Alaska Department of Environmental Conservation

Quarterly Report of

Oil and Hazardous Substance Response

April 1 - June 30, 2000

Significant Responses This Quarter

Tesoro Pipeline Terminal — Anchorage

Spill Date: *April 13, 2000*
Product/Quantity: *Jet A, 5,000 gallons*
Cause: *Overpressurization of pipeline*

Excessive pressure at the pipeline manifold resulted in the release of several thousand gallons of Jet A fuel inside a concrete secondary containment area. The containment overflowed and the product migrated onto an unlined gravel surface and to an unnamed creek that drains into Cook Inlet. Tesoro and a contractor used vacuum trucks to recover the spilled product near the source of the leak and at the slough, and deployed boom to contain the fuel within the slough. Contaminated soils were removed and stockpiled on site while awaiting thermal treatment. As of April 14, an estimated 3,789 gallons of fuel had been recovered.

Weaver Brothers, Mile 75 Seward Hwy

Spill Date: *June 19, 2000*
Product/Quantity: *Diesel, 500 gallons*
Cause: *Overturned fuel tanker trailer*

The rear tanker trailer of a tandem rig owned by Weaver Brothers, Inc. came unhooked, tore through the guardrail and rolled down a small embankment into the highway ditch. The two-compartment tanker trailer was hauling 3,600 gallons of #4 diesel fuel. About 250 gallons spilled into a dry highway ditch about 300 to 400 feet from Ingram Creek. The fuel spilled from the compartment covers and two puncture holes in the trailer. The drivers used sticks to plug the holes. The Girdwood Fire Department responded and applied additional plugs and a temporary patch. The spill appeared confined to the wreck site and there was no evidence of fuel reaching Ingram Creek. The remaining fuel was pumped into another Weaver Brothers tanker trailer. Weaver Brothers activated an environmental consultant to assist in the cleanup. The company will submit a final report that will include the sampling results.

Stevens Village Washeteria and Tank Farm

Spill Date: *May 14, 2000*
Product/Quantity: *Fuel oil, 200 gallons*
Cause: *Tank overflow and leaking fuel line*

An estimated 750 gallons of heating oil was released from two unrelated sources into a seasonal pond that drains into the Yukon River. An unknown quantity of product was released when the washeteria day tank overflowed during fuel transfer. Additional fuel spilled into the pond after the secondary containment berm around the tank farm breached, allowing fuel from a leaking coupler to flow into the pond. An underflow dam was constructed along the drainage from the pond to the river to prevent further migration. A rope mop and drum skimmer were also deployed. All recoverable fuel oil has been removed from the pond surface. Fuel-contaminated vegetation along the drainage was removed and stored for later disposal. The drainage was flushed to move the fuel to the underflow dam for recovery.

Alaska Railroad Tank Car ARR 9306

Spill Date: *April 17, 2000*
Product/Quantity: *Diesel-contaminated water, unknown quantity*
Cause: *Unknown*

The entire contents of a tank car holding diesel-contaminated water recovered from the Gold Creek spill site was discharged, possibly by vandals. The tank car's capacity was 20,677 gallons, but the actual amount of contaminated water in the tank car has yet to be determined. Much of the water appeared to have soaked into the roadbed and surrounding soil. A contractor used a vacuum truck and sorbent materials to recover a 70-foot by 10-foot puddle of contaminated water. After the area dried a soil-sampling plan was developed and potential soil contamination issues were addressed.

Savoonga Post Office

Spill Date: *June 10, 2000*
Product/Quantity: *Diesel, estimated 200 gallons*
Cause: *Leaking heating oil line*

A fuel line had been leaking for an unknown period of time, resulting in the release of at least 200 gallons of fuel oil. The Department assumed the response and declared a class A emergency to procure the services of local resources. The village corporation initiated a separate response in cooperation with the Department. Contaminated snow was removed and stored in bermed and lined containment areas. Fuel-contaminated water was pumped from two small ponds into a tank where the fuel was removed.

For more information, visit our website at
http://www.state.ak.us/dec/dspar/perp

Cleanup Continues at Gold Creek

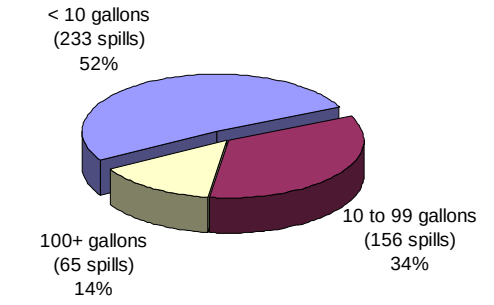
Ground level view of the interception trench designed to prevent fuel from reaching the Susitna River.

See Spill News (p. 2) for more information.

