BIENNIAL REPORT

Short-Term and Long-Term Fund Viability

Petroleum Tank Release Cleanup Fund

2009- 2010

Petroleum Tank Release Compensation Board

1100 North Last Chance Gulch

P.O. Box 200902

Helena, Montana 59620-0902

Petroleum Tank Release Compensation Board

The Petroleum Tank Release Compensation Board, established under §2-15-2108, Montana Code Annotated (MCA), consists of seven members appointed by the Governor. The Board is administratively attached to the Department of Environmental Quality. The members presiding in the positions established by law, and their positions at the time of the writing of this report are:

Position Held	Member Name	Term Ends
Representative of the financial or banking industry	Steve Sendon	June 30, 2011
Representative of petroleum services industry or a representative of the petroleum release remediation consultant industry	Roger A. Noble Vice Presiding Officer	June 30, 2010
Representative of independent petroleum marketers and chain retailers	Greg Cross Presiding Officer	June 30, 2010
Representative of the general public	Daniel Annala	June 30, 2012
Representative of the service station dealers	Roy Morris	June 30, 2012
Representative of the insurance industry	Karl Hertel	June 30, 2010
Person with a background in environmental regulation	Theresa Blazicevich	June 30, 2011

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Executive Summary

Revenue from fuel use is expected to remain steady over the next biennium. Total revenue from gas, diesel, and aviation fuel increased between 1995 and 2006, flattened between 2006 and 2008, and declined in 2009. The increase in total fuel revenue is due primarily to the use of diesel fuel for transportation. The U.S. Department of Energy predicts an increase in diesel fuel use over the next several years and a decline in gasoline use due to corporate average fuel economy standards. The revenues from fuel use in Montana appear to remain steady and both the Montana Department of Transportation and Legislative Fiscal Division (LFD) expect fuel use to decline in 2009 and experience a small increase in 2010. Given all the information reviewed, revenues in the coming biennium are expected to remain near the current annual revenues.

Revenues continue to be outpaced by the increase in cost of goods sold. The Consumer Price Index indicates an annual increase until 2009, when it becomes flat. Total fee revenue exhibits an increase until 2006. The rate of increase for total fee revenue is less than the rate of increase for the Consumer Price Index. In addition, total fee revenues are flat from 2006 through 2008, while the consumer price index increases. The total fee revenue declined in 2009, while the consumer price index remained steady. The divergence between total fee revenue and the Consumer Price Index indicates that the fund currently has only 77% of the buying power it had in 1995.

Fund administrative expenses are consistent with the consumer price index. There are spikes in the administrative expenses due to subrogation activities, which are off-set by the funds recovered from owners/operators' insurance carriers. Other fluctuations in administrative expenses are caused by legal expenses associated with seeking cost recoveries. Claim expenditures are quite variable and are difficult to predict. The Board is obligating funds for the highest priority cleanup activity at a rate consistent with expected available funding. Current claim expenditures are considered to be the best estimate of the future expenditures.

The number of releases discovered each year is declining and the cleanup of existing releases continues. Release discoveries appear to be correlated to tank closures which have, in the past, resulted from imposed regulatory requirements. There do not appear to be any regulatory changes in the coming years that would have any significant impact on the number of tank closures. Therefore, the number of releases over the coming biennium is expected to decline.

Recent Federal and State regulatory changes are not expected to influence tank closures; however, they are aimed at reducing the number of releases and the severity of contamination resulting from new releases. The Energy Policy Act of 2005 and State regulations being implemented to conform to this act will assist with preventing releases. The implementation of spill prevention control and countermeasure (SPCC) requirements at aboveground petroleum storage facilities will help to minimize impacts from a release. Senate Bill 97 (2009) is expected to assist with long-term fund solvency through the establishment of a copayment for double-wall tank systems and an incentive for owners and operators to obtain private insurance. The Board continues to promote a self-inspection checklist for aboveground storage tanks to improve aboveground storage tank operation and management.

The Board continues to look for ways to encourage insurance companies to make pollution coverage available for petroleum storage tank owners in Montana. The Board is communicating with some insurance providers and the insurance providers are monitoring the regulatory and fund administrative changes. Insurance for historical operations is not reasonably priced; however, insurance for current operating facilities is becoming more accessible. With the recently implemented statutory changes, insurance is expected to play a more active role in the cleanup of releases. Until insurance and/or other financial mechanisms are in place, collection of the petroleum tank release cleanup fee and this program will be necessary to assist owners with meeting petroleum cleanup challenges and financial responsibility requirements.

Introduction

America has used petroleum as an energy source since the 1850s. Kerosene was commonly used to light America's homes before the arrival of the electric light bulb. In 1892, the "horseless carriage" required gasoline as an energy source. By 1920 there were nine million motor vehicles in this country and gas stations were opening everywhere. According to the U.S. Department of Transportation Statistical Records Office there were approximately 250 million registered vehicles on the road by January 2009. That figure includes all types of vehicles. However, this growth has left behind a legacy of industrial and commercial properties across Montana with a variety of real and perceived petroleum contamination problems.

The Petroleum Tank Release Cleanup Fund (Fund) assists Montana in meeting the cleanup challenges related to years of petroleum use in the State, as well as to current use of petroleum products. By working to clean up these contaminated properties we bring together government, businesses, community leaders, and citizens to assure that properties remain a vibrant part of the community and to maintain the healthy environment we have come to enjoy as Montanans – a place where our children can grow, our families can thrive and the economy can prosper.

The Fund was established in 1989 and is financed through a fee levied on distribution of petroleum products within the State. The Fund is a state special revenue fund established in §17-2-102, Montana Code Annotated (MCA). It is administered by the Petroleum Tank Release Compensation Board and is statutorily appropriated, as provided in §17-7-502, MCA, for the purposes provided for under subsections (3)(c) and (3)(d) of that section. Administrative costs under subsections (3)(a) and (3)(b) must be paid pursuant to a legislative appropriation.

The challenge put before us demands commitment, cooperation, and a common vision tailored to the needs of Montana. Communities, both urban and rural, need to make

advances toward sustainability by continued use of properties affected by past petroleum contamination, and Montana needs to continue to develop processes that help prevent contamination of properties in the coming decades. The purpose of this report is to provide information to assist and guide the Board, the Department of Environmental Quality (DEQ) and the legislative body in establishing those desirable goals that should be considered by those who are charged with ensuring and administering funding for environmental corrective action programs and projects to clean up petroleum contamination at properties across the state.

This report presents the findings, research methods and descriptive analyses used to examine the viability of the Fund. It is intended to provide useful information about factors impacting the petroleum release cleanup program and the Fund.

Trends in Fund Revenue

The main revenue source for the Fund is a fee levied on distribution of petroleum products within the state. The Fund was established to pay for allowable costs associated with cleanup of releases from petroleum storage tanks (§75-11-313, MCA). The Fund receives proceeds from fees levied on gasoline, diesel, and aviation fuels, which are, on average, 61%, 35%, and 4% of the fuel revenue, respectively. The diesel classification includes distributed fuels sold as heating oil. Additional revenue sources include the Board's subrogation activity and earned interest.

Fuel revenues, depicted in Table 1, below, indicate that 2000 and 2006 had relatively high fund revenues. As can be seen from the total revenues depicted in Table 1, there were other revenues that also contributed to the increase in total fund revenues for those years. Much of that other fund revenue is attributable to subrogation recoveries, especially for 2006.

Subrogation is a general principle of law that allows the Board to recover those payments from the insurance company legally liable for the corrective action, if there is an applicable insurance policy. In this recovery process, the Board assumes the legal rights of the owner/operator for whom the Board has paid expenses in regard to a claim against an insurance company for a covered loss paid on behalf of the owner/operator. To date, these additional revenues have contributed approximately 3.4% of total revenues.

