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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 2006. 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 2006, 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 2006, Response Services filed 2,974 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 June 18, 2010. 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	Α
Bangor	В
Portland	Р
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



Maine DEP - BR&WM Response Regions

Presque Isle Region

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					/ B	Twp	ŝ									
				/	T19 R12 WELS	T19 R11 WELS				~	~	Swillen	1a dawaska	r.		
			/	T18 R1 WELS	3 T18 R12 WELS	T18 R11 WELS	T18 R10	~ 1		Fort	t Kent	French Sair Agat	hat	Grand Isle		
			IT RIA	T17 R13 WELS	T17 R12 WELS		WELS	Saint Francis	Saint John Plt	Wallagra	New soCanada	T17 R5 WELS	T17 R4 WELS	T17 R3 WELS	Van Buren)
		/.	WELS W	T16 R13 WELS	T16 R12 WELS	Alla	agash	T16 R9 WELS	T16 R8 WELS	Eagle La	T16 R6 WELS	T16 R5 WELS	T16 R4 WELS	Stockholm	Cyr Plt	Hamlin
	/	VISR15 WELS	T15 R14 WELS	T15 R13 WELS	T15 R12 WELS	T15 R11 WELS	T15 R10 WELS	T15 R9 WELS	T15 R8 WELS	Wintervill Plt	eT15 R6 WELS	T15 R5 WELS	estmanley	New Sweden	Twp	Caswell
	NELS B	T14 R15 WELS	T14 R14 WELS	T14 R13 WELS	T14 R12 WELS	T14 R11 WELS	T14 R10 WELS	T14 R9 WELS	T14 R8 WELS	T14 R7 WELS	T14 R6 WELS	T14 R5 WELS	Perham	Woodland	Caribou	Limestone
Lise	WELS	T13 R15 WELS	T13 R14 WELS	T13 R13 WELS	T13 R12 WELS	T13 R11 WELS	T13 R10 WELS	T13 R9 WELS	T13 R8 WELS	T13 R7 WELS	Portage Lake	T13 R5 WELS	Wade	Washburn		Fort Fairfield
T12 R17 WELS	T12 R16 WELS	T12 R15 WELS	T12 R14 WELS	T12 R13 WELS	T12 R12 WELS	T12 R11 WELS	T12 R10 WELS	T12 R9 WELS	T12 R8 WELS	T12 R7 WELS	Nashvill Pit	e	Castle Hill	Mapleton	Presque Isle	
T11 R17 WELS	T11 R16 WELS	T11 R15 WELS	T11 R14 WELS	T11 R13 WELS	T11 R12 WELS	T11 R11 WELS	T11 R10 WELS	T11 R9 WELS	T11 R8 WELS	T11 R7 WELS	Garfield Pit	Ashland	T11 R4 WELS	Chapman		Easton
L		[T10 R8 WELS	T10 R7 WELS	T10 R6 WELS	Masardis	Squapar Twp	T10 R3 WELS	Westfiel	Mars Hill
									T9 R8 WELS	T9 R7	Oxbow Pit	T9 R5 WELS	T9 R4 WELS	T9 R3 WELS	E Twp TD R2	Patenti S
												T8 R5 WELS	Saint Croix	T8 R3 WELS	TC R2 WELS	Monticelle
												T7 R5 WELS	Webberto	Dudley Twp	Hammo	Littletor
												Moro Pl	Merrill	Smyrna	Ludlov	v Houlton
											Mount Chase	Hersey	Dyer Brook	Oakfield	Limerick	s Hodgdor
											Patten	Crystal	Island Falls	T4 R3 WELS	TA R2 WELS	Cary Plt
											Staceyvi	lle Sherm	an T3 R4 WELS	T3 R3 WELS	Forkstov Twp	n Amity

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



Spills of Interest in 2006

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-519-2006 Augusta McGee Construction

The driver of a tractor trailer truck suffered a heart attack at the wheel, resulting in the vehicle crashing into several trees before ending up in the middle of the road. Both the vehicle's diesel and hydraulic systems were compromised resulting in a spill onto the roadway. This was cleaned up with sorbent pads and the remaining fuel in the diesel tank was pumped out.