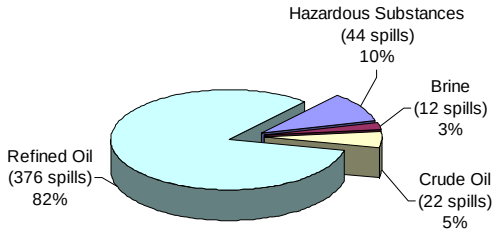
Data Summary

Oil and Hazardous Substance Spills
April 1-June 30, 2000

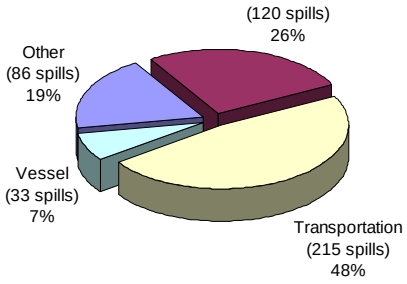
(releases reported in pounds were not included)



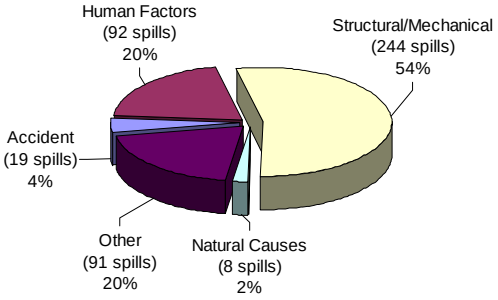
Spills by Size Class



Spills by Product



Spills by Source



Spills by Cause

Spill News

CLEANUP UPDATES

Alaska Railroad at Gold Creek. On July 3, the Department conducted a site assessment and provided technical assistance to the ARRC's contractor. All of the eleven sentinel wells, which are located approximately 500 ft from the Susitna River, had traces of contamination. A trench is being constructed to keep the plume from reaching the river. The trench is lined with a geo-textile fabric on the down gradient side and sorbent boom was placed within the trench to collect any product that may migrate into the trench.

Preliminary results from water samples collected from the Susitna River and also the monitoring (well 6) well located 10 ft from the river's bank were received on July 3. Results from the monitoring well indicate 16,400 ppb (parts-per-billion) of diesel range organics (DRO). One of the five river water samples indicated 330 ppb of DRO. These samples were collected on June 30, prior to the construction of the interception trench.

The Department will continue overseeing excavation activities to ensure aggressive actions are taken toward installing an oil interception trench. Monitoring wells will be sampled daily to define changes in the contamination plume.

Alaska Railroad at Canyon. The Department conducted a site visit at the Canyon derailment site in mid-June. Overall, the area is recovering rapidly. No sheen or oil was observed in any of the streams or ponds on the west side of the railroad tracks. On the east side of the tracks, the ditches and streams were free of sheen with the exception of Beaver Pond "C" which had a light silver to rainbow sheen behind the booms deployed across the pond. With the exception of a few small patches of highly stressed vegetation, the shoreline vegetation is recovering well. It is still possible in a few places to cause a silver sheen by stepping on the vegetation next to the shoreline. Due its marshy nature, the area can be seriously damaged by foot traffic. A non-intrusive program of monitoring and maintaining sorbent and hard booms in selected areas should provide for the most rapid recovery.

RESPONSE TRAINING AND EXERCISES

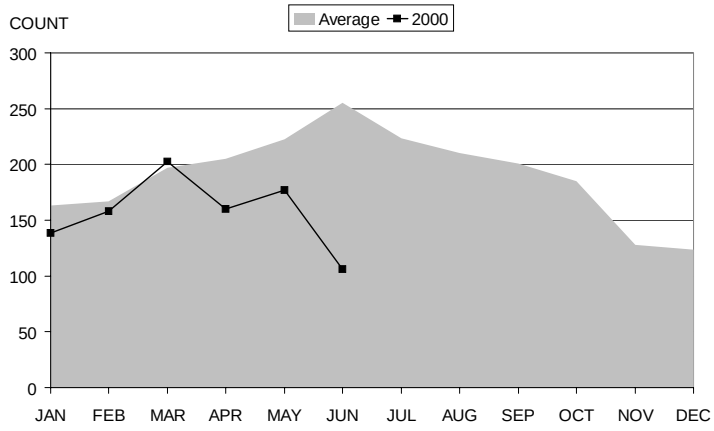
Unalaska Hazmat Project. The Department coordinated and participated in a hazardous materials (hazmat) project in Unalaska on April 25-27. Approximately 45-50 people from the City of Unalaska, seafood processing facilities, Coast Guard, DEC, and the Anchorage and Fairbanks Hazmat Teams attended training sessions on ammonia and chlorine spill response and the Incident Command System. A tabletop exercise was held during the last day of the project.

