

TRACKING OIL PIPELINE INDUSTRY PERFORMANCE

The petroleum pipeline industry has undertaken a voluntary environmental performance tracking initiative, recording detailed information about spills and releases, their causes and consequences.

The pipeline members of the American Petroleum Institute and the Association of Oil Pipe Lines believe that tracking and learning from spills will improve performance, thus demonstrating the industry's firm commitment to safety and environmental protection by its results.

This is one of a series of fact sheets about the Pipeline Performance Tracking System, "PPTS," its evolution and its lessons.

Small Spills: Limited Negative Impact but Many Opportunities to Learn and Thus Prevent

In the past the U.S. Department of Transportation's Office of Pipeline Safety collected information on those oil pipeline incidents that resulted in a death, injury or a release of 50 barrels or more. While oil pipeline operators have collected internal company information on smaller spills in order to monitor company performance, this information was never aggregated across the industry to identify trends that could be used for prevention of spills both large and small. The industry created the Pipeline Performance Tracking System (PPTS) to track spills down to 5 gallons plus any spills to water, so it could learn from these smaller spills that have not been reportable historically and evaluate their impact.

What is the impact of small spills that were not reportable?

PPTS data over the 1999-2001 period show:

- Spills less than 50 barrels – those not required to be reported before – contribute no more than 4% of the total annual volume released from pipeline systems, but constitute 86% of all releases.
- These spills, like larger spills, occur largely in *rural areas* (74% of spills less than 50 barrels, 76% of spills larger than 50 barrels).
- These spills, like larger spills, *seldom impact water* resources (only 3% of spills less than 50 barrels and 13% of spills larger than 50 barrels impact water resources).
- When these spills occur on onshore pipelines (and 60% of them occur elsewhere in the system), they predominantly result from corrosion, which causes 55% of spills less than 50 barrels versus 31% of spills larger than 50 barrels. (In contrast, the largest cause of larger spills on onshore pipe is third party damage: third party damage causes 8% of spills less than 50 barrels versus 42% of spills larger than 50 barrels.)
- These smaller spills have a limited negative impact, but have afforded a 7-fold increase in the opportunities to learn from spills and thus prevent them.

PPTS in Brief				
Number of Participants, 2001		53 pipeline systems		
Their Mileage, 2001		141 thousand miles		
Their Volume Moved, 2001		3.8 trillion barrel-miles		
Their Incidents (Annual Average, 1999-2000)	Spill Size			
	Less than 5 barrels	5-49 barrels	50 barrels or larger	All
Number	418	122	90	630
Share of Total	66%	19%	14%	100%
Volume (000 Barrels)	<2.0*	2.3	103.6	107.9*
Share of Total	2%	2%	96%	100%
*Actual volumes not recorded for spills less than 5 barrels, so value shown is the maximum possible. Include only those incidents that would have met Office of Pipeline Safety 2002 reporting criteria.				