-	-	3	.2	-	-	3	.06	1	unk.am.
	truck	-	-	1	4.0	1	7.5	6	20.3	-	-	-	-
	total	2	.2	3	4.03	23	21.7	24	42.3	37	12.7	1	unk.am.
	TYPE PRODUCT												
	crude		-		-		-		-		-		
	bunker C,#6		-		unk.am.		1.7		8.2		2.1		
	deisel,#2		-		.03		8.5		12.8		1.2		
	gasoline		-		-		6.5		15.4		1.2		
	other		.2		4.0		5.0		5.9		8.2		
	unknown				-		-		-		-		
	GRAND TOTAL:	23	19,050 gal.	37	10,818 gal.	116	33,704 gal.	118	53,129 gal.	113	136,976 gal.	15	23,296 gal.

* 1973 represents data up to and including April 11, 1973

TABLE 1 - Summary of Oil Spills for Portland Area & all Other Maine Areas 1968-1973

TABLE 2 - Total number of spills by Area/Number of Oil Terminals
(see Figure 6 for locations)

AREA 1...Kittery to Cape Elizabeth.....7/2

Kittery	2
York	2
Saco	1
Scarborough	1
Cape Elizabeth	1

AREA 2...Cape Elizabeth to Broad Cove - Casco Bay.....336/16

Portland	335
Halfway Rock	1

AREA 3...North Casco to Cape Small - Cousins Island.....12/2

Freeport	1
Cousins Island	4
Harpswell	2
Orrs/Bailey Island	2
Topsham	2
Cundy's Harbor	1

AREA 4...Cape Small to Pemaquid.....16/4

Boothbay Harbor	4
Wiscasset	3
Damariscotta	2
Bath	4
Hallowell	1
Kennebec	1
Pemaquid	1

AREA 5...Pemaquid to Owls Head.....2/2

Waldoboro	1
Matinicus	1

AREA 6...Owls Head to Camden.....14/9

Rockland	6
Rockport	1
Vinalhaven	2
Camden	5

AREA 7...Camden to North Penobscot - Searsport.....22/4

Belfast	3
Islesboro	1
Castine	2
Searsport	16

TABLE 2 (cont.)

AREA 8...Bucksport.....10/3

Bucksport.....9
Frankfort.....1

AREA 9...Bangor to Old Town.....3/13

Bangor.....1
Old Town.....2

AREA 10..East Blue Hill Bay to Swans Is. - Bass Harbor.....3/5

Stonington.....1
Swans Island.....1
Brooksville.....1

AREA 11..Bass Harbor to Schoodic.....15/3

Manset.....1
Hancock.....1
Winter Harbor.....1
Bar Harbor.....3
Southwest Harbor.....5
Ellsworth.....4

AREA 12..Schoodic Point to Jonesport.....2/5

Jonesport.....1
Prospect Harbor.....1

AREA 13..Jonesport to Cutler.....1/3

Machias.....1

AREA 14..Cutler to Eastport.....4/2

Eastport.....4

AREA 15..Eastport to Woodland.....4/6

Calais.....4

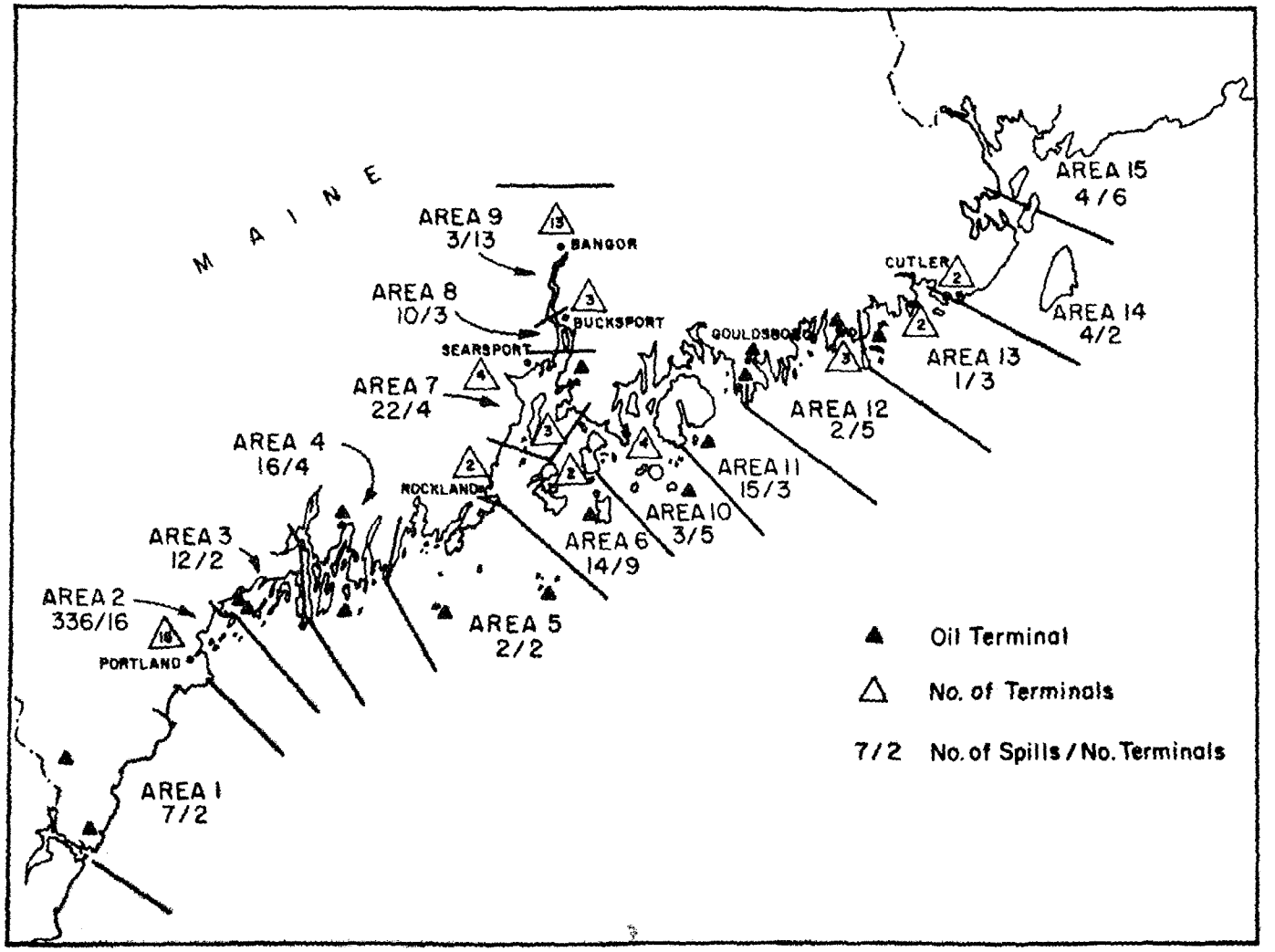

Figure 6. Area Location of Oil Spills Recorded 1953 - 1973

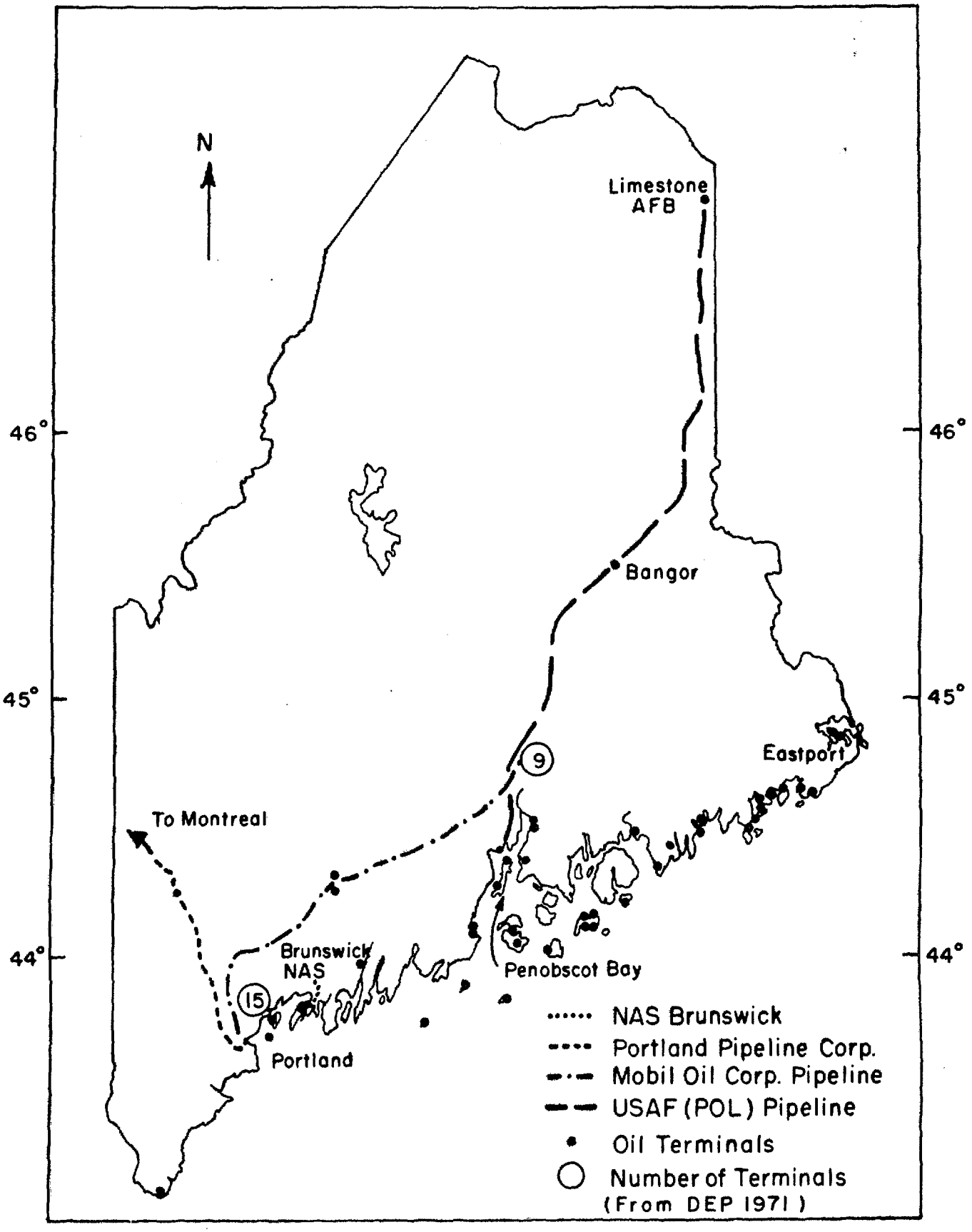

Figure 7. Pipelines and Oil Terminals

	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Portland	17,363	16,167	15,509	15,467	18,734	18,830	18,462	22,315	22,818	27,237	27,831	28,859	31,679
crude	12,836	11,767	11,322	11,283	14,151	14,136	12,627	16,828	17,210	21,493	21,112	DATA MISSING	24,857
gasoline	1,271	1,266	1,216	1,325	1,722	1,779	1,743	1,957	1,777	1,730	1,705		2,109
distillate gas,oil,fuel	1,328	1,276	1,256	1,576	1,149	1,266	1,380	1,252	1,633	1,742	2,400		1,977
jet fuel	1	2	-	1	7	6	6	9	18	37	58		32
kerosene	465	413	419	433	296	310	336	271		325	246		341
residual	644	660	665	435	1,011	1,057	2,077	1,549	1,565	1,716	2,120		2,203
other	42	60	69	52	83	77		85	80	82	88		24
					Volume in short tons x 1,000								
ships	1,429	1,358	1,445	1,447	1,513	1,532	1,473	1,671	1,681	1,724	1,611		1,634
barges									46	220	239		249
TOTAL:					total number of vessels:				1,727	1,944	1,850		1,883

TABLE 3

LANDING STATISTICS (1959-1971) OF ALL OIL PRODUCTS FOR PORTLAND, MAINE (U.S. ARMY CORPS OF ENGINEERS)

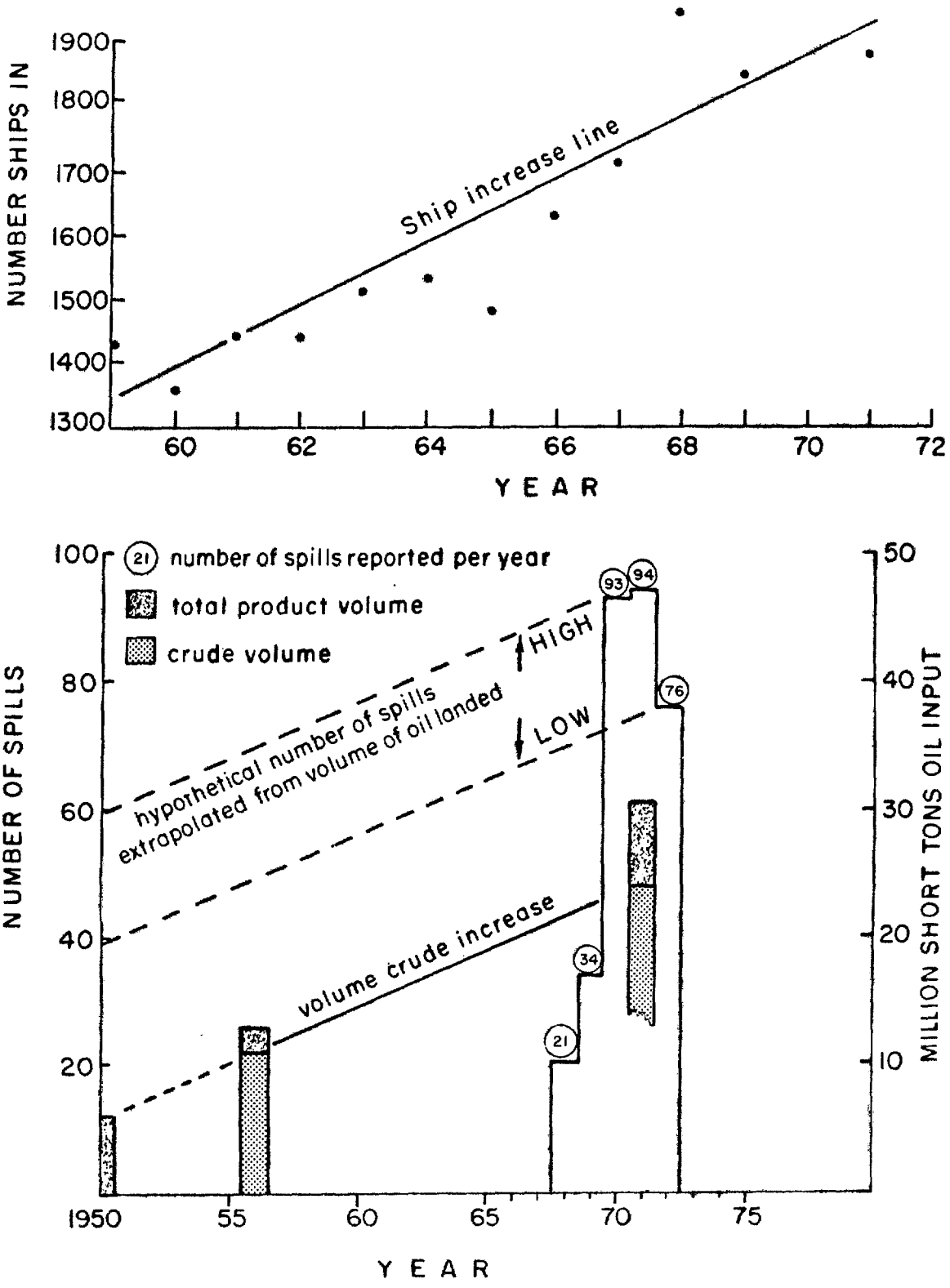

Figure 8. Summary Plot of Portland Spills and Suggested Extrapolation of Previous Spills, 1950-1972

DISCUSSION OF RESULTS

Data Adequacy

In reviewing all the reported information on oil spills for Maine it is clear that the past records are not adequate for a complete picture of either the volume of oil spilled, the frequency, or the suspected impact of spilled products on the environment. With the exception of one or two incidents such as NORTHERN GULF and TAMANO, we can learn little from the behavior of the oil and its movement along the coast by prevailing winds or currents. This is probably due to the fact that 1) small spills disperse and break up and are difficult to track and 2) there has been little or no effort, due probably to insufficient manpower and necessary equipment, to track and identify oil.

However, these data as assembled do represent a 20-year collection of oil spills that show roughly where the events have occurred and give an approximation of the frequency of spills and severity of conditions where oil has been continuously spilled.

During the course of this study it is estimated that over 90 percent of all oil spill records were viewed and included. Additional data still exist at the U. S. Coast Guard facility in Portland and possibly at storage facilities elsewhere although it was the practice to destroy old records. It is doubtful if any of these data would be useful to this study. Therefore, it is assumed that this is the working data base.

Trends

One of the objectives of this study was to see, when all the data were assembled, whether any observable trends or indications were evident. Perhaps the most obvious trend seen is the sharp increase in number, volume, and general information in 1968-69. Most of this increase is due to the functioning of a reporting system and the requirement for parties spilling oil to report it. Otherwise the data base is too sparce and too short to attempt any estimates of trends. However, by noting those areas where spills seem to be most frequent we can assume that these are the locations where biological impacts may be occurring or will occur in the future.

Past Spill Extrapolation

As for the validity of back extrapolating the amount of oil and spill frequency for the harbor area of Portland, it is only a suggestion on the part of the author that this is the

only way to estimate what this amount may have been. Since the present technique is to boom all crude offloading and to attempt to control other spills as well as to fine responsible spillers, there has been a reduction of the number of events and the amount of oil escaping to the harbor areas. Thus, we could assume that even more oil was spilled in the past when there was less control.

Oil Terminal Data

In the course of locating oil terminals using data from the U. S. Coast Guard and Maine Department of Environmental Protection, a difference of total capacity was found at 23 of the 81 terminals listed in the State. Several of these differences were minor and others were very large, as for example the Shell Oil Company, Portland. Department of Environmental Protection (1971) lists 405,838 bbls. while U. S. Coast Guard cites 1,836,000 bbls. storage capacity for that tank farm. No attempt was made to check these discrepancies in the present study. For the entire coast there is a disagreement by 12,253,063 bbls. between DEP and USCG records for the total storage capacity of the oil terminals in the coastal area. Further, neither list all of the terminals. Appendix C is a composite list of three sources.

CONCLUSIONS

Base on a one-month investigation of available oil spill records and the compilation of some simplified resulting data, a few conclusions can be drawn:

a. A total of 451 spills occurring from 1953 to 1973 were documented by reviewing records of several state and federal agencies. This number probably represents from 80 to 90 percent of all spills recorded.

b. By plotting the location and area in which these spills have occurred and by obtaining a description of known biological effects, we can make some first approximations of the extent of oil spillage along the Maine coast. The areas of higher occurrence and accumulative effects can be separated from the smaller or random spills.

c. Portland, with a current throughput of oil of about 30 million tons annually, shows a record of 336 spills over the past 20 years. However, few if any records exist prior to 1968, and this number is obviously low since the input volume has been continuing over 30 years. Using a back extrapolation, a possible total number of spills is more likely to be from 1,200 to 1,700 over the 20 year period 1950 to 1970 with a total volume estimated at 1,467,000 gallons of all oil products.

d. No other trends or statistical analysis seem possible in other areas due to the lack of sufficient data.

e. Oil terminal data collected to show the location, volume of throughput, and total storage capacity for coastal areas are conflicting as reported by the State of Maine, Department of Environmental Protection, and the U. S. Coast Guard.

f. With only two relatively large spills recorded, few data have resulted that show typical spreading of oil along the coast. However, these two, NORTHERN GULF and TAMANO, both grounded ships, demonstrate the long distance oil can spread given sufficient volume.

g. Based on findings of the Maine Department of Marine Resources, there is strong evidence from two spills, NORTHERN GULF and LONG COVE, of the persistence of oil in the sediments for periods up to 10 years with little diminution. Effects of these spills on the biota are serious and have made decided impacts on shell fisheries.

h. There appear to be few investigations of the after effects of most spills. A number of reports suggested possible damage but no re-survey or data from a re-survey

were found. The detailed reports during the 1960's by the Department of Marine Resources were fewer in number after 1970.

i. There is no central location or agency that accumulates all the oil spill data. None of the present ones cover all aspects. Due to lack of funds and differing missions, the Maine Department of Environmental Protection, Department of Marine Resources and the U. S. Coast Guard all accumulate slightly different data. No agency has the mandate to observe, monitor, and document the biological effects of oil spills.

RECOMMENDATIONS

A few recommendations are in order from this study which are supported in part by the data:

a. Using this study as a basic start, a further effort should be continued to fill in any gaps still existing in the baseline of oil spill data.

b. A number of sites should be selected as sampling locations for obtaining hydrocarbon samples by gas chromatography. These areas should be located in areas where the spill incidence is well established and future activities including spills are likely. Such a background analysis would assist in assessing future damages.

c. An improved reporting and monitoring system is necessary to coordinate the various aspects such as the physical clean-up, the reporting of the events, and the biological assessment through followup observation. There appears to be a need for a central function such as an oil spill center or information clearing house.