Swamp Creek GRS. On June 14th, the Department participated in the implementation of the Swamp Creek Geographical Response Strategy (GRS) on Kalgin Island with Cook Inlet Spill Prevention and Response, Inc. (CISPRI) and the U.S. Coast Guard. The purpose of the exercise was to test and refine the draft GRS that calls for the helicopter delivery of boom from Drift River to protect Swamp Creek. In this case, skiffs deployed from CISPRI's response vessel Heritage Service were used to augment the air delivery and determine whether or not this is a viable alternative in case adverse weather precludes helicopter operations. Due to mechanical problems, the helicopter operations were cancelled. The water-based alternative was successful and useful information concerning beach landing areas was gathered. The

Annual Spill Trends -- July 1995 - June 2000 *(excluding Brine)*

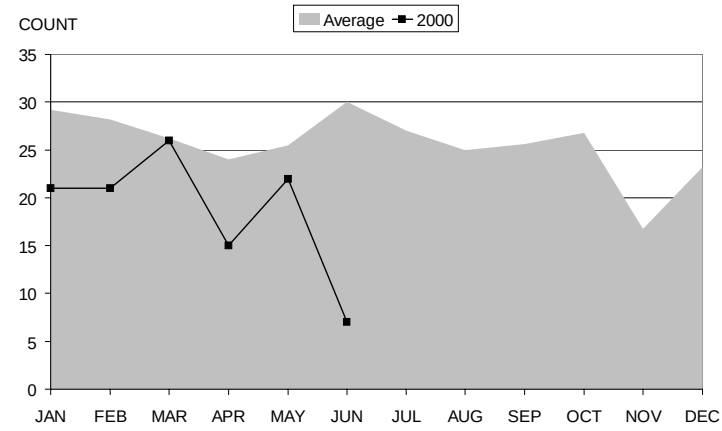
ALL SPILLS

Month	1995	1996	1997	1998	1999	2000	Average
JAN		179	160	176	162	139	163
FEB		156	161	165	194	158	167
MAR		162	189	220	211	203	197
APR		179	211	213	219	159	206
MAY		207	228	263	194	177	223
JUN		237	233	264	289	106	256
JUL	237	217	218	205	239		223
AUG	276	193	179	196	208		210
SEP	227	184	194	189	209		201
OCT	192	157	151	212	213		185
NOV	129	123	111	146	130		128
DEC	143	109	118	110	137		123
Total	1,204	2,103	2,153	2,359	2,405	942	



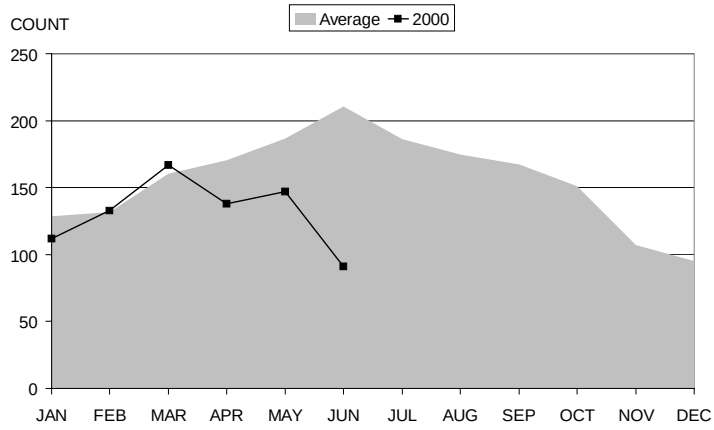
HAZARDOUS SUBSTANCES

Month	1995	1996	1997	1998	1999	2000	Average
JAN		33	35	32	25	21	29
FEB		30	23	36	31	21	28
MAR		23	26	29	27	26	26
APR		16	23	38	19	15	24
MAY		16	31	34	21	22	26
JUN		21	27	49	23	7	30
JUL	35	18	36	20	26		27
AUG	47	16	22	19	21		25
SEP	23	20	23	26	36		26
OCT	30	31	26	25	22		27
NOV	19	15	23	11	16		17
DEC	26	25	30	12	23		23
Total	180	264	325	331	290	112	



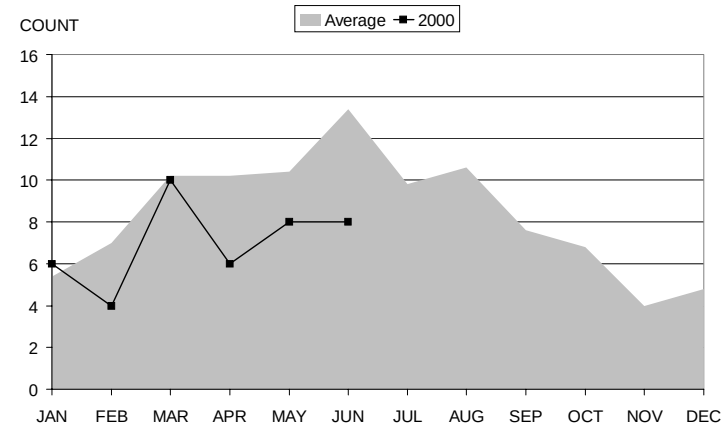
REFINED OIL PRODUCTS

Month	1995	1996	1997	1998	1999	2000	Average
JAN		143	120	135	133	112	129
FEB		116	133	120	156	133	132
MAR		134	152	177	173	167	161
APR		148	177	159	197	138	164
MAY		180	185	216	165	147	179
JUN		199	195	199	251	91	187
JUL	192	187	175	177	201		186
AUG	217	162	149	172	174		175
SEP	200	150	163	158	166		167
OCT	155	120	119	180	183		151
NOV	109	103	84	130	109		107
DEC	109	82	82	94	110		95
Total	982	1,724	1,734	1,917	2,018	788	



