Montana Department of
LABOR & INDUSTRY

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WEIGHTS AND MEASURES METER FEE INCREASE

A notice of intent to adopt higher meter fees was recently filed by the Weights and Measures Bureau with the Business Standards Division of the Department of Labor and Industry to increase meter license fees. This document is intended to provide information on Weights and Measures and provides the following:

- GENERAL INFORMATION & MISSION
- IMPACT OF PROGRAM
- VALUE OF PRODUCTS DETERMINED BY METERS AND THE IMPACT IF THEY ARE OUT OF TOLERANCE.
- MAJOR ISSUES RAISED DURING THE PUBLIC HEARING AND WRITTEN COMMENT PERIOD

GENERAL INFORMATION ABOUT THE BUREAU

Montana's Weights & Measures Bureau has 11 total FTE positions, including the Bureau Chief, 8 Inspectors, 1 Metrologist, and 1 Administrative Staff. Our total budget was $1.02 million in FY2012. Weights & Measures device licenses are part of the DOR One Stop Licensing system and licenses over 23,500 devices statewide, including weighing and measuring (volumetric) devices.

The Bureau tests the following types of meters:

- Retail motor fuel, gasoline & diesel
- Wholesale truck, stationary bulk, hi-flow, and rack, including refineries and pipeline terminals
- LPG (propane), truck and stationary
- Aviation fuel, truck and stationary**
- Industrial, chemical, and pesticide

The Bureau operates eleven provers mounted on trailers: two LPG provers, two retail test units, four 100 gallon fuel provers, one 50 gallon prover, and a 100/500 gallon aviation fuel prover. **The Bureau operates the only 500 gallon prover in the state and responds to the needs of all airports statewide.

MISSION

The over-arching mission of the Weights and Measures Bureau is to provide equity in the market place. Testing meters ensures that consumers are getting what they pay for and that businesses are not giving product away. When businesses are all licensed and tested in a consistent manner, they all follow the same rules and compete on a level playing field.

IMPACT OF WEIGHTS AND MEASURES

The National Conference on Weights and Measures (NCWM) recently reported that a typical weights and measures inspector discovers and corrects an average of $2 million dollars in trade inequality each year. NCWM estimates that a typical weights and measures program has an impact on over half of a state's gross domestic product (GDP). Montana's GDP was over $38 billion in 2011, so based on this information Montana Weights and Measures may impact over $19 billion.

In 2011, over 498 million gallons of gasoline and 268 million gallons of diesel fuel was sold in Montana, resulting in $198 million collected in fuel tax revenue. The Bureau tests these meters, helping to ensure the correct amount of tax is paid.

The Bureau tests different types of meters and the value of the products adds up fast. If a meter is out of tolerance, the overall amount consumers or business owners could be losing is significant. For example, assume a retail petroleum meter registers 1000 gallons a day at $3.70 a gallon. The maintenance tolerance for a retail meter with a flow rate of 20 gallons or less per minute is +/- 6 cubic inches for a 5 gallon test. One cubic inch equals 0.9 tablespoons of liquid, and a gallon contains 231 cubic inches of liquid at 60 degrees Fahrenheit. What if that meter is out of tolerance by one cubic inch per gallon? One cubic inch per gallon of gasoline would be worth about $0.016 and total 4.33 gallons per day, amounting to over $16.00 per day and $5,800.00 per year. Although this example is extreme, we have seen meters off by this amount. If a meter is off by just 1 cubic inch for the 5 gallon test, or about a tablespoon, the total is $3.20 per day or $1,169.00 per year.

Research has shown that a liquefied petroleum gas (LPG) delivery truck may deliver more than 300,000 gallons per year to consumers. The maintenance tolerance on an LPG meter is 1.0 percent. If a truck delivers gallons of LPG at $1.70 per gallon and it is off by 1.0 percent, the total would be $5100 a year. Note that $1.70 a gallon was a recently quoted summer rate, and rates increase significantly during the winter.