APPENDIX A

LIST OF OIL SPILLS 1953-1973

●= Oil Spill Incident Data Sheet filled out - Appendix B

DATE	LOCATION	SOURCE
JUN 21, 1953	Stonington	Pearlescence Plant
• JUN 23, 1953	Searsport, C.H. Sprague Co.	C.H. Sprague Fuel Depot
• AUG 2, 1953	Birch Point, Wiscasett	Tanker at CMP dock
• OCT 23, 1953	Castine Harbor	Maine Maritime Academy ship
• DEC 1, 1953	Orr's & Bailey Island	Gulf tanker
• JAN 26, 1954	Portland Harbor	Tanker ULYSSES
FEB 19, 1954	Boothbay Harbor	Unknown
• APR 8, 1954	Winter Harbor	Unknown
• SEP 16, 1954	Portland Harbor8	Tanker NORDAHL GREIG
JUL 20, 1956	Portland Harbor	Barge #17, Gahagan Dredge
SEP 4, 1956	Portland Harbor	ATLANTIC DUKE
• APR 5, 1957	Stockton Springs; Searsport	Northern Chemical Company
• AUG 1958	Belfast, Searsport	Spragues Dock
JAN 13, 1959	Yarmouth, Cousins Island	CMP, Wyman Station, ALVA STAR
• APR 19, 1959	Belfast	Maplewood Poultry Company
• APR 15, 1960	Scarborough	Storage tank
• SEP 30, 1961	Sears Island, Stockton Springs	Jarka Docks, Searsport
• APR 12, 1962	Sears Island, Stockton Springs	Jarka Docks, Searsport
• NOV 25, 1963	Casco Bay, Wt. Cod Ledge	Tanker NORTHERN GULF
• APR 24, 1964	Wiscasset	Tanker SS GOOD HOPE
• APR 1964	Fort Stockton	Northern Chemical
APR 1965	Piscataqua River, Kittery	Tanker & Barge
FEB 16, 1966	South Portland	Unknown
MAY 18, 1966	Curtis Cove, Harpswell	Unknown
APR 5, 1967	Marsh River, Frankfort	Railroad tank cars
MAY 1, 1967	Rockland Harbor	Unknown
OCT 15, 1967	South Portland Pier #2	Tanker INTERCONTINENTAL
DEC 18, 1967	Portland Harbor (Chevron)	Tanker EAGLE COURIER
JAN 14, 1968	Portland	Tanker NAESS SPIRIT
JAN 17, 1968	Portland "L" Wharf	Tanker HAROLD REINAUER
JAN 18, 1968	Portland Harbor; PPL	Tanker OLYMPIC CLOUD
FEB 12 1968	Portland Harbor; PPL #1	Tanker EBERHART ESSEBERGER
FEB 14, 1968	Portland Harbor; PPL #2	Tanker ALOITH
FEB 18, 1968	Bucksport Harbor	C.H. Sprague Company
MAR 6, 1968	Portland Harbor; PPL #1	Tanker MARITSA
MAR 9, 1968	Portland Harbor; PPL #2	Tanker BERGEBOSS
APR 9, 1968	Cousins Island, Yarmouth	Tanker DOROTHY, CMP Dock
APR 9, 1968	Portland	Unknown

PRODUCT	AMOUNT	PROBABLE CAUSE	INFO SOURCE
Naptha	Unknown	Unknown	S&SF
Bunker C	Unknown	Unknown	S&SF
Unknown	50-100 bbls	Spilled by tanker leaving dock	S&SF
Bunker C	Unknown	Ship pumped bilges	S&SF
Gasoline	3-4,000 gals	Tanker ran aground,pumped to free	S&SF
Crude	10,000 bbls	Wing tank leaking	S&SF
Kerosene	Unknown	Unknown , clams oiled	S&SF
Unknown	Unknown	Oil noted by Teraeo dock, clams oiled	S&SF
Crude	"barrel or less"	Spilled at fuel dock	S&SF/PPH
Unknown	5-6 bbls	Unknown	PPH
Crude	3-4 bbls	Opened wrong valve for ballast	PPH
Bunker C	Unknown	Oil on shore near plant	S&SF
Unknown	Unknown	Possible tanker spill/dispersant	S&SF
Bunker C	Unknown	Discharged oil after fueling	CMP/S&SF
Bunker C	Unknown	Buried tank leaking for a month	S&SF
Re-refined oil	Unknown	Probably oil dumped in sand pit	S&SF
Unknown	Unknown	Probably from ships at dock	S&SF
Unknown	Unknown	Probably ships, 1 tanker, 1 freight	S&SF
Iran Crude	20-25,000 bbls	Tanker grounded	S&SF
Unknown	100 bbls	Patch in old foreign tanker leading	S&SF
Oil alum	Unknown	Persistent overflow from pit	S&SF
Crude	1,000's of gals	Improper connection to fuel dock	S&SF
Crude	Unknown	Small amount spread near CMP cove	S&SF
Light fuel	Unknown	Tanker bilge or depot cleaning	S&SF
Bunker C	3,000 gals	10 cars de-railed	S&SF
Slick	Unknown	Oil slick for several weeks	S&SF/EIC
Venez crude	30 bbls	Emulsifier used	PPH
Unknown	60 bbls	Leak in hull slick 2 mi x ½ mi	PPH
Crude	4 gals	Unknown	USACE/PPH
#2 fuel	2 bbls	Unknown	USACE/PHA
Crude	5 bbls	Unknown	USACE/PHA
Crude	5 gals	Unknown	USACE/PHA
Crude	6 bbls	Unknown	USACE/PHA
Unknown	Unknown	Unknown	USACE
Crude	25 gals	Unknown	UNKNOWN
Unknown	6 bbls	Unknown	UNKNOWN
Unknown	4 bbls	Opened wrong valve	USCG
#6 fuel	4 bbls	Unknown	PHA

APR 14, 1968	Portland	Tanker EMERILLON
APR 14, 1968	Portland	Unknown
*APR 26, 1968	Boothbay Harbor	Fishing vessel SANTA LUCIA
JUN 14, 1968	Portland	Tanker
JUN 17, 1968	Portland	Tanker MARLI & EMERILLON
JUN 23, 1968	Portland	Texaco Oil Dock
*JUN 27, 1968	Peakes Island, Portland	Unknown
JUL 1, 1968	Portland	Tanker JARAGUA
JUL 7, 1968	Portland	Tanker ALBISHLA
JUL 24, 1968	Portland	Tanker TEXACO LOUISIANA
SEP 10, 1968	Portland	Tanker
OCT 28, 1968	Portland	Ametek, Inc.
NOV 7, 1968	Presumpscot River	S.D. Warren Company
*JAN 7, 1969	Berry Mill Bridge, West Bath	Truck spill
JAN 10, 1969	Portland Harbor; PPL	Tanker ARGOLIS
JAN 20, 1969	Portland	Tanker TRAVERTY NAV.
*JAN 29, 1969	Portland, Back Cove	Forest City Chevrolet
FEB 12, 1969	Hussey Sound	Tanker ORISSA
FEB 14, 1969	Portland	Tanker HOEGH RAY
FEB 24, 1969	St. Croix River	Unknowm
APR 9, 1969	Portland	Tanker ERIDGE
APR 16, 1969	Portland	Tanker KONESVANG
APR 24, 1969	Portland	Tanker AEGIS STAR
MAY 9, 1969	Portland	Chevron Oil Company
MAY 12, 1969	Portland	Tanker OLYMPIC EAGLE
MAY 14, 1969	Portland	Tanker PACIFIC
MAY 17, 1969	Portland	Tanker NAESS NORSEMAN
MAY 28, 1969	Portland	Tanker Twin City Delivery
JUL 4, 1969	Portland	Tanker PARAH PALAVI
JUL 18, 1969	Portland	Tanker DESERT PRINCESS
JUL 23, 1969	Portland	Texaco Oil Company
JUL 28, 1969	Portland	Tanker POTOMAC
AUG 8, 1969	Portland; Fore River	Mobil Oil Company
*AUG 9, 1969	Portland; Little Diamond Island	Tanker ESSOGUIDEFORD
AUG 19, 1969	Portland	Tanker EMERILLON
AUG 28, 1969	Penobscot River; Bangor	Webber Oil Company
AUG 30, 1969	Portland	Tanker OGDEN WILLAMETTE
SEP 19, 1969	Portland	F/V MEOAN
OCT 2 1969	Portland; Fore River	Harris Oil Company
NOV 14, 1969	Portland	Tanker OLYMPIC EAGLE
NOV 16, 1969	Portland	Tanker OVERSEAS JOYCE
NOV 16, 1969	Portland	Tanker GLOBTIK MERCURY

Bunker C	7-8 bbls	Unknown	USACE
Crude	8 bbls	Unknown	PHA
Bilge oil	200 gals	Vessel pumped used engine oil	USCG
#6 fuel	8 bbls	Unknown	PHA
Crude	18 bbls	Unknown	PHA/USACE
Diesel	20 bbls	Unknown	PHA/USACE
Crude	20 bbls	Unknown	S&SF
Crude	5 bbls	Unknown	PHA/USACE
Bilge	2 bbls	Unknown	PHA/USACE
#6 fuel	7 bbls	Unknown	PHA/USACE
Crude	320 bbls	Unknown	PHA/USACE
#6 fuel	3gal.- 5 bbls.	Unknown	PHA/USACE
Unknown	Unknown	Mechanical failure	USACE
Range oil	4,000 gals	Truck overturned	S&SF
Unknown	Minor	Unknown	USACE
Unknown	Unknown	Unknown	USACE
#4 fuel	600 gals	Either dumped by garage or apartment	USACE/PPH
Bilge	Unknown	Unknown	USACE
Unknown	Unknown	Unknown	USACE
Bunker C	Unknown	Unknown	USACE
Unknown	Unknown	Unknown	USACE
Unknown	10 gals	Unknown	USACE
Unknown	Unknown	Unknown	USACE
Unknown	Unknown	Separator overflow	USACE
#6 fuel	2 bbls	Unknown	US CE
Unknown	8 bbls	Unknown	USACe
Unknown	1 bbls	Unknown	USACE
Unknown	4,000 gals	Unknown	USACE
Unknown	Minor	Unknown	USACE
Unknown	Minor	Unknown	USACE
Unknown	Unknown	Unknown	USACE
Crude	Unknown	Unknown	USACE
Gasoline	600 gals	Unknown	USACE
Bunker C	210-840 gals	Tanker spill and use of emulsifier	S&SF
Unknown	Unknown	Unknown	USACE
#2 fuel	30 gals	Unknown	USACE
Unknown	1-2 bbls	Unknown	USACE
Bilge oil	Unknown	Unknown	USACE
Unknown	Unknown	Fire caused spill	USACE
Bunker C	Unknown	Unknown	USACE
Unknown	Unknown	Unknown	USACE
Unknown	Unknown	Unknown	USACE

NOV 16, 1969	Portland	Unknown
NOV 20, 1969	Portland	Tanker TIDEWATER
NOV 28, 1969	Portland	Unknown
NOV 29, 1969	Portland; Long Island	Unknown
DEC 9, 1969	Portland	Unknown
DEC 10, 1969	Portland	Tanker VESTFORD
DEC 15, 1969	Portland; PPL #2	Tanker OKLAND
DEC 15, 1969	Portland	Tanker RADE KONCAR
JAN 13, 1970	Portland Harbor; PPL #2	Tanker OLYMPIC CHIVALRY
JAN 19, 1970	Portland Harbor	NATA - Tanker
JAN 21, 1970	Portland Harbor	Resnick Oil Company
JAN 21, 1970	Portland	Unknown
JAN 26, 1970	Portland Harbor; PPL #2	Tanker GULF DANE
JAN 27, 1970	Portland; Fore River	Unknown
FEB 3, 1970	Portland; Fore River	Bancroft & Martin tank farm
FEB 14, 1970	Portland Harbor; PPL #2	Tanker ULYSSES
MAR 1, 1970	Portland Harbor	Unknown
MAR 3, 1970	Cousins Island, Yarmouth	Central Maine Power
MAR 17, 1970	Portland	Unknown
MAR 19,1970	Portland; Fore River	Gulf Oil Company, Rolling Mills
MAR 24, 1970	Upper Cousins River, Freeport	Kennebec Oil Truck
MAR 25,1970	Portland, Fore River	Sewer by Rolling Mills
MAR 26, 1970	Portland Harbor	Unknown
MAR 31, 1970	Portland Harbor	Chevron Oil Corporation
APR 2, 1970	Diamond Island, Portland	Unknown
APR 14, 1970	Portland Harbor; PPL	Tanker NAESS NORSEMEN
APR 14, 1970	Portland Harbor; PPL #2	Unknown
APR 14, 1970	Pemaquid Harbor	Mystery oil spill
APR 18, 1970	Portland; Fore River	Unknown
APR 22, 1970	Portland Mobil, Rolling Mills	Unknown
APR 25, 1970	Cundy's Harbor	Vessel DORCHESTER
APR 29, 1970	Portland - Deakes Wharf	unknown
APR 30, 1970	Portland	unknown (Union Wharf)
APR 30, 1970	Portland	Marine East

Unknown	Unknown	Unknown	USACE
Unknown	Unknown	Unknown	USACE
Unknown	Unknown	Unknown	USCG /USCG
Bunker C	1-2 gals	Unknown	USCG /USCG
Bunker C	Small	Unknown	USCG
Bunker C	1.5 bbls	Leak in hull	USCG/USACE
Crude	1 gal	Leak in manifold	USCG
Crude	3 bbls	Faulty valve	USACE/USCG
Crude	1.5 bbls	O/B discharge valve ballasting	USCG
Crude	5 gals	Unknown	USCG
#2 fuel	1,900 gals	Faulty loading pump to trucks	USCG
Light crude	1 bbl	Unknown	USCG
Crude	18 gals	O/B discharge valve	USCG
Light oil	Unknown	Unknown	USCG
Refined	Unknown	Pond empties into Fore River	USCG
Crude	40 gals	O/B discharge tank clean	USCG
Gasoline	Unknown	Tank-Mobil power or Rolling Mills	USCG
Bunker C	2 bbls	Oil from CMP thru outlets	USCG
Bunker C	1 bbl	Unknown	USCG
Refined	20 gals	Open dike drain	USCG
#2 fuel	7,500 gals	Tank burst, drained into stream	S&SF/CG
Solvent	5 gals	Unknown	USCG
Gasoline	5 gals	Unknown	USCG
Lube	2 gals	Unknown	USCG
Bunker C	35 gals	Weathered product on shore	USCG
Crude	2 qts	O/B discharge leak by valve	USCG
Bunker C	1 bbl	Unknown	USCG
Bunker C	Unknown	Probably bilge pumping	USCG
Light	25 gals	Unknown	USCG
Tar	5 gals	Unknown	USCG
Fuel	Unknown	Broken fuel line	USCG
Heavy	10 gals	unknown	USCG
Lube	5 gals	unknown	USCG
Bilge	5 gals	bilge machine	USCG

MAY 6, 1970	Searsport– Penobscot River	At pipeline
MAY 7, 1970	Hallowell-Kennebeck River	Oil terminal, Mobil
MAY 12, 1970	Portland Harbor	Tanker-CHALLENGE CHEVRON
MAY 14, 1970	Portland Harbor; PPL	Tanker-KENAI PENINSULA
MAY 15, 1970	Portland Harbor; PPL	Unknown-Hobson Wharf
MAY 15, 1970	Portland Anchorage B	Unknown
MAY 16, 1970	Boothbay Harbor	Pierce Marine
MAY 20, 1970	Portland Harbor	Tanker-POTOMAC
MAY 25, 1970	Portland Harbor	Unknown
MAY 25, 1970	Portland Harbor PPL	Tanker-ALNAIR
MAY 26, 1970	Portland Harbor	Oil terminal-Sun Oil
JUN 1, 1970	Portland Harbor	M/V Sylvia M
JUN 4, 1970	Portland Harbor	Barge-B&J No.9 Texaco dock
JUN 5, 1970	Portland Harbor; PPL	Tanker-EDRIDGE
JUN 6, 1970	Portland Harbor; Fore River	Rolling Mills-Humble Gulf
JUN 7, 1970	Portland Harbor; PPL	Tanker-EPHESOS
JUN 9, 1970	Bucksport-Penobscot River	St. Regis Paper Company
JUN 12, 1970	Calais-St. Croix River	Georgia Pacific Company
JUN 17, 1970	Portland Harbor; PPL	Tanker-ESSO Panama
JUN 18, 1970	Saco	Unknown
JUN 23, 1970	Portland Harbor	Tanker-HORAMA
JUN 24, 1970	Portland Harbor	Oil terminal-Shell Oil
JUN 27, 1970	Portland Harbor	Barge-BOUCHARD No. 65
JUN 27, 1970	Portland Harbor	Truck at Prince of Fundy Dock
JUN 28, 1970	Portland Harbor; PPL	Tanker-GULF OIL
JUN 29, 1970	Castine Harbor	Unknown
JUN 29, 1970	Bath-Kennebec River	U.S. Navy - Bath Iron Works
JUL 5, 1970	Portland; Anchorage B	Tanker-EAGLE CHARGER
JUL 5, 1970	Portland Harbor; PPL	Tanker-JOYA McCANCE

JP-4	5,000 gals	Dumped by tank cleaning company	DEP
Diesel	1,000 gals	Pipe cracked, leaked into dike then river	USCG
Bunker C	2 bbls	Oil found near vessel during ballast	USCG
Crude	35 gal	O/B discharge valve leak	USCG
Lube	5 gal	From bilge wash	USCG
Light	5 gal	Unknown	USCG
Refined	5 gal	Unknown	USCG
Black oil	25 gal	Bilge pumping	USCG
Light oil	10 gal	Bilge wash	USCG
Crude	5 gal	Defective O/B discharge	USCG
Gas #2	75 gal	Leaky manifold	USCG/DEP
Diesel	10 gal	Bilge pumping	USCG
#6 fuel	5-1 bbls	Overflowed tank	USCG/DEP
Crude	2 gal	Ballast overflow	USCG
Gasoline	10 bbls	Inter-connection error	USCG
Crude	5 gals	Leak O/B discharge	USCG
#6 fuel	85 gals	Leak in line	USCG/DEP
#6 fuel	1,000 gals	Leak in line	DEP
Crude	21 gals	Loose rivet in hull	USCG
Refined	Unknown	Zaillin & Sons Junk Company	USCG
Asphalt	70 bbls	Steam pipe rupture caused leak	USCG
Unknown	1,700 gals	Unknown	DEP
#2 gas	5 gals	Rain washed oil off deck	USCG
Diesel	35 gals	Broken fuel line on truck	USCG
Ballast	5 gals	Ballast tank overflow	USCG
#2 gas	Unknown	No clean-up	DEP
#6	85 gals	Fueling destroyer	DEP
Crude	6 bbls	O/B discharge during tank clean	USCG
Crude	10 gals	Unknown	USCG

JUL 6, 1970	Portland Harbor; PPL	Barge OCEAN 90
JUL 11, 1970	Portland Harbor; PPL	Tanker POTOMAC
JUL 12, 1970	Portland Harbor; PPL	Tanker ESSO STOCKHOLM
JUL 15, 1970	Portland Harbor; PPL	Tanker ANNA ODLAND (esso)
JUL 16, 1970	Portland Harbor; PPL	F/V Red Jacket
JUL 17, 1970	Bucksport; Penobscot	M/V PHIREMON
JUL 24, 1970	Portland Harbor; PPL	Tanker ESSO DANMARIR
JUL 24, 1970	Portland Harbor; PPL	Oil terminal PPL
JUL 25, 1970	Portland Harbor; PPL	Tanker GLOBTIK MERCURY
JUL 25, 1970	Portland Hæbor; PPL	SMVTI Pier
JUL 26, 1970	Portland Harbor; Fore River	Pond at Bancroft and Martin
JUL 27, 1970	Portland Harbor	Storm drain West Maine State Pier
JUL 27, 1970	Portland Harbor; PPL	Tanker GOLDEN GATE
AUG 8, 1970	Portland Harbor	Unknown
AUG 11, 1970	Portland Harbor;	Tanker PORT MIGUEL
AUG 11, 1970	Portland Harbor	Tanker ALCAID, possibly
AUG 15, 1970	Portland Harbor PPL	Tanker A.J. EWARD JAMES
AUG 17, 1970	Portland Harbor	Unknown
AUG 18, 1970	Portland Harbor	Tanker GRAFTON
AUG 21, 1970	Jonesport	O. W. Look
AUG 21, 1970	Bucksport	Tanker PHIREMON
AUG 22, 1970	Portland Harbor; PPL	Tanker KRISTINA
AUG 23, 1970	Portland Harbor; PPL	Tanker PETEROS HAJIKYRIARUS
AUG 27, 1970	Portland Harbor; PPL	Tanker ESSO ALBORG
SEP 3, 1970	Portland Harbor	Unknown
SEP 8, 1970	Woodland	Georgia-Pacific
SEP 6, 1970	Portland Harbor; PPL	Tanker GLOBTIK MERCURY
SEP 9, 1970	Portland Harbor	Tanker COLVERT
SEP 9, 1970	Bar Harbor	Unknown
SEP 14, 1970	Portland Harbor	Rolling Mills - Pond
SEP 15, 1970	Portland Harbor	Unknown
SEP 16, 1970	Portland Harbor	Unknown
SEP 18, 1970	Portland Harbor	Tanker TEXACO CONNECTICUT
SEP 19, 1970	Portland Harbor	Unknown
SEP 21, 1970	Bucksport	Unknown
SEP 24, 1970	Portland Harbor; PPL	Tanker GULF BRITON
SEP 25, 1970	Bucksport	Tanker TRADE DARLING
OCT 2, 1970	Cousins Island	Central Maine Power Company
OCT 9, 1970	Ellsworth; Union River	Morrison Chevrolet Company
OCT 10, 1970	Wiscasset; Sheepscot River	Barge OCEAN 90 & Tug
OCT 12, 1970	Portland Harbor	Unknown

