

# MAINE STATE LEGISLATURE

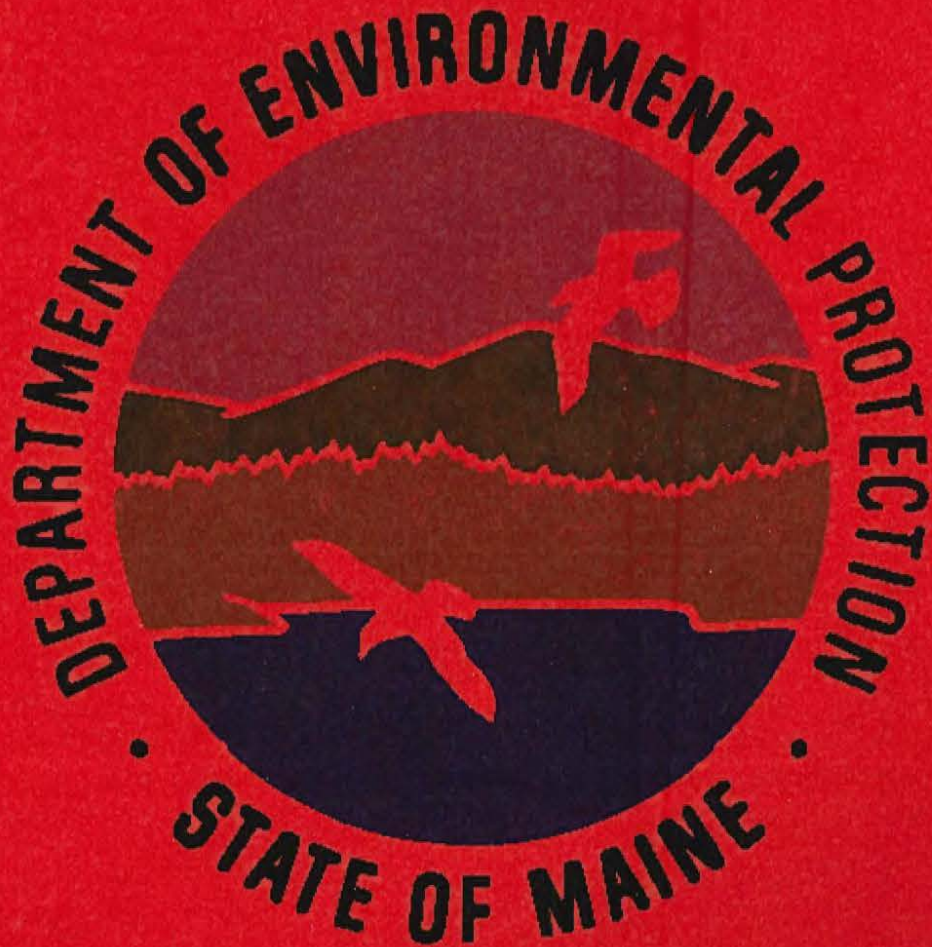
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**2005  
Statistical Report  
Division of Response Services  
Spill Report Case Load**

**Bureau of Remediation & Waste Management**



April 2008

TD  
1042  
.M2  
S74  
2005

Compiled by:  
Diana J. Frith





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# INTRODUCTION

This report is the Maine Department of Environmental Protection's (DEP) statewide Statistical Report for the Division of Response Services (Response Services) spill caseload in 2005. Response Services staff in the Bureau of Remediation and Waste Management respond to oil and hazardous material spills throughout the state and act to mitigate the damage of these events to Maine's environment, public safety, and public health. In 2005, Response Services employees included 25 Oil and Hazardous Material Specialists (OHMS), two Environmental Specialists, three Maintenance Mechanics, one Staff Development Specialist, one Health and Safety Director, and one Division Director. In 2005, Response Services filed 2,728 reports dealing with oil and hazardous incidents throughout Maine. A summary of these filings is contained in this report. These statistics examine Response Services' activity from a variety of perspectives in an attempt to highlight both Maine's environmental concerns and the varieties and numbers of situations Response Services personnel handle in a year.

The reader may notice a slight discrepancy in the total number of reports for the year. Several months are needed to compile all of the data, and the database content may change slightly during that time period. However, we at the Department are confident that these discrepancies are insignificant in regards to the statistical summaries. This report was run on April 17, 2008. Data is representative of this date.

A Response Services report concerns a product that is classified as an oil incident, hazardous material incident, or as a non-oil/non-hazardous incident. An oil incident or a hazardous material incident is where a known or unknown product was released to the environment. The product also may have spilled at an industrial site, but was contained and diverted to a neutralization system, or fully recovered from a containment area and put back into a production process. A non-oil/non-hazardous incident is where a known or unknown product was reported to have been released to the environment; but upon investigation none could be found or the product found did not meet the criteria of an oil or hazardous material. Therefore, the product did not fall within this Division's jurisdiction or DEP was on site in an advisory role (i.e.: tank removals).

Response Services operates out of four regional offices. These are located in Augusta, Bangor, Portland, and Presque Isle. Office names are, on occasion, abbreviated:

Augusta	A
Bangor	B
Portland	P
Presque Isle	PI

Abbreviations may also be used with Incidents and Hazardous Material:

Incident	Inc
Hazardous	Haz
Materials	Mat

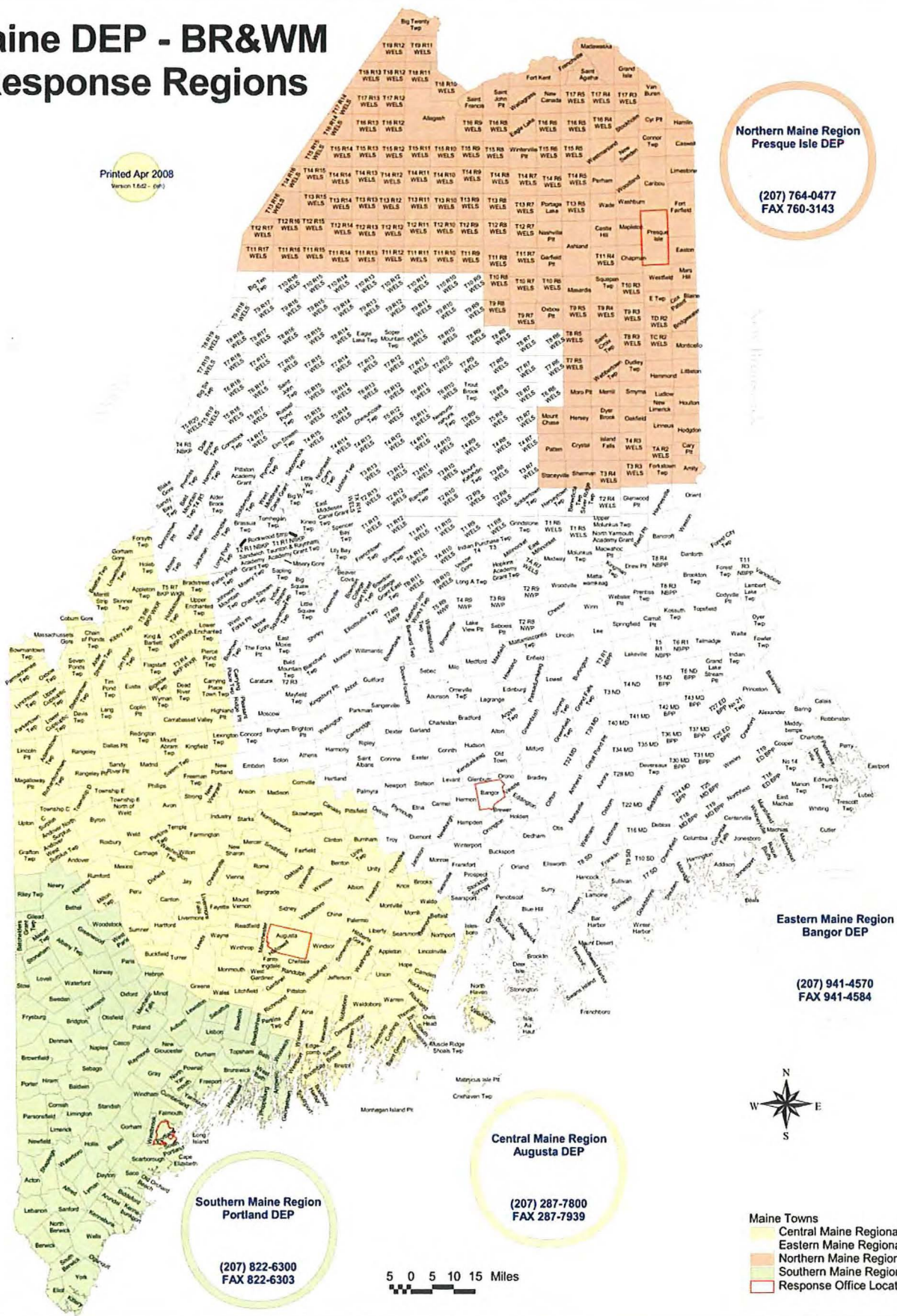


# Maine DEP - BR&WM Response Regions

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Northern Maine Region  
Presque Isle DEP

(207) 764-0477  
FAX 760-3143



Eastern Maine Region  
Bangor DEP

(207) 941-4570  
FAX 941-4584

Central Maine Region  
Augusta DEP

(207) 287-7800  
FAX 287-7939

Southern Maine Region  
Portland DEP

(207) 822-6300  
FAX 822-6303

- Maine Towns
- Central Maine Regional Office
  - Eastern Maine Regional Office
  - Northern Maine Regional Office
  - Southern Maine Regional Office
  - Response Office Locations