B-522-2006 Deblois Worchester Peat Company While cleaning out a channel in a pond designed to catch peat from the bog, an excavator slid off of the dike that it was traveling along and into the pond. The equipment's engine was underwater releasing oil to the pond's surface. Protective sorbent boom was placed across the water. The excavator was successfully removed from the pond a few days later.

P-469-2006

Residence

Three glass bottles and a can of "Cyanogas," a calcium cyanide product, were found in the basement of a rental property. The two-gallon glass bottle was identified as containing gasoline, or some other light solvent, and kerosene. The two smaller bottles were identified as containing hard cider. The calcium cyanide was over packed and the containers were disposed of as household hazardous waste.

Kittery





A-73-2006 Nol

Nobleboro

Seasonal Residence

In January, a kerosene containing outdoor aboveground storage tank at a seasonal camp was hit by a falling tree and fell over. Fortunately, no oil spilled. The camp was located down an unplowed seasonal road, one mile from the main road. The tank was pumped out and a new tank was installed when weather improved.



B-707-2006 Bar Harbor Multi-Family Residence After it was discovered that the drinking water at this rental property was contaminated with gasoline, it was determined that the owner had accidently spilled an unknown quantity gasoline on the gravel driveway earlier in the year. Despite the mostly clay soil, the spill had been precisely over a gravel vein that led to the drinking water line. Almost 50 tons of soil were excavated as part of clean-up operations.

P-427-2006 Shapleigh Seasonal Residence

A large pool of oil was discovered in the basement when this summer camp was being opened for the season. The tank's filter had been broken off at some point during the winter. Some of the contaminated soil was vactored out of the basement, but complete removal could not occur until the camp was lifted off of its foundation. In addition to the contaminated soil, contaminated water was pumped out of a basement sump and it was cleaned. When clean-up was completed, a new foundation was poured, and the building was put back in place.





B-681-2006 Brooksville Bucks Harbor Marine

Storm winds sank the wooden sardine carrier *Royal* at its mooring. The vessel had approximately 100 gallons of diesel fuel on board. The owner was cooperative and arranged to have the tanks plugged and the vessel raised. The shoreline was inspected and little sheen was seen. When the vessel was raised, no additional sheen emanated.

P-451-2006 South Berwick

Irving Oil

A tank trailer carrying 9,500 gallons of diesel rolled over while traveling on Route 236. Neither the trailer tank nor either of the truck's saddle tanks were punctured. The saddle tanks were drilled by Response staff for product removal before the truck was righted without incident.



	Number of Spills Logged by Response Office						
Logged Spills by Response Office and Spill Type for the year of 2006	1200 1000 50 800 754 808 600 400 200 0 Augusta Bangor	1094 318 Portland Presque Isle	Augusta Bangor Portland Presque Isle				
Augusta							
	Hazardous Material Incident	42	5.57%				
	Non-Oil/Non-Hazardous Incident	52	6.90%				
	Oil Incident	660	87.53%				
	Office Total Spills	<u> </u>					
Bangor							
	Hazardous Material Incident	49	6.06%				
	Non-Oil/Non-Hazardous Incident	92	11.39%				
	Oil Incident	667	82.55%				
	Office Total Spills	808					
Portland							
	Hazardous Material Incident	90	8.23%				
	Non-Oil/Non-Hazardous Incident	120	10.97%				
	Oil Incident	884	80.80%				
	Office Total Spills	<u>1094</u>					
Presque Isle							
	Hazardous Material Incident	13	4.09%				
	Non-Oil/Non-Hazardous Incident	7	2.20%				
	Oil Incident	298	93.71%				
	Office Total Spills <u>318</u>						
Tota	Spills for 2006	2974					

Type of Spill	<u>Number of</u> Spills Logged	Percentage of Spills Logged
Hazardous Material Incident	194	6.52%
Non-Oil/Non-Hazardous Incident	271	9.11%
Oil Incident	2509	84.36%