Unknown	45 gals	Unknown	DEP
Bilge wash	Slight	Bilge pump	USCG
Crude	Slight	Unknown	USCG
Bilge oil	45 gals	Unknown	USCG/DEP
Bilge oil	3 bbls	Pumping bilges	USCG
#6	225 gals	Unknown	DEP
Bilge wash	Small	O/B discharge	USCG
Crude	2 bbls	Rusted bleeder line	USCG
Bilge wash	Small	O/B discharge	USCG
Bilge wash	½ bbl	Unknown	USCG*
Refined	Small	Spill into pond empties into River	USCG
Lube	½ bbl	Unknown	USCG
Crude	1 bbl	O/B discharge valve and pump	USCG
Bilge wash	10 gal	Unknown	USCG
Bilge	¼ bbl	Crack in hull	USCG
Bilge	½ bbl	Pumping bilges	USCG
Crude	50 gals	Unknown	DEP
Bilge wash	Small	Unknown	DEP
Crude	10 bbls	Operator error - wrong valve	DEP
Gasoline	6,500 gals	Spilled into harbor by tank truck	DEP
#6	Minor	Unknown	DEP
Crude	1 bbl	O/B discharge	DEP
Crude	5 bbls	O/B discharge	DEP
Crude	½ bbl	O/B discharge	DEP
Light oil	5 bbls	Unknown	DEP
Bunker C	50 gals	Spilled into river - slick several miles	DEP
Crude	¼ bbl	Valve not closed	DEP
Refined	¼ bbl	Drainage	DEP
Diesel	5 gals	Unknown	DEP
Refined	Unknown	Rain and improper equipment	USCG
Refined	Unknown	Unknown	USCG
Refined	Unknown	Unknown	USCG
Gasoline	1 qt	Pin-hole in hull	USCG
Refined	Unknown	Unknown	USCG
Drain oil	Unknown	Crankcase oil on river bank	DEP
Crude	1 bbl	O/B discharge	USCG
#6	200 gals	O/B discharge	USCG/DEP
Diesel	200 gals	Unknown	DEP
Drain oil	Unknown	Crankcase oil dumped in river	DEP
Bilge oil	Unknown	Tug pumped bilges	DEP
Refined	5 gals	Unknown	USCG

OCT 13, 1970	Portland Harbor; PPL	Unknown
OCT 13, 1970	Portsmouth, New Hampshire	Small boat
OCT 13, 1970	Portland	Unknown
OCT 14, 1970	Old Town	Unknown
OCT 16, 1970	Camden Harbor	Unknown
OCT 20, 1970	Portland Harbor	Tanker ESSO PANAMA
OCT 21, 1970	Portland Harbor	Tanker ESSO PANAMA
OCT 21, 1970	Portland Harbor	Tanker TEXACO
• OCT 25, 1970	Casco Bay; Long Island	Oil terminal King Resources
OCT 27, 1970	Portland Harbor; PPL	Tanker ALCAID
NOV 10, 1970	Portland Harbor; PPL	Texaco Maine
NOV 11, 1970	Portland Harbor	Unknown
NOV 14, 1970	Portland Harbor; PPL 2	Tanker NAESS NORSEMAN
NOV 15, 1970	Portland Harbor; PPL	Tanker OLYMPIC TAUNDER
NOV 22, 1970	Portland Harbor	Tanker EMERILLON ARGOLIS
DEC 4, 1970	Portland Harbor	Unknown
DEC 10, 1970	Portland Harbor; PPL	Tanker PEMBROKE TRADER
DEC 28, 1970	Portland Harbor	Unknown
DEC 28, 1970	Portland Harbor; PPL 2	Tanker VITTORIA
DEC 8, 1970	Belfast	Unknown
JAN 2, 1971	South Portland	Tanker TASSOS V
• JAN 4, 1971	Casco Bay; Harpswell	U.S. Navy Fuel Terminal
• JAN 7, 1971	Hancock	H.R. Joy Company
JAN 9, 1971	Portland Harbor	Unknown
JAN 13, 1971	Portland Harbor; PPL	Tanker BRANDON PRIORY
JAN 21, 1971	Portland Harbor; PPL	Mystery spill
JAN 24, 1971	Portland Harbor; PPL	Tanker WORLD LEADER
FEB 1, 1971	Portland Harbor	Tanker ETHEL TIBBETTS
FEB 3, 1971	Portland Harbor	Tanker PORT MIGUEL
FEB 4, 1971	Portland Harbor	Tanker LOUISA LOLLIGHETTI
FEB 5, 1971	Portland Harbor	Tanker TEXACO NEW YORK
FEB 6, 1971	Portland Harbor	Tanker IDDI
FEB 11, 1971	Portland Harbor	Unknown
FEB 15, 1971	Topsham	U.S. Navy Facility
• FEB 22, 1971	Bar Harbor; Hulls Cove	Frenchmen's Bay Motel
FEB 24, 1971	Portland Harbor; PPL	Tanker OLYMPIC SUN
FEB 25, 1971	Portland Harbor	Unknown
FEB 26, 1971	Portland Harbor	Tanker ETHEL TIBBETTS
MAR 1, 1971	Portland Harbor	Unknown
MAR 6, 1971	Portland Harbor	Barge HARTFORD SUN
MAR 8, 1971	Portland	Tank farm Texaco
MAR 10, 1971	Portland Harbor; PPL	Tanker BRITISH PRESTIGE

Crude	Unknown	Unknown	USCG
Bilge wash	Unknown	Pumping bilges	USCG
Oil/scum	10 gals	Unknown	USCG
#6	100 gals	Unknown	DEP
Diesel	Unknown	Slick; 20' x 1 mile	DEP
Crude	5 gals	Unknown	DEP/USCG
Bunker C	1,050 gals	Dumped bilges	USCG
Crude	5 gals	Unknown	DEP
Diesel	20 bbls	Spill in Clarifier room (other spills)	USCG
Crude	10 gals	Unknown	DEP
Crude	5 gals	O/B discharge leak	DEP
Refined	50 gals	Bilge pump	DEP
Crude	1 bbl	O/B discharge	DEP
Crude	1 bbl	Sea suction	DEP
#2	5 gals	Unknown	DEP
Bilge	5 gals	Unknown	DEP
Crudge	½ bbl	Ran off deck	DEP
Unknown	Unknown	Unknown	DEP
Dirty Ballast	½ gal	O/B discharge	DEP
Bilge	Unknown	Cleaning tank - 1oo yards x 1½ mile	DEP
Dark refined	Unknown	Unknown	DEP
JP-5	15-25 bbls	Faculty valve in dike	DEP
Gasoline	9,374 gals	Snowmobile broke line	DEP/USCG
Refined	1 gal	Unknown	USCG
Bunker C	½ gal	Spill on dock	USCG/DEP
Refined dark	Unknown	Unknown	DEP
Crude	½ gal	O/B discharge	DEP
Kerosene	1 qt	Pin-hole leak stbd tank	USCG
Crude	2 gals	O/B discharge valve leak	USCG/DEP
Bunker C	2 gals	Unplugged scuppers	USCG
#2 fuel	1 bbl	Leaking sea suction valve	USCG
Crude	1 bbl	Ran off deck	USCG
Refined	10 gals	Unknown	USCG
Lube oil	5 bbls	Escaped from sump	DEP
#2 fuel	500 gals	Leak in storage tank	PPH/DEP
Oily waste	9 gals	Overflow tank during ballast	USCG/DEP
Refined	10 gals	Unknown	USCG
#2 fuel	2 bbls	Leak in stbd tank	USCG
Refined	2 gals	Unknown	DEP
#2 fuel	10-12 gals	Leak in hull	DEP/USCG
Kerosene	Unknown	Leak in rivets in tank	DEP
Crude	2 gals	Overboard discharge	USCG

MAR	11, 1971	Portland Harbor; PPL	Tanker FRANCHE CONTE
MAR	13, 1971	Portland Harbor; PPL	Tanker EMAFON
• MAR	16, 1971	Searsport	Pipeline at USAF
MAR	17, 1971	Portland Harbor; PPL	Tanker EFTHY COSTA I
MAR	23, 1971	Portland Harbor	Tanker
MAR	24, 1971	Portland Harbor; PPL	Tanker ALCAID
MAR	26, 1971	South Portland	Tanker WORLD INDEPENDENCE
MAR	30, 1971	Portland Harbor	Barge Bouchard 65
APR	5, 1971	Waldoboro	Truck
APR	10, 1971	Portland Harbor; PPL	Tanker ORIENT STARR
APR	11, 1971	Portland Harbor; PPL	Tanker ORIENT STAR
APR	21, 1971	Portland Harbor; PPL	Tanker LYKAUITOS
APR	21, 1971	Islesboro	Mystery
APR	25, 1971	Portland Harbor	Tanker
APR	26, 1971	Portland Harbor	Tanker
APR	28, 1971	Portland Harbor	Tanker HORAMA
APR	29, 1971	Portland Harbor; Fore River	Oil terminal
APR	29, 1971	Damariscotta River	Strong Chevrolet Company
MAY	2, 1971	Portland Harbor; PPL	Tanker SEPIA
MAY	2, 1971	Portland Harbor	Tug
MAY	4, 1971	Portland Harbor; PPL	Tanker GULF DANE
• MAY	11, 1971	York	Tank truck R.E. Young Company
MAY	15, 1971	Casco Bay	Tanker HOEGH RIDER
MAY	19, 1971	Portland Harbor; PPL	Tanker DEFIANT COLOCOTRONIS
• MAY	26, 1971	York beach, Long Island	Possible MAY 11 spill
MAY	27, 1971	Portland Harbor; PPL	Tanker LISELETTE ESSBERGEN
MAY	29, 1971	Portland Harbor; PPL	Tanker LIBERTY BELL
JUN	1, 1971	Portland Harbor; PPL	Tanker KING CADMUS
JUN	4, 1971	Portland Harbor; PPL	Tanker EMERILLON
• JUN	6, 1971	Portland Harbor; PPL	Tanker TIBERIUS
JUN	7, 1971	Portland Harbor; PPL	Tanker TIBERIUS
JUN	17, 1971	Portland Harbor	Oil terminal
JUN	20, 1971	Portland Harbor; PPL	Tanker PANAGHIA
JUN	23, 1971	Portland Harbor	Unknown
JUN	23, 1971	Casco Bay	Unknown
JUN	28, 1971	Portland Harbor	Unknown
• JUN	28, 1971	Vinalhaven	Oil terminal J.C. Calderwood
JUN	30, 1971	Portland Harbor; PPL	Tanker WORLD QUEEN
JUN	30, 1971	Portland Harbor	Tanker ALFMAR
JUN	30, 1971	Portland Harbor	Tanker ETHEL TIBBETTS
JUL	4, 1971	Portland Harbor; PPL	Tanker ESSO BERLIN

●	Crude	25 gals	Stripping discharge	USCG
	Crude	1½ bbls	Sea suction loss in ballast	USCG
	JP 5 & #2	10,000 gals	Terminal discharge	S&SF
	Fuel	1 gal	Seal leakage	USCG
●	Black oil	3 bbls	Bilge pumping	USCG
	Bilge	1 gal	Unknown	DEP
	Bilge, oily	small	Opened wrong valve	DEP
	Gasoline	5 gals	Crack in #1 port tank	DEP
●	#2 fuel	1,000 gals	Unknown	DEP
	Bilge oil	3 gals	Pumping bilges	USCG/DEP
	Crude	15 bbls	Leaking sea suction	USCG/DEP
	Crude	25 gals	Overboard discharge	USCG
●	Bunker C	Unknown	Covered ½ mile of beach	PPH
	Bunker	1 gal	Unknown	USCG
	Asphalt	30 bbls	Opened wrong valve on tank	USCG
	Unknown	45 bbls	Wrong valve	DEP
●	Refined	Unknown	Seepage from ground	USCG
	Waste oil	150 gals	Dumping over bank	DEP
	Crude	10 gals	Overboard discharge	USCG
	Diesel	100 gals	Leaking fuel tank	USCG
●	Crude	20 bbls	Balasting operation	USCG
	#2 fuel	100 gals	Overflow of tank truck	DEP
	#6 fuel	6 bbls	Overflow of #7 cargo tank	USCG/DEP
	Crude	2 bbls	Overboard discharge	USCG
●	Weathered	10 bbls	Mystery (May 11)	PPH/USCG
	Crude	2 bbls	Leaking sea suction	USCG
	Crude	2 bbls	Leaking valve discharged overboard	USCG/DEP
	Crude	1 cup	Overboard discharge	DEP/USCG
●	Crude	3 bbls	Unknown	DEP/USCG
	Bunker C	15 bbls	Overflow due to "carelessness"	USCG/DEP
	Oily waste	20 gals	Overflow due to "carelessness"	PPH/DEP
	Refined	10 gals	Unknown	USCG
●	Crude	Small	Unknown	DEP
	Bunker	10 gals	Unknown	USCG
	Bunker	10 gals	Unknown	USCG
	Refined	Unknown	Unknown	USCG
●	Gasoline	25 gals	Unknown	DEP
	Sludge oil	20 gals	Bilge leak in engine room	DEP/USCG
	Lube oil	1 bbl	Overboard in transfer	DEP
	#2 fuel	1 bbl	Operator inattention	DEP
●	Crude	Small	Unknown	DEP

JUL	7, 1971	Casco Bay	Unknown
JUL	7, 1971	Casco Bay	Unknown
JUL	9, 1971	Kennebec River	Oil terminal
JUL	12, 1971	Portland; Fore River	Mobil terminal
JUL	17, 1971	Casco Bay	Oil terminal
JUL	18, 1971	Portland Harbor; PPL	Tanker ESSENTIAL
JUL	23, 1971	Portland Harbor; PPL	Tanker ST. ANNA
JUL	30, 1971	Portland Harbor	Barge
AUG	3, 1971	Bucksport	Humble Oil Company
AUG	12, 1971	Portland Harbor	Unknown
AUG	21, 1971	Prospect Harbor	Truck
AUG	27, 1971	Portland Harbor; PPL	Tanker ESSO NORNBERG
AUG	27, 1971	Portland Harbor; PPL	Tanker PETROQUEEN
AUG	30, 1971	Searsport	B&A docks
SEP	4, 1971	St. Croix River; Red Beach	Unknown
SEP	4, 1971	Portland Harbor	Unknown
SEP	5, 1971	Portland Harbor	Unknown
SEP	6, 1971	Portland Harbor	Unknown
SEP	7, 1971	Portland Harbor; PPL	Tanker ESSO BERLIN
SEP	7, 1971	Portland Harbor; PPL	Tanker YORK
SEP	8, 1971	Portland Harbor	Tanker
SEP	13, 1971	Portland Harbor	Unknown
SEP	15, 1971	South Portland	American Oil Terminal
• SEP	20, 1971	Odum Ledge; Brooksville	Tanker FRANCIS S. BUSHEY
SEP	23, 1971	Halfway Rock	USCG Cowslip
• SEP	30, 1971	Portland Harbor; PPL	Tanker CANTO
SEP	30, 1971	Portland Harbor	Tug
SEP	30, 1971	Portland Harbor	Tanker
OCT	1, 1971	Portland Harbor; PPL #2	Tanker CANTO
• OCT	1, 1971	Rockport	Truck
OCT	12, 1971	Portland Harbor; PPL	Tanker
OCT	15, 1971	Portland Harbor; PPL	Tanker TANK PRINCESS
• OCT	15, 1971	Eastport Harbor	Holmes Packing Company
• OCT	18, 1971	Searsport	U.S. Air Force Pipeline
OCT	22, 1971	Portland Harbor	Unknown
OCT	26, 1971	Hussey Sound	Tanker OCEAN 90
OCT	28, 1971	Rockland Harbor	Town sewer
NOV	3, 1971	Portland Harbor	Tanker TEXACO ILLINOIS
NOV	3, 1971	Portland Harbor	Tanker PETROQUEEN
NOV	5, 1971	Portland Harbor	Unknown
NOV	6, 1971	Portland Harbor; PPL	Tanker ATALANTE

Bilge	1 bbl	Unknown	USCG
Unknown	Unknown	Unknown	USCG
Asphalt	Unknown	Opened wrong valve	USCG
#2 fuel	3 bbls	Overflowed drain	USCG
#2 fuel	2 bbls	Seepage from day tank	USCG
Crude	2 bbls	Sea suction	USCG
Crude	1½ bbls	Leaking sea chest	USCG
Refined	10 gals	Leaking discharge line	USCG
Gasoline	Small	Unknown	DEP
Unknown	Unknown	Tank car overflow	USCG
Gasoline	6,000 gals	Truck spill	PPH
Oil	Few drops	Unknown	DEP
Crude	Small	Unknown	DEP
Light oil	3 gals	Unknown	DEP
Diesel	20 gals	Mystery	DEP/CG
Bilge	Unknown	Bilge pumping	USCG
Bilge	Unknown	Bilge pumping	USCG
Bilge	Unknown	Bilge pumping	USCG
Crude	3 gal	Leak in overboard discharge	USCG
Crude	50 bbls	Balasting suction	USCG
Bunker C	2 bbls	Unknown	USCG
Refined	10 gals	Leak in fuel line	USCG
#6	5 gals	Leak in fuel line	USCG/DEP
JP #2 oily ballast	500 gals	Vessel grounded, tore tank	DEP
#2 diesel	113 gals	Hose ruptured	DEP
Fuel	20 gals	Pump lost suction	DEP
Lube oil	10 gals	Vessel sank	USCG
Bunker	3 bbls	Leaking valve	USCG
Crude	3 bbls	Same vessel above, O/B leak	DEP
#6 fuel	8,000 gals	All contents reported dammed	PPH
Crude	1 gal	Ballast line	USCG
Crude	10 gal	Leak in O/B discharge valve	DEP/CG
Bunker C	150 gals	Leaked in boiler room	PPH/DEP
JP #4	Unknown	Malfunction at offload	DEP
Bunker C	10 gals	Unknown	USCG
#6 fuel	1 bbl	Overfilled tank	DEP
Oil	2 gals	Unknown	DEP
Bunker C	3 bbls	Overflow bunker tank	DEP/CG
Crude	15 gals	Leaky valve in bottom of vessel	DEP/CG
Waste oil	15 gals	Unknown	USCG
Crude	5 gals	Leak in O/B discharge	DEP/CG

	NOV 14, 1971	Portland Harbor; PPL	Tanker ST. PETER
	NOV 18, 1971	Portland Harbor; PPL	Tanker TITUS
	NOV 22, 1971	Bath; Kennebec	Truck
	NOV 29, 1971	Portland Harbor	Tanker TEXACO SOUTHAMPTON
	DEC 9, 1971	Portland Harbor	Barge
	DEC 14, 1971	Portland Harbor; PPL	Tanker ESSO PANAMA
	DEC 16, 1971	Portland Harbor	Tanker ESSO PANAMA
•	DEC 16, 1971	Bucksport	St. Regis Paper Company
	DEC 19, 1971	Portland Harbor; PPL	Tanker MOZART
	DEC 24, 1971	Portland Harbor	Tanker BRALINDA
	DEC 26, 1971	Portland Harbor	Tanker PETROSLADE
	DEC 27, 1971	Portland Harbor; Fore River	Unknown
	DEC 28, 1971	Southwest Harbor	H. R. Beal & Sons
	DEC 31, 1971	Portland Harbor	Tanker AMBRONIA
•	JAN 2, 1972	Rockland Harbor	Mystery (City sewer)
•	JAN 4, 1972	South Portland	Cities Service Company Terminal
	JAN 8, 1972	Portland Harbor	Tanker REZA PAHLAVI
	JAN 11, 1972	Portland Harbor	Unknown
	JAN 11, 1972	Portland Harbor	Unknown
•	JAN 13, 1972	Portland; Mackworth Island	Mystery spill
	JAN 14, 1972	Portland Harbor	Oil terminal
	JAN 20, 1972	Portland Harbor	Tanker T.H. BROVIE
	JAN 24, 1972	Portland Harbor	Gulf Oil Company Terminal
•	JAN 24, 1972	Bailey Island; Mackerel Cove	Coastal tanker JUDY ANN
	JAN 26, 1972	Portland Harbor	Unknown
•	FEB 1, 1972	Portland Harbor	Coastal tanker CAPT SAM TEXACO
•	FEB 1, 1972	Portland Harbor	Tanker TEXACO UTAH
	FEB 2, 1972	Portland Harbor	Mystery
	FEB 7, 1972	Portland Harbor	Fishing trawler VANDAL
•	FEB 11, 1972	Ellsworth Union Road	H.R. Beal & Sons
	FEB 13, 1972	Portland Harbor	Unknown
	FEB 14, 1972	Portland Harbor; Long Island	Unknown
	FEB 15, 1972	Portland	Mobil Oil Terminal
	FEB 17, 1972	Portland Harbor	Barge BFT #1
	FEB 18, 1972	Ellsworth	R.H.S. Oil Company
	FEB 19, 1972	Matinicus	Dock
	FEB 21, 1972	Portland Harbor	Tanker ATALANTIE
•	FEB 23, 1972	Topsham	Pejepscot Paper Company
	FEB 25, 1972	Portland Harbor	Tanker ANNE
	FEB 28, 1972	Portland Harbor	Barge OCEAN 90
	MAR 1, 1972	Portland Harbor	Oil terminal; Cities Service Co.