ISSUES RAISED DURING THE PUBLIC HEARING AND WRITTEN COMMENT PERIOD

One person attended the public hearing on July 12th to oppose the meter fee increase. Nineteen written comments opposing the fee increase were submitted before the July 22nd deadline for submission. Below is a summary of the major issues raised by opponents:

- Size of the increase
- Meter fees shouldn't increase just because scale fees increased
- Is it necessary for Montana to test every year
- How does Montana's inspection frequency compare to other states.
- How do Montana's fees compare to other states.
- How many meters are actually tested each year versus not tested
- How many rejected meters favor the consumer versus the business owner

SIZE OF THE FEE INCREASE AND WHY IT WAS REQUESTED

Several comments opposed the fee increase on the basis that the amount was excessive. The Bureau acknowledges the increases are substantial but maintains that additional revenue must be raised if we are to operate fully staffed, maintain our current equipment and purchase better testing equipment to meet our statutory requirement to test all meters on an annual basis.

Below are the current and proposed meter fees that are established in ARM 24.351.215. There are four different meter licensing fees and the proposed increases range from 25.3 to 28.6 percent. A comparison to how much other states charge is provided further on in this report.

Meter Designation	Capacity	Current Fee	Proposed Fee
PA	Fuel meter 20 gpm or less	$21	$27
PB	Fuel meter 20 gpm to 130 gpm	$70	$88
PC	Fuel meter over 130 gpm	$83	$104
PD	LPG Meter	$102	$128

The fees for a retail motor fuel meter were $14 in 1993, $16 in 2000, $21 in 2006 and the proposed fee for 2013 is $27. The fees for the other meters were raised essentially the same percentages over the past 20 years. The last fee increase for meters, in October 2006, was approximately 25 percent. The Bureau has seen significant increases in budget expenditure since that time, including 30% for personal services, 42% for fuel, 23% for in-state lodging and 28% for rent.

Research has shown the Bureau has had the same number of FTE for over 20 years but it has often operated with less staff because of inadequate funding. It has only operated with a full inspection staff for 25 months since 2006 and there has been one vacant inspector position since January 1, 2012, due to insufficient funding. The Bureau is not seeking any additional FTE with this increase; the increase will allow us to operate fully staffed for several years.

The Bureau needs to purchase new or updated meter testing equipment. Two new retail testing units were purchased in 2000 and a second LPG prover in 2003. We hope to purchase more efficient testing equipment with the revenue from the meter fee increase. Safety is a concern, given how busy these stations are, and it may be possible to lower worker's compensation claims with better equipment. A five gallon test measure (used to test the majority of retail meters) weighs nearly 60 pounds; inspectors test meters all day using a very repetitive motion. Also the number of stations with above ground fuel storage tanks is increasing every year, making returning fuel to the tanks more difficult and less safe. Better equipment is needed to solve this problem. One state recently reported they were able to reduce injury claims by obtaining more efficient and less labor intensive equipment. A more thorough discussion on the efficiency, safety and other benefits of obtaining better equipment will follow later in the report.

METER FEES SHOULDN'T INCREASE JUST BECAUSE SCALE FEES INCREASED

One commenter stated the scale fee increase approved during the last legislative session does not justify raising the fees for meters. The Bureau reviewed data for scale and meter license revenue dating back to 1995 and the fees have been adjusted over this time period to maintain a balance such that meter and scale license fee revenue each provide half of our total testing revenue. In fact, the total revenue from meter and scale license fees have remained within a few percent of each other for the past 9 years. The recent increase for scale license fees and the proposed meter fee increase were designed such that each will provide half of the total testing revenue needed by the Bureau. Scale fees are projected to provide $579,702 and meters are projected to provide $588,785. There are four different licensing fees for scales and the increases approved during the last legislative session ranged from 22.2 %to 26.92 %. For meters there are 5 different licensing fees and the increases ranged from 25.3 % to 28.6 %. A minimal amount of revenue is also generated by metrology lab fees, late payment penalties, Country of Origin Audits and special inspections.