Number of Spills Reported by Month for 2006



Total Number of Spills for 2006

2,974



	Augusta	Bangor	Portland	Presque Isle	Total
Land	491	511	721	247	1,970
Interior Surface	131	168	215	18	532
None	64	82	111	41	298
Inland Surface Water	82	71	113	18	284
Groundwater	11	25	81	14	131
Atmosphere	6	7	84	4	101
Coastal Water	33	23	43	0	99
Engineered Containment	17	19	25	0	61
Total	835	906	1,393	342	3,476

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

Spill Reports for 2006 by Cause of Spill

<u>Augusta</u>	Cause of Spill	Number of Spills
	Accident - Transportation	98
	Accident - Human Error	85
	Mechanical Failure - Piping/Hose	75
	Other - Unknown	65
	Overfill	59
	Accident - Physical Breakage	51
	Corrosion - Tank	43
	Mechanical Failure - Other	43
	Accident - Storm Damage	41
	Other - No Cause	35
	Mechanical Failure - Loose Fitting	32
	Mechanical Failure - Gasket/Seal	26
	Discharge - Deliberate/Other	20
	Other - Known Cause	20
	Accident - Poor Workmanship	12
	Discharge - Vandalism	12
	Corrosion - Piping	10
	Mechanical Failure - Valve	10
	Accident - Other	7
	Discharge - Bilge	4
	Corrosion - Other	3
	Process Failure - Other	3
	Office Total	754

Bangor Cause of Spill Number of Spills Overfill 98 **Mechanical Failure - Piping/Hose** 81 **Other - No Cause** 79 **Accident - Human Error** 74 Other - Unknown 71 **Accident - Transportation** 60 **Accident - Physical Breakage** 52 **Mechanical Failure - Gasket/Seal** 52 **Accident - Storm Damage** 46 **Corrosion - Tank** 42 **Mechanical Failure - Loose Fitting** 27 **Mechanical Failure - Other** 26 **Other - Known Cause** 21 **Discharge - Vandalism** 14 **Corrosion - Piping** 13 **Corrosion - Other** 12 **Accident - Other** 11 **Discharge - Deliberate/Other** 10 Accident - Poor Workmanship 9 8 **Mechanical Failure - Valve Discharge - Bilge** 1 **Process Failure - Other** 1 **Office Total** 808