Crude	5 gals	Sea suction discharge	DEP/CG
Crude	20 bbls	Overboard discharge	USCG
#2 fuel	4,770 gals	Truck overturned	DEP
Crude	1 gal	Unknown	DEP
#2 fuel	1 gal	Overflow, oil in tubine discharge	DEP/CG
Crude	1 bbl	Sea suction	USCG
Crude	35 gals	Leak in manifold	DEP/CG
#6	20 gals	Human error, boomed	DEP
Crude	35 gals	O/B discharge valve leak	USCG/DEP
Crude	½ bbl	Leak in starboard tank	USCG/DEP
Lube	1 gal	Shaft leak	DEP
Gasoline	5 gals	Unknown	USCG
Diesel	5 gals	Unknown	USCG
Crude	1 gal	Sea suction	UNKNOWN
Unknown	Unknown	"went out with the tide"	DEP/CG
Gasoline	100 gal;CG/2000 g;DEP	Underground pipe break	DEP/CG
Crude	2 gals	O/B discharge valve leaked	USCG
Bunker	20 gals	Unknown	USCG
Refined	10 gals	Unknown	USCG
Unknown	½ bbl	Oil spread over island	DEP
Refined	50 gals	Separator overflow	USCG
#2 fuel	100 gals	Leak in hull rivets	DEP/CG
Refined	10 gals	Ground saturation	USCG
Diesel	50 gals	Overflow in discharge to shore	USCG
Bunker	1.5 gal	Spill near M/T ALNAIR	DEP/CG
#2 & #6	4,500 gals	Deck hand negligence	PPH/CG
Crude	15 gals	Hole in ship	USCG
#6 oil	20 bbls	Part of FEB 1 spill in water	DEP
#2 oil	30 gals	Vessel sank	DEP/CG
#2 oil	360 gals	Underground tank rupture	DEP/CG
#2 oil	10 gals	Unknown	USCG
#2 oil	10 gals	Probable King Resources	DEP/CG
Refined	450 gals	Overflow of separator	DEP
Bunker	10 gals	Overflow of tank	USCG
Fuel	3,000 gals	Spilled into Union River; Tank leak	USCG
Diesel	50 gals	Storm broke dock lines	DEP
Crude	15 gals	Unknown	UNKNOWN
Unknown	5,000 gals	Off loading rail cars, hose failure	DEP
Unknown	1 qt.	Circulatory water	USCG
#6 fuel	2 gals	Loose blank in line, hose ruptured	USCG
Refined	100 gals	Underground leak	USCG

MAR	2, 1972	Portland Harbor	Oil terminal; Cities Service Co
MAR	12, 1972	Portland Harbor; PPL	Tanker DEFIANT COLOCOTRONIS
MAR	12, 1972	Portland Harbor; PPL	Oil terminal
MAR	15, 1972	Southwest Harbor	Gross Lobster Wharf
MAR	18, 1972	Portland Harbor; PPL	Tanker LORD MOUNT STEPHEN
MAR	22, 1972	Portland Harbor	Tanker MOSLI
APR	4, 1972	Portland Harbor	Tanker ETHEL TIBBETS
APR	8, 1972	Portland Harbor	Unknown
APR	16, 1972	Portland Harbor	Tanker T.T. ATA
APR	19, 1972	Damariscotta	Weeks-Waltz Motors, Inc.
APR	17, 1972	Rockland	F.J. O'Hara Company
APR	24, 1972	Searsport	Tanker OVERSEAS ADVENTURER
APR	26, 1972	Portland Harbor	Tanker KONGVANS
MAY	4, 1972	Portland Harbor; PPL	Tanker CABO PILAR
MAY	5, 1972	Bath	Oil terminal Berts Oil Service
MAY	9, 1972	Camden	Mystery slick
MAY	16, 1972	Portland Harbor; PPL	Tanker ERIDGE
MAY	20, 1972	Portland Harbor; PPL	Tanker ASPRA
MAY	22, 1972	Vinalhaven; Carvers Harbor	Unknown
MAY	24, 1972	Portland Harbor; PPL	Tanker REVERE SUN
MAY	26, 1972	Old Town	Penobscot Company
MAY	31, 1972	Swans Island	Oil terminal Mertic Morrison
JUN	1, 1972	Manset	Hinkley Boat Yard
JUN	2, 1972	Portland Harbor	Barge BFT 50
JUN	4, 1972	Portland Harbor; PPL	Tanker AMBRONIA
JUN	10, 1972	Bar Harbor	Unknown
JUN	12, 1972	Portland Harbor; PPL	Tanker CANTO
JUN	12, 1972	Portland Harbor; PPL	Tanker CANTO
JUN	16, 1972	Portland Harbor; PPL	Tanker ESSO EDINBURGH
JUN	16, 1972	Searsport	Unknown
JUN	29, 1972	Machias	Mawhinee Ford Company
JUN	30, 1972	Portland Harbor	Tanker SVEN SALEN
JUL	10, 1972	Portland Harbor	Tanker STATUE OF LIBERTY
JUL	10, 1972	Portland Harbor; PPL	Tanker JAGRANDA
JUL	11, 1972	Portland Harbor; PPL	Tanker
JUL	13, 1972	Portland Harbor	Tanker BRITISH COMMODORE
JUL	13, 1972	Portland Harbor	Mystery
JUL	16, 1972	Portland Harbor	Tanker IBERENIA
JUL	16, 1972	Searsport	Unknown
JUL	17, 1972	Portland Harbor; PPL	Tanker ESSO GHENT
JUL	18, 1972	Portland Harbor	Tanker EVELYN

Refined	3-5 gals/hr	Product came down culvert	DEP/CG
Crude	10 gals	Overboard discharge	USCG
Crude	½ gal	Leak in line	USCG
#2 fuel	6 gals	Overflow of truck	USCG
Crude	30 gals	Lost suction on ballast	USCG
Oily waste	2 gals	Bilge discharge overboard	USCG
#2 fuel	5 gals	Leak in hull	USCG
#6 fuel	1 qt	Unknown	USCG
Bunker	4,200 gals	Overflow of tank	USCG
Waste oil	Unknown	Dumping waste oil on river bank	DEP
Unknown	76 gals	Suspect vandals	USCG
#6 fuel	400 gals	Unknown	DEP
#6 fuel	1 qt	Valve leak	DEP
Crude	2 gals	O/B discharge valve	UNKNOWN
#2 fuel	Unknown	Overflowing tank	DEP
Oil	Unknown	Oil slick reported	DEP
Crude	20 gals	Air in ballast line	USCG
Crude	21 gals	Overboard discharge	USCG
Oil	Slick	Unknown	USCG
Gasoline	5 gals	Overflow of shore tank	DEP
#6 fuel	275 gals	Pumped sump oil into drain culvert to river	DEP
Kerosene	15 gals	Neglect by owner, beach removed/oil burned	DEP
Diesel	40 gals	Workman disconnected fuel line on purpose	USCG
Diesel	30 gals	Loose plate	USCG
Crude	1 qt	Overboard discharge valve	DEP
Light	20 gals	Unknown	USCG
Crude	63 gals	Lost sea suction	USCG/DEP
Crude	126 gals	Overflow of tank	DEP/CG
Crude	42 gals	Lost sea suction	USCG
Light	50 gals	Unknown	USCG
Crankcase Oil	15 gals	Dumping waste oil on river bank	DEP
Lube oil	Small	Leak from steering gear	DEP
Unknown	½ gal	Loose rivet	DEP
Crude	30 gals	Overboard discharge valve	DEP
Crude	1 qt	Equipment failure	DEP/CG
Oil	10 gals	Leak in cooling system	DEP/CG
Gasoline	50 gals	Unknown	USCG
Oily ballast	15 gals	Ballasting overflow	DEP/CG
Light	50 gals	Unknown	USCG
Crude	82 gals	Unknown	USCG
#6 fuel	20 gals	Engine discharge	USCG

•	JUL 22, 1972	Portland Harbor	Tanker TAMANO
	JUL 24, 1972	Portland Harbor	Tanker LAGUNILLAS
	JUL 25, 1972	Searsport	Sunoco Garage
	JUL 25, 1972	Camden	U.S. Post Office
	JUL 27, 1972	Southwest Harbor	Maine Maritime Academy SLOOP GEMI
	AUG 5, 1972	Portland Harbor; PPL	Tanker STATUE OF LIBERTY
	AUG 5, 1972	Portland Harbor; PPL	Tanker WORLD QUEEN
	AUG 8, 1972	Portland Harbor; PPL	Tanker CITTA DI SAUDNA
	AUG 8, 1972	Camden	Mystery
	AUG 12, 1972	Portland Harbor; PPL	Tanker OLYMPIC GATE
•	AUG 12, 1972	Portland Harbor	Tanker AQUARIO
	AUG 15, 1972	Portland Harbor; PPL	Tanker DESERT PRINCESS
	AUG 17, 1972	Portland Harbor	Tanker
•	AUG 15, 1972	Eastport	Mearl Cannery
	AUG 22, 1972	Portland Harbor	Tanker BRITISH CENTAUR
	SEP 1, 1972	Portland Harbor	Tanker
	SEP 5, 1972	Portland Harbor; Light Ship	Tanker THYELLA
	SEP 5, 1972	Bucksport	St. Regis Paper Co.
	SEP 6, 1972	Eastport	Mearl Company
	SEP 12, 1972	Rockland; Lermand Cove	Heating system of school
	SEP 15, 1972	Portland Harbor; PPL	Tanker REX
	SEP 20, 1972	Searsport	Tanker STOLT GEMINI
	SEP 21, 1972	Portland Harbor; PPL	Tanker FREEDOM
	SEP 21, 1972	Portland Harbor; PPL	Tanker PASSAD III
	SEP 28, 1972	Stockton Springs	Unknown
	OCT 3, 1972	Eastport	Rivera Packing Plant
•	OCT 3, 1972	Southwest Harbor	USCG Cowslip
	OCT 10, 1972	Portland Harbor; PPL	Tanker PHILIPPA
	OCT 11, 1972	Portland Harbor	Oil terminal
	OCT 17, 1972	Portland Harbor	Tanker CRUSADER
	OCT 21, 1972	Portland Harbor	Unknown
•	OCT 26, 1972	Searsport (Morse Point)	Mystery spill
	OCT 30, 1972	Portland Harbor	Oil terminal
	OCT 31, 1972	Portland Harbor; PPL	Tanker MT. WASHINGTON
•	NOV 2, 1972	Portland Harbor; PPL	Tanker TEXACO MAINE
	NOV 4, 1972	Camden	Harborside West Marina
	NOV 8, 1972	Southwest Harbor	Southwest Boat Company SPICUS II
	NOV 8, 1972	Portland Harbor	Tanker OLYMPIC EAGLE
	NOV 14, 1972	Portland	Tank truck spill into stormdrain
	NOV 20, 1972	Portland Harbor; PPL	Tanker LONDON INDEPENDENCE

#6 fuel	100,000 gals	Ran aground	DEP/CG/P
Crude	1 gal	Unknown	DEP
Crankcase	Unknown	Dumping over bank into stream	USCG
Fuel	60 gals	Leaking furnace	USCG
Diesel & Waste	5 gals	Deliberate pumping overboard	USCG
Crude	40 gals	Overboard discharge, leak in pump	DEP/CG
Crude	5 gals	Leak in overboard discharge	DEP/CG
Crude	½ gal	Leak in hull	USCG
#2 fuel	Unknown	Mystery under investigation	DEP
Crude	420 gals	Leak in tank	USCG
#6 & #2 bilge	3,000-10,000 gals	Illegal discharge of bilge	DEP/CG
Crude	5 gals	Blow by in discharge valve	USCG
Bilge	10 gals	Bilge pumping	USCG
#6 fuel	150 gals	Overflowing tank many times	DEP/CG
Hydro oil	5 gals	Blown valve seal	USCG
Light oil	21 gals	Bad valve	USCG
Crude	2 gals	Hull fracture	DEP
Machine oil	30 gals	Oil in river, machine leak in plant	USCG
Tar, bunker	10 gals	Plant personnel dumped over bank	USCG
Bunker C	250 gals	A leak from system	PPH
Crude	3 gals	Overboard discharge	USCG
Kerosene	1 gal	From tank cleaning	USCG
Crude	5 gals	Discharge during ballast	USCG
Crude	5 gals	Valve leak	USCG
#2	Unknown	Unknown	DEP
Bunker C	1,000 gals	Found on rocks, leak after fire 1970	USCG
#2 fuel	20 gals	Overflow tank at fill-not contained	DEP/CG
Crude	1 bbl	Sea suction valve	DEP/CG
Gas	20 gals	Hole in gas line	USCG
Crude	1 qt.	Overboard	USCG
Bilge	50 gals	Unknown	USCG
#6 fuel	15 gals	LIBERTY IMPORTER in vicinity	DEP/CG
#6 fuel	½ gal	Hose line failure	USCG
Crude	15 gals	Bad valve seat	DEP/CG
Crude	420 gals	O/B discharge	DEP/CG
Gasoline	600 gals	Leak in tank underground	DEP/CG
Bilge oil	30 gals	Drained bilges in hauling	USCG
Crude	1 gal	Leaking overboard discharge valve	DEP/CG
Bunker C	200 gals	Spill	USCG
Crude	10 gals	Rupture in discharge line	DEP/UCG

NOV	22, 1972	Rockland	Oil terminal, McLoon Company
NOV	30, 1972	Portland Harbor; PPL	Tanker DIADEMA
NOV	30, 1972	Ellsworth Union River	Tulsa Gas Station
DEC	6, 1972	Cape Elizabeth	Trawler ALTON A
DEC	26, 1972	Portland Harbor	Oil terminal
JAN	1, 1973	Portland Harbor	Tanker ESSO EDINBURGH
JAN	17, 1973	Portland Harbor	Mystery spill
FEB	5, 1973	Portland Harbor	Tanker OLYMPIC GARLAND
FEB	8, 1973	Portland Harbor; PPL 2	Tanker EFPLIA
FEB	20, 1973	Portland Harbor	Tanker OVERSEAS VIVIAN
FEB	27, 1973	Portland Harbor; PPL 2	Tanker GIMBLEVANG
MAR	4, 1973	Boothbay Harbor	Fishing dragger, Blakes Marine
MAR	8, 1973	Westbrook	Knowlton Machine Company
MAR	8, 1973	Portland Harbor; PPL 2	Tanker PHILIPPA
MAR	10, 1973	Portland Harbor; PPL 2	Tanker TASMANSEA
MAR	10, 1973	Portland Harbor	Tanker TEXACO NEW MEXICO
MAR	13, 1973	Portland Back Cove	Truck Merrill Transportation Co
MAR	21, 1973	Portland Harbor; PPL 2	Tanker ATLANTIC PRINCE
APR	3, 1973	Portland Harbor; PPL	Tanker FRIEDLAND
APR	11, 1973	Portland; Fore River	Oil terminal, Texaco oil

Diesel	500 gals	Storage tank check valve tail	PPH/CG
Crude	1 gal	Leak in starboard sea suction	USCG
Gasoline	646 gals	Leak in pipeline into drain sewer	USCG
Diesel	Unknown	Sank at Trundy Point	DEP
#6 fuel	3 gals	Faulty valve	USCG
Crude	20 gals	Unknown	USCG
Bilge	300 gals	Unknown	USCG
Unknown	Unknown	Illegal discharge reported by aircraft	USCG
Crude	2 gals	Deck spill thru scuppars	USCG
#2 fuel	1,000 gals	Suspect leak in tank	USCG
#6 fuel	21 gals	Overfilled the day tank	USCG
Bilge	Unknown	Vessel pumped drain oil	USCG
#2 fuel	500 gals	Tank overflow at transfer	USCG
Unknown	Sheen	"few drops per second from rivets"	USCG
Crude	10 gals	Leak from O/B discharge	USCG
Bunker C	10 gals	Leaked from improper hose	USCG
Bunker C	420 gals	500-750 gals in Cove from sewer	USCG
Crude	255 bbls	Wing tank overflow	USCG
Bunker C	3 gals	Unknown	USCG
Kerosene	5-10,000 gals	Pipeline break by ship prop	USCG

APPENDIX B

OIL SPILL INCIDENT DATA SHEETS 1953 - 1973

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: June 23, 1953

LOCATION: Searsport Fuel Depot; C.H. Sprague Company

PRODUCT SPILLED: Bunker Oil #6 ESTIMATED QUANTITY Unknown

CIRCUMSTANCES: Oily sludge around dock. No visible slicks.

RATE AND NATURE OF CONTAMINATION: Clams dug in vicinity had an oily taste. Taste panel test showed 6 free and 3 oily.

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Sea and Shore Fisheries

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: August 2, 1953

LOCATION: Birch Point, Wiscassett

PRODUCT SPILLED: Fuel Oil ESTIMATED QUANTITY 10 bbl min to 50-100 bbl

CIRCUMSTANCES: Spill by tanker after leaving dock at Central Maine Power Plant (American Oil Company Tanks)

RATE AND NATURE OF CONTAMINATION: Few clams or mussels in area but oil observed to kill seaweed (after 2 weeks). Boats have oil slick on them.

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: October 1 oil was detected on the grass at high water mark. Oil on flats and shores had diminished.

SOURCE OF INFORMATION: Maine Department of Sea and Shore Fisheries

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: October 23, 1953

LOCATION: Castine Harbor

PRODUCT SPILLED: Bunker C#6 ESTIMATED QUANTITY _____

CIRCUMSTANCES: Maine Maritime Academy vessel pumped its bilges

RATE AND NATURE OF CONTAMINATION: Oil spread along the mud flats concentrating in patches near clam growing areas. Clams were unacceptable for market.

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: Covered flats across bay at Brooksville

DURATION: Clams effected for several months with oily taste. Assumed that during the following spring the clams were palatible.

ADDITIONAL INVESTIGATIONS: On subsequent observations it was found that an estimated 3690 bushels of clams valued at $18,432 were lost. 81 diggers were out of work for 6 weeks. O l kept herring out of coves and damaged fish nets (letter to Hurst from Hess 54)

SOURCE OF INFORMATION: Maine Department of Sea and Shore Fisheries

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Gulf Oil Tanker DATE: December 1, 195[illegible]

LOCATION: Between Orr's and Bailey's Islands, near Water Cove

PRODUCT SPILLED: High test & regular gasoline ESTIMATED QUANTITY 4,000 gallons

CIRCUMSTANCES: Tanker ran around on a ledge and had to pump out gasoline to refloat itself.

RATE AND NATURE OF CONTAMINATION: No quahogs or clams occur in Water Cove. After seven days no effects were visible.

METEOROLOGIC CONDITIONS: Hightide 7:10 a.m.; NE Wind

SPILL MOVEMENT: Gasoline was held in Water Cove by wind for several hours, later gas spread and went out to sea.

DURATION: Water smelled of gas for 2 days.

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: Maine Department of Sea and Shore Fisheries

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: October 23, 1953

LOCATION: Castine Harbor

PRODUCT SPILLED: Bunker C#6 ESTIMATED QUANTITY _____

CIRCUMSTANCES: Maine Maritime Academy vessel pumped its bilges

RATE AND NATURE OF CONTAMINATION: Oil spread along the mud flats concentrating in patches near clam growing areas. Clams were unacceptable for market.

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: Covered flats across bay at Brooksville

DURATION: Clams effected for several months with oily taste. Assumed that during the following spring the clams were palatible.

ADDITIONAL INVESTIGATIONS: On subsequent observations it was found that an estimated 3690 bushels of clams valued at $18,432 were lost. 81 diggers were out of work for 6 weeks. O 1 kept herring out of coves and damaged fish nets (letter to Hurst from Hess 54)

SOURCE OF INFORMATION: Maine Department of Sea and Shore Fisheries

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Tanker Ulysses DATE: Jan. 26, 1954

LOCATION: Portland Harbor

PRODUCT SPILLED: Venezuela crude ESTIMATED QUANTITY unknown

CIRCUMSTANCES: Wing tank of tanker was leaking at sea. Continued in Portland Harbor, tank holds 8,000 to 10,000 barrels. The leak was below the water line so entire contents could have spilled.

RATE AND NATURE OF CONTAMINATION: Oil covered several acres of shore areas.

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: Maine Department of Sea and Shore; Portland Press Herald.

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: Feb 19, 1954

LOCATION: Boothbay Harbor

PRODUCT SPILLED: Kerosene ESTIMATED QUANTITY unknown

CIRCUMSTANCES: unknown

RATE AND NATURE OF CONTAMINATION: about 10 acres of clam flats affected. Clams oily after a week in clean water.

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Sea and Shore Fisheries

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: April 8, 1954

LOCATION: Winter Harbor

PRODUCT SPILLED: _____ ESTIMATED QUANTITY unknown

CIRCUMSTANCES: Large quantities of oil were noticed by S&SF while on a sanitary survey. Near Texaco Fuel dock. Could be bilge pumping

RATE AND NATURE OF CONTAMINATION: Clams dug in vicinity of oil were oily smelling as was the seaweed.

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Sea and Shore Fisheries

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Nordahl Grieg DATE: Sept. 16, 1954

LOCATION: Portland Harbor

PRODUCT SPILLED: South American Crude Oil ESTIMATED QUANTITY "a barrel or less"

CIRCUMSTANCES: Oil spilled at fuel dock, covered 200 sq. ft. of water surface

RATE AND NATURE OF CONTAMINATION: Oil reported to have been carried out to sea.

METEOROLOGIC CONDITIONS: Tide going out

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: U.S. Coast Guard; Portland Press Herald

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Atlantic Duke DATE: Sept. 4, 1956

LOCATION: Portland

PRODUCT SPILLED: Crude ESTIMATED QUANTITY 3-4 bbls

CIRCUMSTANCES: Opened wrong valve for seawater ballast

RATE AND NATURE OF CONTAMINATION:

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: Portland Press Herald

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Northern Chemical Industries, Inc. DATE: April 5, 1957

LOCATION: Stockton Springs/Searsport

PRODUCT SPILLED: Bunker C#6 ESTIMATED QUANTITY Unknown

CIRCUMSTANCES: Oil on shore adjacent plant

RATE AND NATURE OF CONTAMINATION: Oil spilled either at Sprague's Fuel dock (a mile away from plant) or resulting from plant burning pit.

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: Maine Department of Sea and Shore Fisheries

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: August, 1958

LOCATION: Belfast/Searsport - Sprague's Dock

PRODUCT SPILLED: unknown ESTIMATED QUANTITY unknown

CIRCUMSTANCES: Lobsters stored in lobster car near Sprague's Fuel dock were covered with oil. Fishermen reported a tanker on previous day had spilled oil and used a dispersant.

RATE AND NATURE OF CONTAMINATION: _____

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Sea and Shore Fisheries

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Alva Star American Oil DATE: Jan. 13, 1959

LOCATION: Wyman Station, Central Maine Power, Cousins Island, Yarmouth

PRODUCT SPILLED: Bunker C ESTIMATED QUANTITY unknown

CIRCUMSTANCES: Discharge of oil from tanks after fueling CMP station.

RATE AND NATURE OF CONTAMINATION:

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: A.F. Howard, Chief Engineer, CMP Wyman Station

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: April 19, 1959

LOCATION: Belfast - Maplewood Poultry Company

PRODUCT SPILLED: Bunker C ESTIMATED QUANTITY unknown

CIRCUMSTANCES: A buried tank leaked which covered 350 yards of shore in front of plant. Estimates show spill may be a month old.

RATE AND NATURE OF CONTAMINATION: Boat dealer complained of heavy coatings of oil on CHUBS in his floating car. Similar complaints from worm diggers, lobster fishermen, and boat owners.

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Sea and Shore Fisheries

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: April 15, 1960

LOCATION: Nonsuch River, Scarborough

PRODUCT SPILLED: re-refined crank case oil ESTIMATED QUANTITY unknown

CIRCUMSTANCES: Leakage from storage tank at Beech-Ridge Road

RATE AND NATURE OF CONTAMINATION: _____

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: Probably related to dumping of oil in gravel pit etc., since controlled by law enforcement.