CRUDE OIL

Month	1995	1996	1997	1998	1999	2000	Average
JAN		3	5	9	4	6	5
FEB		10	5	9	7	4	7
MAR		5	11	14	11	10	10
APR		15	11	16	3	6	10
MAY		11	12	13	8	8	10
JUN		17	11	16	15	8	13
JUL	10	12	7	8	12		10
AUG	12	15	8	5	13		10
SEP	4	14	8	5	7		9
OCT	7	6	6	7	8		7
NOV	1	5	4	5	5		5
DEC	8	2	6	4	4		4
Total	42	115	94	111	97	42	

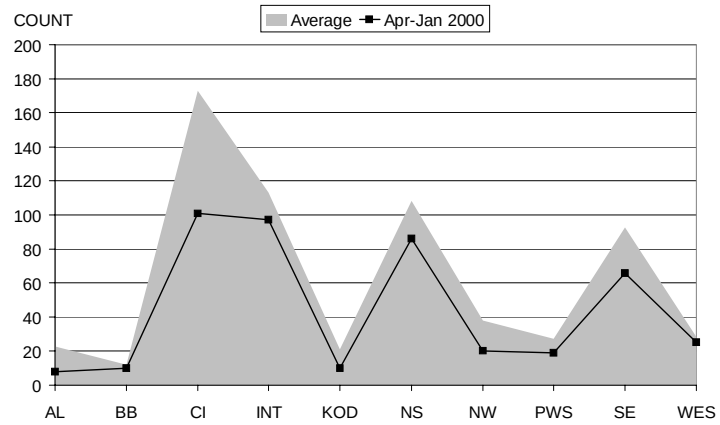


spills reported by SUBAREA *(excluding Brine)*

ALL SPILLS

April-June 2000 compared to same quarter in prior years

	April-June						
Subarea	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*Average*
Aleutian		33	27	20	26	8	23
Bristol Bay		10	14	11	15	10	12
Cook Inlet		169	174	215	205	101	173
Interior		125	135	105	103	97	113
Kodiak		24	28	19	23	10	21
North Slope		111	118	142	85	86	108
Northwest Arctic		23	22	90	35	20	38
Prince William Sound		34	22	32	28	19	27
Southeast		76	100	69	151	66	92
Western Alaska		18	32	37	31	25	29
Total for Quarter		623	672	740	702	442	

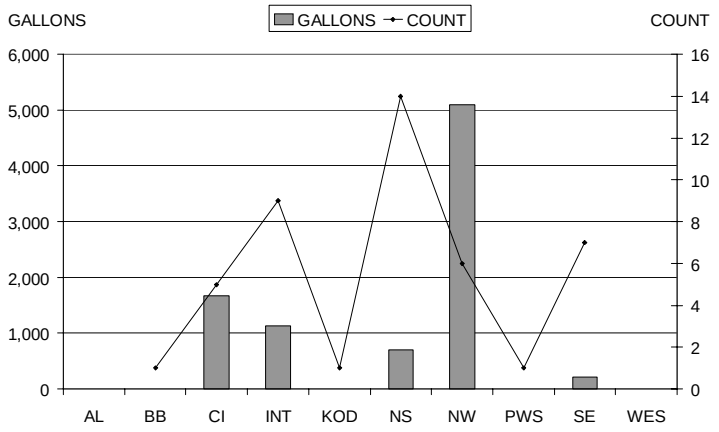


HAZARDOUS SUBSTANCES

April 1-June 30, 2000

Subarea	Count	Gallons
Aleutian (AL)		
Bristol Bay (BB)	1	1
Cook Inlet (CI)	5	1,667
Interior (INT)	9	1,127
Kodiak (KOD)	1	5
North Slope (NS)	14	699
Northwest Arctic (NW)	6	5,094
Prince William Sound (PWS)	1	4
Southeast (SE)	7	209
Western Alaska (WES)		
Total for Quarter	44	8,806

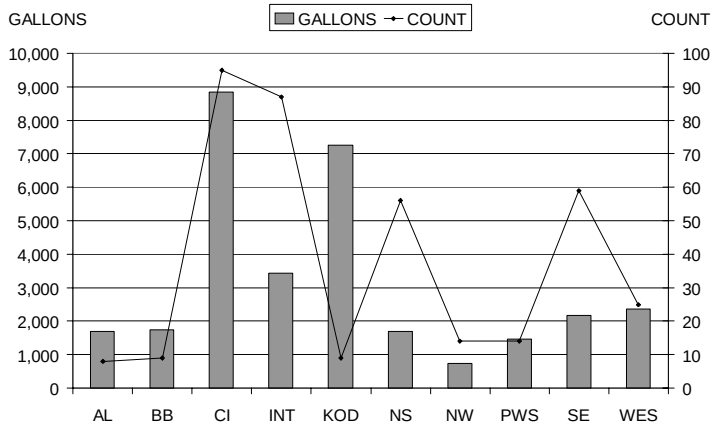
9 spills reported in pounds were not included: Chlorine (3 releases, 152 lbs.); Freon (1 release, 2,000 lbs.); Halon (2 releases, 2,325 lbs.); Natural Gas (1 release, 3 lbs.); Other (2 releases, 705 lbs.)