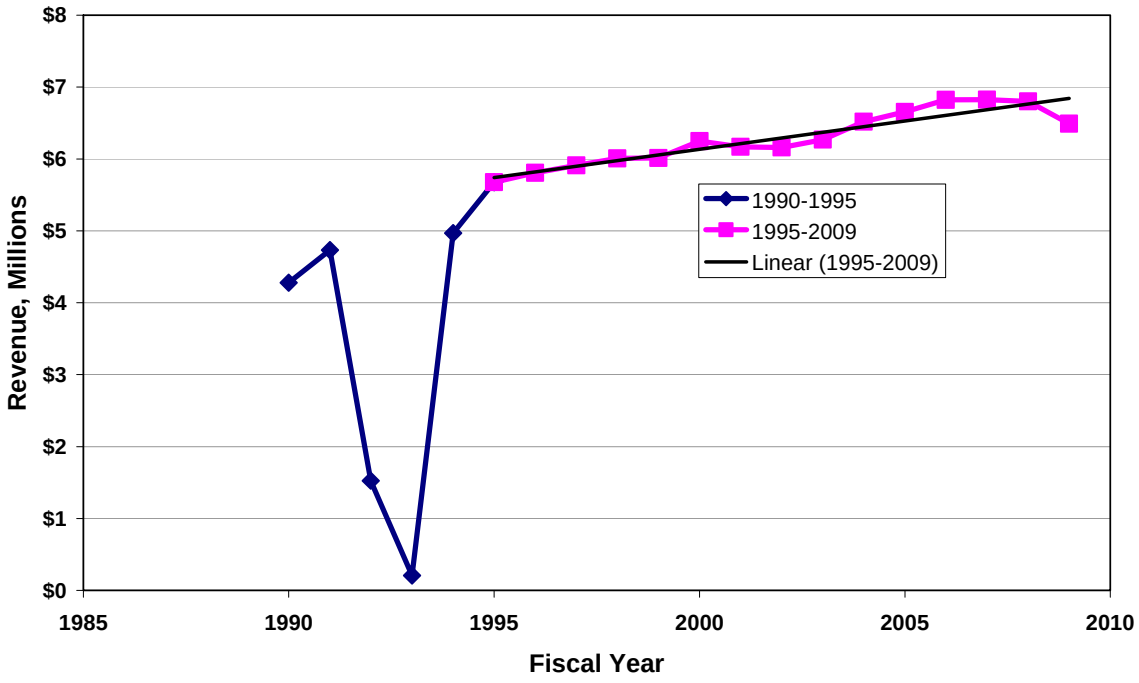
Table 1. Total Revenue by Fiscal Year.

Year	Fuel Revenue	Total Revenue
1990	$4,279,437.24	$4,424,870.32
1991	$4,732,448.59	$5,167,398.46
1992	$1,523,687.95	$1,962,804.40
1993	$206,400.18	$208,585.18
1994	$4,967,452.92	$5,112,778.38
1995	$5,675,845.97	$5,901,317.96
1996	$5,807,832.51	$5,976,382.36
1997	$5,910,993.62	$6,027,122.56
1998	$6,007,973.25	$6,107,358.58
1999	$6,013,468.40	$6,183,625.77
2000	$6,248,375.37	$6,428,345.38
2001	$6,169,082.64	$6,319,922.17
2002	$6,159,618.34	$6,268,611.50
2003	$6,268,885.49	$6,333,823.91
2004	$6,519,302.15	$6,566,672.04
2005	$6,654,184.36	$6,696,950.09
2006	$6,820,875.08	$7,847,636.39
2007	$6,825,951.12	$6,994,593.97
2008	$6,804,407.96	$6,965,033.31
2009	$6,487,586.16	$6,491,533.88

Historical

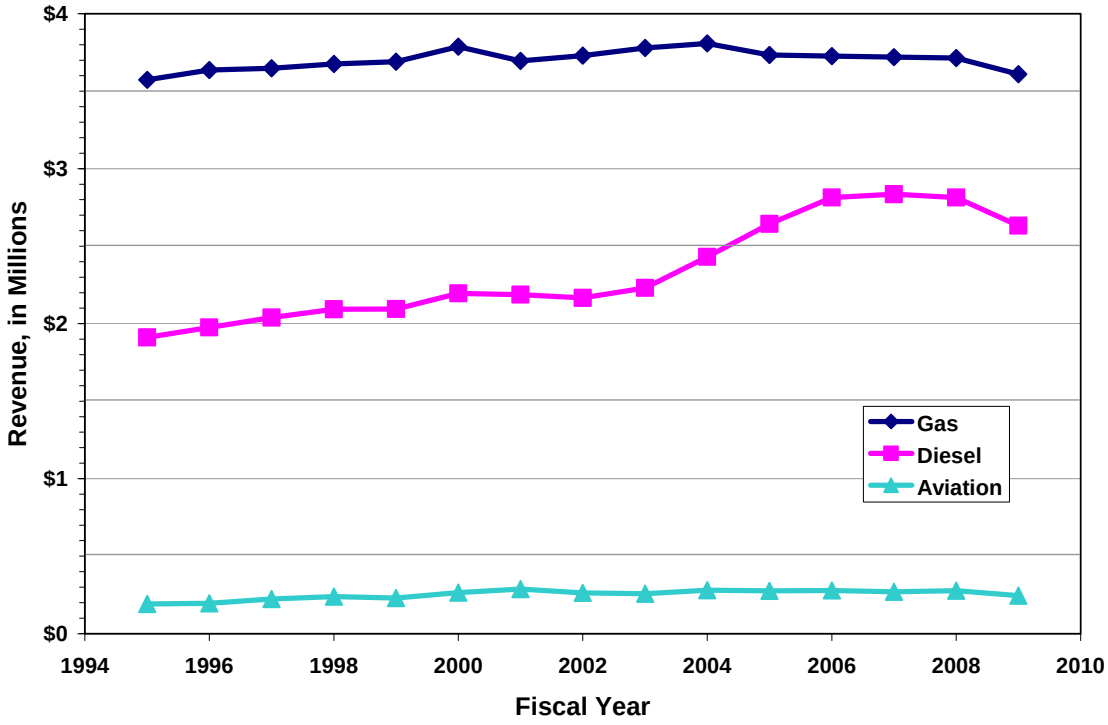
Revenues of over $100 million have been received since the inception of the Fund. Table 1, at right, lists the total revenue per year for fiscal year (FY) 1990 through FY 2009. This covers a period of twenty consecutive years, with average annual fee revenue of $5.5 million. This average, however, includes years when fees were not collected for the entire year. Collection of the fee was suspended during FY 1992, FY 1993, and FY 1994 because the fund balance had reached the legislatively established maximum and collection was not resumed until the fund balance fell below the legislatively established minimum. The average annual fee revenue increases to $6.3 Million per year for the years beyond 1994. Revenue acquired from petroleum fuels sold in the State exhibit an increasing trend for the years following 1994, when the fee was collected for the entire year. Annual revenues from fuel for FY 1990 through FY 2009 have been plotted against fiscal years in Figure 1, below.

Figure 1. Revenue from Fuel by Year



The suspension of the fee on fuel is clearly evident in the revenue from fuel received in both FY 1992 and FY 1993, and possibly in FY 1994. Given the suspension of the fee on fuel for part or all of fiscal years 1992 through 1994, and for the purposes of analysis, revenues have been separated into two parts: early revenue (FY 1990 – FY 1994), and subsequent revenue (FY 1995 – FY 2009). When attention is focused on the later fifteen years, the data exhibit a fairly linear trend (see Figure 1, above). An incline is evident in the slope of a least-squares analysis (see definitions) representing a straight line that best fits the revenue from fuel. The fitted line indicates that revenue from fuels sold in the State increased by approximately $79,000 each year over the 15 years. Although the trend line indicates an increasing trend, there have been periods when revenue has remained flat and other periods when revenue has declined, including the most recent fiscal year.

Figure 2. Revenues from Three Petroleum Products



The fuel revenue is from fees levied on gasoline, diesel, and aviation fuels, each of which exhibits a different trend. Revenue produced from each of the three categories of petroleum product is shown in Figure 2, above.

The plotted data indicate that diesel fuel revenue has the steepest incline. This incline is evident in the least-squares analysis (see definitions) used to calculate a straight line that best fits the revenue data for the fifteen-year period, for each of the fuel categories. The slopes of the lines predicted from a linear regression are 0.0055, 0.0682 and 0.0050 for gasoline, diesel, and aviation fuels, respectively. Due to the decline in fuel revenue in the recent biennium, the slopes of the linear regression lines that approximate these three sets of revenue data have dropped by 54%, 8%, and 44% for gasoline, diesel, and aviation fuels, respectively, as compared to last biennial regressions. Even though the slopes of the three trend lines are all positive, gasoline and aviation fuel revenues

exhibited a negative trend from 2000 through 2009. The increase in fuel revenue from 2005 to 2008 is a result of the increase in the amount of diesel fuel sold in the State.

Although the revenues from fees levied on gasoline, diesel, and aviation fuels exhibit increasing trends, the best estimate for total revenue for 2010 and 2011 is to expect no increase in revenues over the 2009 revenues. The linear trends indicate that the Fund could expect total revenues to increase by approximately $79,000 each year, with diesel contributing $68,000.00 to the expected annual revenue increase, gasoline accounting for $6,000.00, and aviation fuel accounting for $5,000.00. However, given the recent decline in revenues from gasoline, aviation fuel and diesel, the best estimate of expected fuel revenues in the coming biennium is the amount received in 2009, which is approximately the average over the past 12 years.

Revenue and Inflation

It is important to recognize that since the Fund's revenue is generated from a flat fee levied on each gallon of fuel distributed in Montana, the increases in the program's operating and cleanup costs over time can only be offset by increased fuel use. To obtain a better understanding of the status of the Fund one needs to consider how the ever-increasing cost of goods and services compares to the revenue generated by the distribution of fuel.