SOURCE OF INFORMATION: Maine Department of Sea and Shore Fisheries

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: Sept. 30, 1961

LOCATION: Upper Penobscot Area

PRODUCT SPILLED: unknown ESTIMATED QUANTITY unknown

CIRCUMSTANCES: During an overflight a large number of oil slicks between Sears Island and Stockton Springs Harbor. Greatest concentration was around Northern Chemical Company.

RATE AND NATURE OF CONTAMINATION: Chart of observation on file at Sea and Shore Fisheries

METEOROLOGIC CONDITIONS: Light southerly; visibility good

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: Similar flight on October 11 - with numerous slick observations - some possibly attributed to various plants, repeat flight April 12 - oil coming from Jarka Docks, Searsport.

SOURCE OF INFORMATION: Maine Department of Sea and Shore Fisheries

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: April 12, 1962

LOCATION: Penobscot area

PRODUCT SPILLED: _____ ESTIMATED QUANTITY _____

CIRCUMSTANCES: Air flight over area observed slicks from Jarka Docks, Searsport. There was two ships - one oil tanker, one freighter at docks.

RATE AND NATURE OF CONTAMINATION: _____

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Sea and Shore Fisheries

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Northern Gulf (Liberian) Gulf Oil DATE: Nov. 25, 1963

LOCATION: West Cod Ledge, Casco Bay

PRODUCT SPILLED: Iranian crude (Agha-Jari) ESTIMATED QUANTITY 20 - 25,000 bbls 5,000 metric tons

CIRCUMSTANCES: Tanker ran aground, much oil rafted out the bay into the ocean.

RATE AND NATURE OF CONTAMINATION: Stranded oil covered 1.6 km^2 of beach between high and low tides. Five tidal storage lobster pounds of 750,000 capacity with 647,000 lobsters contaminated as well as soft clam areas. Continued on separate page.

METEOROLOGIC CONDITIONS: Clear; NW wind 17.6 km 1 hr; gusts 31.9 km

SPILL MOVEMENT: Much oil rafted out of Casco Bay by strong winds and caught by a small clockwise eddy to Penobscot Bay where a SE gale on Nov 30. drove oil ashore in Friendship-Bristol-Brennan and on to Long Isl.

DURATION:

ADDITIONAL INVESTIGATIONS: On separate page

SOURCE OF INFORMATION: Maine Department of Sea and Shore Fisheries

ADDITIONAL COMMENTS:

All lobster and clams contaminated. Immediate loss of 28,800 lobsters weighing 15.2 m tons in three pounds. Oil trapped in sediment affected clams for over two years and 122 m tons lost. Sampling continued through 1972 showing visible and measurable entrapped residue with strong oily odors when samples of sediment of soft clams examined (JUL 20, 1972). The sample area of Long Island lobster impound is normally isolated from spill effects.

The cost to clean up 412 acres (about 42 miles) of contaminated shoreline was estimated at $3 million not including lobster loss, clam or other shellfish. Total cost including marine life was estimated at $4-7 million.

*Clams tasted of oil for over 2 years as a result of oil in sediments. (Dr. J. Trefethen)

Sampling continues in Simonds' pound area. A reading of 6800 ppm obtained from gas chromatograph in Spring of 1973. Tarry residue still evident on rocks above high water. A visible sheen is present in sediments. (Oil is still evident in the cove north of the pound.

OIL SPILL INCIDENT DATA SHEET

INCIDENT: S.S. Good Hope (American Oil) DATE: APR 24,1964 4:15 p.m.

LOCATION: Birch Point, Wiscasset

PRODUCT SPILLED: Unknown ESTIMATED QUANTITY at least 100 bbls

CIRCUMSTANCES: tanker reportedly was patched with cement and leaking. Subsequently sailed to Japan with a cargo but was lost at sea with all hands in the Pacific

RATE AND NATURE OF CONTAMINATION:

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: Mr. Frank Hammond, Wiscasset letter on file at Maine Department of Sea & Shore Fisheries.

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: APR 1964

LOCATION: Fort Point, Stockton Springs

PRODUCT SPILLED: Oil & Alum ESTIMATED QUANTITY _____

CIRCUMSTANCES: persistent overflow of oil from oil pit spilling over the bank into bay.

RATE AND NATURE OF CONTAMINATION: Flats covered in areas of clam production

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: Letter from Mr. Taylor to Mr. MacDonald (EIC), Discontinuing use of oil pit and using a 15,000 gallon tank to reclaim waste oil. Memo Sept. 16, 1964 Dr. Harriman to R. L. Dow.

SOURCE OF INFORMATION: Maine Department of Sea and Shore Fisheries.

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: MAR 1965

LOCATION: Piscataqua River - Portsmouth/Kittery

PRODUCT SPILLED: Crude Oil ESTIMATED QUANTITY 1,000's of gal.

CIRCUMSTANCES: Spill due to improper connection of tanker to fuel dock also barge reportedly spilled oil.

RATE AND NATURE OF CONTAMINATION: _____

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Donald Moreau, Portsmouth, New Hampshire

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: FEB 16, 1966

LOCATION: South Portland

PRODUCT SPILLED: Crude Oil ESTIMATED QUANTITY Unknown

CIRCUMSTANCES: A small amount of oil spilled from an undetermined source, spread to Maine State Pier, a cove between CMP plant and South Portland Bridge, and an area on Fore River.

RATE AND NATURE OF CONTAMINATION: _____

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Sea and Shore Fisheries

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: MAY 18, 1966

LOCATION: Curtis Cove, Harpswell, below Navy Fuel Depot

PRODUCT SPILLED: Light fuel ESTIMATED QUANTITY _____

CIRCUMSTANCES: Upon complaint of Bruce Booker, Sea and Shore Fisheries investigated. Either from a tanker cleaning bilges (APR 19 last tanker) or cleaning activities at depot.

RATE AND NATURE OF CONTAMINATION: Area had oily smell; seaweed at high tide mark had an oily smell, clams by taste test had oily taste.

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Sea and Shore Fisheries

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: APR 5, 1967 4:30 p.m.

LOCATION: Marsh River Frankfort

PRODUCT SPILLED: Bunker C ESTIMATED QUANTITY 25 to 3,000 gal.

CIRCUMSTANCES: 10 tank cars of 10,000 gal each were de-railed

RATE AND NATURE OF CONTAMINATION: 500 to 1000 gallons lost before an earth dam was erected.

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: Maine Department of Sea and Shore Fisheries

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: MAY 1, 1967

LOCATION: Rockland Harbor near Marine Colloids

PRODUCT SPILLED: _____ ESTIMATED QUANTITY _____

CIRCUMSTANCES: _____

RATE AND NATURE OF CONTAMINATION: Unknown - no discharge but slick persists as water washes ashore.

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: Oil slick continued for several weeks

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Environmental Improvement Commission

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Intercontinental (Liberian) DATE: OCT 15, 1967

LOCATION: Portland Pier #2

PRODUCT SPILLED: Venezuelan Crude ESTIMATED QUANTITY 30 bbls.

CIRCUMSTANCES: Emulsifier used to clean up

RATE AND NATURE OF CONTAMINATION:

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: Portland Press Herald OCT 17, 1967

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Eagle Courier - Chevron DATE: DEC 18, 1967

LOCATION: Portland Harbor, Chevron Oil Pier

PRODUCT SPILLED: _____ ESTIMATED QUANTITY 60 bbls

CIRCUMSTANCES: Leak in hull - gigantic slick

RATE AND NATURE OF CONTAMINATION: 2 miles long - ½ mile width, covered much of Portland Harbor.

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Portland Press Herald, DEC 19, 1967

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Dorothy (Liberia) DATE: APR 9, 1968

LOCATION: Cousins Island (CMP)

PRODUCT SPILLED: _____ ESTIMATED QUANTITY 4 bbls.

CIRCUMSTANCES: Opened wrong valve

RATE AND NATURE OF CONTAMINATION: _____

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: U.S. Coast Guard - U.S. Army Corps of Engineers

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Santa Lucia DATE: APR 26, 1968

LOCATION: Boothbay Harbor

PRODUCT SPILLED: Bilge ESTIMATED QUANTITY 200 gal.

CIRCUMSTANCES: Heavy oil slick noted around vessel and Juliana Dock. Vessel was changing oil and dumping overbroad. Second offence in same location. $500 fine.

RATE AND NATURE OF CONTAMINATION: Oil contaminated lobster at Fisherman's co-op. Mr. Brown lost $2000 worth of lobster in storage cars.

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: U. S. Coast Guard

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: JAN 26, 1969

LOCATION: Back Bay, Portland

PRODUCT SPILLED: Fuel oil ESTIMATED QUANTITY Approx. 600 gal.

CIRCUMSTANCES: Failure of valve at Forest Park Apartments causing overflow

RATE AND NATURE OF CONTAMINATION: No apparent damage

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: Mr. Roger Fogg reported 600 gal. not 200 gal.

SOURCE OF INFORMATION: Portland Press Herald; report of Jerry Sander U. S. Coast Guard

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: AUG 9, 1969

LOCATION: Little Diamond Island, Portland

PRODUCT SPILLED: Bunker C ESTIMATED QUANTITY 210 to 840 gal.

CIRCUMSTANCES: Oil tanker spilled oil of which a portion went ashore on Little Diamond. About 5220 gallons of emulsifiers and dispersants were used over a several day period.

RATE AND NATURE OF CONTAMINATION: Mortalities of shellfish (mussels, periwinkles, soft clams) along an intertidal strip 200 yards long were blamed on chemicals not oil.

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: A survey was conducted by Professor Hackett and Wait of Bates College. Report on file at Sea and Shore Fisheries. Observation of AUG 15 & 21. Also reported by Messrs. Apollonio Hurst

SOURCE OF INFORMATION: Maine Department of Sea and Shore Fisheries

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Gulf Dane DATE: JAN 25, 1970

LOCATION: Portland Pipeline #2, Portland

PRODUCT SPILLED: Crude ESTIMATED QUANTITY 15 Gal.

CIRCUMSTANCES: O/B discharge valve

RATE AND NATURE OF CONTAMINATION:

METEOROLOGIC CONDITIONS: Visibility clear, 8 miles, Temperature 31, wind NWr, sea calm, JAN 26 clear, Visibility 8 temp. 30 NW-10

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: U.S. Coast Guard

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: MAR 24, 1970

LOCATION: Upper Cousins River, Freeport

PRODUCT SPILLED: #2 fuel ESTIMATED QUANTITY 7-7500 gal.

CIRCUMSTANCES: Oil truck dumped fuel accidentally into a gully that drains into a tidal stream.

RATE AND NATURE OF CONTAMINATION: Observed dea fish, clams, worms - polluted a well in Freeport. Killed all finfish, shellfish, and marine plants.

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: After six months the area was still devoid of any plant or animal life - AUG 1970.

SOURCE OF INFORMATION: Maine Department of SEa and Shore Fisheries

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Bernstein & Jacobsen Barge DATE: JUN 4, 1970

LOCATION: Portland Harbor, Texaco Dock

PRODUCT SPILLED: _____ ESTIMATED QUANTITY approx. 1 bbl

CIRCUMSTANCES: Oil spilled when 5 bbls were forced under pack pressure through deck valves (hatches) of barges

RATE AND NATURE OF CONTAMINATION: Sorbent type C used

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Sea and Shore Fisheries, U. S. Coast Guard.

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: OCT 25. 1970

LOCATION: Long Island, Casco Bay

PRODUCT SPILLED: Light oil (diesel) ESTIMATED QUANTITY 10-20 bbls

CIRCUMSTANCES: King Resources Terminal - Pier - Suspected spills on 20-24 October

RATE AND NATURE OF CONTAMINATION: Slick in Hussey Sound from pier out past overset Island and into Hussey. Slick 150 feet wide

METEOROLOGIC CONDITIONS: Overcast visibility 8 miles, temp. 51, sea calm, wind N-03

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: U. S. Coast Guard

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: JAN 4, 1971

LOCATION: Harpswell

PRODUCT SPILLED: JP-5 ESTIMATED QUANTITY 15-25 bbls

CIRCUMSTANCES: Faulty valve in dike

RATE AND NATURE OF CONTAMINATION: _____

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: U. S. Coast Guard cites 3 bbls. in report.

SOURCE OF INFORMATION: Maine Department of Environmental Protection.

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: JAN 7, 1971

LOCATION: Hancock - H. R. Joy Company

PRODUCT SPILLED: Gasoline ESTIMATED QUANTITY 9374 gal

CIRCUMSTANCES: Snowmobile broke off storage tank pipe

RATE AND NATURE OF CONTAMINATION: Small amount spilled into Bay gone in two days.

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Environmental Protection and Department of Sea & Shore Fisheries by Mac Richards.

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: FEB 15, 1971

LOCATION: Topsham (USN facility)

PRODUCT SPILLED: Lubricating oil ESTIMATED QUANTITY 5 bbls

CIRCUMSTANCES: Escaped from sump. Clean up by Lt. Tom Cooney in Cathance River.

RATE AND NATURE OF CONTAMINATION: _____

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Deparment of Environmental Protection and Department of Sea & Shore Fisheries by Dick Nelson

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: FEB 22, 1971

LOCATION: Bar Harbor - Hall Cove; (Frenchman's Bay Motel)

PRODUCT SPILLED: Fuel oil ESTIMATED QUANTITY 200 gal

CIRCUMSTANCES: Leaked from 10,000 gal storage tanks at Bar Harbor Motel

RATE AND NATURE OF CONTAMINATION: Oil spread for 2.5 miles along Frenchman's Bay. No apparent damage

METEOROLOGIC CONDITIONS: Wind and current dissappated slick

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: 2/23 Biologist from Sea and Shore Fisheries unable to find visible signs of fuel oil.

SOURCE OF INFORMATION: Portland Press Herald - Department of Environmental Protection Report and Department of Sea & Shore Fisheries by Mac Richards

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: MAR 16, 1971

LOCATION: Long Cove, Searsport

PRODUCT SPILLED: JP 5 & No.2 fuel ESTIMATED QUANTITY Initial estimate of 1.5 bbls. over 5000 gal. were recovered by MAR 22, only part of spill. Other reports indicate 10,000 gal #2 recovered.

CIRCUMSTANCES: All samples examined in both survey areas - all marine animals and plants collected contained detectable quantities of petroleum hydrocarbons. Analysis indicated continuing spills since MAR 1971

RATE AND NATURE OF CONTAMINATION: Bay MAR 30- 30% of clams in Long Cove were dead - a loss of $24,000 wholesale value.

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: Oil traced to Sears Island, Browns Head Northport. Little River (5 miles across Penobscot Bay). Photos showing most of the slick location taken by Republican Journal.

DURATION: Seeps from culverts continued several months or longer.

ADDITIONAL INVESTIGATIONS: S&SF given study contract by USAF. 23,000 bushel standing crop before spill. By AUG 1972 a mortality of 12,000 bushels reported. Oil was present in 23% of 130 intertidal samples from 1972 survey. Environmental damage continues. Loss of $150,000/year to digger will continue.8% residual surviving clams had developed cancerous tumors in connective tissue gills and gonads.

SOURCE OF INFORMATION: Sea and Shore Fisheries files; U. S. Coast Guard.

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: APR 21, 1971

LOCATION: Islesboro

PRODUCT SPILLED: Bunker C ESTIMATED QUANTITY _____

CIRCUMSTANCES: Mystery oil spill

RATE AND NATURE OF CONTAMINATION: Covered ½ mile of beach

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Portland Press Herald and Maine Department of Sea & Shore Fisheries.

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: MAY 11, 1971

LOCATION: York (Roger E. Young Company, Inc.)

PRODUCT SPILLED: #2 ESTIMATED QUANTITY 100 gal.

CIRCUMSTANCES: Overflow of tank truck

RATE AND NATURE OF CONTAMINATION: "Mystery Spill"

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Environmental Protection.

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Unknown DATE: MAY 27, 1971

LOCATION: Long Sand Beach in York

PRODUCT SPILLED: Weathered ESTIMATED QUANTITY 10 bbls

CIRCUMSTANCES:

RATE AND NATURE OF CONTAMINATION: Coated area 3-5 feet wide for 2 miles of beach at high tide. More 1½ miles north toward Cape Neddick

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: Portland Press Herald - U. S. Coast Guard.

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Tiberius (Norway) Boston Fuel Co, DATE: June 6, 1971

LOCATION: Portland

PRODUCT SPILLED: Bunker C ESTIMATED QUANTITY 10-15 bbls

CIRCUMSTANCES: Operator negligence at pump; "Carelessness"

RATE AND NATURE OF CONTAMINATION: Covered Cushing Island, Willard Beach South Portland, an extensive area of channel and Portland Harbor to Fish point near East End Beach.

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS: Inspection DEC 16, 1971 to Cushing Island. All beaches cleaned up - no oil to a depth of 1 foot in Sand. Seaweed growing back 8" long now. Little white shells on rock growing back Degraded Bunker C seen on larger rocks - hard and weathered.

SOURCE OF INFORMATION: Maine Department of Environmental Protection, Portland Press Herald, U. S. Coast Guard.

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: JUN 28, 1971

LOCATION: Vinal Haven, James C. Calderwood, Inc.

PRODUCT SPILLED: Gasoline ESTIMATED QUANTITY 20-25 gal

CIRCUMSTANCES: Loading hose from truck ruptured

RATE AND NATURE OF CONTAMINATION: Gasoline readily evaporated

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Environmental Protection.

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: AUG 21, 1971

LOCATION: Prospect Harbor

PRODUCT SPILLED: Gasoline ESTIMATED QUANTITY 6000 gal

CIRCUMSTANCES: Spilled by a truck

RATE AND NATURE OF CONTAMINATION:

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: Portland Press Herald and Maine Department of Sea & Shore Fisheries by Mac Richards.

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: SEP 4, 1971

LOCATION: Red Beach, St. Croix River

PRODUCT SPILLED: Diesel ESTIMATED QUANTITY 20 gal.

CIRCUMSTANCES: Mystery Spill

RATE AND NATURE OF CONTAMINATION: _____

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Environmental Protection.

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Francis S. Bushey DATE: SEP 20, 1971

LOCATION: Odom Ledge, Brooksville

PRODUCT SPILLED: Oily ballast water ESTIMATED QUANTITY Unknown

CIRCUMSTANCES: Vessel grounded, tore open bottom, refloated after pumped out. 11 Tanks ruptured.

RATE AND NATURE OF CONTAMINATION: Mill Cove covered with light film on beach

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS: USCG reported that up to 6000 bbls of raw water with ballast discharged at grounding. Thin film of JP found 3/4 of a mile from ledge. At least 500 gal JP-2 lost. No contamination in Morse Cove on Mill Cove.

SOURCE OF INFORMATION: Maine Department of Environmental Protection/U. S. Coast Guard

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: CG Cowslip DATE: SEP 23, 1971

LOCATION: Halfway Rock

PRODUCT SPILLED: #2 Diesel ESTIMATED QUANTITY 113 gal

CIRCUMSTANCES: Hose ruptured

RATE AND NATURE OF CONTAMINATION:

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: Maine Department of Environmental Protection and U. S. Coast Guard.

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: MT Canto DATE: SEP 30, 1971

LOCATION: Portland PPL #2

PRODUCT SPILLED: Fuel oil ESTIMATED QUANTITY ½ bbls

CIRCUMSTANCES: Pump lost suction; on OCT 1, same vessel spilled spilled crude 3 bbls due to a leak in O/B discharge

RATE AND NATURE OF CONTAMINATION:

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: Maine Department of Environmental Protection.

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: OCT 1, 1971

LOCATION: Rockport

PRODUCT SPILLED: #6 fuel ESTIMATED QUANTITY 8000 gal

CIRCUMSTANCES: Tank truck spilled contents but a dam prevented any from getting into harbor

RATE AND NATURE OF CONTAMINATION: _____

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Portland Press Herald - October 5, 1971.

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: OCT 15, 1971

LOCATION: Eastport Harbor, Holmes Packing Plant

PRODUCT SPILLED: Bunker C ESTIMATED QUANTITY 50 gal

CIRCUMSTANCES: Leaked from the boiler room of the plant. DEP records state "Suspect sabotage to boiler" USCG states furnace nozzle removed and approx. 35 gal/hour sprayed through night of OCT 15.

RATE AND NATURE OF CONTAMINATION: Beach covered. Sea Coast Service esti. 150 gallons on rocks alone.

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: Oil reached breakwater OCT 17.

DURATION: Continued into OCT 16 and OCT 17

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Portland Press Herald, U. S. Coast Guard.

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: OCT 18-19, 1971

LOCATION: Searsport USAF (Pol)

PRODUCT SPILLED: JP-4 ESTIMATED QUANTITY Unknown

CIRCUMSTANCES: Malfunctioning of gaskets in chicksand boom while off loading vessel

RATE AND NATURE OF CONTAMINATION: _____

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: Two days

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Environmental Protection

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: OCT 28, 1971

LOCATION: Rockland Harbor, Town Sewer

PRODUCT SPILLED: Oil ESTIMATED QUANTITY 2 gals

CIRCUMSTANCES: _____

RATE AND NATURE OF CONTAMINATION: _____

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Environmental Protection

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: NOV 22, 1971

LOCATION: Bath area

PRODUCT SPILLED: #2 ESTIMATED QUANTITY 4770 gal

CIRCUMSTANCES: Tank truck overturned on I-95 (NOV 16, 1971) spill found way into Kennebec River.

RATE AND NATURE OF CONTAMINATION: _____

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Environmental Protection.

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: DEC 16, 1971

LOCATION: St. Regis Paper Company

PRODUCT SPILLED: #6 ESTIMATED QUANTITY 15-20 gal

CIRCUMSTANCES: Human error - boomed and absorbed

RATE AND NATURE OF CONTAMINATION: _____

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Environmental Protection

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: JAN 2, 1972

LOCATION: Rockland Harbor

PRODUCT SPILLED: Unknown ESTIMATED QUANTITY Unknown

CIRCUMSTANCES: Mystery reported by CG

RATE AND NATURE OF CONTAMINATION: Spill went out with tide

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Environmental Protection.

