REPORT OF THE OFFICE OF ATTORNEY GENERAL
IN RESPONSE TO HOUSE RESOLUTION NO. 577

PRICING FACTORS FOR AUTO EMISSIONS TESTING IN PENNSYLVANIA

GERALD J. PAPPERT
ATTORNEY GENERAL
STRAWBERRY SQUARE
HARRISBURG, PA 17120

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I. **Background**

A. **Review of Emissions Testing by Office of Attorney General**

My Office conducted a review of the emissions inspection program in the Commonwealth pursuant to House Resolution No. 577. An attorney and investigator from my Antitrust Section contacted PennDOT and numerous emissions inspection station operators around the Commonwealth to learn more about the emissions inspection program. They examined these operators to determine whether emissions inspection stations engaged in anti-competitive collusive conduct concerning the price of the emissions inspection and whether emissions inspection stations had knowledge of any other emissions inspection stations engaging in anti-competitive collusive conduct concerning the price of the emissions inspection, in violation of the federal antitrust laws. My staff inquired about the costs incurred by the emissions inspection stations to purchase the necessary testing equipment; to have technicians certified to perform the tests; and to perform an actual emissions inspection inclusive of all labor costs and overhead costs. Furthermore, they questioned how long it takes to complete an emissions inspection; how each test is performed on vehicles from various model years; and how many vehicles have failed the test and why they failed.

B. **The Requirement for Emissions Inspections**

Emissions inspections are not new to the Commonwealth. In the Philadelphia region, certain vehicles\(^1\) have been subject to tiered and targeted emissions inspection requirements since 1984. Likewise, emissions tests have been required in the Pittsburgh region since 1984. Both regions introduced an enhanced auto emissions test in October 1997. A May 2003 settlement of a lawsuit brought by public interest groups\(^2\) resulted in auto emissions testing in some form for the rest of the Commonwealth. The groups sued the Commonwealth because they alleged that the state was not taking steps to comply with the Clean Air Act in a timely manner.

The application of emissions testing varies by regions in the Commonwealth. There are five regions, each of which has different standards from other regions. The level of testing varies by region due to the unique set of environmental concerns and conditions for each region. Not only is this approach used in emissions testing, but also it is used in setting the requirements for certain types of gasoline, such as conventional, reformulated and oxygenated, which vary by region due to environmental concerns and conditions.

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\(^1\)Vehicles, as the term is used in this report, are defined as only being gasoline-powered, consistent with the present application of the emissions inspection programs in the Commonwealth.

\(^2\)The public interest groups are Citizens for Pennsylvania’s Future and the Clean Air Council.
C. Statewide Implementation of the Emissions Inspection Program

The Pennsylvania Department of Environmental Protection ("DEP") and PennDOT have divided the Commonwealth into five regions: Philadelphia, Pittsburgh, South Central, Northern and Other Counties. The listing indicates those regions with the most environmental concerns, as identified by the Environmental Protection Agency, DEP and PennDOT, in descending order, based on the emissions testing and gasoline requirements for each region. Thus, DEP and PennDOT have devised a test program for each region that is appropriate for the needs of each region. The settlement introduced three new emissions tests to Pennsylvania: the visual anti-tampering test; the gas cap test; and the OBD2 diagnostic test. In the areas where testing has been required since 1984, inspections stations have been performing a tailpipe test and, since 1997, a tailpipe test using a dynamometer. The OBD2 diagnostic test is applicable in the Philadelphia, Pittsburgh and South Central regions. The visual anti-tampering test is common in all regions. The gas cap test is applicable in all regions except the Other Counties region.

3The Philadelphia region includes the following counties: Bucks, Chester, Delaware, Montgomery and Philadelphia.

4The Pittsburgh region includes the following counties: Allegheny, Beaver, Washington and Westmoreland.

5The South Central region includes the following counties: Berks, Cumberland, Dauphin, Lancaster, Lebanon, Lehigh, Northampton and York.

6The Northern region includes the following counties: Blair, Cambria, Centre, Erie, Lackawanna, Luzerne, Lycoming and Mercer.

7The Other Counties region includes the following counties: Adams, Armstrong, Bedford, Bradford, Butler, Cameron, Carbon, Clarion, Clearfield, Clinton, Columbia, Crawford, Elk, Fayette, Forest, Franklin, Fulton, Greene, Huntingdon, Indiana, Jefferson, Juniata, Lawrence, McKean, Mifflin, Monroe, Montour, Northumberland, Perry, Pike, Potter, Schuylkill, Snyder, Somerset, Sullivan, Susquehanna, Tioga, Union, Venango, Warren, Wayne and Wyoming.
D. The Tests

The visual anti-tampering test is designed to ensure that certain emissions equipment is present on the vehicle. This test involves putting the vehicle up on the rack to permit the technician to verify the presence of all required equipment on the vehicle. This test is generally required on vehicles that are 1995 and older. The test does not, however, rate the operational efficacy of the required emissions equipment.