The Consumer Price Index (CPI) is used to measure inflation. The CPI, also called the cost-of-living index, is a measure of the price of a set group of goods and services. The amount of inflation is measured by the change in the cost of that group of goods and services over time. The CPI can be scaled to a base year to provide a clearer picture of what is happening to the cost of goods and its effects on the purchasing power of revenue or income. For example, a scaling of the CPI could indicate what the cost for a group of goods and services would be in FY 2009 if it cost $6 million to purchase those same goods and services in FY 1995.

Transformed consumer price index values and the Fund's fee revenue from FY 1995 through FY 2009 are provided in Table 2, below, along with the differences between the yearly values (*Annual Average Consumer Price Index for Urban Consumers*, U.S. Department of Labor and Statistics CPI Detailed Report - April 2010). Note that the base CPI of 152.4 is just a number; it is not dollars, nor is it what a typical consumer actually pays. It is just an index number that is used as a base to determine the inflation rate in

Table 2. Fund Revenue and Transformed Consumer Price Index.

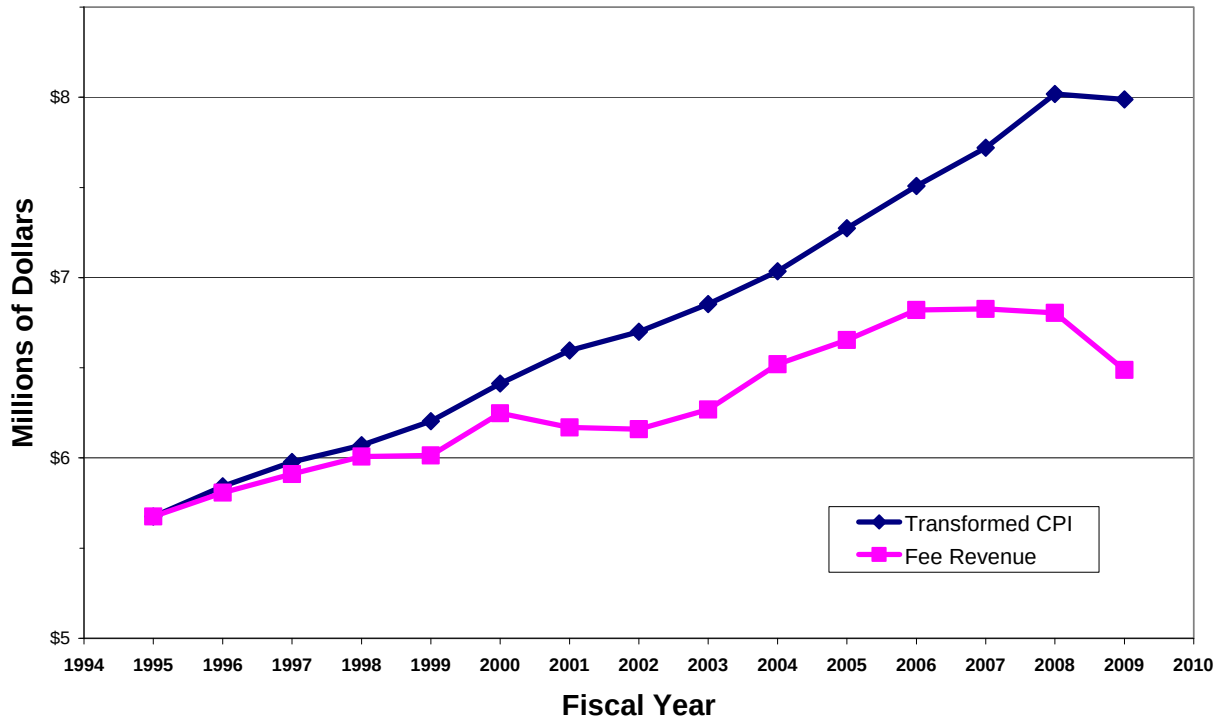
Year	Consumer Price Index	CPI Re-indexed to 1995	Decimal Form	Transformed CPI	Fund Fee Revenue	Difference
1995	152.4	100.000	1.00	$5.675846	$5.675846	$0.00
1996	156.9	102.953	1.03	$5.843440	$5.807833	-$35,607.34
1997	160.5	105.315	1.05	$5.977515	$5.910994	-$66,521.33
1998	163	106.955	1.07	$6.070623	$6.007973	-$62,649.41
1999	166.6	109.318	1.09	$6.204698	$6.013468	-$191,229.36
2000	172.2	112.992	1.13	$6.413259	$6.248375	-$164,883.66
2001	177.1	116.207	1.16	$6.595750	$6.169083	-$426,667.50
2002	179.9	118.045	1.18	$6.700031	$6.159618	-$540,412.43
2003	184	120.735	1.21	$6.852727	$6.268885	-$583,841.93
2004	188.9	123.950	1.24	$7.035219	$6.519302	-$515,916.38
2005	195.3	128.150	1.28	$7.273574	$6.654184	-$619,389.90
2006	201.6	132.283	1.32	$7.508206	$6.820875	-$687,330.61
2007	207.3	136.024	1.36	$7.720491	$6.825951	-$894,540.15
2008	215.3	141.273	1.41	$8.018436	$6.804408	-$1,214,027.98
2009	214.5	140.748	1.41	$7.988641	$6.487586	-$1,501,055.31

subsequent years. The number 152.4 is set to the CPI base equaling 100 percent, which can also be expressed in decimal form. In subsequent years, the base number of 100 percent will be increased by the same amount as the increase in general prices.

The purchasing power of the Fund is declining each year. The cost of goods and services, indicated by the transformed CPI, is growing more rapidly than Fund revenue. This divergence is evident in Figure 3, below, which depicts the transformed CPI and Fund's fee revenue for FY 1995 through FY 2009. The approximate cost of $5.5 million worth of goods and services purchased in FY 1995 increased each year by about

$173,000, compared to the average increase in fuel revenue of $79,000. Annual increases for CPI and fuel revenue were estimated using a least-squares regression analysis to fit a linear line through the data. The average difference between the CPI and the Fund revenue values is approximately $94,000 per year. The divergence leads to a reduction of more than $1.5 million in purchasing power from 1995 to 2009.

Figure 3. Transformed CPI and Fund Fee Revenue.



Future Revenue Projections

Revenues predicted from the sale of fuels are not expected to increase. Historical revenues usually provide the best available estimate for future revenue projections. Performing a least-squares analysis to calculate a straight line that best fits the historical fuel revenue data for the years that were considered to be representative of a complete year (1995 - 2009) yields the linear function **y = 0.0787x – 151.31**. This regression, as noted above, indicates that fuel revenues increased by approximately $79,000.00 each year, on average, from 1995 - 2009. The Biennial Report for 2008

estimated an annual increase of $92,800.00 each year between 1995 and 2007 from a linear function of **y = 0.0928x - 179.51**. The Biennial Report for 2006 estimated an annual increase of $70,200 each year between 1995 and 2005 from a linear function of **y = 0.0702x - 134.08,** which was used to provide a prediction of fuel revenue. It is important to recognize that gasoline sales are a function of the price per gallon of gasoline, vehicle fuel economy, and economic conditions and as such are highly variable. Linear regression of historical revenues has provided reasonable estimates for revenue projections; however, some of the fuel revenue curves have flattened in recent years and all fuel revenue sources have exhibited a decline this past fiscal year.

In all sectors, except transportation, fuel consumption remains at roughly the same level through 2035 according to the U.S. Department of Energy. The Energy Information Administration (EIA), which provides official energy statistics from the U.S. Government, estimates the growth in demand for transportation fuels is met primarily by diesel fuel and bio-fuels. They expect a decrease in the consumption of gasoline and an increase in the consumption of diesel fuel through 2035. Others sectors that consume liquid fuels, such as the industrial, electricity generator, and building use sectors, are expected to remain unchanged over the projection period. In their report entitled *Annual Energy Outlook 2010 with Projections to 2035*, released in May 2010 (Report #: DOE/EIA-0383(2010)), the EIA predicts that the most recent increases in U.S. Corporate Average Fuel Economy (CAFE) standards will increase the fuel efficiency of motor vehicles; however, the growth in demand for transportation services that results from increases in population and GDP is expected to outpace the anticipated improvements in efficiency. Motor gasoline, ultra-low-sulfur diesel, and jet fuel are the main fuels consumed in the transportation sector. The EIA believes that growth in demand for diesel fuel will result from increasing sales of diesel powered light-duty vehicles (LDVs) that are needed to meet the new CAFE standards, as well as an increase in shipping that leads to more consumption of diesel by heavy freight trucks.