REFINED OIL PRODUCTS

April 1 - June 30, 2000

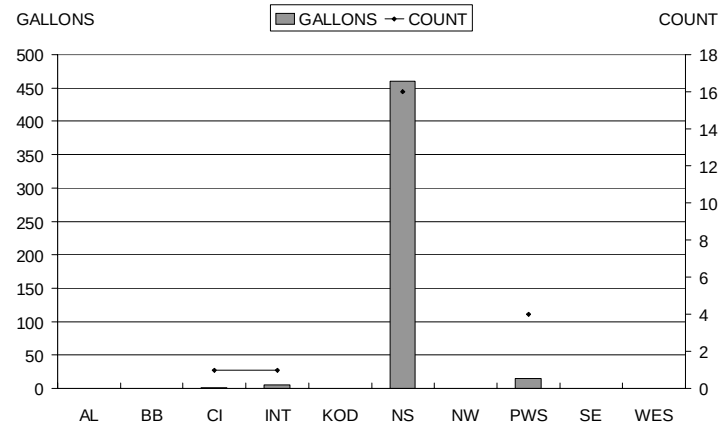
Subarea	Count	Gallons
Aleutian (AL)	8	1,696
Bristol Bay (BB)	9	1,730
Cook Inlet (CI)	95	8,855
Interior (INT)	87	3,441
Kodiak (KOD)	9	7,263
North Slope (NS)	56	1,704
Northwest Arctic (NW)	14	729
Prince William Sound (PWS)	14	1,473
Southeast (SE)	59	2178
Western Alaska (WES)	25	2,358
Total for Quarter	376	31,427



CRUDE OIL

April 1 - June 30, 2000

Subarea	Count	Gallons
Aleutian (AL)		
Bristol Bay (BB)		
Cook Inlet (CI)	1	1
Interior (INT)	1	5
Kodiak (KOD)		
North Slope (NS)	16	460
Northwest Arctic (NW)		
Prince William Sound (PWS)	4	15
Southeast (SE)		
Western Alaska (WES)		
Total for Quarter	22	481

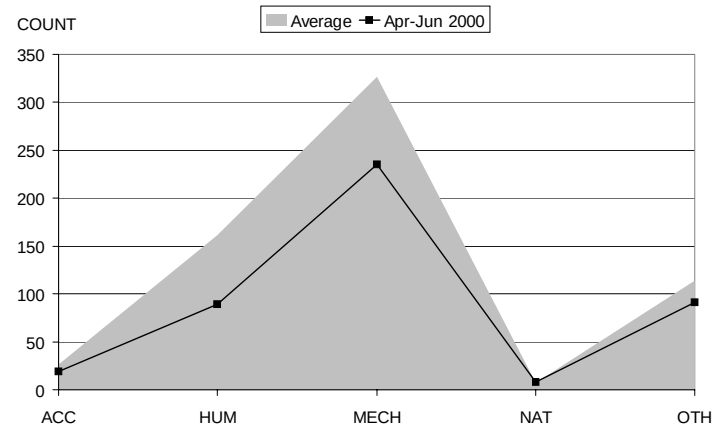


spills reported by CAUSE *(excluding Brine)*

ALL SPILLS

April-June 2000 compared to same quarter in prior years

	April-June						
Subarea	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*Average*
Accident (ACC)		20	30	23	39	19	26
Human Factors (HUM)		159	191	181	188	89	162
Structural/Mechanical (MECH)		316	330	411	341	235	327
Natural Causes (NAT)		11	3	9	5	8	7
Other/Unknown (OTH)		117	118	116	129	91	114
Total for Quarter		623	672	740	702	442	

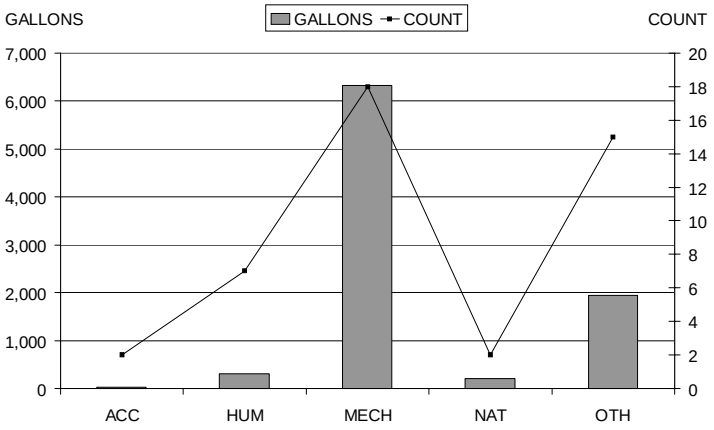


HAZARDOUS SUBSTANCES

April 1 - June 30, 2000

Cause	Count	Gallons
Accident (ACC)	2	35
Human Factors (HUM)	7	308
Structural/Mechanical (MECH)	18	6,324
Natural Causes (NAT)	2	201
Other/Unknown (OTH)	15	1,938
Total for Quarter	44	8,806