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: JAN 4, 1972

LOCATION: South Portland (Cities Service Oil Company)

PRODUCT SPILLED: Gasoline ESTIMATED QUANTITY CG 100 gal DEP 2000 gal

CIRCUMSTANCES: Underground flange and seal broke, reported at 1545.

RATE AND NATURE OF CONTAMINATION: No booming. Gasoline moved out of harbor. Estimated 100 gal was on the water at 1600. By 1800 most of spill was gone.

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: Spill dispersed out of harbor by wind and tide

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Environmental Protection

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: JAN 13, 1972

LOCATION: Mackworth Island, Portland

PRODUCT SPILLED: Unknown ESTIMATED QUANTITY ½ bbl

CIRCUMSTANCES: Mystery spill

RATE AND NATURE OF CONTAMINATION: _____

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: Oil spread thinly over a great area of island.

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Environmental Protection

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: JUDY ANN DATE: JAN 24, 1972

LOCATION: Bailey Island, MacKerel Cove

PRODUCT SPILLED: Diesel oil ESTIMATED QUANTITY 50 gal

CIRCUMSTANCES: Overflow by pumping from Merrill tank to US/CTK Judy Ann.

RATE AND NATURE OF CONTAMINATION:

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: U. S. Coast Guard/ Maine Department of Sea & Shore Fisheries, "Attorney general would not prosecute since vessel had no record of previous spills."

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Coastal tanker Captain Sam (Texaco) DATE: FEB 1, 1972

LOCATION: Portland harbor

PRODUCT SPILLED: #2 & Bunker C ESTIMATED QUANTITY 4500 gal

CIRCUMSTANCES: Pumping negligence in shifting from tanks. Deck hand relieved of duties.

RATE AND NATURE OF CONTAMINATION: Threat to surface feeding ducks; large flocks noted off Ram Island. At least 3500 gal ran out into Fore River. Pump rate 1600 gpm. Over 5 miles of shore covered.

METEOROLOGIC CONDITIONS: Temp 16^0, visibility 10 miles; winds N 5-10 sea calm.

SPILL MOVEMENT: "Oil had settled in the ice making clean-up impossible. However, USCG reported 1000 to 1500 gal cleaned up. Remaining oil dispersed with wind/tide - some remained in ice.

DURATION:

ADDITIONAL INVESTIGATIONS: Largest spill since OCT 70, 30-40 k gal*

SOURCE OF INFORMATION: Portland Press Herald, 2/2/72; Maine Department of Environmental Protection.

ADDITIONAL COMMENTS:

*Average spill has been 5-10 bbls. Penalty $2000.00

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: FEB 2, 1972

LOCATION: Texaco spill area of FEB 1, South Portland

PRODUCT SPILLED: #6 ESTIMATED QUANTITY CG 10-20 bbls DEP +20 bbls

CIRCUMSTANCES: Mystery spill. Area covered previous day by #2, was thick with #6

RATE AND NATURE OF CONTAMINATION: Heavy pockets along shore. Sorbant C used. S.O.S. picked up 6,000 gal of slop oil. Part is from Texaco spill FEB 1 - 50% is water.

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Environmental Protection

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: FEB 11, 1972

LOCATION: Ellsworth Union River

PRODUCT SPILLED: #2 ESTIMATED QUANTITY 360 gal

CIRCUMSTANCES: Underground tank ruptured

RATE AND NATURE OF CONTAMINATION: Clean-up moderately successful

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Environmental Protection

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: FEB 19, 1972

LOCATION: Mantinicius

PRODUCT SPILLED: Diesel ESTIMATED QUANTITY 50 gal

CIRCUMSTANCES: Storm tore dock lines

RATE AND NATURE OF CONTAMINATION:

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: Maine Department of Environmental Protection, U. S. Coast Guard

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: FEB 23, 1972

LOCATION: Topsham Pejepscot Paper Company

PRODUCT SPILLED: #6 ESTIMATED QUANTITY 5000gal

CIRCUMSTANCES: The hose broke while loading tank cars

RATE AND NATURE OF CONTAMINATION: _____

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Environmental Protection

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: APR 19, 1972

LOCATION: Damariscotta Weeks - Waltz Motors Inn

PRODUCT SPILLED: Waste oil ESTIMATED QUANTITY Unknown

CIRCUMSTANCES: Dumping waste oil on Damariscotta River bank

RATE AND NATURE OF CONTAMINATION: _____

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Environmental Protection

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Overseas Adventurer DATE: APR 24, 1972

LOCATION: Searsport (C.H. Sprague)

PRODUCT SPILLED: #6 ESTIMATED QUANTITY Unknown

CIRCUMSTANCES:

RATE AND NATURE OF CONTAMINATION: Beach removed

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: Maine Department of Environmental Protection

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: MAY 5, 1972

LOCATION: Bath, Berts Oil Service

PRODUCT SPILLED: #2 ESTIMATED QUANTITY Unknown

CIRCUMSTANCES: Overflowing tanks

RATE AND NATURE OF CONTAMINATION: Gravel removed from stream bank

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Environmental Protection

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: MAY 9, 1972

LOCATION: Camden

PRODUCT SPILLED: Oil slick fuel ESTIMATED QUANTITY Unknown

CIRCUMSTANCES: Oil slick reported - but no source found

RATE AND NATURE OF CONTAMINATION:

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: Maine Department of Environmental Protection

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: MAY 26, 1972

LOCATION: Old Town (Penobscot Company)

PRODUCT SPILLED: _____ ESTIMATED QUANTITY _____

CIRCUMSTANCES: Pumping out sump into drain culvert that empties into river.

RATE AND NATURE OF CONTAMINATION: _____

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Environmental Protection

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: MAY 31, 1972

LOCATION: Swans Island, Mertic Morrison

PRODUCT SPILLED: Kerosene ESTIMATED QUANTITY Unknown

CIRCUMSTANCES: _____

RATE AND NATURE OF CONTAMINATION: Beach removed and oil burned off rocks

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Environmental Protection

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: JUN 29, 1972

LOCATION: Machias, Mawhinee Ford Company

PRODUCT SPILLED: Waste oil ESTIMATED QUANTITY Unknown

CIRCUMSTANCES: Dumping waste lube oil on river bank

RATE AND NATURE OF CONTAMINATION: Action: River bank cleaned and new gravel replaced.

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Environmental Protection

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: 4/28 to 8/7/72

LOCATION: Camden Harbor

PRODUCT SPILLED: #2 ESTIMATED QUANTITY Unknown

CIRCUMSTANCES: Unknown mystery spill - under investigation

RATE AND NATURE OF CONTAMINATION:

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: Maine Department of Environmental Protection

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: TAMANO (Norway) Texaco DATE: JUL 22, 1972

LOCATION: Portland Harbor

PRODUCT SPILLED: #6 oil ESTIMATED QUANTITY 100,000 gal to as high as 578,000 gal

CIRCUMSTANCES:

RATE AND NATURE OF CONTAMINATION: 46 miles of coast affected - 18 island investigated. Inter-tidal zone affected by smoothering and toxicity

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS: (All official records restricted due to litigatic Later estimates of volume suggest that the tank ripped by grounding may have discharged entire contents of 13,000 bbls (578,000 gallons)

SOURCE OF INFORMATION: Portland Press Herald; Maine Department of Sea & Shore Fisheries; U. S. Coast Guard.

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Aquario (Liberian) American oil DATE: AUG 12, 1972

LOCATION:

PRODUCT SPILLED: #6 and #2 ESTIMATED QUANTITY 3000 to 5000 gal (1500 recovered)

CIRCUMSTANCES: Illegal discharge of bilge - discharge on deck during ballast

RATE AND NATURE OF CONTAMINATION: small patches of oil on hourse on Chebeague Island, some fresh oil on Cousins, Diamond, Long, and Little Diamond Islands. Little Diamond was hit worse.

METEOROLOGIC CONDITIONS: OVE, VSB 6, wind 5-10 sea 5. Wind south 2 knots

SPILL MOVEMENT: Two oil slicks off South of Little Diamond and House Island moving toward Peakes Island; SW&N side of Long Island into Chandler Cove; long slick Anchorage A to Clapboard Island,

DURATION: Clean-up lasted until AUG 16 - estimated at $17,500

ADDITIONAL INVESTIGATIONS: Slick movement on AUG 13 - the worst contaminated area was Little Diamond Island

SOURCE OF INFORMATION: Portland Press Herald August 15/ Maine Department of Environmental Protection and Maine Department of Sea and Shore Fisheries.

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Mearl Corporation DATE: AUG 16, 1972

LOCATION: Eastport Maine, Broad Cove

PRODUCT SPILLED: Bunker C ESTIMATED QUANTITY 40 to 150 gal

CIRCUMSTANCES: Leaking from plant boiler room. Plant manager states situation lasted 5 years.

RATE AND NATURE OF CONTAMINATION: 20 X 20 foot area of shoreline saturated. AUG 17 portions of beach covered.

METEOROLOGIC CONDITIONS: Unknown

SPILL MOVEMENT:

DURATION: AUG 17 blanket of shore continued

ADDITIONAL INVESTIGATIONS: three pollution reports

SOURCE OF INFORMATION: U. S. Coast Guard

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: AUG 17, 1972

LOCATION: Eastport (Mearl Cannery)

PRODUCT SPILLED: #6 ESTIMATED QUANTITY Unknown

CIRCUMSTANCES: Overflowing tank

RATE AND NATURE OF CONTAMINATION: Fresh oil cleaned with straw; weathered clean with Bacto-zine

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: Spill was the result of many overflows

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Environmental Protection

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: SEP 12, 1972

LOCATION: Lermand Cove, Rockland

PRODUCT SPILLED: Bunker C ESTIMATED QUANTITY 250 gal

CIRCUMSTANCES: A leak from the heating system of a school

RATE AND NATURE OF CONTAMINATION: Absorbed with straw

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Portland Press Herald, Sept. 13, 1972

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: CGC Cowslip DATE: OCT 3, 1972

LOCATION: Southwest Harbor

PRODUCT SPILLED: #2 ESTIMATED QUANTITY 20 gal.

CIRCUMSTANCES: Overflowing tank while refueling

RATE AND NATURE OF CONTAMINATION: Unable to contain on the ebbing tide

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: Maine Department of Environmental Protection

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: OCT 26, 1972

LOCATION: Searsport, Moose Point State Park

PRODUCT SPILLED: #6 ESTIMATED QUANTITY less 15 gals

CIRCUMSTANCES: Mystery oil spill deposited at high water mark - over 100 yards - spotty - to scattered to clean up

RATE AND NATURE OF CONTAMINATION: Liberty Importer in vicinity

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Maine Department of Environmental Protection

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Texaco Maine DATE: NOV 2, 1972

LOCATION: PPL #2 Portland

PRODUCT SPILLED: Bunker C ESTIMATED QUANTITY 10 bbls recovered

CIRCUMSTANCES: Leak due to ruptured discharge line 13' below water.

RATE AND NATURE OF CONTAMINATION: 1-2 bbls in water. 2nd spill due to negligence of watch personnel. Estimated 3 gal.

METEOROLOGIC CONDITIONS: Rain, VSB 2, temp. 42, WD 15 sea moderate

SPILL MOVEMENT:

DURATION: Leak continued, is contained, total spill 5 bbls

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: U. S. Coast Guard, Fine $500.

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: NOV 4, 1972

LOCATION: CAMDEN - Harbor side west

PRODUCT SPILLED: Gasoline ESTIMATED QUANTITY 3 gal

CIRCUMSTANCES: Leak in tank

RATE AND NATURE OF CONTAMINATION:

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: Maine Department of Environmental Protection

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: _____ DATE: NOV 25, 1972

LOCATION: Rockland - McLoon Oil Company - storage tank

PRODUCT SPILLED: Diesel fuel ESTIMATED QUANTITY 500 gal

CIRCUMSTANCES: Check safety values removed allowing oil to spill

RATE AND NATURE OF CONTAMINATION: _____

METEOROLOGIC CONDITIONS: Wind moved spill

SPILL MOVEMENT: reached 2/3 of way to breakwater - estimated 400 yards wide - USCG tried to move it out of harbor

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: Portland Press Herald

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: ALTON A DATE: DEC 6, 1972

LOCATION: Cape Elizabeth, Trundy Point

PRODUCT SPILLED: Diesel ESTIMATED QUANTITY Unknown

CIRCUMSTANCES: Dragger went ashore in high seas - no clean-up possible or deemed necessary.

RATE AND NATURE OF CONTAMINATION:

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: Maine Department of Environmental Protection

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: US/TK Christian Reinauer DATE: DEC 9, 1972

LOCATION: Brewer

PRODUCT SPILLED: #1 and #2 ESTIMATED QUANTITY 600 gal
Est. Skipper: 200-300 ga
Est. USCG: 1000-1500 gal

CIRCUMSTANCES: River flow at 7 knots and ice pack forced slip

ice 3 inches 30% cover

RATE AND NATURE OF CONTAMINATION: No oil on beaches sufficient to sample

METEOROLOGIC CONDITIONS: Temp. 35°F

SPILL MOVEMENT: Dissipated by flow. Sheen visible from Brewer to

Winterport.

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: U. S. Coast Guard

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Tanker ESSO EDINBURGH (UK) DATE: January 9, 1973

LOCATION: Portland Harbor

PRODUCT SPILLED: Crude ESTIMATED QUANTITY 15-20 gal.

CIRCUMSTANCES:

RATE AND NATURE OF CONTAMINATION:

METEOROLOGIC CONDITIONS: Clear, visib. 5, wind - calm, temperature - 10° F

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: U. S. Coast Guard

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Mystery spill DATE: January 17, 1973

LOCATION: Portland

PRODUCT SPILLED: bilge oil ESTIMATED QUANTITY 300 gal.

CIRCUMSTANCES: unknown

RATE AND NATURE OF CONTAMINATION:

METEOROLOGIC CONDITIONS: clear - visib. 5-10 miles, temperature 43°, sea calm.

SPILL MOVEMENT: oil dispersed by tide

DURATION:

ADDITIONAL INVESTIGATIONS: 6 samples forwarded to Mr. Coulon of Environmental Protection Agency, Boston.

SOURCE OF INFORMATION: U.S. Coast Guard

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: OLYMPIC GARLAND DATE: Feb. 5, 1973

LOCATION:

PRODUCT SPILLED: ESTIMATED QUANTITY

CIRCUMSTANCES: U. S. Coast Guard sighting of oil discharge within 50 mile limit by vessel. 4247N 6945W - slick 10 mi. x 100 yds. trailing - no pictures.

RATE AND NATURE OF CONTAMINATION:

METEOROLOGIC CONDITIONS:

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: U. S. Coast Guard

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Tanker EFPLIA (LT) DATE: Feb. 8, 1973

LOCATION: Portland Pipe Line #2 Portland

PRODUCT SPILLED: Crude ESTIMATED QUANTITY 2 gal.

CIRCUMSTANCES: Deck spill run off through scuppers

RATE AND NATURE OF CONTAMINATION:

METEOROLOGIC CONDITIONS: Rain, visib 1, temperature 32°, wind calm, sea calm.

SPILL MOVEMENT:

minor - no clean-up

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: U. S. Coast Guard

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Tanker OVERSEAS VIVIAN (US) DATE: Feb. 20, 1973 0945

LOCATION: Chevron Oil Dock, South Portland

PRODUCT SPILLED: #2 ESTIMATED QUANTITY 1,000 gal.

CIRCUMSTANCES: Suspect leaking tank, ship to offload all oil on Hussey Sound

RATE AND NATURE OF CONTAMINATION: 5 gal. per minute for 3 hours - 0945 to 1245.

METEOROLOGIC CONDITIONS: Clear, visibility 1-5 miles, temperature 42°, wind 0 , sea calm.

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: U. S. Coast Guard

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Tanker GIMBLEVANG (NO) DATE: Feb. 27, 1973 0615

LOCATION: Portland Pipe Line #2, South Portland

PRODUCT SPILLED: #6 ESTIMATED QUANTITY: ~~21 gal.~~

CIRCUMSTANCES: Overfill of the day tank

RATE AND NATURE OF CONTAMINATION:

METEOROLOGIC CONDITIONS: ~~clear, visibility 10 miles, wind N. 10, sea~~ moderate, temperature 02°

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: U. S. Coast Guard

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Unknown - fishing dragger DATE: March 4, 1973

LOCATION: Boothbay Harbor (innerharbor) at Blakes Marine

PRODUCT SPILLED: Bilge oil ESTIMATED QUANTITY _____

CIRCUMSTANCES: vessel pumped out in harbor; reporting person refused to give name or vessel name. U. S. Coast Guard found a thin film of oil. Sample taken.

RATE AND NATURE OF CONTAMINATION: _____

METEOROLOGIC CONDITIONS: _____

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: _____

SOURCE OF INFORMATION: U. S. Coast Guard

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Knowlton Machine Company DATE: March 8, 1973

LOCATION: Westbrook

PRODUCT SPILLED: #2 ESTIMATED QUANTITY 500 gal.

CIRCUMSTANCES: overflow of tank during transfer

RATE AND NATURE OF CONTAMINATION: 300 gallons flowed into Presumpscot River

METEOROLOGIC CONDITIONS: Rain, fog, visibility 1 mile, temperature 50°.

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: U. S. Coast Guard

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Tanker PHILIPPA (LT) DATE: March 8, 1973 A

LOCATION: Portland Pipe Line # 2, South Portland

PRODUCT SPILLED: _____ ESTIMATED QUANTITY sheen

CIRCUMSTANCES: _____

RATE AND NATURE OF CONTAMINATION: "few drops per second from rivets"

METEOROLOGIC CONDITIONS: clear, visibility 10 miles, wind calm, sea calm, 45°

SPILL MOVEMENT: _____

DURATION: _____

ADDITIONAL INVESTIGATIONS: "Ship had previous oil spill in Portland October 10, 1972".

SOURCE OF INFORMATION: U. S. Coast Guard

ADDITIONAL COMMENTS: _____

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Tanker TASMANSEA (LI) DATE: March 10, 1973
A

LOCATION: Pier # 2

PRODUCT SPILLED: crude ESTIMATED QUANTITY 10 gal.

CIRCUMSTANCES: leak from overboard discharge

RATE AND NATURE OF CONTAMINATION:

METEOROLOGIC CONDITIONS: clear, visibility 2 miles, wind calm, sea-calm, temperature 38°

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: U. S. Coast Guard

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Tanker TEXACO NEW MEXICO (PN) DATE: March 10, 1973 B

LOCATION: Texaco Dock, South Portland

PRODUCT SPILLED: Bunker C ESTIMATED QUANTITY 10 gal.

CIRCUMSTANCES: leaked from improperly slung hose

RATE AND NATURE OF CONTAMINATION:

METEOROLOGIC CONDITIONS: same March 10, 1973 A

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: U. S. Coast Guard

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Merrill Transport Truck DATE: March 13, 1973
1002

LOCATION: Back Cove, Portland

PRODUCT SPILLED: Bunker C ESTIMATED QUANTITY 4,200 gal.

CIRCUMSTANCES: Truck discharge hose leaked spilling oil into Back Cove.

RATE AND NATURE OF CONTAMINATION: 500 to 750 gallons escaped into cove through sewer

METEOROLOGIC CONDITIONS: Clear, temperature 58, wind N-10

SPILL MOVEMENT: Oil sighted in Harbor from channel north to next inlet. March 14 - 2 miles of Back Cove and coast area covered .

DURATION: Clear, wind calm, temperature 53 .

ADDITIONAL INVESTIGATIONS: Maine Department of Sea & Shore Fisheries on scene March 14 (4 political representatives). Sand used on March 15 for clean-up.

SOURCE OF INFORMATION: U. S. Coast Guard

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Texaco Oil Company (bulk plant) DATE: March 21, 1973

LOCATION: (Bangor) Hampden, Penobscot River

PRODUCT SPILLED: # 2 fuel ESTIMATED QUANTITY: 20,000 gal. spilled on ground, "Medium spill"

CIRCUMSTANCES: overflow at plant

RATE AND NATURE OF CONTAMINATION: 20 to 30 gallons per minute seeping into Penobscot River - under dike. Amount finally in Penobscot estimated as "small".

METEOROLOGIC CONDITIONS: clear, wind 0 - temperature 35°

SPILL MOVEMENT: Boomed and pumped into truck. Traces of oil five miles down river March 23.

DURATION:

ADDITIONAL INVESTIGATIONS: 6 political representatives

SOURCE OF INFORMATION: U. S. Coast Guard

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Tanker ATLANTIC PRINCE (Liberia) DATE: March 21, 1973 0120

LOCATION: Portland Pipe Line #2, South Portland

PRODUCT SPILLED: Largo Trico Crude ESTIMATED QUANTITY 20 - 25 bbls.

CIRCUMSTANCES: wing tank overflow

RATE AND NATURE OF CONTAMINATION: Oil hit south end of Willard Beach

METEOROLOGIC CONDITIONS: clear, visibility 5-10 miles, temperature 31°, wind 10-15 NE, sea moderate

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS: 22 U. S. Coast Guard survey - Beach at Bay Road. No residue on beach; insignificant on seaweed. Willard Beach: minor staining, contaminated seaweed & absordent above high tide. Spring Point no contamination. Weather prevents recovery at Graving Dock.

SOURCE OF INFORMATION: March 23, seacoast found no further evidence on beach.

U. S. Coast Guard

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: FRIEDLAND (Somali Republic) DATE: April 3, 1973

LOCATION: Portland Pipe Line

PRODUCT SPILLED: Bunker C ESTIMATED QUANTITY 3 gal.

CIRCUMSTANCES: unknown

RATE AND NATURE OF CONTAMINATION:

METEOROLOGIC CONDITIONS: visibility 1 mile, wind 35 NE, temperature 38°, seas rough

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: U. S. Coast Guard

ADDITIONAL COMMENTS:

OIL SPILL INCIDENT DATA SHEET

INCIDENT: Texaco Terminal DATE: April 11, 1973

LOCATION: South Portland, Fore River

PRODUCT SPILLED: kerosene ESTIMATED QUANTITY 5 - 10,000 gallons

CIRCUMSTANCES:

RATE AND NATURE OF CONTAMINATION: Oil covered all shores of river from Gulf Transfer Line Rolling Mills Dock to Million Dollar Bridge.