The November 17, 2008 Revenue Estimate Recommendations report prepared by the Montana Legislative Fiscal Division (LFD) predicts that gasoline use will continue to

decline and that diesel use will decline in 2009 and then begin to increase. To determine the likely future consumption of diesel and gasoline, the change in consumption experienced in fiscal year 2008 was duplicated in fiscal 2009. The growth for fiscal years 2010 and 2011 was estimated using an average historic rate of growth. The report predicted a decline in gasoline sales for 2009, followed by an average 2.2 percent per year reduction in gasoline sales for 2010 and 2011. The report predicted a 5 percent decline in diesel sales for 2009 followed by average diesel sales growth at a rate of 2 percent per year for 2010 and 2011. Combining the predicted revenues from gasoline and diesel indicates a decline in 2009 followed by a flattening in the predicted revenues. The decline in gasoline is shown to be offset by an increase in diesel.

Although the 2006 Biennial Report predictions made using the linear regression as a predictive tool resulted in a revenue prediction that was within approximately 1 percent of the actual revenues, linear regression may not be a good predictive tool for the coming biennium. The economy appears to be affecting fuel use, with fuel revenues declining in 2009. There was little change in revenue from all three categories of fuel between 2006 and 2008, indicating that fuel sales leveled off. However, the revenues for all three categories of fuel dropped in 2009. The flattening of the revenue curve, and the recent decline, indicate that the linear regression line is not the best predictor of future revenues.

Table 3. Projected revenue

Fiscal Year	Projected Revenue
2010	$6.5
2011	$6.5
2012	$6.5
2013	$6.5

With an uncertain economic recovery and, therefore, uncertain consumption, the best likely predictor of fuel revenues is current revenues. The 2008 Biennial Report also expected no increase or decrease in anticipated revenue. The 2008 revenues did not exhibit any significant change over 2007 revenues; however 2009 did exhibit a 7% change from the 2007 revenues. Given the EIA expectation that consumption remains at roughly the same level through 2035 and that LFD predicts revenues will be flat over the

next biennium, the best prediction for fuel revenues would be those received in 2009. This prediction of fuel revenues remaining constant is depicted in Table 3, above

Trends In Expenditures

Fund administrative expenses appear to have a pattern, consistent with the cost of living, while claim expenditures exhibit no definable pattern. Following an initial rapid growth period (FY 1990 - FY 1994), personal services and operating expenses indicate a pattern and trend correlated to the consumer price index. An analysis of claim expenditures indicates the average expenditures for the last thirteen years, which follow a start-up period, is likely the best predictive technique.

Table 4. Personal Services and Operating Expenses.

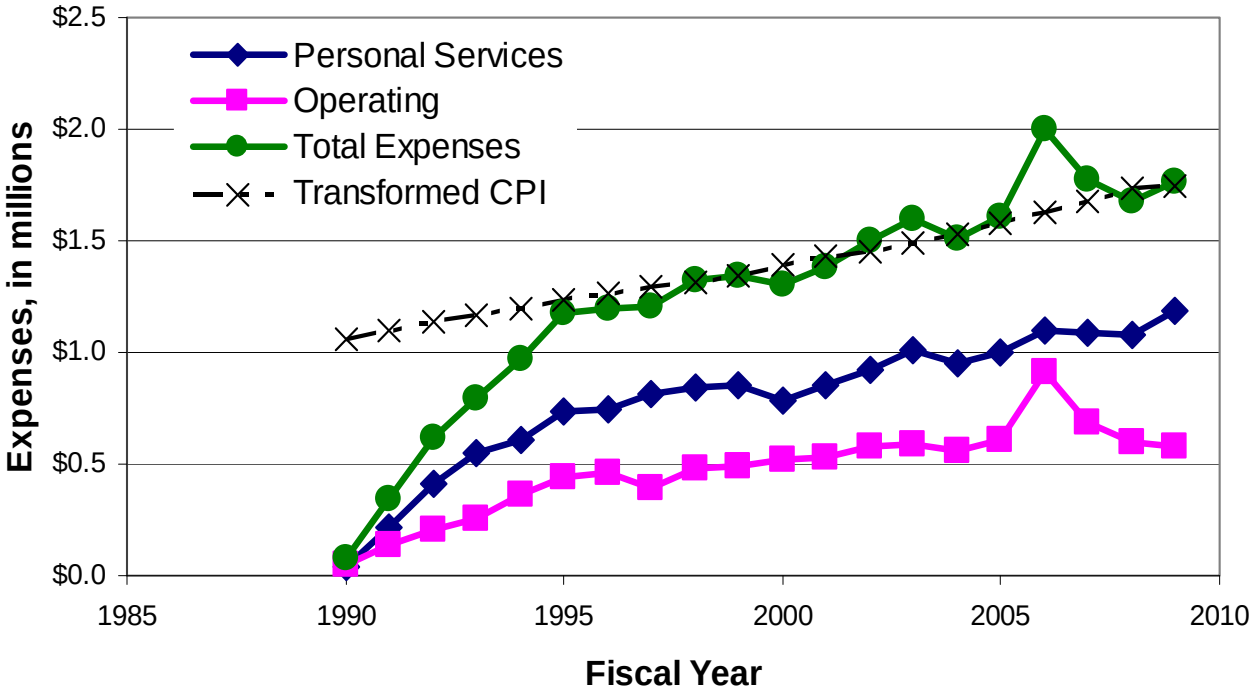
Fiscal Year	Personal Services	Operating Expenses	Total	Transformed CPI
1990	$0.04	$0.05	$0.08	$1.06
1991	$0.21	$0.13	$0.34	$1.10
1992	$0.41	$0.20	$0.62	$1.13
1993	$0.55	$0.25	$0.80	$1.17
1994	$0.61	$0.36	$0.97	$1.20
1995	$0.74	$0.44	$1.18	$1.23
1996	$0.74	$0.46	$1.20	$1.27
1997	$0.81	$0.39	$1.20	$1.30
1998	$0.85	$0.48	$1.33	$1.32
1999	$0.85	$0.49	$1.35	$1.35
2000	$0.78	$0.52	$1.31	$1.39
2001	$0.85	$0.53	$1.38	$1.43
2002	$0.92	$0.58	$1.50	$1.45
2003	$1.01	$0.59	$1.60	$1.49
2004	$0.95	$0.56	$1.51	$1.53
2005	$1.00	$0.61	$1.61	$1.58
2006	$1.10	$0.91	$2.00	$1.63
2007	$1.09	$0.69	$1.78	$1.68
2008	$1.08	$0.59	$1.68	$1.74
2009	$1.19	$0.58	$1.77	$1.74

Administrative Expenses

The growth of administrative expenses continues to be consistent with the consumer price index. The expenses incurred by the Fund that are associated with administrative activities by the Board and regulatory activities by the Department of Environmental Quality (Department) consist primarily of two categories; operating expenses and personnel expenses. Because Fund-supported Department costs have not always been separate from Board costs in

the State of Montana financial system, the summary provided in this report will examine the combined expenses for both the Board and the Department. Personal services, operating expenses, and the combined total administrative expenditures for FY 1990 through FY 2009 are provided in Table 4, above. Personal services consist of salaries and benefits for persons engaged in the following: review of materials for eligibility determination; analysis of claims for actual, reasonable, and necessary costs; evaluation

Figure 4. Personal Services, Operating Expenses, and Combined Total Expenditures.



of work plans for cost control; technical management of corrective action for releases; and other associated administrative activities. Operating expenses include direct operating, contracting, general and administrative expenses. Personal services, operating expenses, and the combined total administrative expenditures for FY 1990 through FY 2009, along with the transformed CPI, are depicted in Figure 4, above. Figure 4 shows a sharp rise in expenses as the program matured over the first four years. Total combined expenditures then begin to trend more closely with the CPI. In 2006 there was a temporary increase in operating expenses. This increase is

associated with a subrogation contract and reflects contingent expenses connected with a significant insurance subrogation recovery. Contingent contract expenses are only incurred when there is an insurance subrogation recovery.