The actual expense of testing meters versus scales has been very difficult to determine because inspectors often test both scales and meters in a given day. In some cases business locations have both scales and meters. Some inspectors spend more time testing meters, especially in the western part of the state. In the eastern part of the state, more time has generally been spent testing scales. For other parts of the state, inspector time appears to be about equally split. On January 1, 2013, we implemented a new time keeping system that we hope will provide an accurate measure of the time spent testing each type of device. A full inspection cycle of one year of data is needed to obtain accurate numbers, since testing for some devices tends to be seasonal. The new data will be available at the end of the year.

TESTING FREQUENCY

Several comments were made that Montana is one of the few western or neighboring States still testing on an annual basis. Research showed that some states test annually while others have gone to 2 or 3 year inspection intervals. Some states have even implemented a risk-based testing schedule. It must be noted that information collected from states with a longer inspection interval suggests that they have a higher percentage of meters out of tolerance. The Bureau acknowledges that the number of retail petroleum meters out of tolerance has decreased over the years due to better technology. The value of the products dispensed and the impact on consumers needs to be considered if the testing interval were to change. Some states such as Arizona have implemented high civil penalties and reported this is effective to help ensure compliance. Last year they collected over $350,000.00 in civil penalties for gas pump violations. Below is a breakdown of the frequency of testing for neighboring or western states.

SUMMARY OF METER TESTING FREQUENCY BY WESTERN STATES

Montana	Annually
Oregon	Annually
New Mexico	Annually
Idaho	Annually
Alaska	Annually

California	Reported most are tested on an annual basis
North Dakota	15 month testing interval by private companies, state only spot-checks
Colorado	2 years
Arizona	2 years by law but do a central testing in the spring and fall and after 6 years
South Dakota	2 years
Utah	2-3 years
Washington	3 years
Wyoming	Risk based analysis
	Reviews all records of inspection annually
	Locations within upper 1/3 of all violations tested annually
	Locations within middle 1/3 of all violations tested every 2 years
	Locations within lower 1/3 of all violations tested every 3 years

HOW MONTANA'S FEES AND FUNDING SOURCES COMPARE TO OTHER STATES

Several commenters said Montana's fees were 3 to 5 times higher than neighboring, surrounding or other states. Specifically cited were Idaho, Colorado and Washington. A major factor to consider is Montana's large geographic area. Our inspectors travel up to 180,000 miles in a year. Our inspection regions are much larger than other states (only Alaska is larger) and results in higher expenses.

Idaho reported lower fees and tests on an annual basis, but 67% of the program is funded by the general fund, not by fees. Based on these percentages, if the full amount of costs were paid by the meter owners, fees for large capacity meters and LPG meters would be higher than Montana is proposing. It should be noted that Idaho charges by grade as opposed to Montana's charge by metering chamber system. Older dispensers are constantly being upgraded to new dispensers which don't have a separate meter for midgrade, sometimes called "blender pumps." Since the Bureau does not charge a license fee for testing midgrade on blender pumps, the total licensing fee often decreases for a gas station when they upgrade their pumps. It is estimated that over 50% of the dispensers in Montana now have blender pumps for midgrade, so our inspectors are testing three grades for the cost of two. Note that if a station installs a diesel fuel hose on a new dispenser, as some stations do, the amount of license fees collected per dispenser will not change, but our inspectors are testing four grades for the license price of three. Idaho reported they are currently reviewing fees and may request increases during the next legislative session.

Colorado reported they test at least once every two years and are funded by a $0.01/ gallon fuel surcharge. Attempts were made to obtain more information to make comparisons but were unsuccessful.

Washington reported testing meters every three years and the annual registration fee is lower than Montana's. However, the amount paid by meter owners over three years as shown below for this one test is higher than Montana's proposed annual fee for retail motor fuel and medium capacity meters. Washington also charges by grade or hose so they are not impacted when stations upgrade to blender pumps.

Montana

Retail fuel 20 gpm or less	Currently $21; proposed $27
Meter 20 to 130 gpm	Currently $70; proposed $88

Washington

Retail fuel 20 gpm or less	$10 per year, fees paid over 3 years $30
Meter 20 to 100 gpm	$32 per year, fees paid over 3 years $96

Oregon was the only state that reported receiving all funding from meter license fees. Oregon also tests on an annual basis, like Montana, but their fees are considerably higher than Montana's proposed fees. In fact, fees for the larger capacity meters are two to three times higher than Montana's proposed fee. Of all the western states, their program is most similar to Montana's with annual testing, per-meter fees, and because the program is funded by fees alone. Below is a comparison of Montana fees to Oregon fees.