Spill Reports for 2006 by Cause of Spill

Portland	Cause of Spill	<u>Number of Spills</u>
	Accident - Transportation	127
	Overfill	101
	Accident - Physical Breakage	100
	Other - Unknown	100
	Other - No Cause	97
	Accident - Human Error	89
	Mechanical Failure - Pining/Hose	78
	Corrosion - Tank	73
	Mechanical Failure - Other	51
	Mechanical Failure - Gasket/Seal	49
	Other - Known Cause	49
	Accident - Storm Damage	33
	Mechanical Failure - Loose Fitting	29
	Discharge - Deliberate/Other	27
	Accident - Other	26
	Machanical Failura - Valva	20 16
	Discharge Vendelism	10
	A soldent - Door Workmonshin	14
	Accident - Foor Workinanship Connection Bining	13
	Corresion Other	12
	Corrosion - Other	9
	Process Fanure - Other	2
	Office Total	1,094
Presque Isle	Cause of Spill	<u>Number of Spills</u>
Presque Isle	<u>Cause of Spill</u> Mechanical Failure - Piping/Hose	<u>Number of Spills</u> 82
<u>Presque Isle</u>	<u>Cause of Spill</u> Mechanical Failure - Piping/Hose Accident - Physical Breakage	<u>Number of Spills</u> 82 47
<u>Presque Isle</u>	<u>Cause of Spill</u> Mechanical Failure - Piping/Hose Accident - Physical Breakage Accident - Human Error	<u>Number of Spills</u> 82 47 28
<u>Presque Isle</u>	<u>Cause of Spill</u> Mechanical Failure - Piping/Hose Accident - Physical Breakage Accident - Human Error Accident - Transportation	<u>Number of Spills</u> 82 47 28 21
<u>Presque Isle</u>	<u>Cause of Spill</u> Mechanical Failure - Piping/Hose Accident - Physical Breakage Accident - Human Error Accident - Transportation Corrosion - Tank	<u>Number of Spills</u> 82 47 28 21 20
<u>Presque Isle</u>	<u>Cause of Spill</u> Mechanical Failure - Piping/Hose Accident - Physical Breakage Accident - Human Error Accident - Transportation Corrosion - Tank Mechanical Failure - Gasket/Seal	<u>Number of Spills</u> 82 47 28 21 20 17
<u>Presque Isle</u>	<u>Cause of Spill</u> Mechanical Failure - Piping/Hose Accident - Physical Breakage Accident - Human Error Accident - Transportation Corrosion - Tank Mechanical Failure - Gasket/Seal Other - Known Cause	<u>Number of Spills</u> 82 47 28 21 20 17 12
<u>Presque Isle</u>	<u>Cause of Spill</u> Mechanical Failure - Piping/Hose Accident - Physical Breakage Accident - Human Error Accident - Transportation Corrosion - Tank Mechanical Failure - Gasket/Seal Other - Known Cause Mechanical Failure - Loose Fitting	<u>Number of Spills</u> 82 47 28 21 20 17 12 11
<u>Presque Isle</u>	<u>Cause of Spill</u> Mechanical Failure - Piping/Hose Accident - Physical Breakage Accident - Human Error Accident - Transportation Corrosion - Tank Mechanical Failure - Gasket/Seal Other - Known Cause Mechanical Failure - Loose Fitting Mechanical Failure - Other	<u>Number of Spills</u> 82 47 28 21 20 17 12 11
<u>Presque Isle</u>	<u>Cause of Spill</u> Mechanical Failure - Piping/Hose Accident - Physical Breakage Accident - Human Error Accident - Transportation Corrosion - Tank Mechanical Failure - Gasket/Seal Other - Known Cause Mechanical Failure - Loose Fitting Mechanical Failure - Other Other - Unknown	<u>Number of Spills</u> 82 47 28 21 20 17 12 11 11 11
<u>Presque Isle</u>	Cause of Spill Mechanical Failure - Piping/Hose Accident - Physical Breakage Accident - Human Error Accident - Transportation Corrosion - Tank Mechanical Failure - Gasket/Seal Other - Known Cause Mechanical Failure - Loose Fitting Mechanical Failure - Other Other - Unknown Discharge - Vandalism	<u>Number of Spills</u> 82 47 28 21 20 17 12 11 11 11 10 8
<u>Presque Isle</u>	Cause of Spill Mechanical Failure - Piping/Hose Accident - Physical Breakage Accident - Human Error Accident - Transportation Corrosion - Tank Mechanical Failure - Gasket/Seal Other - Known Cause Mechanical Failure - Loose Fitting Mechanical Failure - Other Other - Unknown Discharge - Vandalism Mechanical Failure - Valve	Number of Spills 82 47 28 21 20 17 12 11 11 10 8 8 8
<u>Presque Isle</u>	Cause of Spill Mechanical Failure - Piping/Hose Accident - Physical Breakage Accident - Human Error Accident - Transportation Corrosion - Tank Mechanical Failure - Gasket/Seal Other - Known Cause Mechanical Failure - Loose Fitting Mechanical Failure - Other Other - Unknown Discharge - Vandalism Mechanical Failure - Valve Discharge - Deliberate/Other	Number of Spills 82 47 28 21 20 17 12 11 11 10 8 8 8 7
<u>Presque Isle</u>	Cause of Spill Mechanical Failure - Piping/Hose Accident - Physical Breakage Accident - Human Error Accident - Transportation Corrosion - Tank Mechanical Failure - Gasket/Seal Other - Known Cause Mechanical Failure - Loose Fitting Mechanical Failure - Other Other - Unknown Discharge - Vandalism Mechanical Failure - Valve Discharge - Deliberate/Other Other - No Cause	Number of Spills 82 47 28 21 20 17 12 11 11 11 10 8 8 8 7 7 7
<u>Presque Isle</u>	Cause of Spill Mechanical Failure - Piping/Hose Accident - Physical Breakage Accident - Human Error Accident - Transportation Corrosion - Tank Mechanical Failure - Gasket/Seal Other - Known Cause Mechanical Failure - Loose Fitting Mechanical Failure - Other Other - Unknown Discharge - Vandalism Mechanical Failure - Valve Discharge - Deliberate/Other Other - No Cause Accident - Other	Number of Spills 82 47 28 21 20 17 12 11 11 11 10 8 8 8 7 7 7 6
<u>Presque Isle</u>	Cause of Spill Mechanical Failure - Piping/Hose Accident - Physical Breakage Accident - Human Error Accident - Transportation Corrosion - Tank Mechanical Failure - Gasket/Seal Other - Known Cause Mechanical Failure - Loose Fitting Mechanical Failure - Other Other - Unknown Discharge - Vandalism Mechanical Failure - Valve Discharge - Deliberate/Other Other - No Cause Accident - Other	Number of Spills 82 47 28 21 20 17 12 11 11 10 8 8 8 7 7 6 6 6
<u>Presque Isle</u>	Cause of Spill Mechanical Failure - Piping/Hose Accident - Physical Breakage Accident - Human Error Accident - Transportation Corrosion - Tank Mechanical Failure - Gasket/Seal Other - Known Cause Mechanical Failure - Loose Fitting Mechanical Failure - Other Other - Unknown Discharge - Vandalism Mechanical Failure - Valve Discharge - Deliberate/Other Other - No Cause Accident - Other Corrosion - Other	Number of Spills 82 47 28 21 20 17 12 11 11 10 8 8 8 7 7 6 6 6 6
<u>Presque Isle</u>	Cause of Spill Mechanical Failure - Piping/Hose Accident - Physical Breakage Accident - Human Error Accident - Transportation Corrosion - Tank Mechanical Failure - Gasket/Seal Other - Known Cause Mechanical Failure - Loose Fitting Mechanical Failure - Other Other - Unknown Discharge - Vandalism Mechanical Failure - Valve Discharge - Deliberate/Other Other - No Cause Accident - Other Corrosion - Other Corrosion - Piping Overfill	Number of Spills 82 47 28 21 20 17 12 11 11 10 8 8 7 7 6 6 6 6 6 6
<u>Presque Isle</u>	Cause of Spill Mechanical Failure - Piping/Hose Accident - Physical Breakage Accident - Human Error Accident - Transportation Corrosion - Tank Mechanical Failure - Gasket/Seal Other - Known Cause Mechanical Failure - Loose Fitting Mechanical Failure - Other Other - Unknown Discharge - Vandalism Mechanical Failure - Valve Discharge - Deliberate/Other Other - No Cause Accident - Other Corrosion - Other Corrosion - Other Corrosion - Piping Overfill	Number of Spills 82 47 28 21 20 17 12 11 11 10 8 8 7 7 6 6 6 6 6 3