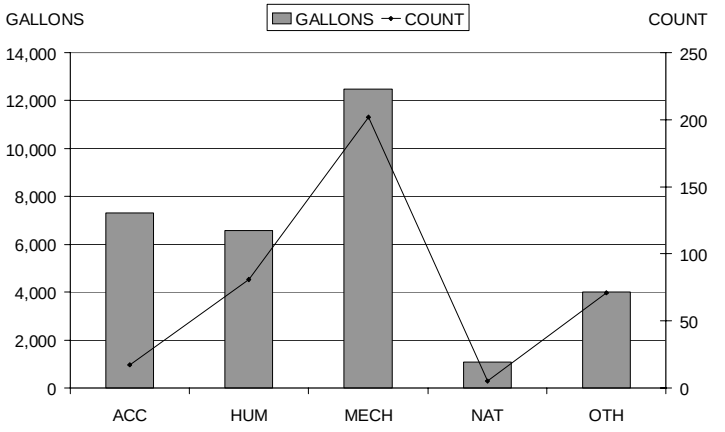
9 spills reported in pounds were not included: Chlorine (3 releases, 152 lbs.); Freon (1 release, 2,000 lbs.); Halon (2 releases, 2,325 lbs.); Natural Gas (1 release, 3 lbs.); Other (2 releases, 705 lbs.)



REFINED OIL PRODUCTS

April 1 - June 30, 2000

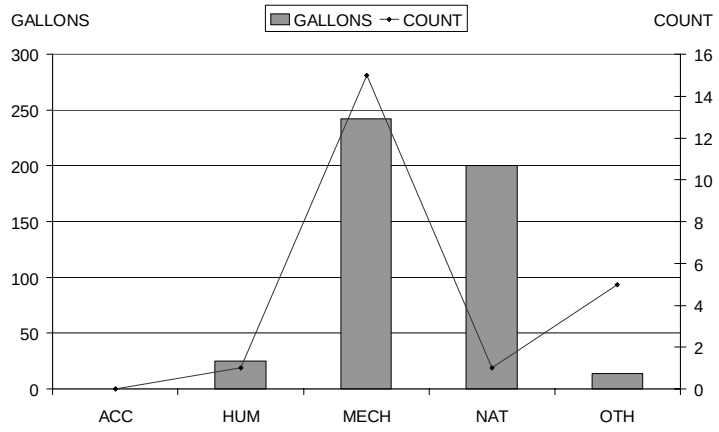
Cause	Count	Gallons
Accident (ACC)	17	7,304
Human Factors (HUM)	81	6,566
Structural/Mechanical (MECH)	202	12,473
Natural Causes (NAT)	5	1,071
Other/Unknown (OTH)	71	4,013
Total for Quarter	376	31,427



CRUDE OIL

April 1 - June 30, 2000

Cause	Count	Gallons
Accident (ACC)		
Human Factors (HUM)	1	25
Structural/Mechanical (MECH)	15	242
Natural Causes (NAT)	1	200
Other/Unknown (OTH)	5	14
Total for Quarter	22	481

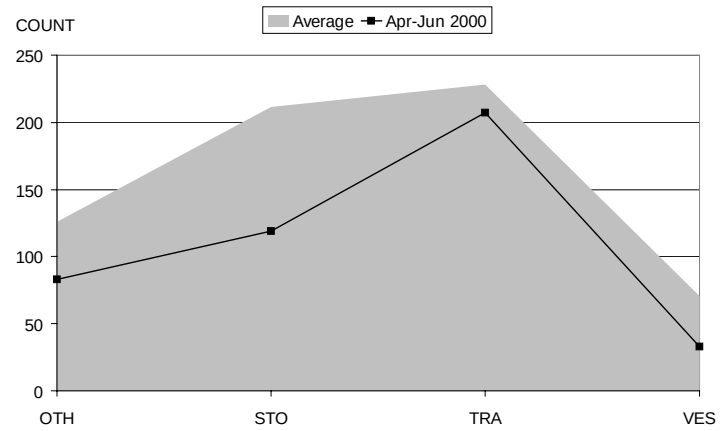


spills reported by SOURCE *(excluding Brine)*

ALL SPILLS

April-June 2000 compared to same quarter in prior years

	April-June						
Source	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	**Average**
Other/Unknown (OTH)		139	150	140	118	83	126
Storage (STO)		215	219	280	224	119	211
Transportation (TRA)		194	223	256	260	207	228
Vessel (VES)		75	80	64	100	33	70
Total for Quarter		623	672	740	702	442	