Montana

Retail fuel 20 gpm or less	Currently $21; proposed $27
Meter 20 to 130 gpm,	Currently $70; proposed $88
Meter over 130 gpm,	Currently $83; proposed $104
Liquified Petroleum Gas (LPG)	Currently $102; proposed $128

Oregon

Retail fuel meter 20 gpm or less	$37
Meter 20-150 gpm	$166
Meter over 150 gpm	$247
Liquefied Petroleum Gas	$242

Below is a breakdown of the frequency of inspections, meter fees and the funding sources for all neighboring and western states. It is difficult to compare fees for different states when they have different funding sources, testing schedules, definitions of what is tested, and the fees categories are often based on different capacities than Montana's fees. Some of these states responded to a request for information and if they didn't it was obtained from their website or other sources. How the information was obtained is provided for each state.

Montana

Testing frequency	Annually
Funding Source	Annual license fees
Fees	Retail fuel 20 gpm or less, Currently $21; proposed $27
	Meter 20 to 130 gpm, Currently $70; proposed $88
	Meter over 130 gpm, Currently $83; proposed $104
	Liquified Petroleum Gas (LPG), Currently $102; proposed $128

Oregon (Agency response)

Testing frequency	Annually
Funding Source	Annual license fees
Fees	Retail fuel meter 20 gpm or less is $37
	Meter 20-150 gpm is $166
	Meter over 150 gpm is $247
	Liquefied Petroleum Gas is $242

New Mexico (Agency response)

Testing frequency	Annually
Funding Source	General Fund
Fees	NA

Idaho (Agency response)

Testing frequency	Annually
Funding Source	33% from annual licensing fees and 67% from general fund
Fees	Retail fuel 20 gpm or less, $6 per grade
	Meter 20 to 30 gpm is $10 per grade
	Meter 30 to 150 gpm is $33 per grade
	Meters over 150 gpm is $40 per grade
	Liquefied Petroleum Gas is $60 per meter

Note: Idaho charges by grade; Montana charges by the meter.

Alaska (Agency response)

Testing frequency	Annual
Funding Source	Equipment, travel, and services 100% general fund
	Personal services are 50% general fund and 50% device annual registration fees
Fees	25 gpm or less is $19
	25 to 150 gpm is $38
	More than 150 gpm is $75

Colorado (Agency response)

Testing frequency	Every 2 years
Funding Source	0.01%/gallon fuel surcharge
Fees	NA

Arizona (Agency response and website)

Testing frequency	2 years by law but do a central testing in the spring and fall and after 6 years
Funding Source	Inspection fee
Fees	Meter 12 gpm or less is $12
	Meter 13 to 150 gpm is $36
	Meters over 151 to 500 gpm is $90
	Liquefied Petroleum Gas is $90 per meter

Washington (Agency response – several counties and cities have their own testing programs)

Testing frequency	3 years
Funding Source	Annual device registration fee
Fees	Retail fuel 20 gpm or less is $10 per year for each grade
	Meter 20 to 100 gpm is $32 per year for each grade

Note: The State charges by grade where as Montana charges by the meter.

Wyoming (Website and agency response)

Testing frequency	Risk-based testing. Reviews all records of inspection annually.
	Locations within upper 1/3 of all violations tested annually
	Locations within middle 1/3 of all violations tested every 2 years
	Locations within lower 1/3 of all violations tested every 3 years
Funding Source	Not able to determine
Fees	$25 for 5 or less devices
	$50 for 5-11 devices
	$75 for 11 or more

South Dakota (Website and NCWM Report)

Testing frequency	2 years
Funding Source	50% general fund and 50% from fees.
	Collect a license fee when they inspect.
Fees	Per pump - $14
	Truck meter $46
	Liquefied Petroleum Gas meter is $68
	Liquefied Petroleum Gas Bulk is $94

Note: Fees doubled or nearly tripled from 2007 to 2009.