5 0 5 10 15 Miles





# Maine DEP - BR&WM Response Regions

## Bangor Region



Eastern Maine Region  
Bangor DEP  
(207) 941-4570  
FAX 941-4584

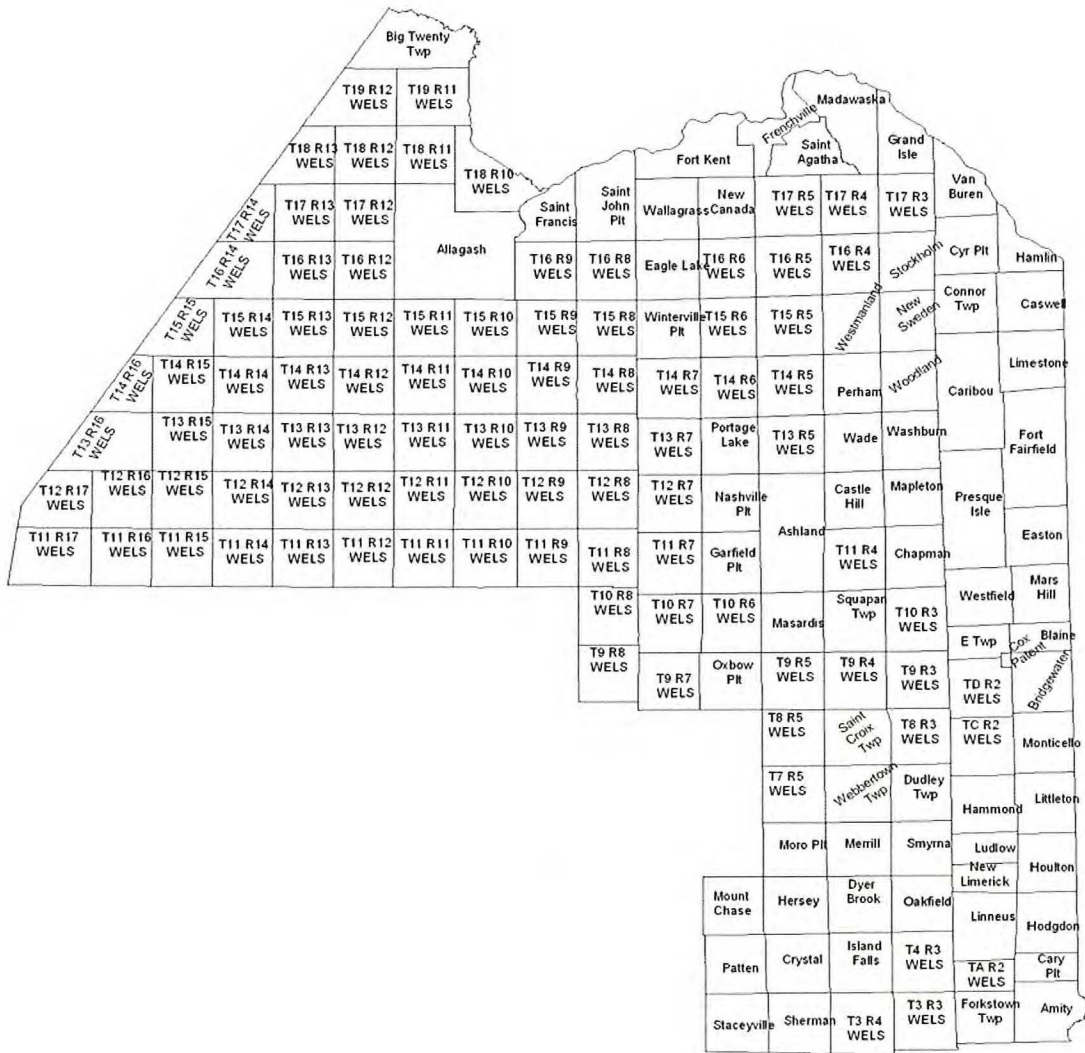
# Maine DEP - BR&WM Response Regions

## Portland Region



# Maine DEP - BR&WM Response Regions

## Presque Isle Region



Northern Maine Region  
Presque Isle DEP  
(207) 764-0477  
FAX 760-3143



## Spills of Interest in 2005

The next two pages list some of the interesting spills that took place during the year. The spill number, location town, and responsible party are listed. A brief synopsis of the official spill report provides basic information about the incident.

### **A-202-2005 Augusta Maine Industrial Repair Svcs.**

During an annual inspection by an Underground Tank Installer, #2 fuel oil was discovered in the sump of the system. Upon further investigation it was determined that the fiberglass tank and contaminated soils needed removal. Over 300 tons of contaminated soil was removed, along with over 86,000 gallons of mixed liquid media, and almost 3,000 gallons of spilled product. A drum skimmer deployed in the excavation worked quite well at product recovery.



### **B-646-2005 Mount Desert Northeast Harbor Marina**

Due to a miscommunication, a dump truck full of gravel sank to a depth of 25 feet in Northeast Harbor when the transportation barge it was boarding inadvertently pulled away. Fortunately, DEP and a contractor were on-site when the truck was extracted and a quarter inch hole was discovered in one of the saddle tanks. The diesel fuel was immediately removed from both of the saddle tanks and minimal spillage occurred.

### **I-53-2005 Van Buren Maine DOT**

While plowing Route 1, a Maine DOT plow truck struck a large pothole and overturned in the road. A tanker truck carrying gasoline narrowly averted a collision by veering off the road. DEP was on-site to oversee the clean-up of motor oil and ensure the tanker truck was not damaged and that no product was lost from the tanker truck when it was returned to the roadway.



### **P-526-2005 Hiram Lily Transportation**

A tanker truck carrying Poland Spring water lost control and crashed into the Saco River. Motor oil that was discharged into the river was retrieved with sorbent material. More importantly, DEP and a contractor removed the potential to spill 150 gallons of diesel fuel by removing the product prior to the salvage of the vehicle.

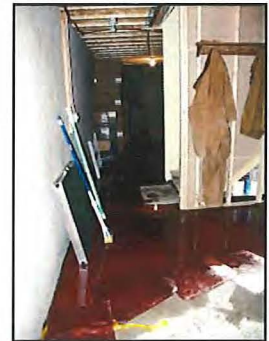


**P-529-2005 Waterboro Cole Farm Dairy**  
 A small tank truck carrying pool water misjudged the weight limit of a small wooden bridge and fell into the stream below. The minimal amount of oil that was discharged was recovered from the stream with sorbent materials. Once again, quick DEP action with the removal of 75 gallons of diesel fuel prevented the potential for further spillage.



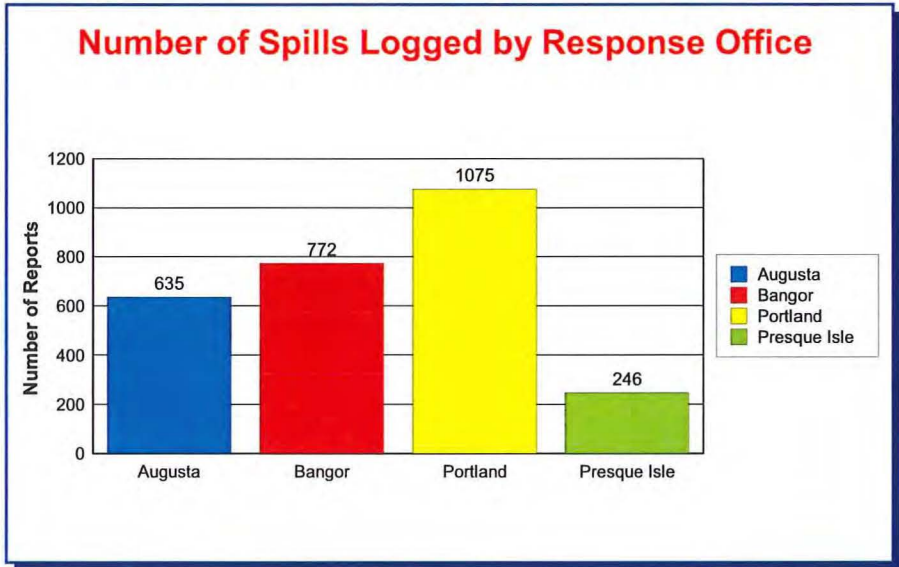
**P-574-2005 Sanford International Woolen Co.**  
 A historic site with the DEP, this site was re-visited in 2005 for the clean-up of oiled soils, ground and surface waters, and non-aqueous phase liquids around and associated with five abandoned #6 fuel oil Underground Storage Tanks. During this phase of the project nearly 96 tons of contaminated soils were removed along with approximately 2,000 gallons of mixed liquid media.

**P-738-2005 North Yarmouth Residence**  
 Although exercise is good for your health, in this instance it was bad for the fuel filter and basement floor. While exercising on his treadmill, a homeowner accidentally hit his oil tank's filter with his foot subsequently breaking it off. Approximately 60 gallons of oil was discharged. Clean-up involved wood removal, concrete washing, and an application of a two-part epoxy. The homeowner has since re-evaluated the location of his treadmill.



**P-919-2005 South Portland Sprague Energy Corp.**  
 Due to an operator error, an Aboveground Storage Tank was overfilled for 8 hours causing the discharge of 86,000 gallons of liquid asphalt into a containment area. Although most of the asphalt stayed within the containment, approximately 300-500 gallons managed to escape through small openings in the containment wall.

**Logged Spills  
by Response Office  
and Spill Type  
for the year of  
2005**

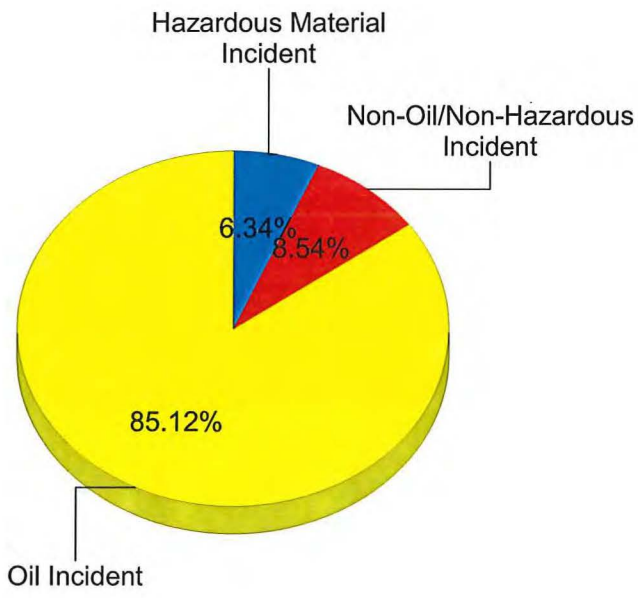


<b>Augusta</b>		
Hazardous Material Incident	55	8.66%
Non-Oil/Non-Hazardous Incident	31	4.88%
Oil Incident	549	86.46%
<b>Office Total Spills</b>	<b>635</b>	
<b>Bangor</b>		
Hazardous Material Incident	32	4.15%
Non-Oil/Non-Hazardous Incident	99	12.82%
Oil Incident	641	83.03%
<b>Office Total Spills</b>	<b>772</b>	
<b>Portland</b>		
Hazardous Material Incident	81	7.53%
Non-Oil/Non-Hazardous Incident	96	8.93%
Oil Incident	898	83.53%
<b>Office Total Spills</b>	<b>1075</b>	
<b>Presque Isle</b>		
Hazardous Material Incident	5	2.03%
Non-Oil/Non-Hazardous Incident	7	2.85%
Oil Incident	234	95.12%
<b>Office Total Spills</b>	<b>246</b>	
<b>Total Spills for 2005</b>	<b>2728</b>	

