

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.

PPTS OPERATOR ADVISORY: REPORTING THE RELEASE SCENARIOS OUTLINED BY THE COMMITTEE ON ENVIRONMENT, HEALTH AND SAFETY

Need for Clarification and Education on Spill Reporting

At its November 2007 meeting, the API Pipeline Committee's Committee on Environment, Health and Safety (CEHS) considered the results of a "Release Reporting Quiz." CEHS sent out a survey on whether hypothetical releases were reportable to the Pipeline and Hazardous Materials Safety Administration (PHMSA) and/or to PPTS. The purpose of the quiz was to gauge whether there was a common understanding of reportability among industry operators, especially among applicants for the API Pipeline Environmental Award and the API Pipeline Distinguished Environmental and Safety Award.

The quiz demonstrated that there was a good deal of misunderstanding on the reportability of different release scenarios. The questionnaire highlighted areas that require additional clarification and education on PPTS reporting.

The Data Mining Team (DMT) has reviewed the Release Reporting Quiz and offers this document to clarify PPTS guidelines on each release scenario. In its review, the DMT reaffirmed the PPTS guidelines as reflected in the Frequently Asked Questions (FAQs) in all but one situation: the policy with respect to reporting releases resulting from maintenance activities. *The DMT has removed any volume limitation on the applicability of the maintenance exclusion, as detailed below.*

The DMT has purposely limited the scope of this document to PPTS release reporting. Neither the DMT nor this document purports to provide guidance on compliance with PHMSA regulations; each operator is independently responsible for its own compliance with PHMSA reporting requirements, in consultation with its specialists and legal advisors.

Release Reporting Quiz

For each of the numbered scenarios shown, the guidance from the Data Mining Team is provided in the indented text below.

1. A tank is taken out of service for a 653 inspection. When the tank is being refilled, the flange between the tank and the tank valve starts leaking because of improperly tightened bolts. Two (2) barrels of crude oil is released to the soil in the tank dike.

Even if the tank is not regulated by PHMSA (perhaps it is regulated by EPA only), the release is still reportable to PPTS. Not only has the maintenance activity been completed before the release in this scenario, but the release is

unintentional; improperly tightened bolts would be ascribed to operator error. The fact that the spill is contained within the tank dike does not change the reportability.

2. A drainup of a pipeline system is being conducted. A large pan is placed under a flange and the flange is parted. Six (6) barrels of diesel drains into the pan. None escapes the pan.

For PPTS, the guidance has previously been explicit that the maintenance exclusion applies only to **intentional** releases of **less than 5 barrels**. (Every **unintentional** release of 5 gallons or more [or meeting other criteria] is reportable to PPTS.) Therefore, this release would have been reportable to PPTS because it is 5 barrels or more.

As a result of this review, however, the DMT has removed any reference to volume in its FAQs. The PPTS FAQs will now state: “PPTS excludes intentional releases related to maintenance activity if they are not otherwise reportable and if [for liquids] the release is captured, remains under control; does not require clean-up; there is no impact to water, no discernable impact to soil, plants or animals; no injury, death, unintentional fire, or explosion.” (Additional PPTS guidance covers HVL releases related to maintenance.) Under the new PPTS FAQs, this release is not reportable to PPTS.

Please note that the only change to the PPTS FAQs relates to the volume limitation. A maintenance-related spill is still reportable to PPTS if it requires clean-up or has an impact to water, soils, plants or animals (or involves other reporting criteria). Thus, the PPTS maintenance exclusion remains narrower than the PHMSA maintenance exclusion.

→ N.B.: If you have reported maintenance-related releases to PPTS solely because they amounted to 5 barrels or more (but continued to meet all of the other elements of the PPTS maintenance release exclusion), you may wish to remove those releases from the PPTS database. If you need assistance, please contact Bukky Adefemi at adefemia@api.org. If your company is applying for the API Pipeline Environmental Award for performance in 2007, you should revise your entries by February 18, 2008. Whether your company is applying for the Environmental Award or not, you may wish to remove any such releases reported for 2005, 2006, and 2007 so that your next operator-to-operator performance comparison based on the three-year average reflects consistent reporting criteria among operators.

3. A corrosion pit develops in the bottom of a natural gas pipeline and 6 gallons of condensate is released from the pipeline to the surrounding soil.

Natural gas pipelines are not part of PPTS. The PPTS FAQs state: “If the condensate spill occurred on a 49 CFR 195-regulated line, then you should report it in the PPTS. However, if the condensate spill occurred on a 49 CFR 192-regulated line, you should NOT report it in the PPTS.”

4. A valve malfunctions between a marine dock and the associated tankage, causing 12 gallons of gasoline to be released to the soil.

The first question that comes to mind in this scenario is, “Where is the valve that malfunctioned?” This scenario description does not clarify whether the release occurred on the land side or the water side of the Coast Guard valve, which is the line of demarcation for PPTS (regardless of whether the asset is PHMSA-regulated). The PPTS FAQ states: “Yes, if you operate or are the operator of record of piping on the landside of the Coast Guard valve, you should report to the PPTS (this is regardless of DOT regulatory status).”

5. A pipeline which was idled in 1991 and was not completely purged develops a corrosion pit and releases 20 gallons of crude oil to the surrounding soil.

This release is reportable to PPTS even if the mileage was not reported on the annual infrastructure survey. The DMT will add this situation to the FAQs to make the release’s reportability explicit.