Future Administrative Expense Projections

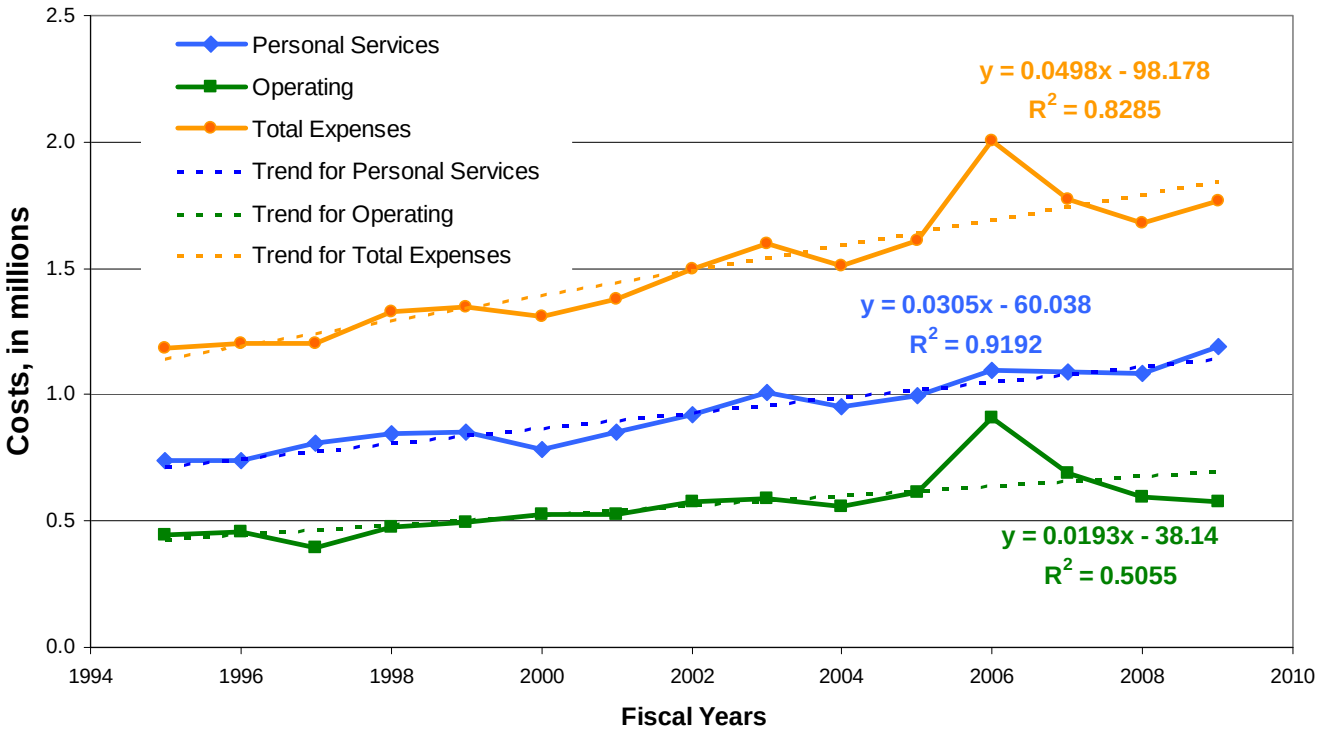
The more recent expenditures are likely the best available information to use to provide an estimate for future administrative expense projections. The expense curves presented in Figure 4, above, can be viewed in two parts. These two periods have differing rates of growth. The two periods are most evident in the combined total curve, but can be observed to a lesser extent in the curves representing personal services and operating expenses. The early period (FY 1990 – FY 1995) is associated with the initial growth and development of the program and reflects a steeply increasing trend as the program staffed-up to meet legislative expectations. The later years (FY 1995 – FY 2009) reveal a shallower increasing curve that is more representative of stabilized operations.

The personal services, operating, and total expenses for the stabilized operations period from 1995 through 2009 are depicted in Figure 5, below. The total operating expenses include the contingent contracted expenses and therefore exhibit a similar increase in 2006. There have been contingent contract expenses associated with subrogation activities since 2002. These expenses are quite variable and are not easily predicted. They have been included in the data presented in Figure 5, below, in an effort to provide comprehensive information. However, these expenses are not included in the predictive model to provide a more reliable expenditure projection.

A linear regression model applied to the non-contingent expense data for later years is likely the most reliable predictor of future administrative expenses. If one ignores the expenses associated with recovery from subrogation that may impact administrative expenditures, the fiscal year can be used as the dependent variable in a valuable

predictive model. Performing a least-squares linear regression analysis to calculate a straight line that best fits the non-contingent expense data for these later years yields a function that can reasonably predict future expenses. The later years are considered to be representative of more stabilized operations. The linear regression equation for combined total expenses estimates that total costs (excluding contingent subrogation contracting expenses) will increase approximately $42,000.00 per year. This indicates

Figure 5. Linear Regression Using Recent Expenes.



that expenditures will likely be in step with the cost of living, resulting in total expenditures of $1.8 million in FY 2011.

Recoveries associated with the subrogation activity are not easily predicted due to the nature of the legal process. The legal uncertainties in the program preclude reliable predictive analysis.

Claim Expenditures

Identifying the controlling parameters for claim expenditure is difficult. The annual claim expenditures for FY 1990 through FY 2009 are listed in Table 5, below. Annual claim expenditures climbed from $703,653.28 in FY 1990 to $5.4 million by FY 1995. Taking into account a $2 million litigation settlement paid as claims in FY 1997 indicates that expenditures for claims from FY 1995 through FY 2009 were quite variable, having a range from about $3.7 million to $7.5 million. A graph of the data is provided in Figure 6, below. These data were analyzed using regression techniques on all the data (FY 1990 – FY 2009), as well as on various subgroups of the data. Attempts were made to identify the leading influential parameter(s), including litigation settlements, discovered releases, work plan activity and personal services expenditures. However, no leading indicator was identifiable in the analysis and no predictive model was found to be representative of the data.

Table 5. Claim Expenditures by Fiscal Year.

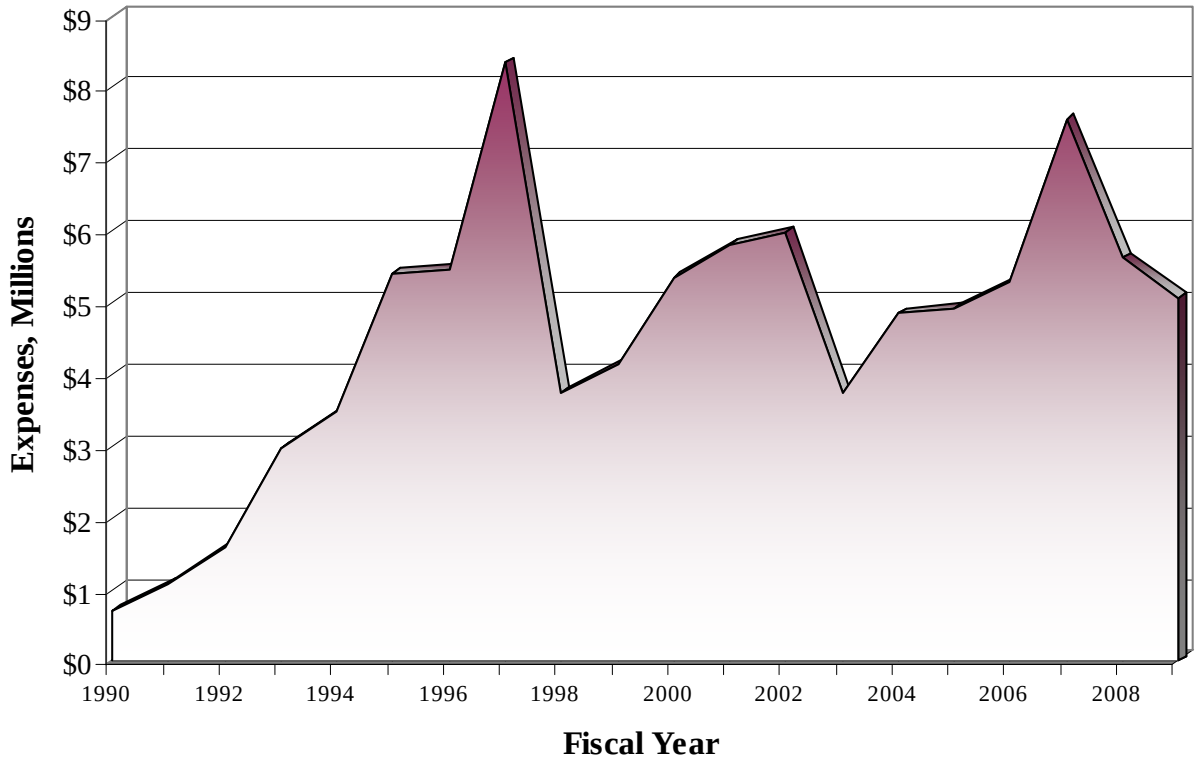
Fiscal Year	Claims
1990	$703,653.28
1991	$1,065,514.92
1992	$1,585,906.16
1993	$2,960,965.77
1994	$3,480,161.88
1995	$5,394,682.48
1996	$5,465,402.00
1997	$6,339,423.82
1998	$3,748,623.21
1999	$4,153,031.36
2000	$5,334,095.37
2001	$5,799,130.55
2002	$5,985,691.11
2003	$3,731,611.03
2004	$4,844,535.10
2005	$4,911,911.04
2006	$5,294,311.24
2007	$7,554,982.16
2008	$5,618,087.36
2009	$5,057,747.82
Total	$72,798,650.32

Future Claim Projections

The average annual claim expenditure is likely the best available predictor to provide an estimate for future claim expenditure projections. This analysis focused on the data and

did not take into consideration any impacts from potential influential outside actions, such as regulatory changes, or any long-term strategic plans.

Figure 6. Claim Expenditures by Fiscal Year.