**Percentage of Spills Logged by Spill Types for 2005**

<u>Type of Spill</u>	<u>Number of Spills Logged</u>	<u>Percentage of Spills Logged</u>
Hazardous Material Incident	173	6.34%
Non-Oil/Non-Hazardous Incident	233	8.54%
Oil Incident	2322	85.12%

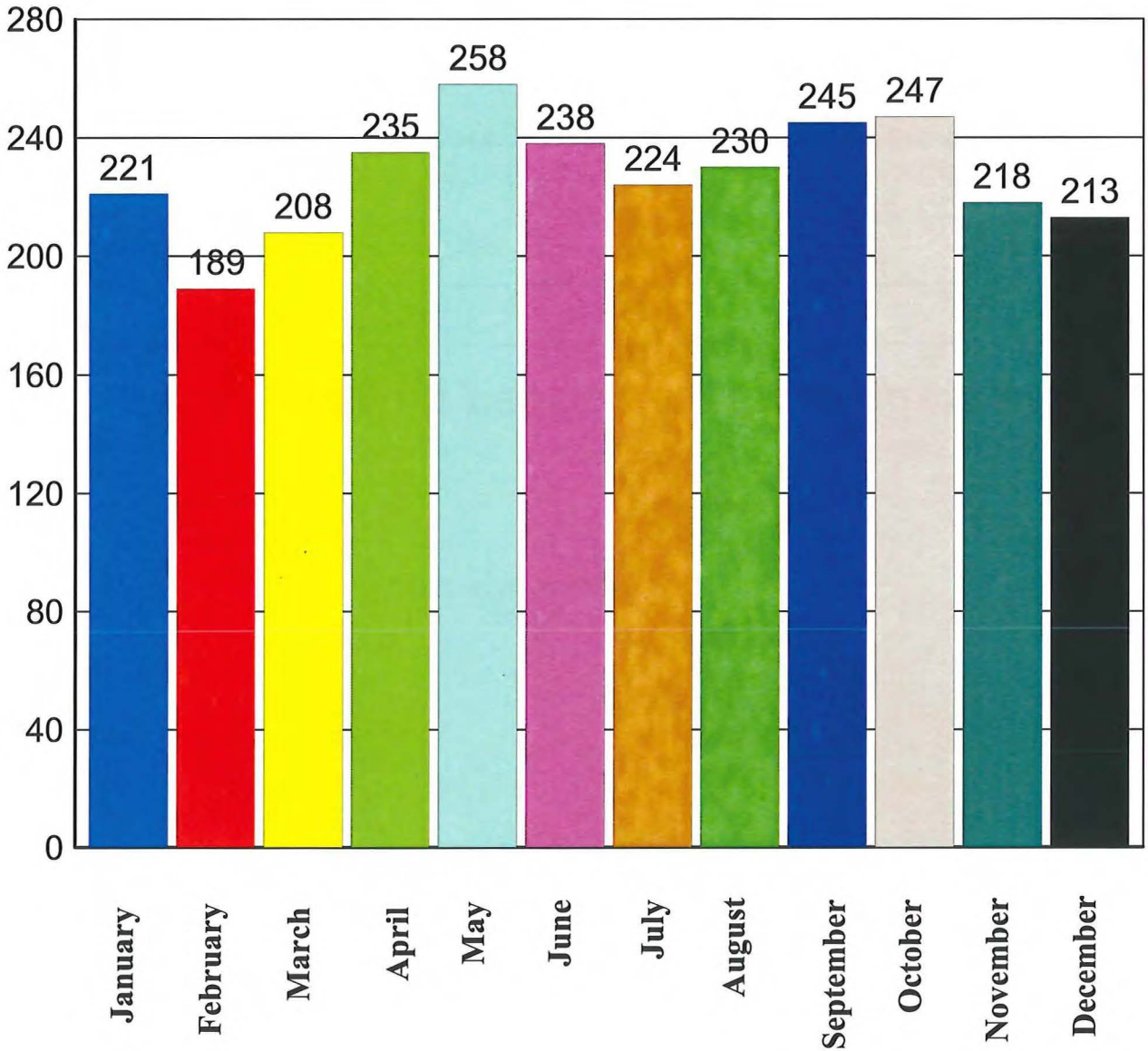
**Percentage of Spills Logged by Spill Types**



Hazardous Material Incident	6.3%
Non-Oil/Non-Hazardous Incident	8.5%
Oil Incident	85.1%
<b>Total:</b>	<b>100.0%</b>



**Number of Spills Reported by Month for 2005**

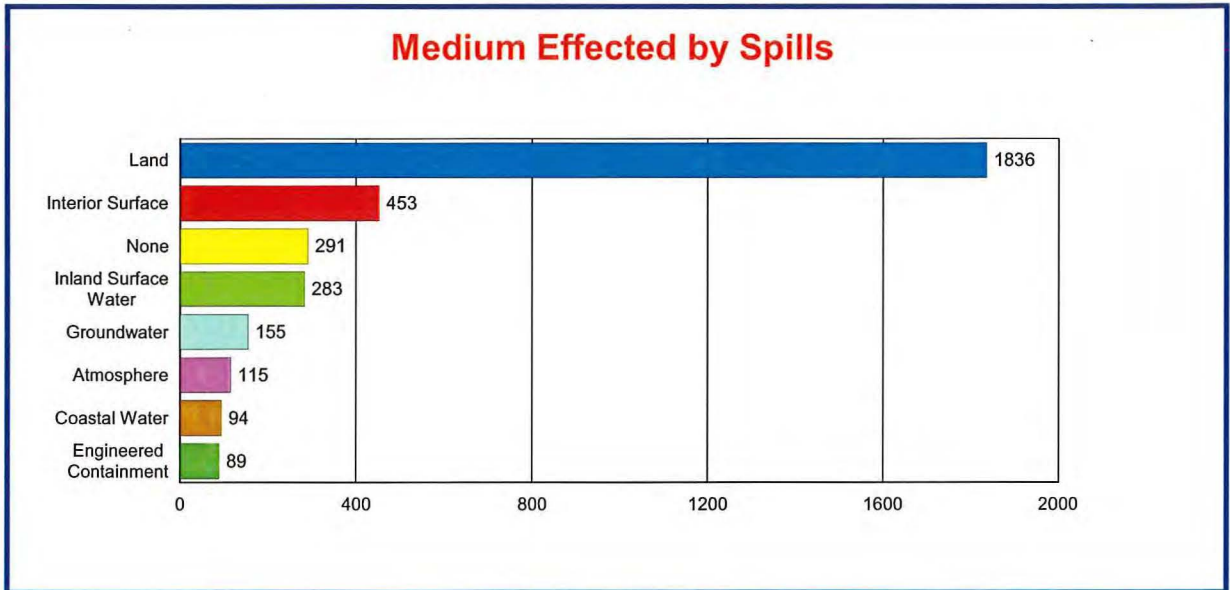


**Total Number of Spills for 2005**

**2,726**

Two reports are missing due to either late reporting or incorrect reported spill dates.

## Spill Reports Arranged by Medium Effectuated for 2005



	Augusta	Bangor	Portland	Presque Isle	Total
<b>Land</b>	424	486	717	209	1,836
<b>Interior Surface</b>	117	118	207	11	453
<b>None</b>	48	118	119	6	291
<b>Inland Surface Water</b>	89	78	94	22	283
<b>Groundwater</b>	24	27	78	26	155
<b>Atmosphere</b>	20	10	82	3	115
<b>Coastal Water</b>	14	33	47	0	94
<b>Engineered Containment</b>	26	21	40	2	89
<b>Total</b>	762	891	1,384	279	3,316

The number of Spill Reports reflected does not show the actual number of spills because one spill may have multiple mediums effectuated. We use "effectuated" for this report to mean the medium that the discharged product consequently contaminated.

**Spill Reports for 2005 by Cause of Spill**

**Augusta**

<u>Cause of Spill</u>	<u>Number of Spills</u>
Accident - Transportation	83
Mechanical Failure - Piping/Hose	69
Overfill	69
Other - Unknown	55
Accident - Human Error	50
Other - No Cause	46
Accident - Physical Breakage	40
Corrosion - Tank	38
Mechanical Failure - Other	30
Mechanical Failure - Gasket/Seal	26
Mechanical Failure - Loose Fitting	25
Accident - Storm Damage	17
Other - Known Cause	16
Discharge - Deliberate/Other	15
Accident - Other	11
Accident - Poor Workmanship	11
Corrosion - Other	10
Corrosion - Piping	10
Mechanical Failure - Valve	6
Discharge - Vandalism	3
Process Failure - Other	3
No Cause Reported	2
Office Total	635

**Bangor**

<u>Cause of Spill</u>	<u>Number of Spills</u>
Other - No Cause	118
Overfill	97
Other - Unknown	82
Mechanical Failure - Piping/Hose	76
Accident - Transportation	59
Accident - Physical Breakage	54
Accident - Human Error	48
Corrosion - Tank	39
Mechanical Failure - Other	35
Mechanical Failure - Gasket/Seal	28
Accident - Other	19
Mechanical Failure - Loose Fitting	19
Accident - Storm Damage	15
Corrosion - Other	15
Other - Known Cause	14
Accident - Poor Workmanship	12
Corrosion - Piping	11
Mechanical Failure - Valve	11
Discharge - Vandalism	9
Discharge - Deliberate/Other	7
Discharge - Bilge	2
Process Failure - Other	2
Office Total	772

<b>Spill Reports for 2005 by Cause of Spill</b>
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<u>Portland</u>	<u>Cause of Spill</u>	<u>Number of Spills</u>
	Accident - Transportation	144
	Other - Unknown	115
	Other - No Cause	110
	Overfill	92
	Mechanical Failure - Piping/Hose	87
	Accident - Human Error	78
	Accident - Physical Breakage	75
	Corrosion - Tank	71
	Mechanical Failure - Other	62
	Mechanical Failure - Gasket/Seal	45
	Other - Known Cause	43
	Mechanical Failure - Loose Fitting	33
	Discharge - Deliberate/Other	22
	Accident - Other	18
	Mechanical Failure - Valve	18
	Accident - Storm Damage	13
	Accident - Poor Workmanship	11
	Corrosion - Other	11
	Corrosion - Piping	11
	Discharge - Vandalism	6
	Process Failure - Other	6
	Discharge - Bilge	3
	No Cause Reported	1
	Office Total	1,075