Office Total

Process Failure - Other

2006 Grand Total

2,974

1

318

Spill Reports by Reporter Method for 2006



Number of Reports

2006 Statistical Report

Maine Department of Environmental Protection

Product Spilled	Number of Spills	Product Spilled	Number of Spills
#2 Fuel Oil	608	Algae Blooms/Plant Pollen Sheens	9
Hydraulic Oil	403	Asphalt	8
Diesel	307	PCB Oil	8
Transformer Oil	279	Hazardous Chemical - Unspecified	7
Unleaded Gasoline	218	Unknown Substance	7
#1 Fuel Oil - Kerosene	205	Unspecified Motor Fuel	7
Waste Oil/Used Motor Oil	193	Aviation Gasoline	6
None	174	Crude Oil	6
Gasoline Unspecified	80	Ammonia	5
Hazardous Chemical - Specified in report	71	Waste Oil (as Haz Chem)	5
Non-Chemical Non-Oil Specified in report	71	Chlorine	4
Unspecified Oil	65	Hydrochloric Acid	4
Oil - Other - Specified in Report	60	Medical Waste	4
Jet Fuel	51	Premium Unleaded	4
Lube Oil	40	#4 Fuel Oil	3
Anti-freeze	24	Animal Fats/Remains	3
#6 Fuel Oil	22	#5 Fuel Oil	2
Mercury	22	Bio 1-74	2
Transmission Oil	19	Leaded Gasoline	2
Pesticide General	18	Non-Chemical Non-Oil Unspecified	2
Corrosive	17	Regular Gasoline	2
Non-Hazardous Chemical - Specified in report	15	Unleaded Plus	2
Unspecified Fuel Oil	13	Liquors	1
Marsh Sheen	11		
Sulfuric Acid	10		