The best predictor of future claim payments is the average of past expenditures. It is worth noting that the claim expenditures exhibit what appears to be a ramp-up period between FY 1990 and FY 1995. An average can be calculated using the complete set of claim expenditures, or by using only the last 15 years. The average for the complete set of claim expenditures is $4,551,473.38 and the average of the past 15 years is $5,415,551.04. The annual claim expenditures for the next several years are projected to be at approximately $5 million. The projection was estimated from a simple average. No regression equation was determined to have a reasonable coefficient of determination with the actual claim expenditures.

Exposure to Long-Term Liabilities

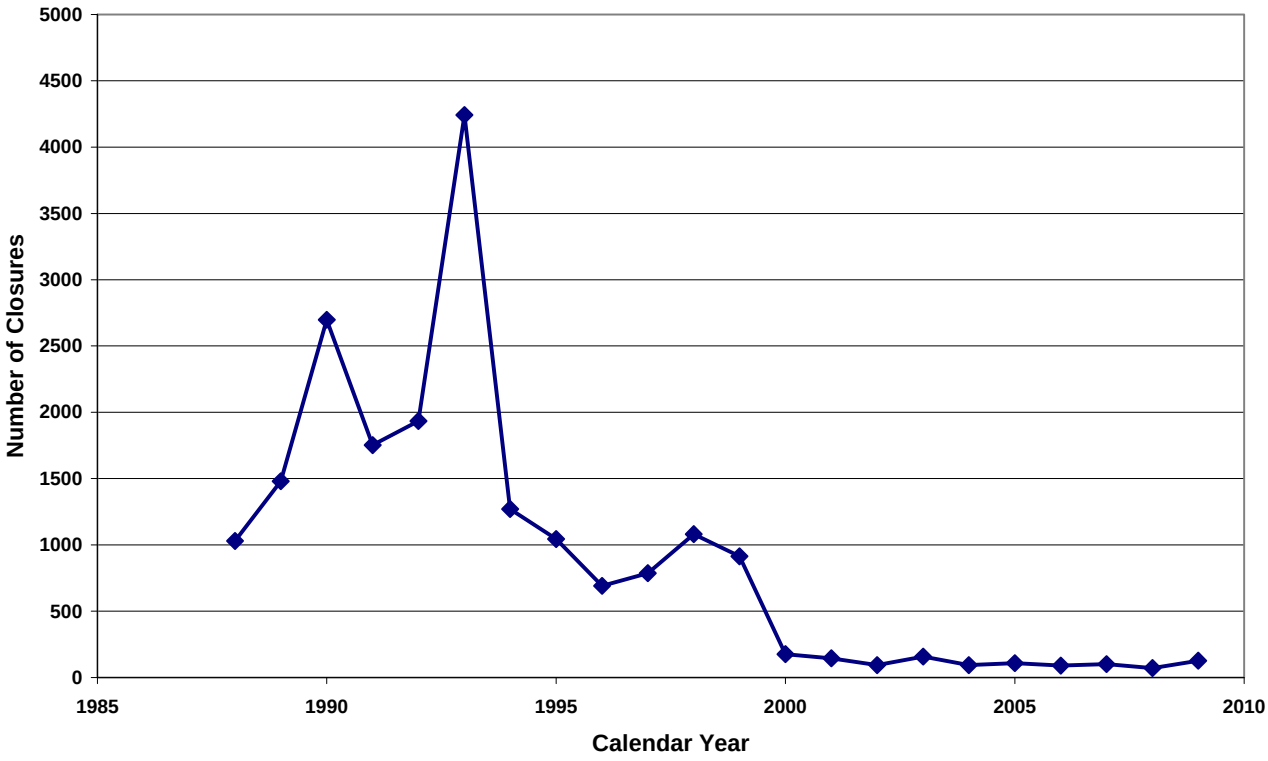
Liabilities for the Fund consist of cleanup costs for current releases and future releases. The liabilities associated with each current active release are impacted by the amount of on-going effort required to accomplish cleanup, amount of insurance coverage for the release, and the facility's compliance. The liabilities associated with future releases are affected by those aspects mentioned for current releases as well as the rate at which new releases are being discovered, and eligibility applications filed.

The decline in newly discovered releases, the reduced severity of those releases, the existence of some private insurance coverage for some releases, the implementation of Board initiatives, and ongoing department efforts to close releases, reduces the Fund's exposure to long-term liabilities. On a release-by-release basis, existing obligations continue to decline as ongoing corrective action meets cleanup objectives. Future obligations may be further reduced as a result of federal requirements focused on preventing releases. Future obligations may temporarily increase depending on whether aboveground storage tank owners are required to achieve current standards.
An increase in the number of tank closures influences the number of releases applying for eligibility. This impacts the Fund's long-term liability. In 1984, Congress responded to the increasing threat to groundwater posed by underground storage tanks by adding Subtitle I to the Solid Waste Disposal Act (SWDA). The Environmental Protection Agency's (EPA's) 1988 regulations set minimum standards for new tanks and required owners of existing tanks to upgrade, replace, or close them within ten years (40 CFR Ch I §280.21). The transition period was characterized by the continuing growth of a national underground storage tank program, realized through the creation of state and local programs.

During Montana's 51st Legislative session (1989), the legislature approved three major underground storage tank bills that had an impact on the closure of underground storage tanks. HB 603 (1989) established the Montana Petroleum Storage Tank Release

Cleanup Fund to provide underground storage tank owners and operators with a financial assurance program for cleanup of tank releases. SB 321 (1989) amended the Montana Hazardous Waste Act to specifically include underground storage tanks, and authorized the Department of Health and Environmental Sciences (Department of Health, predecessor to the Department of Environmental Quality) to establish annual tank registration fees to defray state and local government costs for implementing an underground storage tank leak-prevention program. The Act established leak detection

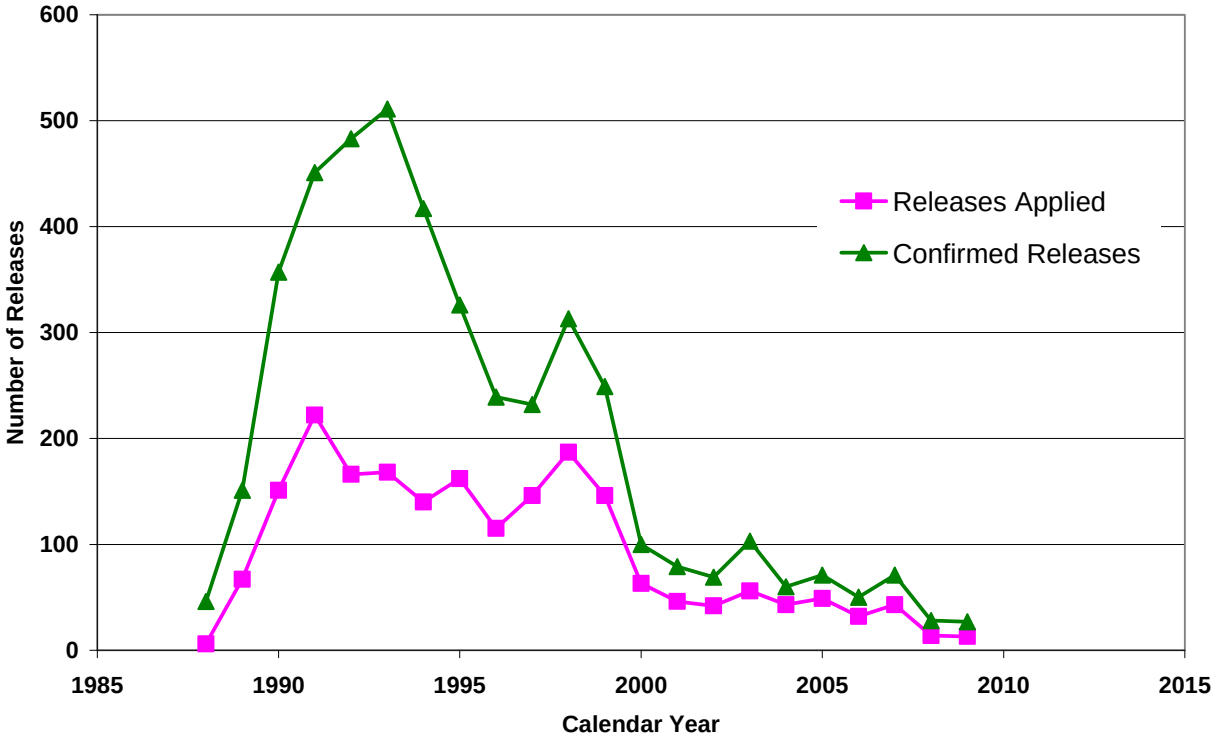
Figure 7. Tank Closures by Calendar Year



requirements for all existing tanks and performance and design standards for new underground storage tank systems. HB 552 (1989) required tank owners to obtain permits for underground storage tank installations, repairs, and closures; required those who remove and install underground storage tanks to be licensed; and authorized the Department to adopt rules establishing fees for licenses, a permitting process, and inspections of tank installations and closures.