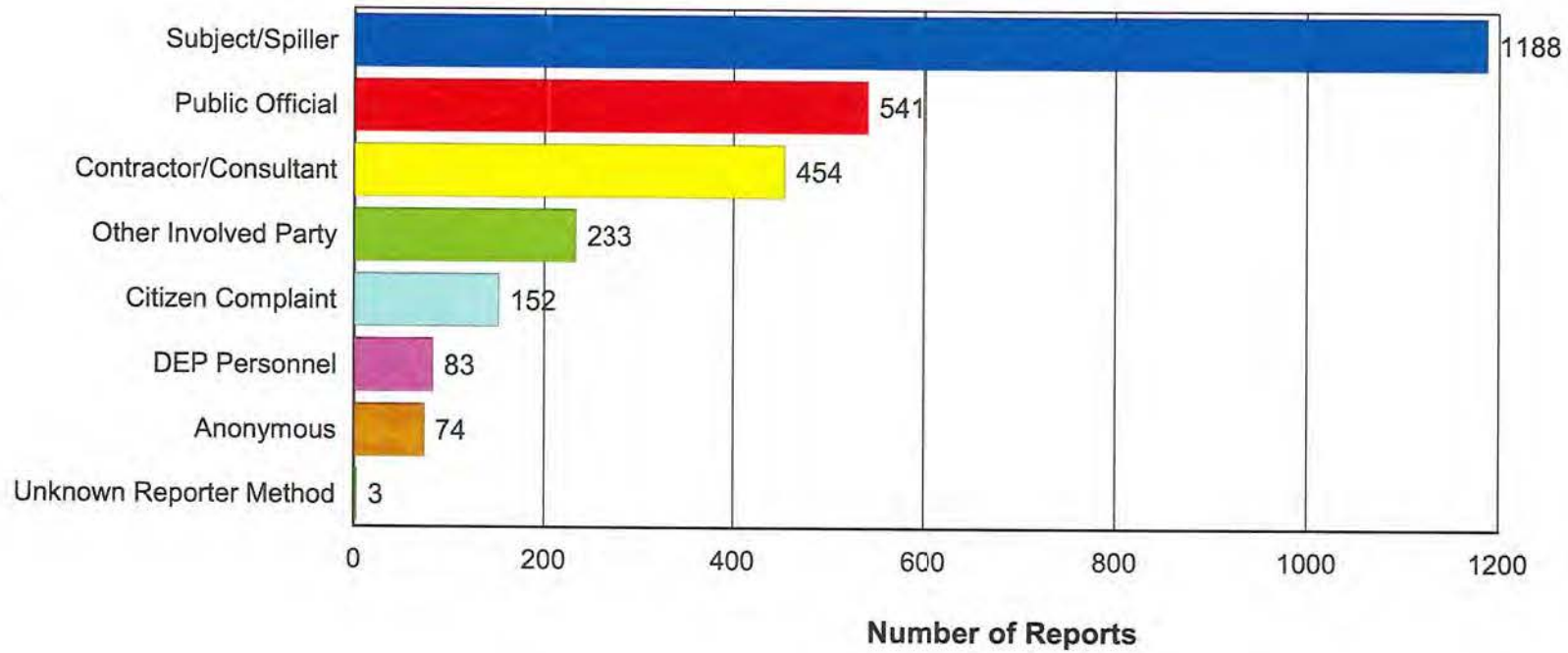
<u>Presque Isle</u>	<u>Cause of Spill</u>	<u>Number of Spills</u>
	Mechanical Failure - Piping/Hose	44
	Accident - Physical Breakage	39
	Overfill	19
	Accident - Human Error	17
	Other - Known Cause	16
	Corrosion - Tank	15
	Accident - Transportation	14
	Mechanical Failure - Other	12
	Mechanical Failure - Valve	11
	Other - Unknown	11
	Accident - Other	10
	Mechanical Failure - Gasket/Seal	10
	Mechanical Failure - Loose Fitting	8
	Other - No Cause	6
	Discharge - Deliberate/Other	4
	Accident - Poor Workmanship	3
	Accident - Storm Damage	3
	Corrosion - Piping	2
	Corrosion - Other	1
	Discharge - Vandalism	1
	Office Total	246

2005 Grand Total	2,728
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## Spill Reports by Reporter Method for 2005

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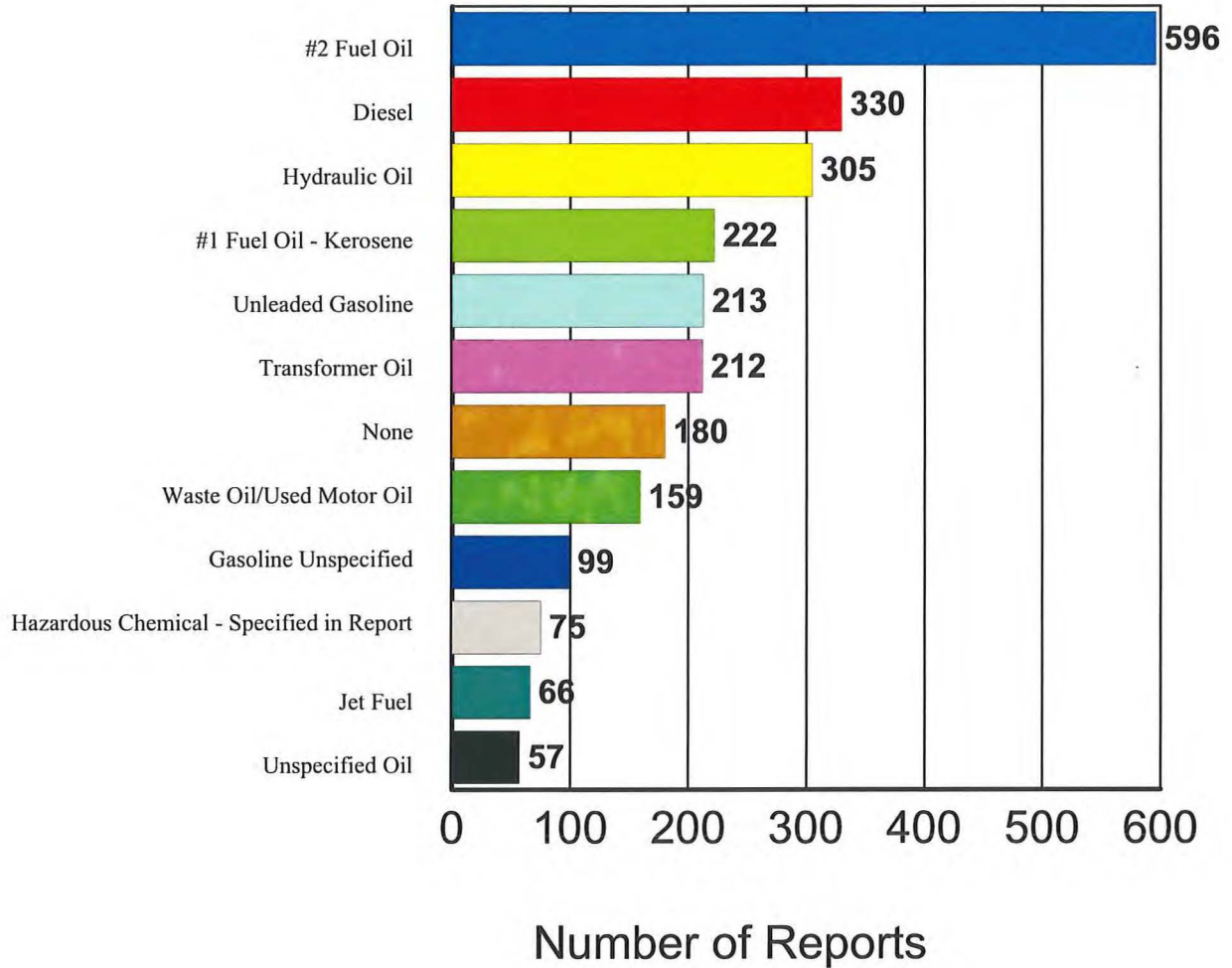


**Spill Reports by Product Spilled for 2005**

Product Spilled	Number of Spills	Product Spilled	Number of Spills
#2 Fuel Oil	595	Sulfuric Acid	8
Diesel	330	Unknown Substance	8
Hydraulic Oil	305	Algae Blooms/Plant Pollen Sheens	7
#1 Fuel Oil - Kerosene	222	Non-Hazardous Chemical - Specified in report	6
Unleaded Gasoline	213	PCB Oil	6
Transformer Oil	212	Unspecified Motor Fuel	6
None	180	Hydrochloric Acid	5
Waste Oil/Used Motor Oil	159	Chlorine	4
Gasoline Unspecified	99	Hazardous Chemical - Unspecified	4
Hazardous Chemical - Specified in report	75	Waste Oil (as Haz Chem)	4
Jet Fuel	66	Aviation Gasoline	3
Unspecified Oil	57	Regular Gasoline	3
Oil - Other - Specified in Report	51	Animal Fats/Remains	2
Lube Oil	41	Crude Oil	2
Anti-freeze	27	Leaded Gasoline	2
Mercury	26	Medical Waste	2
Transmission Oil	24	Non-Chemical Non-Oil Unspecified	2
Non-Chemical Non-Oil Specified in report	23	Premium Unleaded	2
#6 Fuel Oil	21	Unleaded Plus	2
Marsh Sheen	14	Liquors	1
Asphalt	11	Non-Hazardous Chemical - Unspecified	1
Unspecified Fuel Oil	11	Water Storage	1
Corrosive	10		
Ammonia	8		
Pesticide General	8		