North Dakota (Website and agency response)

Testing frequency	Owner must have tested once every 15 months by registered service companies.
	State only spot checks retail meters
Funding Source	General Fund and inspection fees
Fees	$11 for retail dispenser
	$53 for pipeline or transport meter

Utah (Website and agency response)

Testing frequency	2-3 years
Funding Source	General fund and license fees
Fees	Annual registration fee 1-12 dispensers or one meter $30 13-24 dispensers or 2-3 meters $90 25-36 dispensers or 4-6 meters $150 37 or more dispensers or 7 or more meters $290

Note: Utah reported they are currently looking into raising all testing fees. These devices are counted as individual grades per side, per hose of dispenser, including diesel.

California (Agency response - State annual report. Each county has a testing program)

Testing frequency	Reported most meters are tested annually but not less than once every 2 years
Funding Source	Annual registration and business fees collected by each county
Fees	Business fee not to exceed $100, plus fees sufficient to support the county testing program, State has set the maximum the amount the fee can be. Retail Motor Fuel, Varies - fees sufficient to support the county program Wholesale meter maximum is $75 Liquefied Petroleum Gas meter maximum is $185 per meter

THE BUREAU'S EQUIPMENT, HOW TESTING HAS CHANGED AND WHY BETTER EQUIPMENT IS NEEDED

Some commenters suggested that the Bureau needs to evaluate new technology and obtain more reliable equipment. The Bureau agrees and intends on purchasing better equipment with funds from the meter fee increase.

There are several reasons better equipment is needed. Gas stations are getting bigger, busier and the underground tanks where the fuel is returned are often further away than they used to be. In addition all dispensers are now prepay and generally take longer to test because the clerk must reset the pump for each test. The majority of the meters are still tested by "hand" or with 5 gallon test measures that are hauled on a cart or carried by hand. Montana currently has two retail testing trailer units with 110 gallon tanks for each product, allowing an inspector to test more meters before having to return the fuel to the underground tanks. While these units help, the inspectors report they are also heavy to haul around and difficult to maneuver in smaller or more crowded stations. Part of the fee increase would be used to purchase more efficient testing equipment like "slip-in" retail motor fuel test units that go in the back of a pickup truck, saving fuel costs over hauling a trailer and also making our inspectors more efficient. Some states have purchased these units for all inspectors who test fuel meters. Since Montana inspectors must share and shuttle equipment around, more equipment would mean less time shuttling equipment

Safety is also a concern. Some inspectors have had very close calls and have had test measures, funnels or safety cones run over by vehicles. Fortunately no serious injuries have occurred. Slip-in testing units would provide better protection for the inspector and also might lead to fewer worker compensation claims caused by use of the five gallon test measures all day.

The Bureau needs to purchase better and more efficient testing equipment. Two retail test units were purchased in 2000 and a second LPG test unit was purchased in 2003. Some of the retail, wholesale and LPG provers being used today are believed to be over 30 to 40 years old. Most of the 11 provers are constructed of carbon steel that have been sandblasted and repainted over the years but the rust keeps returning quicker each time. Obviously a considerable amount of time and expense is spent repairing and maintaining this old equipment.

As explained earlier the Bureau has no plans to hire additional full time staff with funds from this fee increase and there have been 8 inspector positions for nearly 20 years. With better technology and newer and more dependable equipment, the Bureau will operate more efficiently, testing more meters with the same number of staff.

NUMBER OF METERS TESTED AND REJECTED AND A COMPARISON OF REJECTION RATES WITH OTHER STATES

There were several comments about the rejection rate for meters and that all meters weren't tested every year. The Bureau acknowledges the number of retail petroleum meters out of tolerance has decreased over the years likely due to better technology. Below is the data for calendar years 2011 and 2012.