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 2006



Number of Reports

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 2006



Number of Wells Impacted

Product Categories vs Wells Impacted for 2006

Product Category	<u>Number of Spills</u>	<u>Number of Wells</u> Impacted
Home Heating Oils	828	21
Motor Fuels	679	13
Other Oils	1,073	11
Hazardous & NonHazardous Chemicals	215	1
Heavy Fuel Oils	27	0
Non Oil,Non Hazardous	270	0
Unknown	7	0
Total	3,099	46

The Product Categories above contain the following product types:

Home Heating Oils:	Heavy Fuel	Motor Fuels:	Other Oils:	Hazardous &
	<u>Oils</u> :			<u>Non-Hazardous</u>
				Chemicals:
#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)
Bio-Diesel 1-74		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 44:3. That is to say, on average, every forty-fourth 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 2006 Sorted by Spill Type Reported and Product Found

<u>Spill Type</u>	Product Found	<u>Number</u> <u>of</u> <u>Incidents</u>	<u>Wells</u> <u>at Risk</u>	<u>Wells *</u> Impacted
Hazardous N	Hazardous Material Incident			
	Hazardous Chemical - Specified in report	2	3	0
	Hazardous Chemical - Unspecified	1	1	0
Non-Oil, Noi	n-Hazardous Incident			
	None	7	10	0
	Non-Chemical Non-Oil Specified in report	2	2	0
	Gasoline Unspecified	1	1	0
Oil Incident				
	#2 Fuel Oil	57	84	14
	#1 Fuel Oil - Kerosene	44	50	5
	Unleaded Gasoline	21	27	5
	Diesel	18	25	2
	Gasoline Unspecified	13	16	6
	Waste Oil/Used Motor Oil	10	8	5
	Unspecified Oil	7	10	4
	Hydraulic Oil	6	6	0
	Oil - Other - Specified in Report	4	6	2
	Unspecified Fuel Oil	4	4	2
	Lube Oil	2	2	0
	Transformer Oil	2	2	0
	Hazardous Chemical - Specified in report	1	1	0
	Leaded Gasoline	1	1	
	Premium Unleaded	1	1	0
Totals		204	260	45

* 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 2006 Sorted by Response Office and Spill Type

Response Office Spill Type		G	Р	Т	Y
Augusta	Hazardous Material Incident	6,450	3,651	0	0
	Non-Oil, Non-Hazardous Incident	4	500	25	0
	Oil Incident	18,769	0	0	0
	Office Total	25,223	4,151	25	0
Bangor	Hazardous Material Incident	3,597	97	0	0
	Non-Oil, Non-Hazardous Incident	18	1	0	0
	Oil Incident	23,492	0	0	0
	Office Total	27,108	98	0	0
Portland	Hazardous Material Incident	102,882	368	0	4
	Non-Oil, Non-Hazardous Incident	257	550,000	0	1
	Oil Incident	36,017	0	0	0
	Office Total	139,157	550,368	0	5
Presque Isle	Hazardous Material Incident	550	200	24	0
	Non-Oil, Non-Hazardous Incident	71	0	0	0
	Oil Incident	9,006	0	0	0
	Office Total	9,626	200	24	0
Grand Total of All Offices Combined		201,114	554,817	49	5