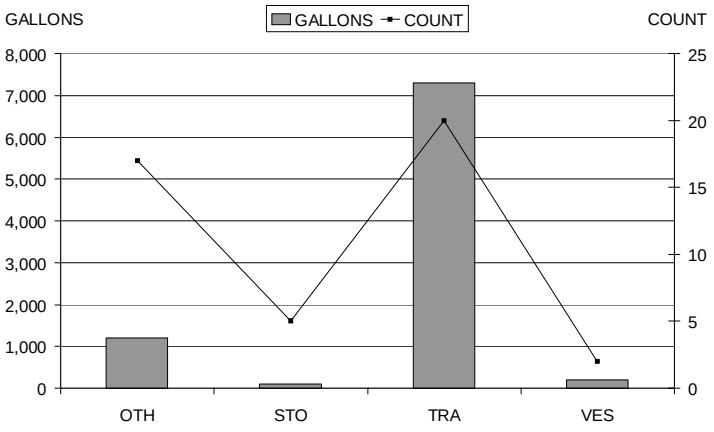


HAZARDOUS SUBSTANCES

April 1-June 30, 2000

Source	Count	Gallons
Other/Unknown (OTH)	17	1,212
Storage (STO)	5	103
Transportation (TRA)	20	7,291
Vessel (VES)	2	200
Total for Quarter	44	8,806

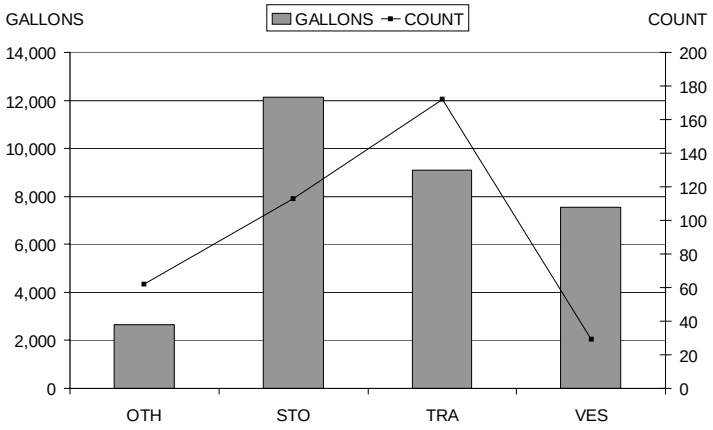
9 spills reported in pounds were not included: Chlorine (3 releases, 152 lbs.); Freon (1 release, 2,000 lbs.); Halon (2 releases, 2,325 lbs.); Natural Gas (1 release, 3 lbs.); Other (2 releases, 705 lbs.)



REFINED OIL PRODUCTS

April 1-June 30, 2000

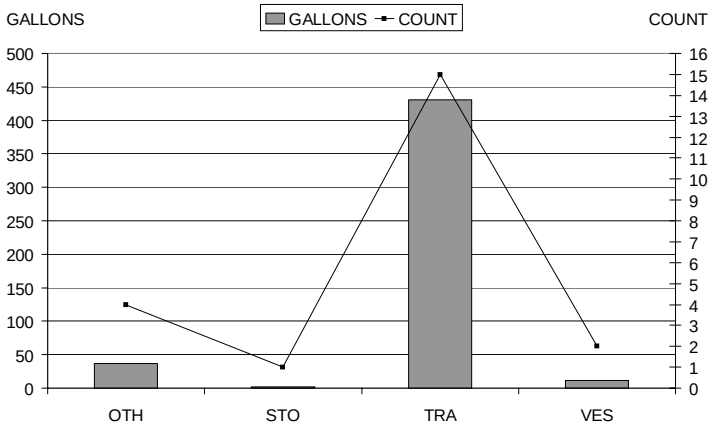
Source	Count	Gallons
Other/Unknown (OTH)	62	2,642
Storage (STO)	113	12,135
Transportation (TRA)	172	9,096
Vessel (VES)	29	7,554
Total for Quarter	376	31,427



CRUDE OIL

April 1-June 30, 2000

Source	Count	Gallons
Other/Unknown (OTH)	4	37
Storage (STO)	1	2
Transportation (TRA)	15	431
Vessel (VES)	2	11
Total for Quarter	22	481



Spill News

booming configuration in the draft GRS will be revised based on the experience gained during this exercise. Changes will include use of heavier anchors, longer lengths of boom, and the re-positioning of the boom slightly upstream of the areas used in the exercise.

PLANNING

Cruise Ship Oil Spill Response Work Group. The Department co-chaired the Cruise Ship Initiative's Oil Spill Response Work Group. The Work Group reviewed and approved the operational management plan for 4 pairs of 249 bbl response barges as presented by SEAPRO. They asked that the plan be formalized on paper as the barges come on line and that the plan be kept under review. The Group developed a list of ten concepts and criteria to evaluate equipment options for consideration by the State for 2.1 million dollars of response equipment which is to be donated by Royal Caribbean Cruise Lines (RCCL) as part of a settlement with the State of Alaska. With the completion of the development of concepts and priorities to help guide equipment donations by RCCL, the cruise ship oil spill work group activities will transition into the regional response planning group (Southeast Alaska Subarea Committee) to continue spill response planning activities on a broader scope. The final email to the work group formally dissolving the Cruise Ship Oil Response work group and transitioning to the Subarea Committee was sent out on June 23, 2000.