Montana Weights and Measures 2011

	20 gpm or less	10 to 130 gpm	Over 130 gpm	LPG	Totals
Licensed	13,543	1,332	207	588	15,670
Accepted	11,164	1,032	153	461	12,810
Rejected141	141	56	9	58	264
Total Tested	11,305	1,088	162	519	13,074
% Tested	83.5%	81.7%	78.3%	88.3%	83.4%
% Accepted	98.8%	94.9%	94.4%	88.8%	98.0%
% Rejected	1.2%	5.1%	5.6%	11.2%	2.0%

Montana Weights and Measures 2012

	20 gpm or less	10 to 130 gpm	Over 130 gpm	LPG	Totals
Licensed	13,375	1,337	215	584	15,511
Accepted	10,807	891	160	448	12,306
Rejected	186	45	4	36	271
Total Tested	10,993	936	164	484	12,577
% Tested	82.2%	70.0%	76.3%	82.9%	81.1%
% Accepted	98.3%	95.2%	97.6%	92.6%	97.8%
% Rejected	1.7%	4.8%	2.4%	7.4%	2.2%

The Bureau acknowledges that it has not been able test all meters annually as required by MCA 30-12-205. The number of licensed devices (scales and meters) has continued to increase over the years and an additional inspector position should probably have been requested at one of two past legislative sessions but that didn't appear likely to happen. There were 20,737 licensed devices in 1999 and over 23,500 today. If the eight inspectors on staff in 2011only had to test the number of devices licensed in 1999, they would have tested over 97% of all licensed devices. We have only operated with a full inspection staff for 25 months since 2006 and there has been one vacant inspector position since January 1, 2012, due to insufficient funds. The Bureau believes that if it was fully staffed and had newer and more efficient and dependable testing equipment the number of devices tested could improve significantly.

Data on rejection rates was requested from other neighboring and western states but over half did not provide any data, nor was it available on their websites. It was quickly determined that the data is difficult to interpret and compare to Montana. Some states reject meters for minor violations such as a label or seal is missing or a light or LCD is burned out. Montana does not generally reject a meter for minor violations such as those listed above but will instead inform the meter owner the problem needs to be corrected and document it. Most states, including Montana, do not record the reason meters are rejected. The rejection rates that were reported for Montana and other states are significantly higher for LPG than other meters. Below is data on rejection rates.

Reported rejection rate for meters

Montana	All meters 2.2%
Colorado	All meters less than 1%
New Mexico	All meters 4.5 % with 2.2% for meters out of tolerance
Idaho	All meters 5%
Oregon	7.1 to 15.3 % depending on the type of meters
Washington	All meters 10 %
California	Retail motor fuel 5.4%, Wholesale 5.6%, LPG 16.1%
Utah	All meters 11%
South Dakota	Not able to determine
Colorado	Not able to determine
Wyoming	Not able to determine
Nevada.	Not able to determine
Arizona	Has a detailed annual report but not able determine by percentage
North Dakota	Not able to determine
Alaska	Not able to determine

One interesting point is that station owners now have their meters tested more frequently by private companies or by their own employees because they obviously don't want to be giving product away. It is common for a private company to come in after the Bureau has tested and not only recalibrate the meters that were rejected but also the meters on the plus side (giving fuel away) even though they were within tolerance. Weights and Measures law requires all meters be adjusted as close as practical to a zero value but must be within the prescribed tolerance.

THE NUMBER OF REJECTED METERS IN FAVOR OF THE CONSUMER VERSUS THE BUSINESS OWNER

There were several comments that meters will mostly give away fuel when out of tolerance and this is a good reason to go to longer inspection interval. The Bureau doesn't track this type of data and it was determined that most other States also do not track this data. Of the States that were asked to provide this data only New Mexico responded they track this data and reported that about 66% of the meters that were out of tolerance are in favor of the consumer and giving fuel away. While no official data is available the Bureau believes that more meters do tend to give product away rather than short the consumer.

The Bureau intends on pursuing a data base with funds from the fee increase to interact with the One Stop System that would provide actual inspection data. The One Stop system works well for licensing, fee payment and recording if a meter passes or fails a test, but it does not provide inspection data such as how meters are out of tolerance or if they are in favor of the consumer or business owner. This data is collected on paper forms and the Bureau doesn't have the staff to compile the data for the 23,500 meters and scales in Montana. It is intended this new system would capture this inspection data.