NOTE: All numeric fields are BEST ESTIMATES by the OHMS involved based on the years of experience with spill events. In 2006 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 2006 by Spill Type and Recovery Method					
	Recovery Method	В	G	Р	Т	Y
Hazardou	us Burning	0	100	0	0	0
Inciden	t Excavation	0	100	25	0	11
	Licensed Treatment Facility	0	22	10	0	1
	None	0	200	0	0	0
	Other	0	4,724	312	24	0
	Pumps	0	9,150	0	0	0
	Remove	0	90,036	553	24	7
	Sorbents	0	4,578	232	0	4
	Treatment in Place	0	4,136	0	0	2
	Vacuum Trucks	0	4,547	0	0	0
Non-Oil	l, Burning	0	46	0	0	0
Inciden	t Excavation	0	0	500	0	0
	None	0	12	0	0	0
	Other	0	1	0	0	0
	Pumps	0	0	0	20	0
	Remove	0	112	515	0	0
	Sorbents	0	8	60	0	1
	Vacuum Trucks	0	46	0	0	0
Oil Incide	ent Burning	0	250	51	0	32
	Excavation	8	265,053	53,244	31,541	33,781
	Filter	0	338	270	686	0
	Licensed Treatment Facility	5	266	85	0	206
	None	0	1,168	0	0	1
	Other	0	65,703	4,680	116	907
	Pumps	0	294,990	41,740	3,065	1,384
	Remove	8	16,488	5,525	115	310
	Sorbents	10	108,842	76,918	2,820	1,378
	Treatment in Place	0	10,060	340	790	5,483
	Vacuum Trucks	0	134,958	38,588	8,360	8,377

Recovery Methods Used in 2006



Number of Reports

The total number of recovery methods used in 2006 is greater than the total number of spill reports due to multiple recovery methods used during some spills.

Types of Hazardous Materials Spilled

The following table, "Hazardous Materials Spilled in 2006", contains a summary of the best information available to Response Services as to the types of chemicals and other hazardous materials spilled during 2006. 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
Р	-	Pounds
Y	-	Cubic Yards
В	-	Barrels
U	-	Unknown

Hazardous Materials Reported Spilled During 2006

	Number of	Amount	Unit of
Material Reported	Spills	Spilled *	Measure
Acetylene	1	200.00	Р
Aluminum Sulfate	1	50.00	G
Ammonia	5	356.00	Р
Ammonium Sulfate	1	0.10	Р
Anti-freeze	17	52.53	G
Aromatic hydrocarbons and butyl acetate	1	0.06	Р
Arsenic containing wood treatment	1	0.10	G
Asbestos	1	4.00	Y
Calcium cyanide	1	0.00	G
Calcium oxide	1	10.00	Р
Carbon dioxide	1	2.00	G
Carbon monoxide	1	0.00	Unknown
Chlorine	4	100,001.60	G
Chlorox	1	0.12	G
Concrete Sealer	2	0.30	G
Contact cement	1	0.50	G
Corrosive	17	4,431.68	G
Degreaser	1	0.25	G
Dish washer liquids	1	0.75	G
Driveway cleaner	1	1.25	G
F006 electroplating sludge	1	0.25	G
Floor Finish	1	0.25	G
Flourescent bulb	1		Unknown
Fluoride	1	40.00	Р
Furnace Cement	1	4.00	Р
Grease remover	1	0.20	G
Hydrochloric Acid	4	24.49	G
Lead paint chips - 17%	1		Unknown
Liquors	1	2,700.00	G
Medical Waste	4	16.10	Р
Mercury	22	5.16	G
Methamphetamine lab chemicals	2	5.00	G
Methamphetamine Lab waste	1	0.50	Р
Methylene Chloride	1	0.20	G
Miscellaneous laboratory chemicals	1	50.00	G
Multiple chemicals	5	15.00	Р
Multiple compressed gas cylinders	1		Unknown
Oxy Clean	1	10.00	Р
Paint Related Products	14	7.89	G

* The amount reported shown is the least amount reported.

Material Reported	Number of Spills	Amount Spilled *	Unit of Measure
(continued from previous page)			
PCB Oil	8	32.56	G
Pesticide General	18	54.86	G
Propane	1	40.00	Р
Propane	1		Unknown
Propane	2	8.40	G
Renuzit	1	1.00	G
Sewage sludge/solvent	1	0.00	G
Sodium hydroxide - 50%	1	1,200.00	G
Sodium hypochlorite	6	2,721.50	G
Sulfuric Acid	10	4,858.23	G
Tetrachloroethylene	1	0.10	G
Tetrahydrofuran	1	2.00	G
Transmission cleaning chemicals	1	15.00	G
Unknown	1		Unknown
Unspecified	2	0.50	G
Washer solvent (containing petroleum distillates)	1	2.00	G
Waste Oil (as Haz Chem)	2	30.00	G

Hazardous Materials Reported Spilled During 2006

^{*} The amount reported shown is the least amount reported.

