



ANNUAL REPORT

of the

Motor Fuel Quality Program

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Background

The Washington State Department of Agriculture (WSDA) is responsible for administering the state's Motor Fuel Quality Program. Statutory authority for the program is provided in Chapter 19.112 RCW. The program, carried out by the department's Weights and Measures Program, inspects businesses marketing motor fuel at the retail and distributor level. The inspections are conducted across the state on a random basis and are accomplished on-site by using portable octane analyzers and by collecting samples for detailed laboratory analysis. The department uses four portable octane analyzers to test whether the motor fuel dispensed meets the octane number posted on dispensers. The department contracts with Saybolt, Inc., a laboratory located in Tukwila, to conduct the detailed fuel sample analysis on motor fuel that fails the on-site testing. The laboratory analyses determine product compliance with motor fuel specifications of the American Society for Testing and Materials (ASTM). The program also responds to and investigates consumer complaints involving fuel quality, fuel labeling and quantity.

Funding for the Motor Fuel Quality Program is from the Motor Vehicle Account appropriated in the state Transportation Budget. WSDA's appropriation authorized for the 2005-2007 biennium is \$329,000. This funds two FTEs and the costs of contract laboratory analysis of fuel samples and administrative costs. Appropriations for this program have remained essentially unchanged since 1995.

Test Results

Table 1 provides a breakout of gasoline samples by grade with corresponding compliance rates for 2006. The program took a total of 1,106 motor fuel samples in 2006. Of these samples, 1,052 passed on-site analysis using the portable Zeltex octane analyzers. An additional 54 samples failed on-site tests and were submitted to Saybolt, Inc. laboratories for analysis. Only samples failing laboratory tests are reported as noncompliant. In 2006, regular, midgrade and premium product analysis resulted in zero, two, and two samples respectively, that failed to meet minimum octane or quality standards.

Table 1: Motor Fuel Analyses by Grade, 2006

Product	Total Samples Analyzed	Laboratory Analyses	Laboratory Samples Out of Compliance	Compliance Rate*
Unleaded Regular	265	18	0	100%
Unleaded Midgrade	460	18	2	99%
Unleaded Premium	381	18	2	99%
Totals	1,106	54	4	99%

* Compliance rate based on laboratory failure rate among all fuel samples taken.

On-Site Testing Device Performance

Table 2 shows the results of the program's efforts to improve Zeltex device performance through refinements in device calibration. In 2005, 10 percent of samples failed the Zeltex portable octane analyzer test, resulting in 143 samples be submitted for laboratory analysis. In 2006, only 4 percent of samples failed the on-site test. Despite the dramatic decline in the number of samples sent to the lab for analysis, device performance remained fairly stable. The improvements in device calibration resulted in significantly lower laboratory costs with little decline in overall compliance rates. On-site testing device performance will continue to be monitored closely to ensure proper assessment of motor fuel quality in the state.

Table 2: Zeltex Device Performance Comparison, 2005-2006

Year	Total Samples Analyzed	Samples Sent to Laboratory		
		Number	%	Compliance Rate
2005	1,379	143	10%	94%
2006	1,106	54	5%	93%

Complaints

The WSDA Weights and Measures Program received 282 motor fuel complaints in 2006, down 10 percent from the 315 complaints received in 2005 and the 312 complaints received in 2004. Complaint numbers for the last three years are well above the number of complaints received the prior four years, which ranged from a low of 176 in 2002 to a high of 267 in 2000. The complaints are summarized in *Table 3*. Most complaints deal with meter accuracy not fuel quality. Overall, 12 percent of the 2006 complaints were found to be valid.

Table 3. Motor Fuel Complaints, 2005 and 2006

<i>Type of Complaint</i>	2005 Complaints			2006 Complaints		
	<i>Total #</i>	<i># Valid</i>	<i>% Valid</i>	<i>Total #</i>	<i># Valid</i>	<i>% Valid</i>
Fuel Quality	20	2	10%	16	1	6%
Meter Accuracy	282	19	7%	252	27	11%
Price/Signage/Other	13	5	38%	14	7	50%
Totals	315	26	8%	282	35	12%

Program Scope Expanded

Legislation enacted in 2006 (ESSB 6508) expanded the Motor Fuel Quality program's scope to include biofuels, including biodiesel, biodiesel blends and ethanol blends. WSDA worked extensively with stakeholders after passage of the legislation and is now in the process of adopting biofuel quality and labeling standards in rule. The Governor's recommended budget for the 07-09 biennium includes an additional \$1.5 million in the Transportation Budget for WSDA to implement a biofuel quality assurance program. The program will inspect biofuels manufacturing and distribution facilities, conduct field fuel tests, and collect fuel samples to be analyzed using a private laboratory. The proposal assumes a high level of monitoring initially due to unproven industry quality and the importance of quality to the overall success of the state's bioenergy initiative.

Conclusion

The Motor Fuel Quality Program provides regulatory oversight to the approximately 2.7 billion gallons of gasoline and 1.2 billion gallons of taxable diesel fuel sold to Washington motorists in 2006. The program acts as a deterrent for those who would attempt to sell low quality fuel, or misrepresent fuel and fuel prices to Washington motorists. When the program was implemented in 1991 compliance rates were as low as 72 percent; the rates have consistently exceeded 94 percent since 1994. The program continues to be effective and well received by the citizens of Washington State and the retail motor fuel industry.