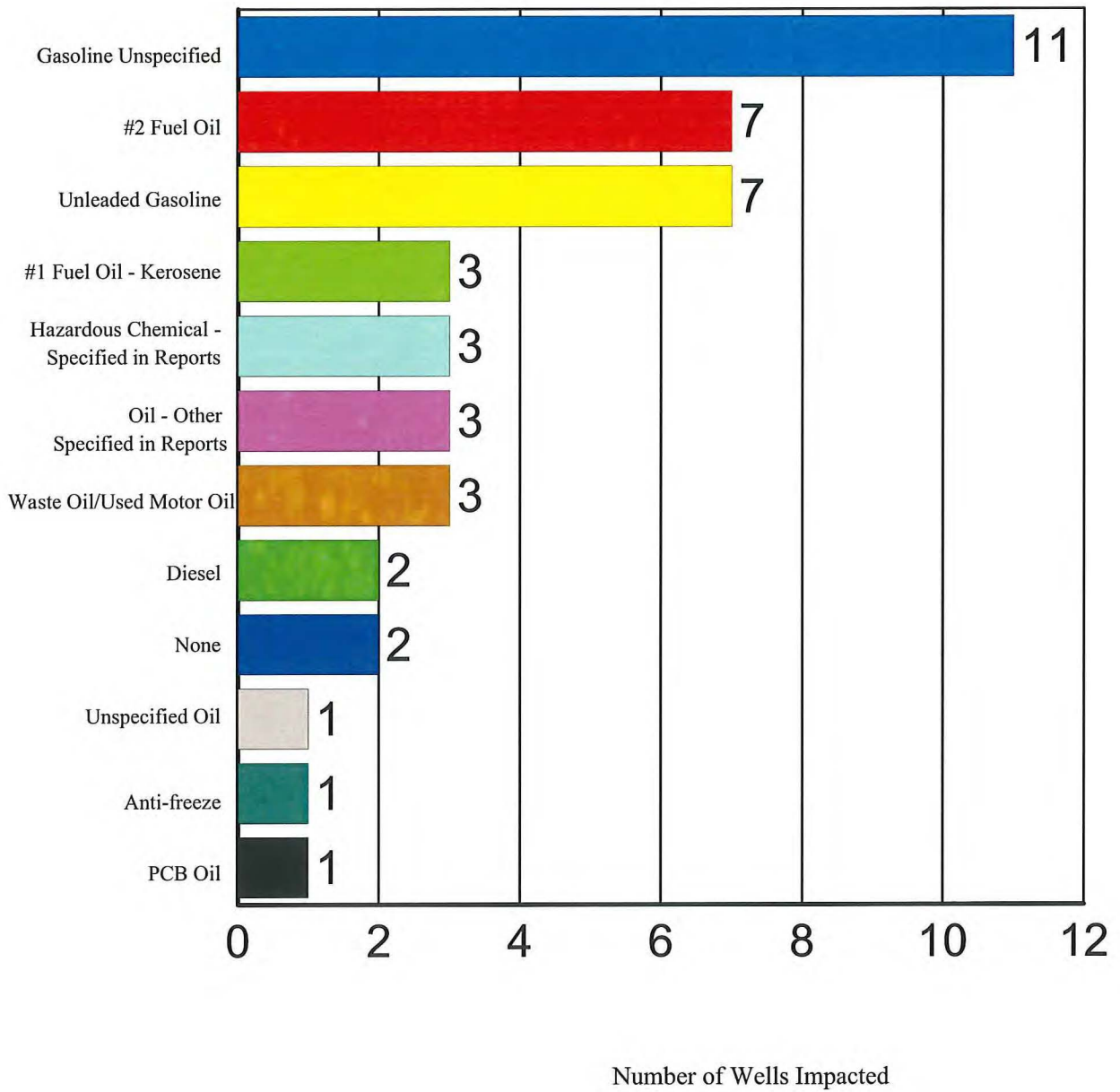
The number of spill reports reflected does not show the actual number of spills because one spill may have multiple products spilled.

## Top Twelve Products Involved in Reports for 2005



The number of spill reports reflected does not show the actual number of spills because one spill may have multiple products spilled.

## Top Twelve Products Contaminating Wells in 2005





## Product Categories vs Wells Impacted for 2005

<u>Product Category</u>	<u>Number of Spills</u>	<u>Number of Wells Impacted</u>
Motor Fuels	726	22
Home Heating Oils	828	10
Other Oils	862	8
Hazardous & NonHazardous Chemicals	195	5
Non Oil, Non Hazardous	229	1
Heavy Fuel Oils	21	0
Unknown	8	0
<b>Total</b>	<b>2,869</b>	<b>46</b>

The Product Categories above contain the following product types:

<u>Home Heating Oils:</u>	<u>Heavy Fuel Oils:</u>	<u>Motor Fuels:</u>	<u>Other Oils:</u>	<u>Hazardous &amp; Non-Hazardous Chemicals:</u>
#1 Fuel Oil	#4 Fuel	Gasoline Unspecified	Lube Oil	Demolition Debris
# 2 Fuel Oil	#5 Fuel	Leaded Gasoline	Asphalt	Pesticide (General)
Heating Oils Unspecified	#6 Fuel	Unleaded Gasoline	Crude Oil	PCB Oil (over 50 ppm)
		Aviation Gasoline	Unspecified Oil	Sulfuric Acid
		Jet Fuel	Waste Oil	Corrosives
		Diesel	Transmission Oil	Chlorine
		Unspecified Motor Fuels		Hazardous Chemicals
		Premium Unleaded		Ammonia
				Hydrochloric Acid
				Medical Waste
				Antifreeze
				Liquors
				Non-Hazardous Chemicals
				Mercury

This table's primary purpose is to show that Home Heating Oils and Motor Fuels are the most frequent contaminants found by Response Services in wells (for groundwater). By this analysis, they are the greatest threat to Maine's groundwater. Close examination of the data shows that the ratio of home heating oils and motor fuel spills to well water contaminations is about 49:1. That is to say, on average, every forty-ninth spill of home heating oil or motor fuel results in one contaminated well case.

The number of "wells impacted" may change as the data represents a "snapshot in time" when Response Services personnel complete the report. If a site is referred to Technical Services for additional investigation and remediation, the possibility exists for the number of "wells impacted" to change which isn't reflected above.

The number of spill reports reflected does not show the actual number of spills because one spill may have multiple products spilled.

## Number of Wells Impacted or Threatened for 2005

Sorted by Spill Type Reported and Product Found

<u>Spill Type</u>	<u>Product Found</u>	<u>Number of Incidents</u>	<u>Wells at Risk</u>	<u>Wells * Impacted</u>
<b>Hazardous Material Incident</b>				
	Hazardous Chemical - Specified in report	3	4	3
	PCB Oil	2	2	1
<b>Non-Oil, Non-Hazardous Incident</b>				
	None	9	12	0
	Non-Chemical Non-Oil Specified in report	1	2	0
<b>Oil Incident</b>				
	#2 Fuel Oil	67	72	7
	#1 Fuel Oil - Kerosene	54	68	3
	Diesel	27	33	2
	Unleaded Gasoline	22	35	7
	Gasoline Unspecified	19	42	11
	Waste Oil/Used Motor Oil	17	26	3
	Oil - Other - Specified in Report	10	17	3
	Hydraulic Oil	7	9	0
	Transformer Oil	3	3	0
	Anti-freeze	2	4	1
	None	2	6	1
	Regular Gasoline	2	3	1
	Aviation Gasoline	1	1	0
	Hazardous Chemical - Specified in report	1	3	0
	Jet Fuel	1	1	0
	Lube Oil	1	1	0
	Transmission Oil	1	1	0
	Unspecified Motor Fuel	1	2	1
	Unspecified Oil	1	0	2
	Waste Oil (as Haz Chem)	1	1	0
<b>Totals</b>		<b>255</b>	<b>348</b>	<b>46</b>

\* The number of "wells impacted" may change as the data represents a "snapshot in time" when Response Services personnel complete the report. If a site is referred to Technical Services for additional investigation and remediation, the possibility exists for the number of "wells impacted" to change which isn't reflected above.

Non-Oil, Non-Hazardous incidents with threatened wells indicate that a well was reported as a potential for contamination, but upon further investigation no contamination was found. This field also may indicate that a potential for a spill was identified, but had not yet occurred.

## Amount of Material Spilled in 2005 Sorted by Response Office and Spill Type

Response Office		Spill Type	G	P	T	Y
<b>Augusta</b>	Hazardous Material Incident		13,408	3,122	0	20
	Non-Oil, Non-Hazardous Incident		5	0	0	28
	Oil Incident		16,638	0	0	0
	<b>Office Total</b>		<b>30,052</b>	<b>3,122</b>	<b>0</b>	<b>48</b>
<b>Bangor</b>	Hazardous Material Incident		5,047	20	0	0
	Non-Oil, Non-Hazardous Incident		1	0	0	0
	Oil Incident		12,634	0	4	1
	<b>Office Total</b>		<b>17,682</b>	<b>20</b>	<b>4</b>	<b>1</b>
<b>Portland</b>	Hazardous Material Incident		3,313	12,686	0	0
	Non-Oil, Non-Hazardous Incident		255	0	1	0
	Oil Incident		103,273	0	0	0
	<b>Office Total</b>		<b>106,840</b>	<b>12,686</b>	<b>1</b>	<b>0</b>
<b>Presque Isle</b>	Hazardous Material Incident		250	10	0	0
	Non-Oil, Non-Hazardous Incident		1,460	0	0	0
	Oil Incident		11,245	0	0	0
	<b>Office Total</b>		<b>12,955</b>	<b>10</b>	<b>0</b>	<b>0</b>
<b>Grand Total of All Offices Combined</b>			<b>167,529</b>	<b>15,838</b>	<b>5</b>	<b>49</b>

NOTE: All numeric fields are BEST ESTIMATES by the OHMS involved based on the years of experience with spill events. In 2005 zero (0) Unknown and zero (0) Barrels were discharged. Units of measure are abbreviated as follows:

G = Gallons      P = Pounds      T = Tons      Y = Yards

# Recovery Method

The following two pages detail the amount of material that was recovered using various recovery methods. Although it would seem logical to compare the amounts of material spilled in each region to the amounts recovered, the reader should avoid this comparison. The data is incomparable because the physical form of the recovered product may be different than the spilled form. A thousand gallons of gasoline could spill onto the ground, but cleanup may involve cubic yards of soil, gallons of pure gasoline, or pounds of saturated sorbent material.

The following list shows some of the recovery methods used by the responders when they enter report data into the HOSS (Hazardous Oil Spill System) database at the Maine Department of Environmental Protection.

## Category

Burning  
Excavation  
Filter  
(Treated by) Licensed Treatment Facility  
None  
Other  
Pumps  
Remove  
Skimmers  
Sorbents  
Treatment in Place  
Vacuum Trucks

The following list details the abbreviations used on the next two pages for the amounts of material recovered.