Non-Hazardous Non-Oil Materials Reported Spilled During 2006

	Number	Amount	Unit of
Material Reported	of Spills	Spilled	Measure
Algae Blooms/Plant Pollen Sheens	9	0	G
Animal Waste, etc	5	550026	Р
Betadyne compound	1	1.00	G
Class & Seal	1	2.00	G
Construction Debris	1	0.00	G
Diluted Wood Fiber	1	240.00	G
Drippage from Garbage Waste	1	0.10	G
Dye	1	0.00	G
ESP black water	1	45.56	G
Farm Waste	1	500.00	Р
Floor Adhesive	1	1.00	G
Hydro Seed	1		Unknown
Lime Mud	1	50,000.00	Р
Marsh Sheen	11	0.00	G
Miracle Grow	1	0.01	G
Mold	1		Unknown
Murphy Oil Soap	1	0.50	Р
None	176	0.00	G
Paint Products	42	5.75	G
Paper Dust	1	0.00	Р
Possible Leach Bed/Cesspool Overflow	1		Unknown
Septic Tank Treatment	1	0.25	G
Septic Waste	1		Unknown
Sludge	1	0.00	G
Sodium Methyldithiocarbamate	1	0.00	G
Titanium Dioxide	1	0.00	G
Unknown Substance	6	7.00	G
Vegetable Oils	3	6.00	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





Hazardous Material Incident	194
Business	101
Residential	32
Government	20
Transportation System	18
Utility	9
School	7
Other	5
Terminal	2
Non-Oil, Non-Hazardous Incident	271
Business	96
Residential	76
Other	35
Transportation System	25
Terminal	23
Government	7
Utility	6
School	3
Oil Incident	2,509
Residential	684
Business	538
Transportation System	415
Terminal	321
Utility	305
Government	137
Other	76
School	33
Grand Total of Spills	2,974

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Types of Facilities Involved in All Spill Reports for 2006



Total Number of Spills 2,974

Two reports missing.

Types of Facilities Involved in Hazardous Material Incidents in 2006



Total Number of Reports

Types of Facilities Involving Underground Storage Tanks in 2006



Total Number of Reports

270

Types of Facilities Involving Aboveground Storage Tanks in 2006



Number of Reports

Total Number of Reports

807

Explanation of Discrepancies between 2006 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 2006.

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 2006

Products		Barrels Transported into Maine and Associated with Groundwater Funding	Barrels Transferred while in Maine	Barrels Associated with Surfacewater Funding
Crude Oil		136,708,120	0	136,708,120
Unleaded Gasoline		21,205,703	0	21,205,703
Fuel Oil #2		9,807,770	72,891	9,880,661
Diesel		7,384,634	0	7,384,634
Fuel Oil #6		5,140,405	748,414	5,888,819
Kerosene (#1)		959,766	0	959,766
Jet Fuel		1,402,722	0	1,402,722
Asphalt		1,273,801	0	1,273,801
Aviation Gasoline		57,119	0	57,119
Other Petroleum Products (Hydraulic Fluid, Mineral Oil, etc)		28,469	0	28,469
	TOTALS:	183,968,509	821,305	184,789,814

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

The total of barrels imported into Maine is 183,968,509.

BARRELS OF PETROLEUM PRODUCTS TRANSPORTED OUT OF MAINE BY TANK TRUCK IN 2006

MONTH	GASOLINE BARRELS	FUEL BARRELS
January	291,856	111,984
February	291,017	121,709
March	339,861	130,752
April	246,689	81,505
Мау	316,663	77,963
June	349,440	72,061
July	515,057	64,512
August	467,401	84,396
September	366,134	85,959
October	365,916	91,546
November	335,396	111,061
December	342,856	121,936
Totals:	4,228,286	1,155,384

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