6. A block valve malfunctions and releases 10 gallons of gasoline to a concrete vault. No gasoline escapes the vault.

This release involves a malfunction, and thus provides an opportunity to learn from it and prevent a similar release in the future. The PPTS FAQ on releases to secondary containment states: “The fact that a spill is captured in secondary containment does not negate the reporting requirement. Once the transported material exits the primary containment (basically the pipe or the pipeline system) it has reached the threshold to be considered a release. In the perspective of the DMT, secondary containment is designed to mitigate the impact of a release, but doesn’t change the fact that the release occurred. Also, the amount reported should include any volume captured in secondary containment. PPTS requests additional information about the impact of a spill, so you’ll have an opportunity to report that there were no impacts, if this is the case.”

7. Ten (10) gallons of DRA is released to gravel inside a pipeline station when a hose separates from the DRA pump.

A DRA spill is not reportable to PPTS. The PPTS FAQ states: “Since DRA is not a transported commodity, it does not need to be reported. If the DRA was already mixed with a transported commodity when released, then it would be reported as a spill of the commodity.”

8. A pump seal malfunctions and crude oil overflows the seal drain and 8 gallons of oil drips into the pan on the pump base. No oil overflows the pan.

This is an unintentional release, and it does not involve maintenance. The release is reportable to PPTS, just as other spills to secondary containment are. The existence or placement of the pan does not change reportability, it only changes

impact. As noted above, the PPTS FAQ states: “The fact that a spill is captured in secondary containment does not negate the reporting requirement.”

9. A valve stem begins seeping. A bucket is placed under the valve and plans are developed to take the valve out of service as soon as a diesel shipment is across the valve. Several days pass before the valve is repaired and 8 gallons of mixed refined product drips into the bucket.

This is an unintentional release, and it did not occur during a maintenance activity. This release is reportable to PPTS. The bucket has mitigated the impact, but the leak of 5 gallons or more has still occurred. Had the valve been repaired while the released volume was less than 5 gallons, it would not have been reportable to PPTS.

10. Ten (10) gallons of hydraulic fluid is released to gravel from a ruptured hose between a central hydraulic unit and a valve operator.

Hydraulic fluid is not a transported commodity, so its release is not reportable to PPTS. The PPTS FAQ is explicit: “What spills should I NOT report to the PPTS? Spills of oil that is not transported for hire, such as hydraulic oil.” At another point, the PPTS FAQ states: “For example, hydraulic oil from station equipment (*e.g.*, central hydraulic units, valve operators or control valve actuators) should not be reported.”

11. A valve malfunctions between a terminal tank and the terminal truck rack, causing a 15-gallon release to the soil in the terminal manifold area.

The release is reportable to PPTS if it occurred upstream of the truck rack canopy. From PPTS FAQs: “The first valve underneath the canopy marks the point where PPTS reporting stops. If you operate or are the operator of record of piping on the terminal side of that valve, you should report to the PPTS (this is regardless of DOT regulatory status).”

12. A drainup of a pipeline system is being conducted. A pan is placed under a vacuum truck connection. The pipeline valve doesn’t close completely during drainup operations and crude oil drips from the open connection into the pan and 10 gallons of crude overflows the pan, onto plastic sheeting placed under the pan.

The PPTS maintenance exclusion specifies that it applies to “intentional” releases; the fact that the release resulted from a valve that didn’t completely close makes the release **un**intentional. The plastic sheeting mitigates the impact, but does not change its status as a release.

Considerations for Operators

- ❖ ***Learn from every unintentional release.*** PPTS has provided an opportunity for the industry to learn from, and thus prevent, releases. It is the underlying philosophy of PPTS that operators can learn from every unintentional release.

- ❖ **Comparisons based on consistent reporting practices.** Comparisons between operators or comparisons that rank operators for the industry’s API Pipeline Environmental Award or Distinguished Environmental and Safety Award must be based on consistent practices for spill reporting.
- ❖ **Participants committed to following established guidelines.** Participants in PPTS have committed to following the reporting guidelines established by the industry through the Data Mining Team, and published in the [Frequently Asked Questions](#) and [other PPTS guidance](#).
- ❖ **If applying for API Pipeline Awards, CEO must now certify.** In applying for the API Pipeline Environmental Award for 2007 and later years, the CEO (or highest ranking officer) of each applicant operator will be required to certify that their PPTS incident reporting follows the industry’s established guidelines, including the following:
 - ✓ ALL unintentional releases;
 - ✓ Releases to secondary containment;
 - ✓ Releases from operated assets regardless of PHMSA regulatory status; and
 - ✓ Maintenance-related releases as prescribed in PPTS FAQs.
- ❖ **New policy for maintenance exclusion: no volume limitation.** As of December 2007, the Data Mining Team has revised the PPTS policy with respect to reporting maintenance-related spills, removing any reference to volume released. The new policy states: *PPTS excludes intentional releases related to maintenance activity if they are not otherwise reportable and if [for liquids] the release is captured, remains under control; does not require clean-up; there is no impact to water, no discernable impact to soil, plants or animals; no injury, death, unintentional fire, [or] explosion.*
- ❖ **If you are uncertain about reportability or other questions, ask.** It is very difficult to envision every set of circumstances that may require guidance in the PPTS FAQs. If you encounter an uncertain situation, e-mail the API PPTs staff, Adebukola Adefemi (adefemia@api.org), Hazem Arafa (arafa@api.org), or API’s contractor on PPTS issues, Cheryl Trench of Allegro Energy Consulting (ctrench@rcn.com). If an established policy does not apply, your question will be blinded and distributed it to the Data Mining Team for a determination.
- ❖ **Operator commitment to clear and consistent reporting is key to ensuring and maintaining the credibility of PPTS.** If operator management has concerns regarding reportability policies for PPTS, please contact API’s Pipeline Director, Peter Lidiak (lidiakp@api.org).



For additional information on PPTS and its lessons for the oil pipeline industry, please see www.api.org/ppts/.