## Units of Measure

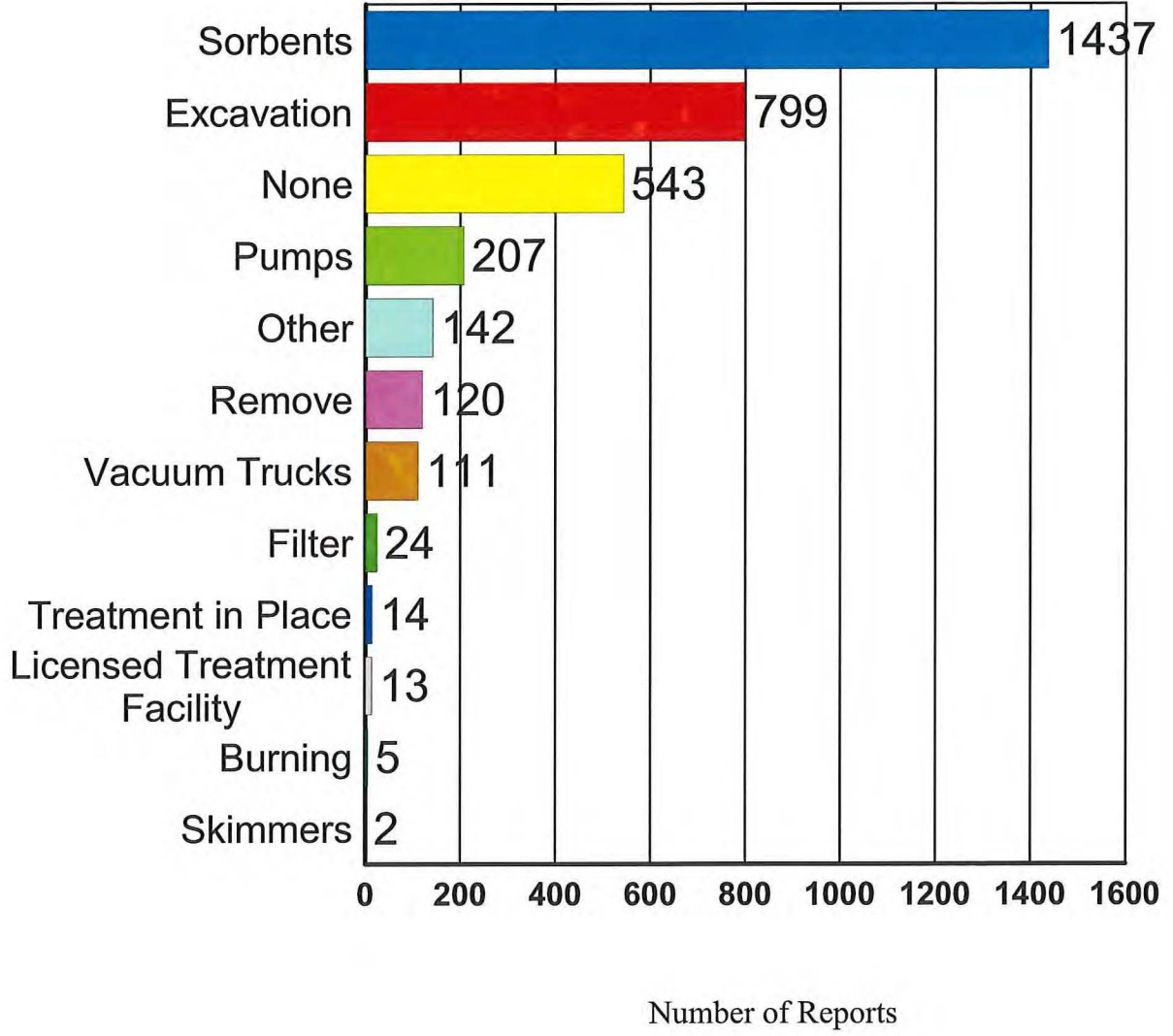
B = Barrels  
G = Gallons  
P = Pounds  
T = Tons  
Y = Cubic Yards



**Recovered Amounts of Spilled Material in 2005  
by Spill Type and Recovery Method**

Recovery Method		B	G	P	T	Y
Hazardous Material Incident	Excavation	0	252	0	129	47
	Filter	0	0	0	0	0
	Licensed Treatment Facility	0	578	10	0	0
	None	0	0	0	0	0
	Other	3	30	431	30	4
	Pumps	0	5,342	5,463	25	7
	Remove	3	1,371	5,133	0	20
	Sorbents	0	6,568	4,583	25	75
	Treatment in Place	0	227	0	0	10
	Vacuum Trucks	0	2,766	0	8	70
Non-Oil, Non-Hazardous Incident	Excavation	0	0	0	1	0
	None	0	0	0	0	0
	Other	0	0	0	0	0
	Remove	0	115	0	0	0
	Sorbents	0	2	0	0	0
	Vacuum Trucks	0	70	0	0	0
Oil Incident	Burning	0	48	0	0	0
	Excavation	36	402,186	25,631	25,809	19,760
	Filter	2	218,623	300	740	5
	Licensed Treatment Facility	0	30,043	0	233	10
	None	0	4	0	0	0
	Other	2	74,261	3,552	201	28
	Pumps	6	386,605	6,065	9,319	1,439
	Remove	0	11,066	881	0	30
	Skimmers	0	30	0	0	20
	Sorbents	19	227,008	32,066	2,909	1,731
	Treatment in Place	2	1,908	550	0	21
	Vacuum Trucks	4	381,329	8,040	2,611	416

## Recovery Methods Used in 2005



The total number of recovery methods used in 2005 is greater than the total number of spill reports due to multiple recovery methods used during some spills.

## Types of Hazardous Material Spilled

The following table, "Hazardous Materials Spilled in 2005", contains a summary of the best information available to Response Services as to the types of chemicals and other hazardous materials spilled during 2005. It is not always possible to identify an unknown substance in any but the broadest of terms. General characteristics such as flash point or pH are often the only factors that can be determined about an unknown without costly laboratory analysis. Given these factors, a substance may qualify as a hazardous material, yet remain an unknown.

The problem of estimating amounts spilled can also be difficult. Uncontrolled sites may have had any number of products dumped there for months or years, before anyone noticed or decided to report the event(s). Catastrophic events, like floods, result in barrels and other containers being released into the environment full or partially filled with product. These containers are often found empty or with their contents diluted. When a tank truck rolls over, a best estimate is made of the amount spilled, but the exact amount is seldom measured. If a responder is called to inspect leaking barrels at a site, it is often difficult to know how much product has already been lost into the ground. As a result of this, estimates of amounts spilled are often based on past experience with other similar spills and information that is available to extrapolate at that time. Each substance listed was discharged in at least the amount listed; usually it is reasonable to assume more than that amount was lost to the environment.

There are cases where this assumption should not be made. Most spills are industrial in nature; such as when a company either public or private has had an accident and product was lost. In general, industries know what chemicals are in what processes and in what volumes. Central Maine Power (CMP), for instance, knows how much oil is in a transformer and on those occasions when one is ruptured they make a fairly accurate assessment as to how much oil is lost. Keeping in mind the health and safety of the public as well as its employees, CMP then handles the material as though it were PCB contaminated until enough evidence is collected to indicate otherwise. Also, paper companies are quite precise in their figures of the amount of chlorine released into the atmosphere and the amount of chlorine dioxide spilled. Pure product fields, as a result of this industry scrutiny, should contain accurate data. Cases where a general family of hazardous materials is listed may well contain spill amounts that are much more than the amounts listed.

The following symbols have been utilized:

G	-	Gallons
P	-	Pounds
Y	-	Cubic Yards
B	-	Barrels
U	-	Unknown

## Hazardous Materials Reported During 2005

Material Reported	Number Of Spills	Amount Spilled *	Unit of Measure
Acetone	1		Unknown
Aluminum Sulfate	1	1,500.00	P
Ammonia	8	13,906.00	G
Ammonium Hydrogen & Hydrogen Peroxide Mix	1	25.00	G
Ammonium-Nitrate & Fuel Oil	1	0.00	G
Anhydrous Ammonia	1	300.00	P
Antifreeze	11	15.25	G
Asbestos	1		Unknown
Burning Plastic	1		Unknown
Calcium Sulfate	1		Unknown
Carbon Tetrachloride	4	0.00	G
Chlorine	4	6.10	G
Corrosive	20	101.60	G
Degreaser	1	0.10	G
Dye	1	1.00	G
Ethanol – Methanol Mix	1	0.50	G
Ether	1		Unknown
Flammable Adhesive	1	0.02	G
Freon	1		Unknown
Hazardous Chemical – Unspecified	4	0.00	G
Hydrochloric Acid	5	226.01	G
Lead	1	20.00	P
Leukotan NS3 Acrylic Synton	1	25.00	G
Liquors	1	4,000.00	G
Medical Waste	2	0.00	G
Mercury	27	1.32	G
Methane	1	10.00	P
Mixed Debris & Waste	1	20.00	Y
Mixed waste Alcohols & Xylene	1	7.00	G
Mold & Mildew Remover	1	0.25	G
Multiple Chemicals	4	166.25	G
Multiple Chemicals	3	4,466.00	P
Paint Related Products	5	1.00	G
PCB Oil	6	49.35	G
Pentachlorophenol	1		Unknown
Pesticide General	8	50.55	G
Phenol	1	0.25	G
Phenol Formaldehyde	1	250.00	G

\*The amount spilled shown is the least amount spilled.



## Hazardous Materials Reported During 2005

Material Reported	Number Of Spills	Amount Spilled *	Unit of Measure
(Continued from previous page)			
PKP Fire Extinguishing Agent	1	5.00	P
Polyurethane	1	0.50	G
Porta-Potty	1	20.00	G
Potassium Metal	1	0.00	P
Propane	4		Unknown
Roof Coating	2	20.25	G
Silver	1	1.00	G
Sodium Hypochlorite	1	3,000.00	P
Sodium Hypochlorite Solutions	5	1,301.00	G
Sodium Nitrate & Sodium Hydroxide Mix	1	4.00	P
Styrene Monomer	1	0.25	G
Sulfur	1	0.00	G
Sulfuric Acid	6	2.66	G
Trichloroethylene	1		Unknown
Waste Oil (As Haz. Chem.)	3	0.00	G

\*The amount spilled shown is the least amount spilled.

## Non-Hazardous & Non-Oil Materials Reported During 2005

Material Reported	Number Of Spills	Amount Spilled *	Unit of Measure
Algae Blooms/Plant Pollen Sheen	1	0.00	G
Animal Fats/Remains	2	250.00	G
Blowdown Water	1	60.00	G
Dye	1		Unknown
Latex Paint	8	4.50	G
Marsh Sheen	14	0.00	G
Non-Chemical Non-Oil Specified in Report	6	5.11	G
Non-Chemical Non-Oil Specified in Report	1	.10	P
Non-Chemical Non-Oil Specified in Report	1	1.00	T
Non-Chemical Non-Oil Specified in Report	2	28.00	Y
Non-Chemical Non-Oil Unspecified	2	400.00	G
None	179	1.00	G
Potato Juice	1	1,000.00	G
Unknown Substance	8	0.00	G
Water Storage	1	0.00	G

\*The amount spilled shown is the least amount spilled.