METEOROLOGIC CONDITIONS: clear, visibility 5 miles, temperature 37°, wind 5-20-25, seas moderate.

SPILL MOVEMENT:

DURATION:

ADDITIONAL INVESTIGATIONS:

SOURCE OF INFORMATION: U..S Coast Guard

ADDITIONAL COMMENTS:

APPENDIX C

OIL TERMINALS AND FACILITIES IN COASTAL IN MAINE

OIL TERMINALS AND FACILITIES

SOURCES: DEP, USCG PORTLAND AND SOUTHWEST HARBOR

LOCATION	TOTAL CAPACITY
Kittery to Portland (Area #1)	
1. U. S. Navy Shipyard, Kittery: Bunker C and diesel	333,900 bbls (USCG) 334,067 bbls (DEP)
2. Sutton Mills, Sanford: Heating oil	40,000 gals (952 bbls)
	TOTAL: 334,852 (USCG)/335,019 (DEP)
South Portland to Portland (Area #2)	
3. American Oil Corporation: Gasoline; Heating oil; Kerosene; Bunker C	422,000 bbls
4. British Petroleum: Gasoline; Fuel oil; Kerosene	218,000 bbls
5. Central Maine Power Company, Cape Steam Plant: Bunker C	60,000 bbls
6. Cities Service Oil Company: Gasoline; Fuel oil; Heating oil	201,100 bbls (DEP) 186,100 bbls (USCG)
7. Central Maine Power, Peakes Island: Diesel	20,000 gals (476 bbls)
8. Gulf Oil Company, Danforth Street: Gasoline; Heating oil; Kerosene; Diesel	60,000 gals (1,429 bbls)
9. Gulf Oil Corporation, South Portland: Gasoline; Fuel oil; Kerosene	505,000 bbls
10. Getty Oil Company: Gasoline; Fuel oil	258,000 bbls (USCG) 298,465 bbls (DEP)
11. Humble Oil Co.: Gasoline; Heating oil; Motor oil; Diesel; Kerosene	890,747 bbls (DEP) 784,000 bbls (USCG)
12. Long Island Fuel Farm: #2 and #6	600,000 bbls
13. Mobil Oil Co.: Gasoline; Kerosene; Fuel oil; Diesel; #6; Asphalt	788,726 bbls (DEP) 622,000 bbls (USCG)

LOCATION	TOTAL CAPACITY
14. Portland Pipeline Corporation: Crude (Oil delivered in 1972: 160,000,000 bbls, USCG)	3,438,524 bbls (DEP) 2,560,000 bbls (USCG)
15. Shell Oil Company: Gasoline; Solvent; Spirits; Kerosene; Fuel oil; Asphalt	405,838 bbls (DEP) 11,836,000 bbls (USCG)
16. Sun Oil Company: Gasoline; Kerosene; Fuel oil	85,000 bbls
17. Texaco, Inc.: Gasoline; Kerosene; Heating oil; Diesel; #6	628,000 bbls (DEP) 368,000 bbls (USCG)
18. Chevron Oil Company: Gasoline; Heating oil; Kerosene	784,000 bbls
	TOTAL: 9,327,305 (DEP)/19,290,005 (USCG)
Portland to Pemaquid (Area #3 and #4)	
19. Central Maine Power, Cousins Island, Yarmouth: Bunker C	384,000 bbls
20. U.S. Navy, Harpswell: Aviation gas; Jet fuel	280,000 bbls (DEP) 940,000 bbls (USCG)
21. Central Maine Power, Wiscassett: Bunker C	364,000 bbls
22. Humble Oil and Refinery Company, Hallowell: Heating oil; Kerosene	165,000 bbls
23. Mobile Oil Corporation, Hallowell: Gasoline; Kerosene; Diesel	4,632,834 gals (110,306 bbls)
24. Squirrel Island Village Corporation, Boothbay: Heating oil; Gasoline	6,500 gals (155 bbls)
	TOTAL: 1,303,461 (DEP)/1,963,461 (USCG)
Pemaquid to Searsport (Area #5,#6 and #7)	
25. Monhegan Store: Gasoline; Heating oil; Kerosene	7,800 gals (186 bbls)
26. Calderwood Oil Corp., Vinalhaven: Gasoline; Heating oil; Kerosene; Diesel	54,000 gals (DEP) (1,286 b) 3,120 bbls (USCG)
27. Henry Young and Co., Matinicus: Gasoline; Diesel; Kerosene (Oil delivered in 1972: 2,695 bbls, USCG)	22,050 gals (DEP) (525 bbl) 450 bbls (USCG)
28. Vinalhaven Fuel Company: Diesel; Gasoline; Range oil (Oil delivered in 1972: 27,907 bbls, USCG)	45,000 bbls (USCG)
29. J. P. Brown, North Haven: Gasoline; Diesel; Kerosene (Oil delivered in 1972: 2,500 bbls, USCG)	475 bbls (USCG) 24,000 gals (DEP) (571 bbl)

LOCATION	TOTAL CAPACITY
30. Point Look Out Club, Isle Au Haut: Heating oil, summer delivery only	Unknown
31. J. J. Emery & L. E. Rogers, Isleboro: Heating oil, Gasoline; Motor oil (Oil delivered in 1972: 625 bbls, USCG)	8,000 gals (190 bbls)
32. A. C. McLoon, Rockland: Gasoline; Kerosene; Fuel oil (Oil delivered in 1972: 75,000 bbls, USCG)	217,000 gals (DEP) (5,167 b 5,422 bbls (USCG)
33. Gulf Oil Co., Rockland: Gasoline; Fuel oil; Kerosene; Heating oil	90,000 gals (2,143 bbls)
34. Durkee's Oil Service, Islesboro: Gasoline; Diesel; Kerosene (Oil delivered in 1972: 4,500 bbls, USCG)	Unknown (USCG) 35,000 gals (DEP) (833 bbl
35. Lamont's Fuel Service, Islesboro: Gasoline; Kerosene; Fuel oil; Heating oil	23,800 gals (DEP) (567 bbl
36. Eaton's Boat Yard, Castine: Gasoline; Diesel; Kerosene (Oil delivered in 1972: 725 bbls, USCG)	6,500 gals (155 bbls)
Searsport	TOTAL: 11,623 (DEP)/57,141 (USGC)
37. U.S. Air Force POL: Aviation gas; Heating oil; Jet fuel (Oil delivered in 1972: Estimated 1,500,000 bbls, USCG)	870,000 bbls
38. C. H. Sprague & Sons Company: #6 oil (Oil delivered in 1972: 3,221,000 bbls, USCG)	242,000 bbls (USCG) 342,000 bbls (DEP)
39. Shell Oil Company: Gasoline; Diesel; Kerosene; Heating oil (Oil delivered in 1972: 800,000 bbls, USCG)	336,000 bbls
40. Irving Oil Company: #6 oil (Installed JAN 1973)	400,000 bbls
41. C. H. Sprague & Sons Company: #6 oil (Oil delivered in 1972: 3,100,000 bbls, USCG)	150,000 bbls
42. Webber Tanks, Inc.: Gasoline; Fuel oil; Kerosene; Diesel (Oil delivered in 1972: 3,800,000 bbls, USCG)	776,000 bbls
43. St. Regis Paper Company: Bunker C	190,000 bbls (DEP) 72,000 bbls (USCG)

LOCATION	TOTAL CAPACITY
Bangor - Brewer (Area #9)	
44. Astroline Petroleum Corporation: Gasoline; Kerosene; Heating (Oil delivered in 1972: 850,000 bbls, USCG)	33,000 bbls
45. Barrett Paving Materials: Asphalt; Tar (Oil delivered in 1972: 140,000, USCG)	70,000 bbls (USCG) 5,000 bbls
46. British Petroleum: Gasoline; Fuel oil	48,000 bbls
47. Chevron Oil Company: Gasoline; Heating oil; Kerosene (Oil delivered in 1972: 530,000 bbls, USCG)	68,000 bbls
48. City Oil Company: Gasoline; Kerosene; Fuel oil (Oil delivered in 1972: 553,753 bbls, USCG)	85,000 bbls
49. American Oil Company: Gasoline; Fuel oil	48,000 bbls (USCG)
50. Gulf Oil Company: Gasoline; Heating oil; Kerosene (Oil delivered in 1972: 1,069,918 bbls, USCG)	169,000 bbls (USCG) 80,000 bbls (USCG)
51. C. H. Sprague & Sons, Co.,: #6 oil (Oil delivered in 1972: 840,410,016, USCG)	140,000 bbls
52. Sun Oil Company: Gasoline (Oil delivered in 1972: 350,000 bbls, USCG)	25,000 bbls
53. Texaco, Inc.: Gasoline; Heating oil; Diesel (Oil delivered in 1972: 600,000 bbls, USCG)	82,793 bbls
54. Mobil Oil Corporation: Heating oil; Kerosene (Oil delivered in 1972: 345,695 bbls, USCG)	98,741 bbls
55. Webber Oil Company: Heating oil; Kerosene; Diesel (Oil delivered in 1972: 770,000 bbls, USCG)	124,000 bbls
56. Webber Tank (Penobscot Terminaling): Jet fuel (Oil delivered in 1972: 700,000 bbls, USCG)	67,000 bbls (DEP) 776,000 bbls (USCG)
	TOTAL: 3,840,534 (DEP)/4,698,534 (USGC)
Stonington to Eastport-Calais (Areas #11-#15)	
57. Richard Kent, Swans Island: Gasoline; Kerosene	11,000 gals (262 bbl)

LOCATION	TOTAL CAPACITY
58. Morris Sprague, Swans Island: Gasoline; Heating oil (Oil delivered in 1972: 2,750 bbls, USCG)	11,000 gal (DEP) (262 bbl) 375 bbls (USCG)
59. Mertic Morrison, Swans Island: Gasoline; Fuel oil; Kerosene; Diesel	31,800 gals (757 bbls)
60. Swan's Island Electric Corporation, Minturn: Diesel	20,000 gals (476 bbls)
61. Lunt and Lunt, Frenchboro: Gasoline; Heating oil	Unknown
62. Beal and Barber, Cranberry Island: Gasoline; Heating oil (Oil delivered in 1972: 2,500 bbls, USCG)	300 bbls
63. D. H. Look and Sons, South Addison: Gasoline	9,000 gals (214 bbls)
64. O. L. & R. C. Carver, Beals Island: Kerosene; Heating oil; Gasoline; Diesel	30,500 gals (726 bbls)
65. Uriah Beal, Beals Island: Gasoline; Diesel (Oil delivered in 1972: 587 bbls, USCG)	8,500 gals (202 bbls)
66. Vernal O. Woodward, Beals Island: Gasoline; Diesel	14,500 gals (345 bbls)
67. O. W. and B. S. Look Co., Jonesport: Kerosene; Fuel oil (Oil delivered in 1972: 138,000 bbls, USCG)	1,005,000 gals (23,929 bbls)
68. Neil Corbot, Cutler: Fuel oil; Gasoline (Oil delivered in 1972: 375 bbls, USCG)	125 bbls
69. U. S. Naval Station, Cutler: Heating oil; Diesel	20,000 bbls (DEP) 72,000 bbls (USCG)
70. Rudolp Johnson, Winter Harbor: Gasoline; Diesel	8,600 gals (205 bbls)
71. A. C. McLoon, Bucks Harbor: Gasoline	7,100 gals (169 bbls)
72. L. G. Ham, Inc., Islesboro: Gasoline; Fuel oil (Oil delivered in 1972: 1,260 bbls, USCG)	160 bbls
73. Sprague and Look, Bucks Harbor: Gasoline	7,000 gals (167 bbls)
74. Linwood Workman, Gouldsboro: Gasoline	2,000 gals (48 bbls)

LOCATION	TOTAL CAPACITY
75. Gulf Oil Co., Pembroke: Gasoline; Diesel; Kerosene (Oil delivered in 1972: 90,000 bbls, USCG)	46,065 bbls (DEP) 15,000 bbls (USCG)
76. Mobil Oil Co., Pembroke: Gasoline; Fuel oil; Kerosene; Diesel (Oil delivered in 1972: 75,000 bbls, USCG)	1,114,000 gals (DEP) (26,524) 788,726 bbls (USCG) 15,000 bbls (USCG)
77. Georgia Pacific Corporation, Woodland: Bunker C	50,000 bbls
78. Dead River Oil Co., Calais: Gasoline; Kerosene; Heating oil; Diesel	4,000,000 gals (DEP) (95,238) 24,000 bbls (USCG)
79. Irving Bunker "C" Company, St. Stephen, NB: Bunker C	24,000 bbls
80. Gulf Oil Company, St. Stephen, NB: Gasoline; Fuel oil	24,000 bbls
81. Irving Oil Company, St. Stephen, NB: Fuel oil	24,000 bbls

TOTAL: 338,174 (DEP)/1,065,186 (USCG)

GRAND TOTAL: 15,156,116 bbls (DEP)
27,409,179 bbls (USCG)

Difference: 12,253,063 bbls.

APPENDIX D

APPLICABLE REGULATIONS

SUBCHAPTER II-A

OIL DISCHARGE PREVENTION AND POLLUTION CONTROL

(1970, c. 572, § 1)

Sec. 541. Findings; purpose

The Legislature finds and declares that the highest and best uses of the seacoast of the State are as a source of public and private recreation and solace from the pressures of an industrialized society, and as a source of public use and private commerce in fishing, lobstering and gathering other marine life used and useful in food production and other commercial activities.

The Legislature further finds and declares that the preservation of these uses is a matter of the highest urgency and priority and that such uses can only be served effectively by maintaining the coastal waters, estuaries, tidal flats, beaches and public lands adjoining the seacoast in as close to a pristine condition as possible taking into account multiple use accommodations necessary to provide the broadest possible promotion of public and private interests with the least possible conflicts in such diverse uses.

The Legislature further finds and declares that the transfer of oil, petroleum products and their by-products between vessels and vessels and onshore facilities and vessels within the jurisidiction of the State and state waters is a hazardous undertaking; that spills, discharges and escape of oil, petroleum products and their by-products occurring as a result of procedures involved in the transfer and storage of such products pose threats of great danger and damage to the marine, estuarine and adjacent terrestrial environment of the State; to owners and users of shorefront property; to public and private recreation; to citizens of the State and other interests deriving livelihood from marine-related activities; and to the beauty of the Maine coast; that such hazards have frequently occurred in the past, are occurring now and present future threats of potentially catastrophic proportions, all of which are expressly declared to be inimical to the paramount interests of the State as herein set forth and that such state interests outweigh any economic burdens imposed by the Legislature upon those engaged in transferring oil, petroleum products and their by-products and related activities.

The Legislature intends by the enactment of this legislation to exercise the police power of the State through the Environmental Improvement Commission by conferring upon said Commission the exclusive power to deal with the hazards and threats of danger and damage posed by such transfers and related activities; to require the prompt containment and removal of pollution occasioned thereby; to provide procedures whereby persons suffering damage from such occurrences may be promptly made whole; and to establish a fund to provide for the inspection and supervision of such activities and guarantee the prompt payment of reasonable damage claims resulting therefrom.

The Legislature further finds and declares that the preservation of the public uses referred to herein is of grave public interest and concern to the State in promoting its general welfare, preventing disease, promoting health and providing for the public safety, and that the State's interest in such preservation outweighs any burdens of absolute liability imposed by the Legislature upon those engaged in transferring oil, petroleum products and their by-products and related activities.

Sec. 542. Definitions

The following words and phrases as used in this subchapter shall, unless a different meaning is plainly required by the context, have the following meaning:

1. Barrel. "Barrel" shall mean 42 U. S. gallons at 60 degrees Fahrenheit.

2. Board. "Board" shall mean the Board of Arbitration.

3. Commission. "Commission" shall mean the Environmental Improvement Commission.

4. Discharge. "Discharge" means any spilling, leaking, pumping, pouring, emitting, emptying or dumping.

5. Fund. "Fund" shall mean the Maine Coastal Protection Fund.

6. Oil. "Oil, petroleum products and their by-products" means oil of any kind and in any form including, but not limited to, petroleum, fuel oil, sludge, oil refuse, oil mixed with other wastes, crude oils and all other liquid hydrocarbons regardless of specific gravity.

7. Oil terminal facility. "Oil terminal facility" means any facility of any kind and related appurtenances, located in, on or under the surface of any land or water, including submerged lands, which is used or capable of being used for the purpose of transferring, processing or refining oil, petroleum products and their by-products, or for the purpose of storing the same, but does not include any facility used or capable of being used to store no more than 500 barrels, nor any facility not engaged in the transfer of oil, petroleum products or their by-products to or from tidal waters of the State. A vessel shall be considered an oil terminal facility only in the event of a ship to ship transfer of oil, petroleum products and their by-products, and only that vessel going to or coming from the place of transfer and the oil terminal facility.

8. Operate or operator. "Operate or operator" shall mean any person owning or operating an oil terminal facility whether by lease, contract or any other form of agreement.

9. Person. "Person" shall mean individual, partnership, joint venture, corporation or any group of the foregoing organized or united for a business purpose.

10. Transferred. "Transferred" shall include both onloading and offloading between terminal and vessel and vessel to vessel.

11. Vessel. "Vessel" includes every description of watercraft or other contrivance used, or capable of being used, as a means of transportation on water, whether self-propelled or otherwise and shall include barges and tugs.

Sec. 543. Pollution and corruption of waters and lands of the State prohibited

The discharge of oil, petroleum products or their by-products into or upon any coastal waters, estuaries, tidal flats, beaches and lands adjoining the seacoast of the State, or into any river, stream, sewer, surface water drain or other waters that drain into the coastal waters of the State is prohibited.

Sec. 544. Powers and duties of the Commission

The powers and duties conferred by this subchapter shall be exercised by the Environmental Improvement Commission and shall be deemed to be an essential governmental function in the exercise of the police power of the State.

1. Jurisdiction. The powers and duties of the Commission under this subchapter shall extend to the areas described in section 543 and to a distance of 12 miles from the coastline of the State.

2. Licenses. Licenses required under this subchapter shall be secured from the Commission subect to such terms and conditions as are set forth in this subchapter.

Sec. 545. Operation without license prohibited

No person shall operate or cause to be operated an oil terminal facility as defined in this subchapter without a license.

1. Expiration of licenses. Licenses shall be issued on an annual basis and shall expire on December 31st annually, subject to such terms and conditions as the Commission may determine are necessary to carry out the purposes of this subchapter.

2. Renewal of licenses. As a condition precedent to the issuance or renewal of a license the Commission shall require satisfactory evidence that the applicant has or is in the process of implementing state and federal plans and regulations for control of pollution related to oil, petroleum products and their by-products and the abatement thereof when a discharge occurs.

3. Exemptions. The Legislature finds and declares that the likelihood of significant damage to marine, estuarine and terrestrial environment, due to spills of oil petroleum products and their by-products by the following classes of persons, is remote due to the limited nature of their operations and the small quantities stored, and accordingly exempts the same from the licensing requirements imposed by this section:

A. Marinas. Persons engaged in the business of servicing the fuel requirements of pleasure craft, fishing boats and other commercial vessels, where the purchaser and the consumer are the same entity and the serviced vessel is 75 feet or less in overall length.

4. Certain vessels included. Licenses issued to any terminal facility shall include vessels used to transport oil, petroleum products and their by-products between the facility and vessels within state waters.

Sec. 546. Regulatory powers of Commission

The Commission shall from time to time adopt, amend, repeal and enforce reasonable rules and regulations necessary to carry out the intent of this subchapter.

1. Procedure for adopting rules and regulations. The Commission shall post notice of proposed rules and regulations by publishing an attested copy of such notice in the state paper, and such other daily papers published in the State as it believes will bring the proposals to the attention of all interested parties, at least 7 days prior to holding a public hearing.

A. Such notice shall in addition contain the time, date and place of the public hearing.

B. The Commission may establish reasonable rules and regulations governing the conduct of public hearings under this subchapter including adjournments and continuations thereof.

C. Rules and regulations adopted by the Commission shall become effective 15 days after final adjournment of the public hearing.

D. Rules and regulations of the Commission shall be seasonably printed and made available to interested parties.

2. Emergency rules and regulations without hearing. Upon finding by the Commission that an emergency exists requiring immediate rules, regulations or orders to effectively deal with such emergency, the Commission may without hearing adopt such rules and regulations and issue such orders which shall have the force and effect of law, but any rules, regulations or orders issued under authority of this subsection shall be null and void 30 days thereafter unless sooner adopted in accordance with subsection 1.

3. Enforcement of rules and regulations. Rules, regulations and orders issued by the Commission under this subchapter shall have the force and effect of law.

4. Extent of regulatory powers. The Commission shall have the power to adopt rules and regulations including but not limited to the following matters:

A. Operating and inspection requirements for facilities, vessels, personnel and other matters relating to licensee operations under this subchapter.

B. Procedures and methods of reporting discharges and other occurrences prohibited by this subchapter.

C. Procedures, methods, means and equipment to be used by persons subject to regulations by this subchapter.

D. Procedures, methods, means and equipment to be used in the removal of oil and petroleum pollutants.

E. Development and implementation of criteria and plans to meet oil and petroleum pollution occurrences of various degrees and kinds.

F. The establishment from time to time of control districts comprising sections of the Maine coast and the establishment of rules and regulations to meet the particular requirements of each such district.

G. Requirements for the safety and operation of vessels, barges, tugs, motor vehicles, motorized equipment and other equipment relating to the use and operation of terminals, facilities and refineries and the approach and departure from terminals, facilities and refineries.

H. Such other rules and regulations as the exigencies of any condition may require or such as may reasonably be necessary to carry out the intent of this subchapter.

Sec. 547. Emergency proclamation; Governor's powers

Whenever any disaster or catastrophe exists or appears imminent arising from the discharge of oil, petroleum products or their by-products, the Governor shall by proclamation declare the fact and that an emergency exists in any or all sections of the State. If the Governor is temporarily absent from the State or is otherwise unavailable, the next person in the State who would act as Governor if the office of Governor were vacant shall, by proclamation, declare the fact and that an emergency exists in any or all sections of the State. A copy of such proclamation shall be filed with the Secretary of State. The Governor shall have general direction and control of the Environmental Improvement Commission and shall be responsible for carrying out the purposes of this subchapter.