The following November, the Department adopted rules implementing new underground storage tank regulations. These underground storage tank regulations likely produced the increase in the number of tank closures seen in the late 1980s and early 1990s, as depicted in Figure 7, above. In 1993, Senate Bill 196 exempted certain underground storage tanks from the closure requirements of the Montana Hazardous Waste and Underground Storage Tank Act until December 31, 1993. Although the owners and operators could remove a tank without a permit and without the services of a licensed installer, they were still required to notify the Department of Health of the removal and report any discovered releases. The large number of tank closures in 1993 appears to have resulted from this temporary exemption legislation. The number of tank closures

Figure 8. Releases by Calendar Year



per year declined as rapidly between 1993 and 2000 as they had increased in the prior six years. The spike in 1998 was a result of underground storage tank owners and operators attempting to comply with the federally mandated1998 deadline for upgrading, replacing, or closing underground storage tanks. The next significant regulatory activity

was the Energy Policy Act of 2005 (the Energy Policy Act, or Act), enacted in August 2005 and effective February 2007. The Energy Policy Act is discussed in the *Impacts of Changes in State and Federal Regulations* section of this report.

The number of releases applying for eligibility is most certainly affected by the number of confirmed releases. The number of releases applying for eligibility, along with the number of confirmed releases between 1988 and 2007, is depicted in Figure 8, above. A visual inspection of the two curves indicates that the number of releases applying for eligibility each year correlates with the number of confirmed releases each year. The correlation coefficient of the confirmed releases and the number of releases applying for eligibility (0.938) indicates a very positive relationship between the two sets of data.

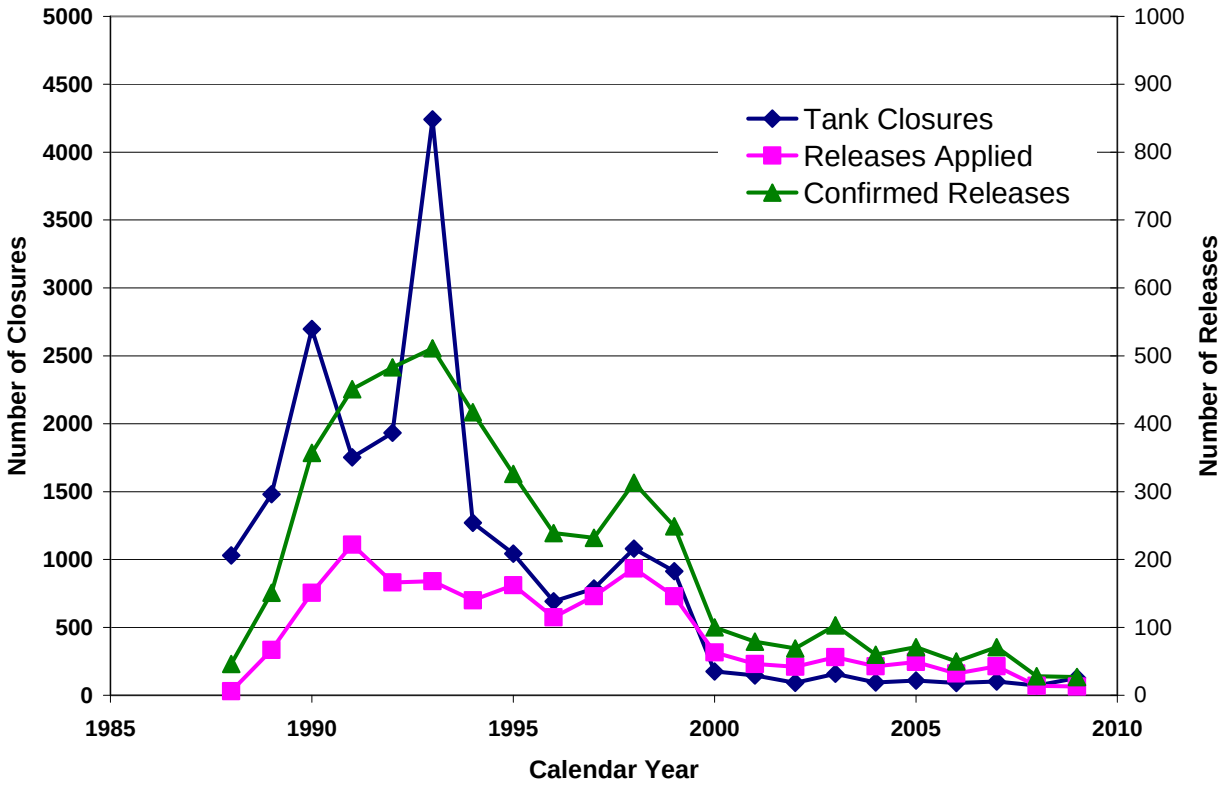
The number of confirmed releases, and therefore the number of releases applying for eligibility, appears to be related to the number of tank closures. The number of releases applying for eligibility, the number of confirmed releases, and the number of tank closures between 1988 and 2007 have been plotted in Figure 9, below. The scale for the number of closures is indicated on the left, while the scale for the number of releases is provided on the right. The correlation coefficient of the number of tank closures by year and the number of confirmed releases by year (0.823) indicates a high positive relationship between the two sets of data. The correlation coefficient between of the number of tank closures by year and the number of releases applying for eligibility each year (0.667) indicates there is a moderate relationship between closures and requested assistance from the Fund. The spike in closures that occurred in 1993 affects the correlation with releases, though not significantly.

New Releases

The number of new releases appears to be decreasing. As described in the previous section, the number of releases is related to the number of tank closures. Tank closures are seen as a function of the regulatory environment. New Department requirements are focused on newly replaced or installed underground storage tanks.

An estimate of new releases cannot adequately be obtained from all of the available data on tank closures and releases. However, the last eight years may provide a reasonable estimate. In the three curves depicted in Figure 9, below, the number of tank closures and release discoveries are shown to increase during implementation of the federal and State regulatory framework, to peak in relation to regulatory changes, to decline over a period of several years, and then remain steady for a period of nine years. With no

Figure 9. Comparing Tank Closures to Releases



expectation of significant regulatory changes, it is this steady period that may provide the best estimate of future releases. Although the period from 2000 through 2009 appears to be constant, each of the curves actually exhibits a declining trend over that period of time. Regression analysis indicates that closures decline by about seven each year, confirmed releases decline by nearly seven each year and releases applying for eligibility decline by more than four each year during the nine year period. While regulatory

changes are expected to have negligible impact on tank closures and releases discovered, there still remains some uncertainty. The average number of confirmed releases between 2000 and 2009 is 66, with a standard deviation of 26 releases. The average number of releases applying for eligibility between 2000 and 2009 is 40, with a standard deviation of 16 releases. These statistics estimate the number of confirmed release per year to be between 40 and 92, with approximately 26 to 56 applying for eligibility.

The Board is examining strategies associated with development of inspection requirements for aboveground storage tanks. This effort is intended to reduce the number and severity of releases from aboveground storage tanks and encourage owners to purchase tank insurance. Many aboveground storage tanks do not comply with current storage tank standards. Older installations are only required to be in compliance with regulations in place at the time of tank installation. Compliance of existing tanks with current standards is often only required if the aboveground storage tank system is upgraded. Over the long term, compliance with current standards will result in a decline in the number of releases from aboveground storage tanks. The Board also recognizes that it is important to balance this strategy with available funds.

Other Potential Impacts

Although we may have expectations associated with new and historical releases, possible regulatory changes, the role of insurance, and changes in the fee would change long-term Fund liabilities. For instance, implementing a mixing zone, which would allow acceptable levels of petroleum constituents in the environment where there is no risk to human health or the environment, would increase release closures and reduce cleanup costs.

Impacts of Changes in State and Federal Regulations

The Board is following the progress of State and Federal regulations that may impact the Fund. The federal regulations being monitored include the Energy Policy Act of 2005, the requirements for Spill Prevention Control and Countermeasure (SPCC) Plans under the Oil Pollution Prevention and Response (Oil Pollution Prevention) regulations and the Corporate Average Fuel Economy (CAFE) regulations. State regulatory changes with potential impact to the Fund include Senate Bill 97 (2009), rule changes promulgated by the Department in response to the Energy Policy Act and updates to risk based corrective action requirements.

The underground storage tank provisions of the Energy Policy Act are aimed at reducing underground storage tank releases to the environment. Additional details of this act can be found in the Petroleum Tank Release Compensation Board (PTRCB) 2008 biennial report. The Department promulgated rule changes that require all underground storage tanks, newly replaced or installed, to have secondary containment. With secondary containment now required, there is no longer a need for a statutory incentive on double-wall tank systems. The 2009 legislature passed Senate Bill 97 which removed this incentive language from the statute, thus requiring a copayment consistent with single wall tanks for releases discovered and reported after October 1, 2009. Provisions intended to reduce the number of releases, and possibly the severity of contamination, while retaining the required copayment is expected to reduce the burden on the Fund.