## **Types of Facilities with Corresponding Subcategories**

The graphs on the next five pages utilize the following categories and subcategories:

### **Business**

- Business - Commercial
- Business - Farm
- Business - Industrial
- Business - Other

### **Government**

- Government - Federal
- Government - Local
- Government - Military
- Government - Other
- Government - State of Maine

### **Other**

- Other - Mystery
- Other - Religious
- Other - Specified in Report

### **Residential**

- Residential - Multi Family
- Residential - Other
- Residential - Single Family

### **School**

- School - Private
- School - Public

### **Terminal**

- Terminal - Air
- Terminal - Bulk Plant
- Terminal - Licensed
- Terminal - Marina
- Terminal - Other
- Terminal - Service Station

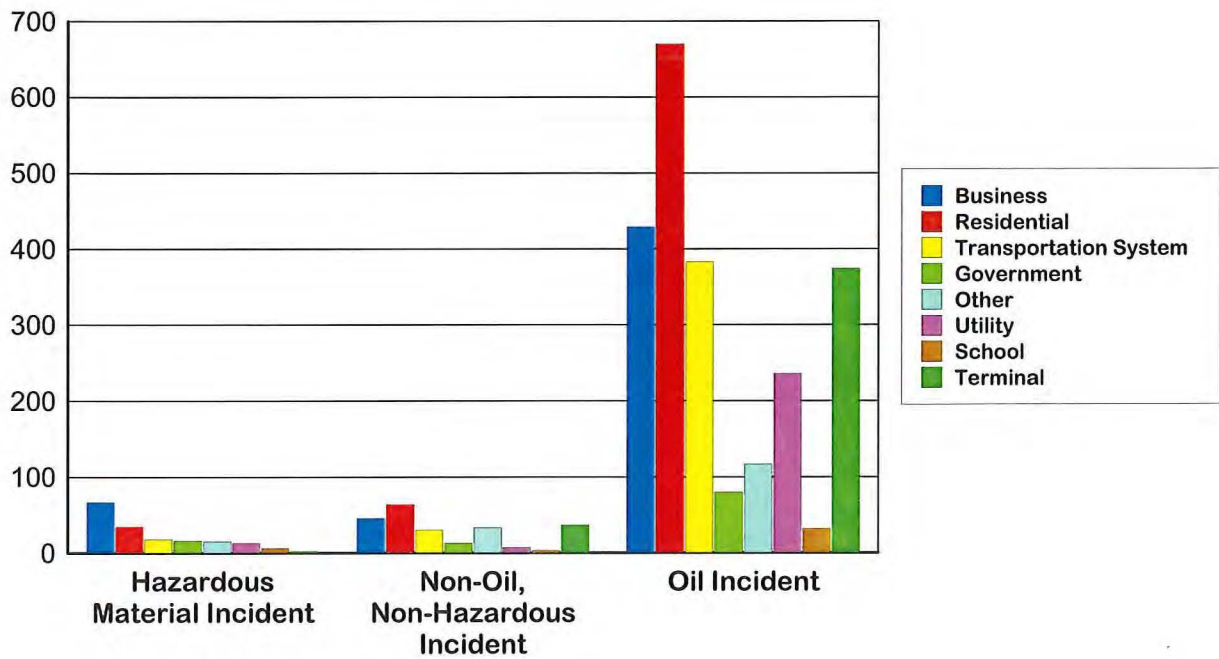
### **Transportation System**

- Transportation - Air
- Transportation - Marine
- Transportation - Other Off-Road
- Transportation - Rail
- Transportation - Road

### **Utility**

- Utility - Other
- Utility - Power
- Utility - Telecommunications

**Types of Facilities Involved in Reports during 2005  
by Incident Location Category**

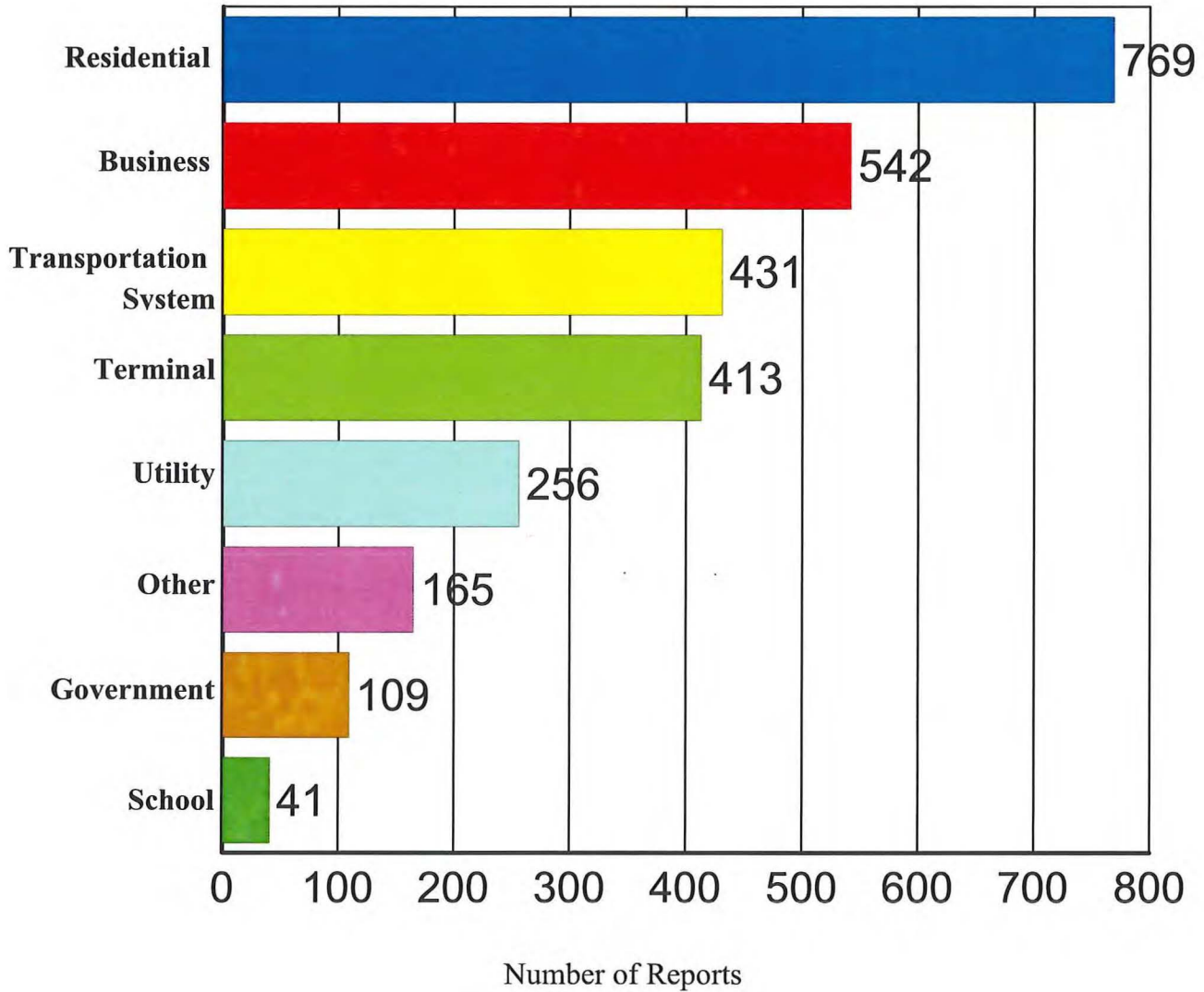


<b>Hazardous Material Incident</b>	<b>172</b>
Business	67
Residential	35
Transportation System	18
Government	16
Other	15
Utility	13
School	6
Terminal	2
<b>Non-Oil, Non-Hazardous Incident</b>	<b>233</b>
Residential	64
Business	46
Terminal	37
Other	33
Transportation System	30
Government	13
Utility	7
School	3
<b>Oil Incident</b>	<b>2,321</b>
Residential	670
Business	429
Transportation System	383
Terminal	374
Utility	236
Other	117
Government	80
School	32
<b>Grand Total of Spills</b>	<b>2,726</b>

Two reports missing.



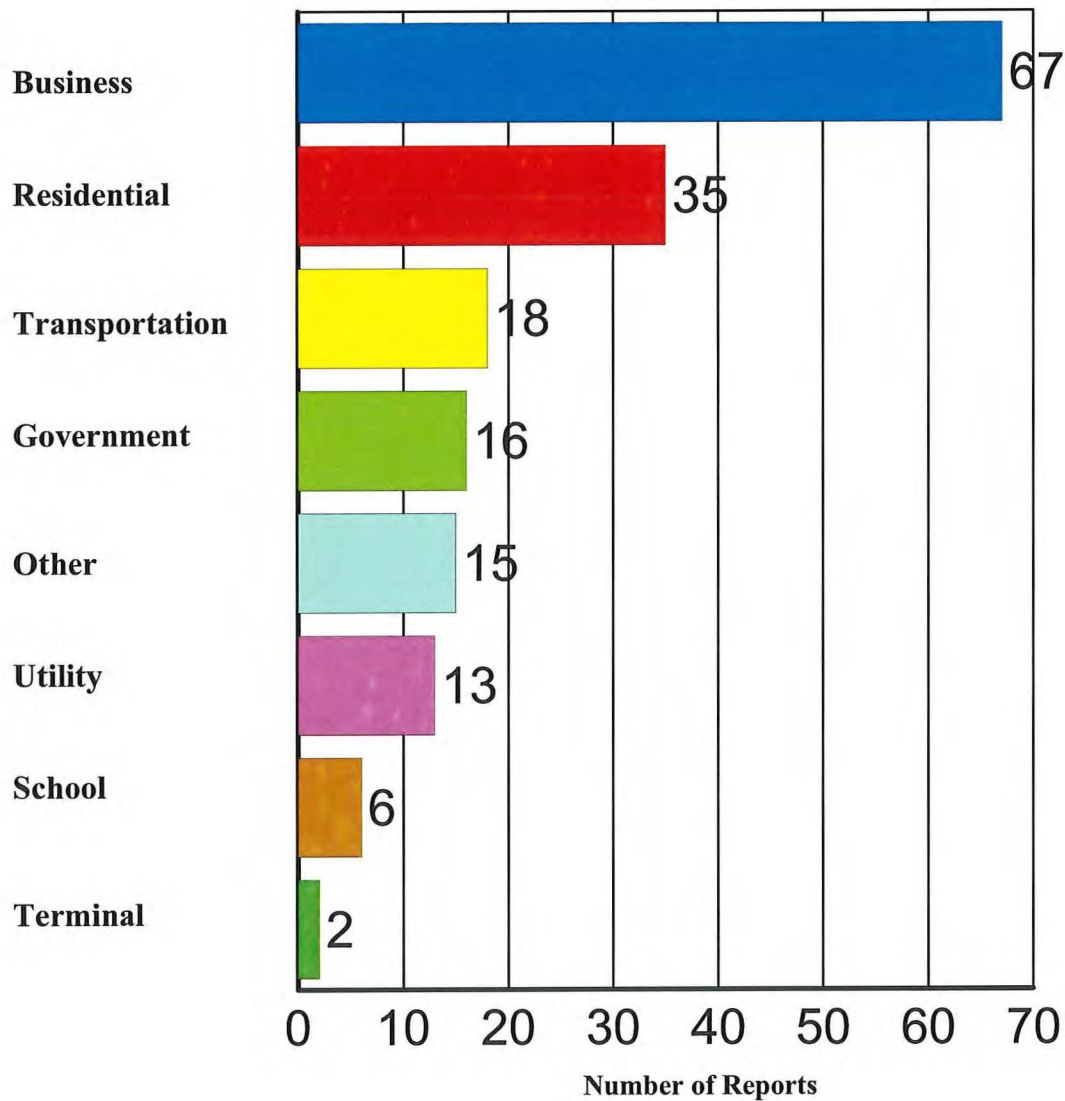
## Types of Facilities Involved in All Spill Reports for 2005