PREPAREDNESS

Response Barge Dedication. A dedication ceremony was held in Juneau on May 5 for the first of four sets of response barges to be placed in Southeast Alaska during the year 2000 tour ship season. The barges, which are leased to the Southeast Petroleum Response Organization (SEAPRO), are part of the Northwest Cruise Association's efforts to improve members' response capability. A 15-year contract between the Association and SEAPRO was signed during the dedication ceremony. ♦

All Significant Responses *(April-June 2000)*

APRIL 2000
- 4/6 Williams Tank 1001 Fire
- 4/13 Tesoro Pipeline Terminal — Anchorage
- 4/17 Healy Lake Spill
- 4/17 ARRC Tank Car ARR 9306
- 4/20 F/V Destiny
- 4/20 Chena Hot Springs Road Permafrost Test Facility
- 4/20 F/V Starrgavin
- 4/28 Lower Yukon School District-Pitka Point Spill
- 4/29 Ivanof Bay Power Plant Spill #2

MAY 2000
- 5/14 Stevens Village Release
- 5/18 Inlet Fisheries — Near Bethel
- 5/22 Valdez Marine Terminal, Berth 4

JUNE 2000
- 6/8 Airland Transport Truck Spill
- 6/10 Savoonga Post Office
- 6/19 Weaver Brothers, Mile 75 Seward Hwy
- 6/20 Aleknagik Washeteria
- 6/23 Unocal Swanson River Field Produced Water
- 6/28 Newport Petroleum Inc. Barge 225
- 6/30 Alyeska Marine Terminal

Spill Digest

Oil and Hazardous Substance Spills reported to DEC during the period April 1-June 30, 2000

HAZARDOUS SUBSTANCES

*(does not include **brine** or releases reported in **pounds**)*

Total Count: 44 **Total Gallons:** 8,806

Top 5 Substances

Product	*Count*	*Gallons*
Ethylene Glycol (Antifreeze)	11	1,244
Propylene Glycol	5	204
Methyl Alcohol (Methanol)	7	172
Corrosion Inhibitor	3	111
Sulfuric Acid	1	32

Top 5 Causes

Product	*Count*	*Gallons*
Valve Faulty	4	5,047
Leak, Other	7	952
Intentional Release	3	210
Freezing	1	200
Connection Faulty	4	166

Top 5 Sources

Product	*Count*	*Gallons*
Pipeline	3	5,024
Aircraft	1	1,600
Well	11	626
Pleasure	1	100
Passenger Vessel	1	100

CRUDE AND REFINED OIL

Total Count: 398 **Total Gallons:** 31,908

Top 5 Substances

Product	*Count*	*Gallons*
Diesel	178	26,821
Hydraulic Oil	82	1,800
Transformer Oil	5	787
Drilling Muds	6	529
Gasoline	42	501

Top 5 Causes

Product	*Count*	*Gallons*
Leak, Other	96	8,141
Sinking	2	7,015
Tank Overfill	47	3,010
Line Ruptured	47	2,877
Third Party Act	4	1,754

Top 5 Sources

Product	*Count*	*Gallons*
Fishing	7	7,229
Pipeline	6	5,184
Home/Office/Business	18	3,910
Home Heating Tank	20	2,618
School Tanks	9	2,354

2000 Drill Calendar

Visit the PERP website for updated information on drills and training. http://www.state.ak.us/dec/dspar/perp/drill_tr.htm

TBD	Cruise Ship Away Team Deployment Exercise (USCG), Southeast AK
Sept 11-13	Southeast AK PREP Industry-Led Area Exercise (SeaCoast Towing), Ketchikan
Early October	Valdez Marine Terminal Drill (APSC), Valdez
November 2	North Slope Mutual Aid Drill (BP), North Slope

SEND COMMENTS AND SUBSCRIPTION REQUESTS TO:

Camille Stephens, 410 Willoughby Ave., Juneau, AK 99801

or

email: *cstephen@envircon.state.ak.us*

At a glance... *April 1 - June 30, 2000*

Spill Summary	
Total Spills Reported* *(includes 12 brine releases):*	465
Oil -- *Total Gallons Released*	31,908
Hazardous substances* -- *Total Gallons Released*	8,806
Brine -- *Total Gallons Released*	3,069
Oil Releases	
Total Spills Reported:	398
Largest Volume Released by Category	
Substance *(178 spills; 26,821 gallons)*	Diesel
Cause *(96 spills; 8,141 gallons)*	Leak
Source *(7 spills; 7,229 gallons)*	Fishing
Largest Single Release	Diesel; 7,000 gallons
Hazardous Substance Releases * (excluding brine)	
Total Spills Reported:	44
Largest Volume Released by Category	
Substance *(11spills; 1,244 gallons)*	Antifreeze
Cause *(4 spills; 5,047 gallons)*	Valve faulty
Source *(3 spills; 5,024 gallons)*	Pipeline
Largest Single Release	Antifreeze; 850 *gallons*

*excludes 9 releases reported in pounds

Prevention and Emergency Response Program
Division of Spill Prevention and Response
Department of Environmental Conservation
410 Willoughby Avenue, Suite 105
Juneau, AK 99801-1795

http://www.state.ak.us/dec/dspar/perp/perphome.htm
Phone: 907-465-5220
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mail label

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