In performing his duties under this subchapter, the Governor is authorized and directed to cooperate with all departments and agencies of the Federal Government, with the offices and agencies of other states and foreign countries, and the political subdivisions thereof, and with private agencies in all matters pertaining to a disaster or catastrophe.

In performing his duties under this subchapter, the Governor is further authorized and empowered:

1. Orders, rules and regulations. To make, amend and rescind the necessary orders, rules and regulations to carry out this subchapter within the limits of the authority conferred upon him and not inconsistent with the rules, regulations and directives of the President of the United States or of any federal department or agency having specifically authorized emergency functions.

2. Delegation of authority. To delegate any authority vested in him under this subchapter, and to provide for the subdelegation of any such authority.

Whenever the Governor is satisfied that an emergency no longer exists, he shall terminate the proclamation by another proclamation affecting the sections of the State covered by the original proclamation, or any part thereof. Said

proclamation shall be published in such newspapers of the State and posted in such places as the Governor, or the person acting in that capacity, deems appropriate.

3. Civil defense. The provisions of Title 25, chapter 61, as they shall apply to eminent domain and compensation, mutual aid, immunity, aid in emergency, right of way, enforcement and compensation shall apply to disasters or catastrophies proclaimed by the Governor under this subchapter.

Sec. 548. Removal of prohibited discharges

Any person discharging oil, petroleum products or their by-products in the manner prohibited by section 543 shall immediately undertake to remove such discharge to the Commission's satisfaction. Notwithstanding the above requirement the Commission may undertake the removal of such discharge and may retain agents and contracts for such purposes who shall operate under the direction of the Commission.

Any unexplained discharge of oil, petroleum products or their by-products within state jurisdiction or discharge of oil, petroleum products or their by-products occurring in waters beyond state jurisdiction that for any reason penetrates within state jurisdiction shall be removed by or under the direction of the Commission. Any expenses involved in the removal of discharges, whether by the person causing the same, the person reporting the same or the Commission by itself or through its agents or contractors shall be paid in the first instance from the Maine Coastal Protection Fund hereinafter provided for and any reimbursements due said fund shall be collected in accordance with the provisions of section 551.

Sec. 549. Personnel and equipment

The Commission shall establish and maintain at such ports within the State, and other places as it shall determine, such employees and equipment as in its judgment may be necessary to carry out the provisions of this subchapter. The commission, subject to the Personnel Law, may employ such personnel as may be necessary to carry out the purposes of this subchapter, and shall prescribe the duties of such employees.

The salaries of such employees and the cost of such equipment shall be paid from the Maine Coastal Protection Fund established by this subchapter. The Commission and the Maine Mining Bureau shall periodically consult with each other relative to procedures for the prevention of oil discharges into the coastal waters of the State from offshore drilling production facilities. Inspection and enforcement employees of the Commission in their line of duty under this subchapter shall have the powers of a constable.

1971, c. 544, § 134.

Sec. 550. Enforcement, penalties

Whenever it appears after investigation that there is a violation of any rule, regulation, order or license issued by the Commission, the Commission shall proceed in accordance with the provisions of section 451, subsection 2.

Whoever violates any provisions of this subchapter or any rule, regulation or order of the Commission made hereunder shall be punished by a fine of not less than $100 nor more than $5000. Each day that any violation shall continue shall constitute a separate offense. The provisions of this section shall not apply to any discharge promptly reported and removed by a licensee in accordance with the rules, regulations and orders of the Commission.

Sec. 451. Subparagraph 2

2. **Hearing and order for violation.** Whenever it appears to the commission or its authorized employee after investigation that there is a violation of this subchapter, the commission or its authorized employee may schedule a hearing thereon and shall notify the alleged violator in writing of the date, time and place of said hearing and shall set forth in said writing the alleged violation. At such hearing the alleged violator may appear in person or by attorney and answer the allegations of violations, and file a statement of facts, including the methods, practices and procedures, if any, adopted or used by the alleged violator to comply with this subchapter and present such evidence as may be pertinent and relevant to the alleged violation.

The member or authorized employee of the commission presiding at such hearings is authorized to administer oaths and affirmations to witnesses testifying at such hearings. A complete verbatim transcript shall be made of all hearings held under this section.

1971, C. 359, § 1.

After hearing, or in the event of a failure of the alleged violator to appear on the date set for a hearing, the commission shall, as soon thereafter as practicable, make findings of fact based on the record and, if it finds that a violation exists, it shall issue an order aimed at ending the violation.

1971, C. 359, § 2.

All orders of the Commission shall be enforced by the Attorney General. If any order of the Commission is not complied with within the time period specified, the Commission shall immediately notify the Attorney General of this fact. Within 21 days thereafter, the Attorney General shall forthwith commence an action in the Superior Court of any county where the violation of the Commission's order has occurred.

1971, C. 359, § 3.

If the Commission finds that the discharge of any materials into any waters of this State constitutes a substantial and immediate danger to the health, safety or general welfare of any person, persons or property, they shall forthwith request the Attorney General to initiate immediate injunction proceedings to prevent such discharge. Said injunction proceedings may be instituted without recourse to the issuance of an order, as provided for in this section.

The presiding member of the Commission is empowered to administer oaths and affirmations to witnesses testifying at such hearings.

1967, c. 475, § 11; 1968, c. 528, §§ 1-2; 1969, c. 431, §§ 6-9.

Sec. 551. Maine Coastal Protection Fund

The Maine Coastal Protection Fund is established to be used by the Commission as a nonlapsing, revolving fund for carrying out the purposes of this subchapter. The fund shall be limited to the sum of $4,000,000. To this sum shall be credited all license fees, penalties and other fees and charges related to this subchapter, and to this fund shall be charged any and all expenses of the Commission related to this subchapter, including administrative expenses, costs of removal of discharges of pollutants, and third party damages covered by this subchapter.

Moneys in the fund, not needed currently to meet the obligations of the Commission in the exercise of its responsibilities under this subchapter shall be deposited with the Treasurer of State to the credit of the fund, and may be invested in such manner as is provided for by statute. Interest received on such investment shall be credited to the Maine Coastal Protection Fund.

1. Research and development. The Legislature may allocate not more than $100,000 per annum of the amount then currently in the fund to be devoted to research and development in the causes, effects and removal of pollution caused by oil, petroleum products and their by-products on the marine environment. Such allocations shall be made in accordance with the provisions of section 555.

2. Third party damages. Any person claiming to have suffered damages to real estate or personal property or loss of income directly or indirectly as a result of a discharge of oil, petroleum products or their by-products prohibited by section 543 may apply within 6 months after the occurrence of such discharge to the Commission stating the amount of damage he claims to have suffered as a result of such discharge. The Commission shall prescribe appropriate forms and details for such applications. The Commission may, upon petition, and for good cause shown, waive the 6 months limitation for filing damage claims.

A. If the claimant, the Commission and the person causing the discharge can agree to the damage claim, the Commission shall certify the amount of the claim and the name of the claimant to the Treasurer of State and the Treasurer of State shall pay the same from the Maine Coastal Petroleum Fund.

B. If the claimant, the Commission and the person causing the discharge cannot agree as to the amount of the damage claim, the claim shall forthwith be transmitted for action to the Board of Arbitration as provided in this subchapter.

C. Third party damage claims shall be stated in their entirety in one application. Damages omitted from any claim at the time the award is made shall be deemed waived.

D. Damage claims arising under the provisions of this subchapter shall be recoverable only in the manner provided under this subchapter, it being the intent of the Legislature that the remedies provided in this subchapter are exclusive.

3. Board of Arbitration. The Board of Arbitration shall consist of 3 persons, one to be chosen by the person determined in the first instance by the Commission to have caused the discharge, one to be chosen by the Commission to represent the public interest and one person chosen by the first 2 appointed members to serve as a neutral arbitrator. The neutral arbitrator shall serve as chairman. If the 2 arbitrators fail to agree upon, select and name the neutral arbitrator within 10 days after their appointment then the Commission shall request the American Arbitration Association to utilize its procedures for the selection of the neutral arbitrator.

A. No member of the Commission shall serve as an arbitrator.

B. Arbitrators shall be named by their principals within 10 days after the Commission receives notice of claims arising from a discharge prohibited by section 543. If either party shall fail to select its arbitrator within the said 10 days the other party shall request the American Arbitration Association to utilize its procedures for the selection of such arbitrator and the 2 arbitrators shall proceed to select the neutral arbitrator as provided in this section.

C. One Board of Arbitrators shall be established for and hear and determine all claims arising from or related to a common single discharge.

D. Hearings before Boards of Arbitrators shall be informal, and the rules of evidence prevailing in judicial proceedings shall not be binding. The board shall have the power to administer oaths and to require by subpoena the attendance and testimony of witnesses, the production of books, records and other evidence relative or pertinent to the issues represented to them for determination.

E. Determinations made by a majority of the board shall be final, and such determinations may be subject to review by a Justice of the Superior Court but only as to matters relating to abuse of discretion by the board.

F. Representation on the Board of Arbitration shall not be deemed an admission of liability for the discharge.

4. Funding.

A. Annual license fees shall be determined on the basis of ½ cent per barrel of oil, petroleum products or their by-products transferred by the applicant during the licensing period and shall be paid monthly on the basis of records certified to the Commission. License fees shall be paid to the Commission and upon receipt by it credited to the Maine Coastal Protection Fund.

B. Whenever the balance in the fund has reached the limit provided under this subchapter license fees shall be proportionately reduced to cover only administrative expenses and sums allocated to research and development.

5. Disbursements from fund. Moneys in the Maine Coastal Protection Fund shall be disbursed for the following purposes and no others:

A. Administrative expenses, personnel expenses and equipment costs of the Commission related to the enforcement of this subchapter.

B. All costs involved in the abatement of pollution related to the discharge of oil, petroleum products and their by-products covered by this subchapter.

C. Sums allocated to research and development in accordance with this section.

D. Payment of 3rd party claims awarded in accordance with this section.

E. Payment of costs of arbitration and arbitrators.

F. Payment of costs of insurance by the State to extend or implement the benefits of the fund.

6. Reimbursements to Maine Coastal Protection Fund. The Commission shall recover to the use of the fund all sums expended therefrom, including overdrafts, for the following purposes; provided that recoveries resulting from damage due to an oil pollution disaster declared by the Governor pursuant to section 547 shall be apportioned between the Maine Coastal Protection Fund and the General Fund so as to repay the full costs to the General Fund of any bonds issued as a result of such disaster.

A. Costs incurred by the fund in the abatement of a prohibited discharge including 3rd party claims when the person permitting the same shall have failed to promptly report the discharge as required by rules and regulations of the Commission, and such costs where the person permitting the prohibited discharge is not a licensee.

B. In the case of a licensee promptly reporting a discharge as required by this article, costs involved in the abatement of any single prohibited discharge including 3rd party claims in excess of $15,000, over and above payments received under any federal program.

C. Requests for reimbursement to the fund for the above costs if not paid within 30 days of demand shall be turned over to the Attorney General for collection.

7. Waiver of reimbursement. Upon petition of the person determined to be liable for reimbursement to the fund for abatement costs under subsection 6,

the Commission may, after hearing, waive the right to reimbursement to the fund if the Commission finds that the occurrence was the result of any of the following:

A. An act of war.

B. An act of government, either State, Federal or municipal.

C. An act of God, which shall mean an unforeseeable act exclusively occasioned by the violence of nature without the interference of any human agency.

Upon such finding by the Commission immediate credit therefor shall be entered for the party involved. The findings of the Commission shall be conclusive as it is the legislative intent that waiver provided in this subsection is a privilege conferred not a right granted.

Sec. 552. Liabilities of licensees

1. Licensee shall be liable. A licensee shall be liable for all acts and omissions of its servants and agents, and carriers destined for the licensee's facilities from the time such carrier shall enter state waters until such time as the carrier shall leave state waters.

2. State need not plead or prove negligence. Because it is the intent of this subchapter to provide the means for rapid and effective clean-up and to minimize direct damages as well as indirect damages and the proliferation of 3rd party claims, any licensee, agent or servant including carriers destined for or leaving a licensee's facility while within state waters permits or suffers a prohibited discharge or other polluting condition to take place shall be liable to the State of Maine for all costs of clean-up or other damage incurred by the State. In any suit to enforce claims of the State under this section, it shall not be necessary for the State to plead or prove negligence in any form or manner on the part of the licensee, the State need only plead and prove the fact of the prohibited discharge or other polluting condition and that it occurred at facilities under the control of the licensee or was attributable to carriers or others for whom the licensee is responsible as provided in this subchapter.

Sec. 553. Interstate Compact, authority

In accordance with subchapter II the Governor of this State is authorized and directed to execute supplementary agreements with any one or more of the states comprising the New England Interstate Water Pollution Control Commission and the United States for the purpose of implementing and carrying out the provisions, limitations, qualifications and intent of this subchapter.

Sec. 554. Reports to the Legislature

The Commission shall include in its recommendations to each Legislature as required by section 361 specific recommendations relating to the operation of this subchapter, specifically including a license fee formula to reflect individual licensee experience, and fee schedule based upon volatility and toxicity of petroleum products and their by-products.

Sec. 555. Budget approval

The Commission shall submit to each Legislature its budget recommendations for disbursements from the fund in accordance with the provisions of section 551. Upon approval thereof the State Controller shall authorize expenditures therefrom as approved by the Commission.

Sec. 556. Municipal ordinances; powers limited

Nothing in this subchapter shall be construed to deny any municipality, by ordinance or by law, from exercising police powers under any general or special act; provided, however, that ordinances and bylaws in furtherance of the intent of this subchapter and promoting the general welfare, public health and public safety shall be valid unless in direct conflict with the provisions of this subchapter or any rule, regulation or order of the Commission adopted under authority of this subchapter.

Sec. 557. Construction

This subchapter, being necessary for the general welfare, the public health and the public safety of the State and its inhabitants, shall be liberally construed to effect the purposes set forth under this subchapter. No rule, regulation or order of the Commission shall be stayed pending appeal under the provisions of this subchapter.

Inland Waters

§ 416. Discharge of oil prohibited

No person, firm, corporation or other legal entity shall discharge, spill or permit to be discharged oil, petroleum products or their by-products, as defined in section 542, subsection 6, into any inland waters of this State. For the purposes of this section, "inland waters of this State" shall mean all waters of this State except those described in section 543.

Whoever discharges oil, petroleum products or their by-products in violation of this section shall immediately report the fact of such discharge to the commission and undertake to remove such discharge to the commission's satisfaction. Notwithstanding the requirements of the preceding sentence, the commission may undertake to remove such discharge, and may retain agents and contractors for such purpose.

Whoever discharges, spills or permits to be discharged oil, petroleum products or their by-products in violation of this section, and fails to report such discharge, shall be punished by a fine of not less than $500 nor more than $1000.

1971, C. 458, § 1.

Section 361: (In part) Conduct of Hearings

Whenever the commission is required or empowered to conduct a hearing pursuant to any provision of law, such hearings may be held and conducted by the commission, or by any member of the commission or by any qualifed employee or representative of the commission, as the commission may determine. If the hearing is conducted by a single commissioner or qualified employee or representative, such commissioner, employee or representative shall report his findings of fact and conclusions to the commission together with a transcript of the hearing and all exhibits. Such findings of fact and conclusions shall become a part of the record. The commission shall not be bound by such findings or conclusions when acting upon such record, but shall take such action, issue such orders and make such decisions as if it had held and conducted the hearing itself.

1971, C. 414.

APPENDIX E

GLOSSARY OF TERMS USED

Glossary of Terms (from U. S. Coast Guard)

ASPHALTS: Black, solid or semisolid bitumens which occur in nature or are obtained as residues during petroleum refining.

BILGE OIL: Waste oil which accumulates, usually in small quantities, in the lower spaces in a ship, just inside the shell plating. Usually mixed with larger quantities of water.

BUNKER "C" OIL: A general term used to indicate a heavy viscous fuel oil.

BUNKER FUEL: A general term for heavy oils used as fuel on ships and in industry. It often refers to No. 5 and 6 fuel oils.

Conversion Tables:

Knowing	Multiply by factor below to obtain				
	Gallon U.S.	Barrel U.S.	Gallon Imperial	Cubic Feet	Litre
Gallon (U.S.)	1.000	0.023810	0.83268	0.13368	3.7853
Barrel	42.0*	1.0000	34.9726	5.6146	158.984
Gallon (Imp.)	1.2009	0.02859	1.000	0.1605	4.546
Cubic Feet	7.4805	0.1781	6.2288	1.000	28.316
Litres	0.2641	0.00629	0.2199	0.03532	1.000

	Pound	Ton (Short)	Ton (Long)	Ton (Metric)
Pounds	1.00	0.00050	0.000446	0.00045359
Ton (Short)	2000.0*	1.0000	0.89286	0.90718
Ton (Long)	2240.0*	1.120	1.0000	1.0160
Ton (Metric)	2204.6	1.1023	0.98421	1.000

One Hectolitre equals 100 Litre.
One Ton (Metric) equal 1000 Kilograms.
Conversions marked (*) are exact by definition.

Approximate Conversions

Material	Barrels per Ton (long)
Crude Oils	6.7 - 8.1
Aviation Gasolines	8.3 - 9.2
Motor Gasolines	8.2 - 9.1
Kerosenes	7.7 - 8.3
Gas Oils	7.2 - 7.9
Diesel Oils	7.0 - 7.9
Lubricating Oils	6.8 - 7.6
Fuel Oils	6.6 - 7.0
Asphaltic Bitumens	5.9 - 6.5

(As a general rule-of-thumb use 6.5 barrels or 250 gallons per ton of oil).

CRUDE OIL: Petroleum as it is extracted from the earth. There may be several thousands of different substances in crude oil, some of which evaporate quickly while others persist indefinitely. The physical characteristics of crude oils may vary widely. Crude oils are often identified in trade jargon by their regions of origin. This identification may not relate to the apparent physical characteristics of the oil. Commercial gasoline, kerosene, heating oils, diesel oils, lubricating oils, waxes and asphalts are all obtained by refining crude oil.

FUEL OIL GRADE: Numerical ratings ranging from 1 to 6. The lower the grade number, the thinner the oil is and the more easily it evaporates. A high number indicates a relatively thick, heavy oil. No. 1 and 2 fuel oils are usually used in domestic heaters, and the others are used by industry and ships. No. 5 and 6 oils are solids which must be liquified by heating. Kerosene, coal oil, and range oil are all No. 1 oil. No. 3 fuel oil is no longer used as a standard term.

OIL FILMS: A slick thinner than .0001 inch may be classified as follows:

STANDARD TERM	GALLONS OF OIL PER SQUARE MILE	APPEARANCE
"barely visible"	25	barely visible under most favorable light conditions
"silvery"	50	visible as a silvery sheen on surface water
"slightly colored"	100	first trace of color may be observed
"brightly colored"	200	bright bands of color are visible
"dull"	666	color begins to turn dull brown
"dark"	1332	much darker brown

NOTE: Each one-inch thickness of oil equals 5.61 gallons per square yard or 17,378,709 gallons per square mile.

RESIDUAL OIL: A general term used to indicate a heavy viscous fuel oil.

APPENDIX F

REFERENCES

BIBLIOGRAPHY

REFERENCES

Dow, Robert L. (1971). Statement of Robert L. Dow, Maine Department of Sea and Shore Fisheries, given at the Environmental Improvement Commission Public Hearing, Searsport, Maine, March 1971.

Dow, Robert L. Director of Research. Department of Sea and Shore Fisheries. (personal communication).

Maine Department of Environmental Protection, (1971). "State Oil Contingency Plan". 63 pp.

Maine Environmental Improvement Commission. "Maine Waters". Augusta, Maine, 1970. 12 pp.

Maine Environmental Improvement Commission. "Maine Waters". Augusta, Maine, 1971. 6 pp.

Sova, Paul. Maine Department of Environmental Protection. (personal communication)

U. S. Army, Corps of Engineers. (1950-1970). "Waterborne Commerce of the United States". Issued in yearly volumes.

U. S. Coast Guard, (1971). "Pollution Incident Report Portland Harbor Area". pamphelet.

U. S. Coast Guard, (1972). "Pollution Incident Report Portland Harbor Area". pamphelet.

Wong, Edward F.M. (1969 A multiplier for computing the values of shellfish. FWPCA

BIBLIOGRAPHY

Graham, Frank, Jr. (1970). "Oil and the Maine Coast, Is it worth it?" A study sponsored by the Natural Resources Council of Maine, 20 Willow Street, Augusta, Maine. 39 pp.

Maine Department of Sea and Shore Fisheries, (1969). "Oil on the Maine Coast". A request by the Natural Resources Council of Maine. 3 pp.

McMahan, Elizabeth, (1969). "Oil Shores". Coastal Ecological Systems of the United States. Institute of Marine Sciences, University of North Carolina, 1969. Volume 2, pp. 1213-1233.

APPENDIX G

LIST OF INTERVIEWS AND VISITS

List of Visits and Interviews

Academic	Person(s)	*L/T/V
Bates College Lewiston, Maine	Dr. Harold E. Hackett Dept. of Biology	T
Bowdoin College Brunswick, Maine	Dr. Dana Mayo Dept. of Chemistry	T
Federal		
U. S. Coast Guard Portland, Maine	Capt. Donald McCann Group Commander, Portland	T
	Lt. Michael Rashio	V
U. S. Coast Guard Southwest Harbor, Maine	Capt. Ronald Frappier Group Commander, Southwest Hbr.	V
U. S. Coast Guard Southwest Harbor, Maine	Lt. Ernest Blanchard	V
U. S. Coast Guard Boston, Massachusetts	Commander, District 1	L
State		
Maine Department of Sea and Shore Fisheries Augusta, Maine	Mr. Robert L. Dow, Director of Research	V
Maine Department of Environmental Protection Augusta, Maine	Mr. Paul Sova Oil Conveyance	V
Maine Bureau of Waterways Portland, Maine	Mr. Edward Langlois Director	V
Maine Petroleum Association	Mr. Milton Huntington	T

* Means of Communication: (L) = Letter
(T) = Telephone
(V) = Visit