Total Number of Spills      2,726

Two reports missing.

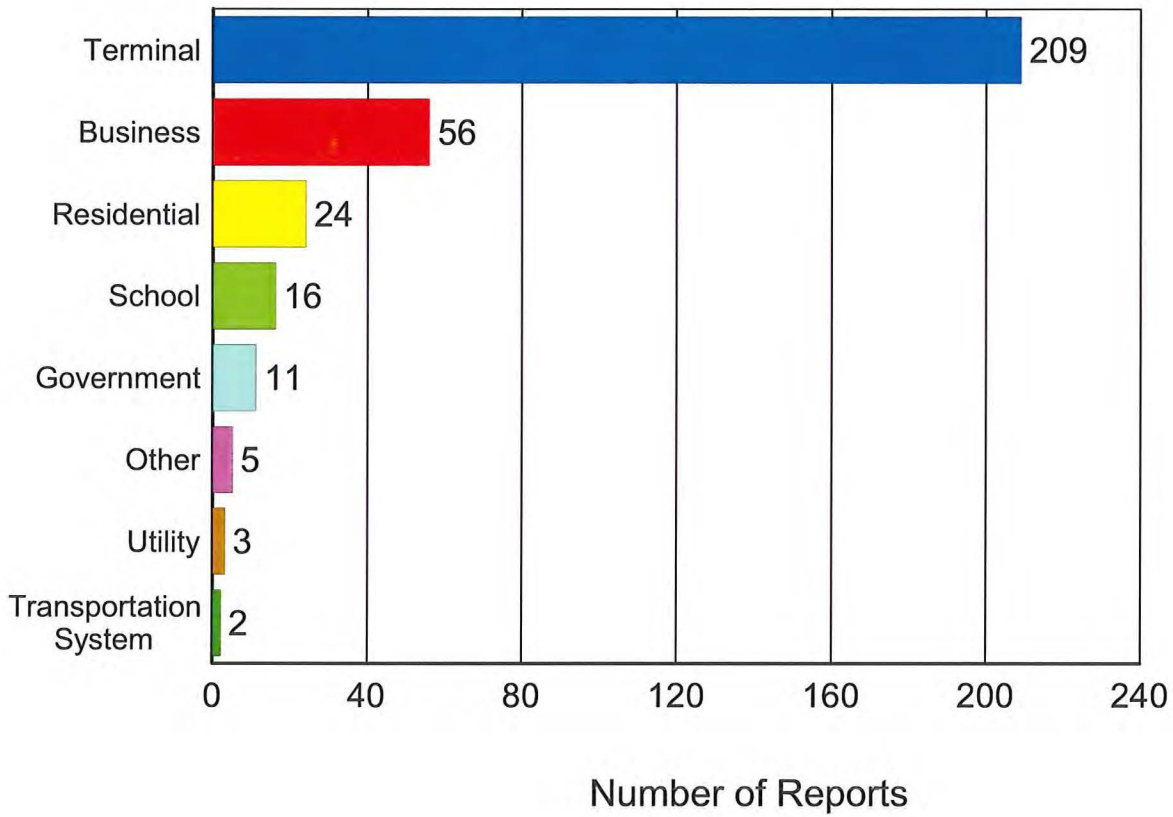
## Types of Facilities Involved in Hazardous Material Incidents in 2005



Total Number of Reports

172

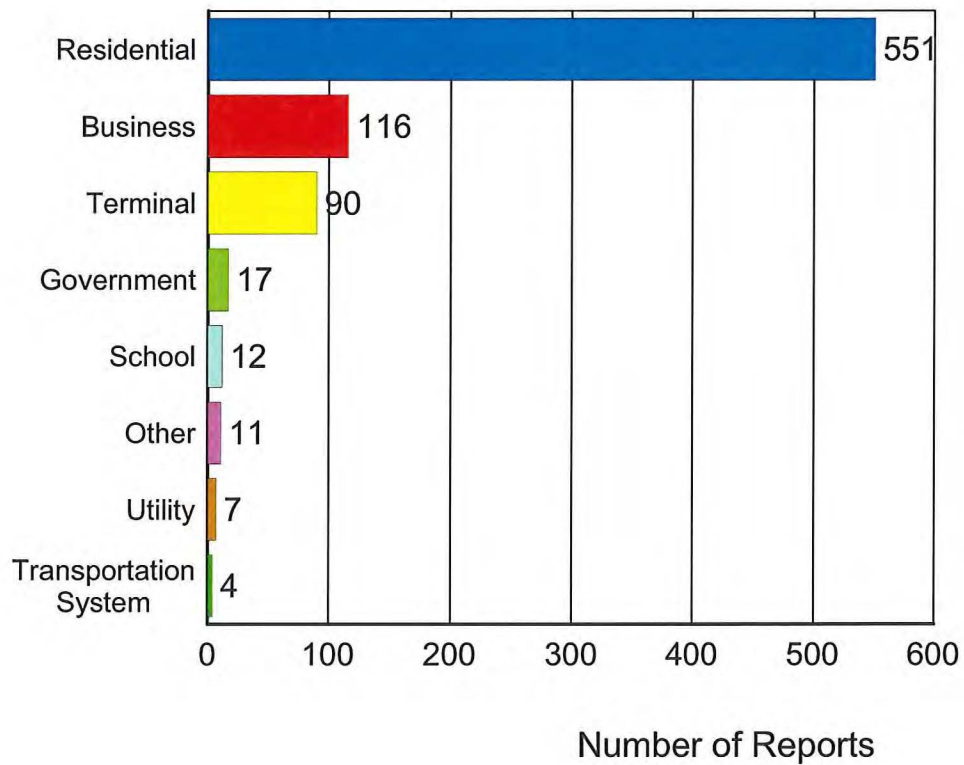
## Types of Facilities Involving Underground Storage Tanks in 2005



Total Number of Reports

326

## Types of Facilities Involving Aboveground Storage Tanks in 2005



Total Number of Reports 808



# **Explanation of Discrepancies between 2005 Maine Coastal & Inland Surface Oil Clean-up Fund and Ground Water Oil Clean-up Fund Number of Barrels**

The following two pages summarize the amount of specified products that have entered, or been transferred inside, Maine borders for 2005.

When product is first transferred into the state, the DEP applies the appropriate Maine Coastal & Inland Surface Oil Clean-up Fund (Surface Fund) and Ground Water Oil Clean-up Fund (Groundwater Fund) fees per barrel and these fees are deposited into the funds for the cleanup of future spills. The number of barrels of product is tracked by month and product type. Occasionally, product is transferred within the State from its initial repository to another storage site. The Maine Coastal & Inland Surface Oil Clean-up Fund transfer fees again apply and the number of barrels are tracked as a second transfer. As a result, the number of Maine Coastal & Inland Surface Oil Clean-up Fund barrels may be higher than the number of Ground Water Oil Clean-up Fund barrels in any given month.

The next two pages involve the following product types:

- Kerosene #1
- Fuel Oil #2
- Fuel Oil #6
- Unleaded Gasoline (Regular & Super)
- Aviation
- JP-4 (Jet Fuel)
- JP-1 & Jet-A (Jet Fuel)
- Diesel
- Asphalt
- Crude Oil
- Other Petroleum Products:  
(Mineral Oil, Hydraulic Fluid, etc)

## BARRELS OF PETROLEUM PRODUCTS TRANSPORTED INTO MAINE IN 2005

Products	Barrels Transported into Maine and associated with Groundwater Funding	Barrels Transferred while in Maine	Barrels associated with Surfacewater Funding
Crude Oil	154,800,718	0	154,800,718
Unleaded Gasoline	20,529,766	0	20,529,766
Fuel Oil #2	9,458,085	48,370	9,506,455
Diesel	7,283,166	0	7,283,166
Fuel Oil #6	7,181,529	1,131,118	8,312,647
Kerosene (#1)	1,396,778	2,835	1,399,613
Jet Fuel	1,365,643	0	1,365,643
Asphalt	859,133	0	859,133
Aviation Gasoline	53,346	0	53,346
Other Petroleum Products	32,280	0	32,280
<b>TOTALS:</b>	<b>202,960,444</b>	<b>1,182,323</b>	<b>204,142,767</b>

Note: Total barrels transported into Maine are taxed by both the Surfacewater and Groundwater Funds simultaneously.

The total of barrels imported into Maine in 2005 is 202,960,444.

## BARRELS OF PETROLEUM PRODUCTS TRANSPORTED OUT OF MAINE BY TANK TRUCK IN 2005

MONTH	GASOLINE BARRELS	FUEL BARRELS
January	303,496	158,490
February	373,862	188,407
March	307,865	141,937
April	263,366	95,689
May	324,553	90,344
June	352,419	67,760
July	419,327	63,640
August	428,676	68,596
September	327,494	70,965
October	312,164	77,959
November	293,558	90,671
December	309,704	133,318
<b>Total</b>	<b>4,016,486</b>	<b>1,247,778</b>

Gasoline: all unleaded gasolines  
 Fuel: #2 Fuel Oil, Diesel, and Kerosene