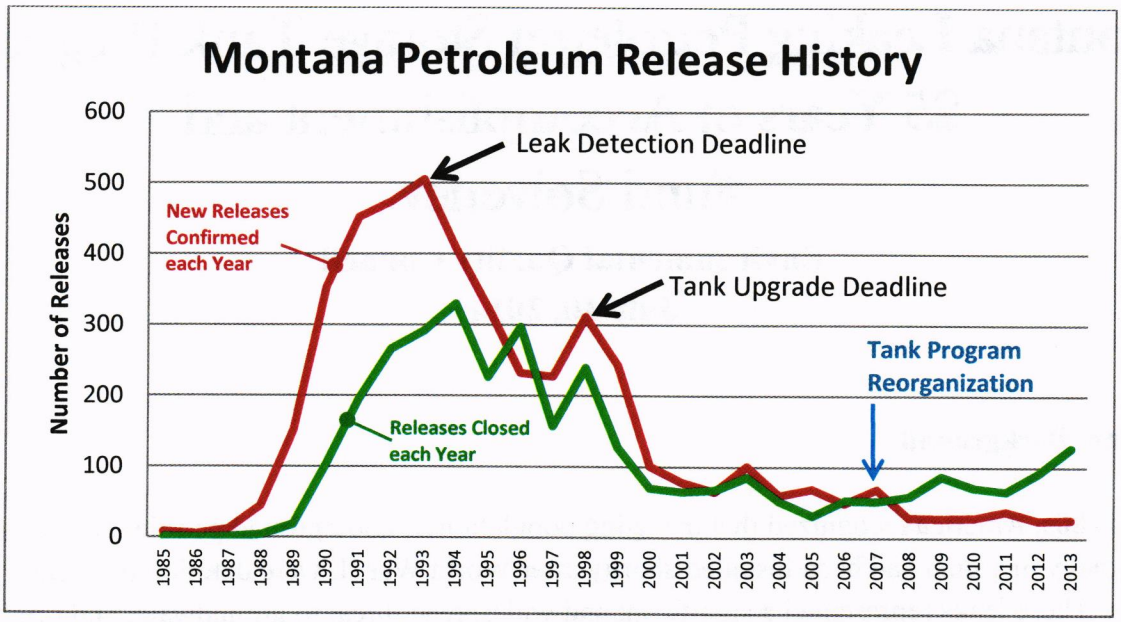
Montana Leaking Petroleum Storage Tank Program
25 Years of Accomplishment and
Fund Solvency

Environmental Quality Council
July 10, 2014

Program Background

In the 1980s, America recognized that the aging population of underground petroleum storage tanks, many of which had been installed shortly after World War II, were deteriorating and leaking. These leaks represented a significant and widespread threat to groundwater and drinking water supplies across the country. Both Congress and the Montana Legislature passed laws mandating construction and operation standards, leak detection requirements, and financial responsibility (insurance) to cover the cost of cleaning up petroleum releases.



Note: All annual figures used throughout this report are based upon calendar year rather than fiscal year and may differ from other reports using fiscal year calculations.

The EPA set new leak detection and tank construction standards in the early 1990s. As tank owners responded to the new leak detection and tank construction requirements, they discovered a significant number of petroleum releases, many of which had been leaking for years.

1. 1993 EPA requirement for leak detection: The first significant discovery of releases came about from the leak detection requirement deadlines, culminating with a Montana-specific peak of 505 releases being discovered in 1993.
2. 1998 EPA requirement for new tank construction: The second peak in release discoveries was due to the deadline to upgrade or replace all older tanks by 1998. This "flurry" of tank work caused a total of over 3,800 releases to be discovered in Montana from 1989 to 2001. Several of these releases were minor, and over 2,300 (approximately 60%) were cleaned up and resolved during this same timeframe.