The Spill Prevention Control and Countermeasure regulation is intended to keep oil from reaching navigable waters and adjoining shorelines, and to contain discharges of oil from aboveground storage tanks (ASTs). Additional details of this act can be found in the PTRCB 2008 biennial report. The SPCC rule is designed to protect public health, public welfare, and the environment from potential harmful effects of oil discharges to navigable waters and adjoining shorelines, but not necessarily to local soils and groundwater. The requirement to develop, implement, and revise the SPCC Plans, as well as train

employees to carry them out, is expected to minimize the impact of AST releases on the environment and reduce corrective action costs that often become Fund-claimed costs.

The Corporate Average Fuel Economy (CAFE) standards may increase fuel economy and therefore reduce fund revenue. The CAFE regulations were first enacted by the US Congress in 1975, and were intended to improve the average fuel economy of cars and light trucks sold. In 2011, the standard will change to include many larger vehicles. In 2002, a committee of the National Academy of Sciences wrote a report on the effects of the CAFE standard (Effectiveness and Impact of Corporate Average Fuel Economy (CAFE) Standards, Board On Energy and Environmental Systems, 2002). The report's conclusions include a finding that, in the absence of CAFE, and with no other fuel economy regulation substituted, motor vehicle fuel consumption would have been approximately 14 percent higher than it actually was in 2002. Therefore, some of the decline of fuel consumption appears to be attributable to CAFE standards. It is possible that the 2011 change could continue to reduce fuel consumption and therefore reduce the growth rate of fuel used in Montana. This increased fuel economy, combined with poor economic conditions, may result in a reduction in growth or even a decline in fuel sold, creating an even larger disparity between fund revenue and consumer costs.

Senate Bill 97 (the Bill), passed in 2009, modified the owner/operator co-payment for double-wall tanks, allowed insurance reimbursements to be attributed towards copayment, and increased in the Fund's floor and ceiling. The federal Energy Policy Act of 2005 resulted in a State requirement that owners/operators upgrade to double-wall underground storage tanks, eliminating the need for the Fund to provide a financial incentive for owners/operators to install double-wall tanks. Therefore, the Bill required releases from a double-wall tank system discovered on or after October 1, 2009 to have the same co-payment as releases from single-wall tank systems. In addition the Bill allowed Fund eligible costs that are paid by an insurer to be considered to have been paid by the owner or operator toward satisfaction of the 50% share requirements, provided the owner or operator receives the payment or reimbursement from the insurer before applying for reimbursement from the board. This language should provide

incentive for owners and operators to have private insurance and to make an insurance claim before applying to the Fund for cost reimbursement. Encouraging owners/operators to use insurance as the preferred reimbursement resource should help spur early insurance company involvement, eliminate the need to subsequently subrogate for covered cleanup activities, and encourage owners/operators to obtain release insurance.

The Bill also increased both the fund ceiling and the floor. This change should assist the Fund in timely management of available funds during possible limit periods and help to prevent a negative fund balance. The changes made by the Bill should improve fund solvency over the long term. The Bill evolved from discussions held before the Petroleum Tank Release Fund Subcommittee, formed in the spring of 2008 by the Environmental Quality Council (EQC) and the Legislative Finance Committee (LFC).

Other Board Activities

The Board continues to push forward initiatives intended to improve fund solvency and prevent releases. The Board is currently proposing rule changes in an effort to coordinate rule language with Senate Bill 97 statutory changes, update applicable rules with current Fire Marshal regulations, and to minimize the likelihood of accidental releases. The Board's previous rules regarding time limits on contesting a Board decision were annulled by the enactment of the Bill and are currently being removed form rule. The rule changes also include replacing references to the Uniform Fire Code with International Fire Code references.

The Board is also working on a self-inspection program for aboveground storage tank systems. The intent is to encourage owners and operators to upgrade facilities to current Fire Marshal-accepted standards and implement measures to prevent spills. The Board has worked with the State Fire Marshal and other interested parties to develop a

draft checklist, which is available on the Board's web site, at: http://deq.mt.gov/pet/Forms/PDFS/SelfInspectionChecklist120208.pdf.

In addition, the Board is working with the Department of Environmental Quality to evaluate a risk-based closure alternative. This concept was discussed at the May 2010 Environmental Quality Council meeting under the title of "mixing zones". Remediation costs can likely be reduced by allowing reduction in petroleum mass or concentration through naturally occurring physical, chemical, and biological processes, such as; biodegradation, dispersion, dilution, adsorption, and volatilization. This proposed approach would require assessment regarding hydrogeologic conditions at a site to ensure that petroleum concentrations will not increase over time and will remain protective of public health and safety and the environment.

Availability of Petroleum Storage Tank Liability Insurance

Petroleum storage tank pollution insurance coverage is available for facility owners in Montana. However, it is not yet practicable for all facilities that are currently storing or that have in the past stored petroleum to obtain private insurance at a reasonable cost. Most insurance companies are willing to provide pollution coverage for facilities that are in compliance with federal and state tank requirements and that have no historical contamination. Most newly constructed facilities meet these criteria. Other insurance companies will provide coverage for facilities that have been cleaned up to state standards and have been provided a "no further corrective action" letter by the State. These would be active facilities that have had a release and have completed all necessary corrective action at the site. It is difficult to obtain private insurance for facilities that have releases currently being investigated or remediated and for facilities that are no longer storing petroleum products but where contamination may exist.

The Board continues to encourage the use and availability of insurance. As described in this report, Senate Bill 97 provides an incentive to the owner/operator to make use of available insurance. In addition, the Board is working to enhance the regulatory framework for petroleum storage tanks in an effort to attract insurance providers to Montana to provide private insurance at low premiums. Working towards inspections of aboveground storage tanks is an example of enhancing the regulatory framework.

The role of insurance in the future of the Fund has been the subject of past biennial reports and has been examined by legislative Subcommittees. Other states have transitioned or attempted to transition to private insurance, with mixed results. The Board has been communicating with insurance providers in an effort to understand the challenges limiting availability of insurance. Although Montana is not ready to transition to a system that requires tank owners and operators to obtain private insurance to pay for petroleum cleanups, the Board continues to look for ways to encourage the use and availability of insurance so that transition may become possible.

The Petroleum Tank Release Cleanup Fee

The petroleum fund program was established to protect public health and safety and the environment, provide adequate financial resources for partial reimbursement to owners or operators of petroleum storage tank systems for costs, expenses and other obligations incurred as a result of releases of petroleum products from petroleum storage tank systems, provide petroleum storage tank owners with incentives to improve tank facilities in order to minimize the likelihood of accidental releases, and to allow underground storage tank owners to demonstrate financial responsibility as required by the EPA. Financial responsibility, as defined by the EPA, may be demonstrated by any combination of the following: private insurance, self insurance, trust fund, guarantee, surety bond, letter of credit, state assurance fund. The Montana Petroleum Tank Release Cleanup Fund is approved by the EPA as a state assurance mechanism. Even with all the available financial responsibility methods, the Fund continues to play a major

active role in the cleanup of releases from underground and aboveground petroleum storage tanks.

Even though several activities have been enhanced, market conditions continue to place demand on the Fund. The number and severity of releases should decline because fewer inactive facilities remain that may have historical contamination, and with improved preventative requirements at active facilities. This decline, along with more releases being closed and insurance incentives, should reduce long-term liabilities for the Fund. However, with reduced fuel use due to economic conditions and higher CAFE standards, the Fund revenue will be unable to keep pace with the cost of goods. Therefore continued collection of the petroleum tank release cleanup fee is necessary to protect public health and the environment.

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Definitions

Consumer Price Index - An index prepared and published by the Bureau of Labor Statistics of the Department of Labor which measures average change in prices over time in a fixed market basket of goods and services typically purchased by consumers. The Consumer Price Index is one way the government measures the general level of inflation. http://www.bls.gov/cpi/

Coefficient of Determination - Compares the fitted (estimated) curve and actual data, and ranges in value from 0 to 1. If it is 1, there is a perfect correlation between the fitted curve and the data. — At the other extreme, if the coefficient of determination is 0, the fitted equation is not helpful in predicting values.

Correlation - Refers to relationship between two variables during a period of time which indicates whether and how strongly pairs of variables are related.

Fiscal Year - The State of Montana Fiscal Year begins on July 1 of each year and ends on June 30 of the following year.

Least-squares - The method of least-squares assumes that the best-fit curve of a given type is the curve that has the minimal sum of the deviations squared (least square error) from a given set of data. The least-squares line method uses a straight line ($y=mX+b$) to approximate the given set of data (x_1,y_1), (x_2,y_2), …..(x_n,u_n).

Subrogation - Assuming the legal rights of a person for whom expenses or a debt has been paid. Typically, subrogation occurs when the Board, which pays owners and operators for corrective action costs, sues the insurance company which the owner or operator contends had obligation to indemnify them.

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