

Treasure Valley Vehicle Inspection and Maintenance Programs

Annual Review



State of Idaho
Department of Environmental Quality
1410 North Hilton
Boise, ID 83706
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Background

In 2008, the Idaho Legislature enacted and the governor signed into law Idaho Code §39-116B, “Vehicle Inspection and Maintenance Program,” laying the groundwork for requiring vehicle emissions testing in areas of the state where air quality is compromised and motor vehicle emissions constitute one of the top two contributing sources to the pollution. Ada and Canyon Counties meet the criteria specified in the law, as data shows the design value for ozone exceeds 85% of the National Ambient Air Quality Standard (NAAQS) and vehicle emissions constitute one of the top two emissions sources contributing to ozone concentrations in the Treasure Valley.

Ada County has had a vehicle emissions testing program in operation since 1984; the program is managed by the Air Quality Board (AQB). In 2010, vehicle emissions testing became a requirement in Canyon County and the city of Kuna in Ada County. The Idaho Department of Environmental Quality (DEQ) contracts with SysTech International LLC to operate the program in Canyon County and the city of Kuna, per Idaho Code §39-116B(3).

Idaho Code §39-116B(5) directs that “The department shall annually review the results of the vehicle inspection and maintenance program. The review shall include, among other things, an estimate of the emission reduction obtained from the number of vehicles that initially fail the test and then pass after maintenance.” This report summarizes the effectiveness of programs for both Ada and Canyon Counties during calendar year 2013.

Program Effectiveness

The effectiveness of an emissions testing program can be described in terms of its failure rates, compliance rates, and estimated emission reductions. Table 1 shows the failure, compliance, and waiver rates for calendar year 2012 and 2013, along with the total number of vehicles tested. These results are consistent with other inspection and maintenance (I/M) programs throughout the United States.

Table 1. Failure, compliance, and waiver rates.

	Ada 2012	Ada 2013	Canyon 2012	Canyon 2013
Vehicles tested	129,937	127,485	42,323	46,958
Failure rate	10.23%	8.73%	9.99%	10.87%
Compliance rate	97.50%	97.20%	96.10%	96.36%
Waiver rate	0.49%	0.44%	0.35%	0.29%

Failure Rate

Failure rates reflect the percentage of tested vehicles that fail the initial test and are required to either obtain repairs and pass a retest or obtain a waiver due to hardship or repair costs.

Compliance Rate

Compliance rates reflect the percentage of vehicles due for testing that have either passed an emissions test or received a waiver or exemption.

Waiver Rate

The I/M programs in Ada and Canyon Counties offer two forms of waivers: repair waivers and hardship waivers. A repair waiver is available to individuals who spend a minimum amount on emission-related repairs for a vehicle that has failed an emission test. A hardship waiver is granted to

an individual who provides proof that a hardship would be endured to complete the necessary repairs to a vehicle that has failed an emissions test.

Emission Reductions

When Idaho Code §39-116B was enacted in 2008, initial modeling was conducted to estimate the annual ozone precursor emission reductions that would be achieved by the two-county I/M programs. Each year, DEQ uses the latest approved model to evaluate emission reductions to assess the continued benefit of the I/M programs in comparison to the initial estimated reductions.

The initial and calendar year 2013 vehicle emission reduction estimates are summarized in Table 2. The 2013 total Ada County emission reductions are 4% greater, and the Canyon County 2013 emission reductions are 25% greater than was initially estimated.

Table 2. Ozone precursor modeled annual reductions.

Ozone Precursor	2008 Emission Reductions		Calendar Year 2013 Emission Reductions	
	Ada County	Canyon County	Ada County	Canyon County
Volatile organic compounds (tons/year)	293	138	306	169
Nitrogen oxides (tons/year)	275	114	282	147
Total reductions (tons/year)	568	252	587	316

Program Review

Pollutant reductions achieved by the two-county I/M program continue to exceed the reductions expected at the time of the enactment of §39-116B. The levels of the reductions that are being achieved are what is expected for a maturing program as older, failing vehicles are repaired or replaced to comply with the I/M program.

Idaho Code §39-116B and the resulting I/M program were implemented in an effort to prevent the Treasure Valley from being designated nonattainment due to a violation of the ozone NAAQS. Although the Treasure Valley has avoided this designation thus far, the US Environmental Protection Agency (EPA) has proposed a more stringent ozone standard in the range of 65–70 parts per billion. The new standard, which has been delayed several times at the federal level, is required to be promulgated in October 2015. Current ozone levels in the Treasure Valley are at or above the range proposed in the rulemaking for which the EPA is now taking comment.

As part of the ongoing air quality public awareness and outreach program, seasonal public service announcements (PSAs) continue to air on Treasure Valley television stations. The PSAs developed by the AQB and DEQ provide the public with information on air quality issues and specific actions that can be taken to improve air quality.

Conclusion

Results from the Ada and Canyon County programs indicate that both programs are achieving greater emission reductions than were estimated in 2008 when Idaho Code §39-116B was passed by the Idaho Legislature and signed into law by the governor. These results confirm that the two-county testing program is one of the most cost effective of all measures evaluated by the Treasure Valley Air Quality Council to reduce ozone precursors in the Treasure Valley.