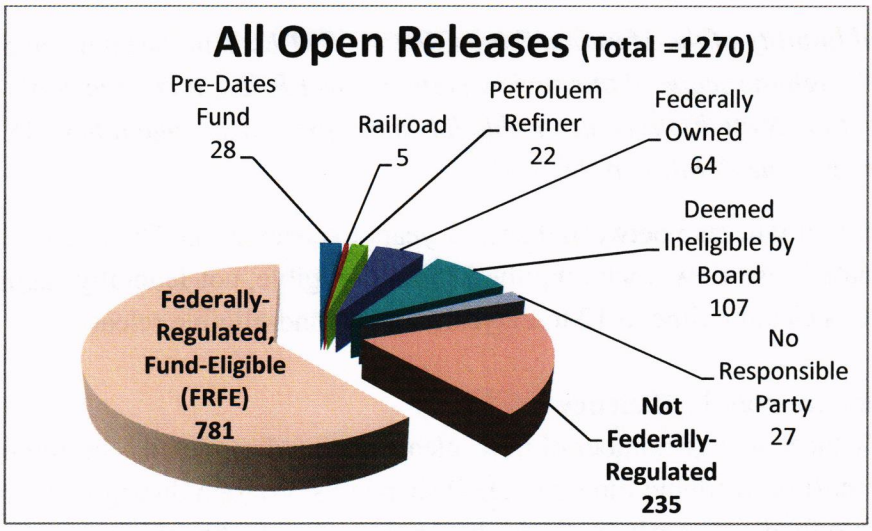
A total of 4,528 releases have been confirmed during the life of the program (1985 to present). DEQ has continued to address the remainder of open releases following that peak period, as well as approximately 20 to 30 new releases discovered each year. Currently, only 1,269 releases (or approximately 28% of the total) remain open. It is also important to note that the required EPA updates caused many owners to get out of the petroleum business because they could not afford the new systems or tanks. As a result, Montana saw redevelopment of some of these sites into other businesses or residential use.

Because private insurance was difficult to find, expensive, and would not cover prior releases, Montana's Legislature enacted the Petroleum Storage Tank Cleanup Act (75-11-301, MCA) in 1989 to ensure financial responsibility to clean up petroleum releases. The ongoing fee of $0.0075 (¾ cent) on each gallon of fuel distributed in the state generates approximately

$7,000,000 annually. After approximately $2,000,000 is appropriated to fund DEQ's regulatory program and the Montana's Petroleum Tank Release Cleanup Fund (Petro Fund) operating expenses, approximately $5,000,000 is available to fund cleanup activities at eligible release sites each year. No increase in the fee has been enacted since the Petro Fund's inception. The only increase in revenue has been realized through higher fuel usage and sales within the State. As the Petro Fund's biennial report has indicated, the revenue source has not kept pace with inflation (the Consumer Price Index).

Federally-Regulated, Fund-Eligible (FRFE)

The EPA's Tier II Soundness Assessment of the Montana State Fund report was finalized in April 2014 and was based on data from 2012. The primary data used in the EPA's analysis only includes releases that are federally regulated and eligible for reimbursement of cleanup costs from the Petro Fund. Unless otherwise stated, the remainder of this discussion will focus on these 781 federally-regulated, fund-eligible (FRFE) releases.



Approximately 235 open releases are not regulated by the federal government, but their cleanup costs are eligible for reimbursement from the Fund. These primarily include above-ground storage tanks, heating oil tanks, and certain residential and farm tanks. Another 253 releases are federally-regulated but not eligible for cleanup reimbursement from the Fund. These include releases from tanks deemed ineligible by the Petro Board (typically for not being in compliance with tank rules) or releases from tanks that are statutorily excluded from the Fund, such as those discovered prior to the Fund enactment, or those owned by railroads, petroleum refiners, or the federal government as well as releases deemed ineligible by the Petro Board (typically for not being in compliance with tank rules). Cleanups of all tank releases are regulated by DEQ's Petroleum Tank Cleanup Section.

Cleanup Costs

DEQ has effectively cleaned and resolved approximately 1,900 FRFE releases within the Fund's limited cash flow. DEQ works closely with Petro Board staff to review and approve work plans prepared by tank owners and operators and their environmental consultants. DEQ only requires cleanup work plans at a rate consistent with the funds available to reimburse work for eligible releases (approximately $5,000,000 each year).

DEQ has consistently used all available funds from the Petro Fund annually, and Montana's average cleanup costs are less than the national average cleanup cost. As stated in EPA's report, "there are several ways to calculate the liabilities of the Montana State Fund." The report finds that Montana's range of cleanup costs range from $64,000 to $120,000 depending on how it is calculated. This is below the national average of cleanup costs for petroleum releases. These figures clearly demonstrate that the primary factor limiting the number of FRFE cleanups and release closures in Montana is the cash flow of the Petro Fund.

Future Liability of the Fund

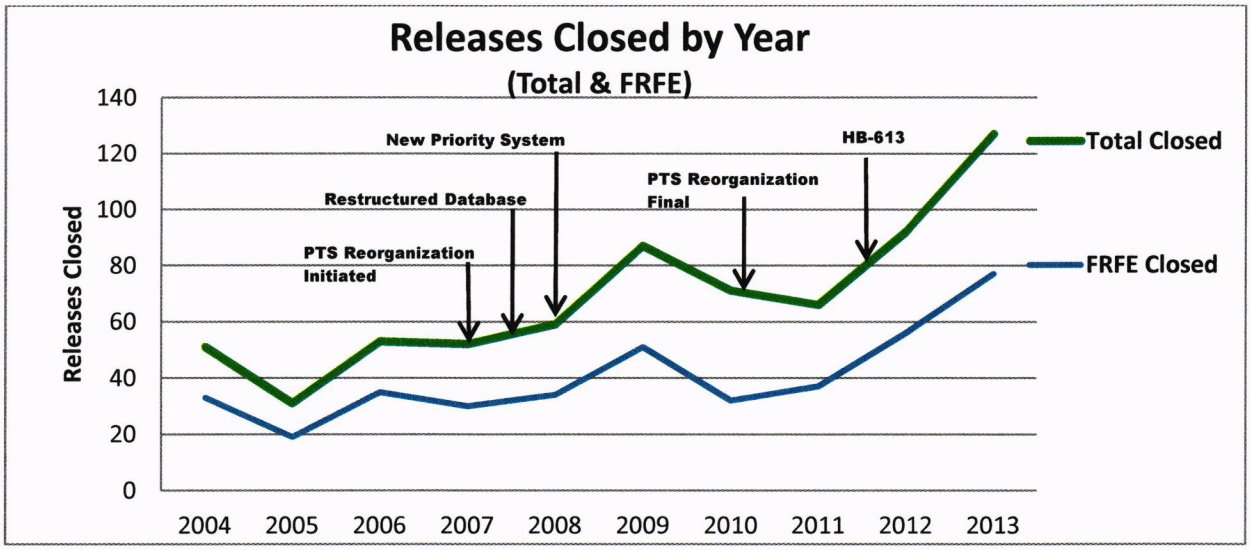
EPA's report states the Fund's liability to close the current open releases in 2012 as follows:

> *"[T]he total liability of the Montana State Fund for FRFEs is in the range of $61-$101 million. Although the scope of this review is limited to FRFEs, it is important to note that the Montana State Fund is also liable for above ground storage tanks (ASTs) which further increases the liability to the fund."*

Given this liability, it will take between 9 and 17 years to clean up the 782 open FRFE releases at the Fund's estimated cash flow. Including the 235 fund-eligible, not-federally-regulated releases would increase this cleanup time to 12 to 22 years for all fund-eligible releases.

Cleanup Prioritization and Efficiency

Montana initially faced a huge number of new releases being discovered – far more than could be addressed by staff or available funding. DEQ shaped its program during this time to prioritize work and available funds primarily by the highest risks to human health, concurrent site construction opportunities, and, to a lesser extent, to assist with property transfers and redevelopment. As new release discoveries tapered off and most of the high-risk releases had been brought under control, a significant number of open releases remained. In 2007, DEQ restructured its organization and work priorities to focus on reducing the backlog of open releases. One goal became taking a more holistic and strategic approach to addressing the backlog of, at that time, over 1,600 total open releases. The reduction in newly discovered high-risk release discoveries now allow the bulk of work plans to focus on resolving the greatest number of releases, while still prioritizing adequate resources on fewer releases that posed significant and imminent risks to human health and the environment.



In addition to reorganizing the work unit, DEQ implemented a database to assist program supervisors to manage the complex workload. Development of database capabilities has evolved hand-in-glove with new business processes to increase efficiencies and manage priorities. Database development continued until it reached the technical limitations of the aging database platform. DEQ is currently procuring and developing a new data management system to replace the old system with funds appropriated in 2013.

In 2008, DEQ implemented a new system for measuring risks and assigning work priorities to petroleum release sites. This large work effort to re-prioritize all the open releases has put the agency on solid footing to strategically manage its finite resources to best address the remaining open releases.

These improvements to DEQs' program has allowed the number of releases closed each year to rise from 52 in 2007 to over 127 in 2013 while funding remained the same and DEQ staffing has been reduced. In 2011, the Legislature passed HB 613 which directed DEQ to resolve 90 releases each year for four years and clarified that closing releases was a higher priority than investigating new releases.

It is important to understand that the current high rate of releases being resolved is primarily due to closure of many low-risk open releases that needed very little cleanup. As these releases are closed and taken off the books, the more complex, expensive, and long-term cleanup sites remain. Many of these larger sites require excavations, where a single project can consume all funding available from the Petro Fund for one or more months. DEQ and the Petro Board staff work very closely to balance the need to clean up these large sites while still keeping funds flowing to less complicated, more easily closeable sites. DEQ and the Petro Board staff are also currently engaged in strategic planning on how to best apply this process to the backlog of releases.