The gas cap test is required in all regions except Other Counties. It tests the integrity of the gas cap, making sure it seals properly to prevent the escape of harmful fumes. The test is performed by removing the gas cap from the vehicle, fitting it on the test equipment and subjecting it to pressure for 45 seconds. Operators contend that the overwhelming majority of failures are due to bad gas caps. Oftentimes, this can be remedied by tightening the gas cap until it clicks a few times and the vehicle will pass.

The OBD2 test is performed in the Philadelphia, Pittsburgh and South Central regions. This test is applicable to vehicles that are 1996 and newer. Of note, 61.0%, 61.7% and 55.2% of the total vehicles registered in the Philadelphia, Pittsburgh and South Central regions, respectively, are 1996 and newer. Diagnostic software analyzes the performance of the ignition, fuel metering and emissions systems. Vehicles subject to this test have an OBD2 port that is generally found under the dashboard on the driver's side. Operators connect a wire between the OBD2 port and the personal computer running the OBD2 diagnostic software. Generally, all vehicles that have the "check engine" light activated on their dashboards when presented for the test will fail the test. Occasionally, the check engine light can be triggered by a failure to properly tighten the gas cap. Operators can use their shop scan tools to diagnose the problem for repair.

The enhanced safety inspection is performed only in the region known as Other Counties. This test is applicable to most vehicles weighing 11,000 lbs and less. In this region, the state safety inspection is augmented by a visual anti-tampering test. Only one sticker is applied to the windshield. Again, the emissions equipment on vehicles in this region is not tested for operational efficacy but, rather, to ensure that the equipment is present.

There are other tests that are still being performed in the Pittsburgh and Philadelphia regions. These are the tailpipe test and the tailpipe test using a dynamometer, respectively. The tailpipe test involves idling the engine while inserting an emissions analyzer in the tailpipe for 30-45 seconds. In the Pittsburgh region, 1975-1995 model year vehicles are subject to the tailpipe test. In the Philadelphia region, 1981-1995 model year cars and 1984-1995 model year light-duty trucks are also subject to the tailpipe test using a dynamometer. This test involves

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The equipment verified are the catalytic converter, exhaust gas recirculation valve, positive crankcase ventilation valve, fuel inlet restrictor, air pump and evaporative control system components.
setting the vehicle’s drive wheels on a treadmill-like device (i.e., the dynamometer), running the vehicle at 15 miles per hour while inserting an emissions analyzer in the tailpipe for 30-45 seconds. The dynamometer is not used to test the emissions of 1975-1980 model year cars and 1975-1983 light-duty trucks in the Philadelphia region. In all cases involving either a tailpipe test or a tailpipe test using a dynamometer, the visual anti-tampering test and the gas cap test are also performed.

II. Emissions Tests Pricing

House Resolution No. 577 was prompted by numerous consumer complaints about the high cost of emissions tests. In January 2004, PennDOT estimated the cost to operators of performing the test was $13.76. This estimate of costs was based on the allocated cost of labor, equipment, program management fee, training and the dedicated phone line. With this cost structure, PennDOT believed operators would charge $25 to $30 for emissions tests. When operators in the South Central region starting charging $50 or more for this test, consumers wanted to know why the tests were so expensive and whether the high prices were set by collusion among operators.

In general, emissions testing is more expensive than PennDOT predicted because operators have actual or perceived costs that are greater than PennDOT estimated. Two principal factors drive those costs: the time it takes to perform the tests and costs associated with the testing equipment. The cost analysis prepared by PennDOT did not include the allocation of overhead costs including, but not limited to, mortgage, rent, utilities, insurance, taxes, back office salaries, service contracts, bank fees, credit card processing fees and building maintenance. These costs are ordinarily allocated to all services that the operators provide.

Since the expansion of the emissions testing program, consumers have had the choice of taking their vehicle to an emissions inspection station based on shopping around for the best price using the Drive Clean PA website.9

A. Cost Structure

We interviewed 25 emissions inspection stations about their emissions testing experience, practices and pricing decisions. The regions were selected so that some stations with each type of testing regime would be interviewed. Interview subjects were either randomly sampled or specifically selected to investigate allegations of collusion. The Office has received allegations that specific operators in specific geographic areas were colluding. Operators in each such area were contacted.

9The website URL is http:\www.drivecleanpa.state.pa.us.
Most operators seek to recover their costs of performing an emissions test. They do not use the test as a promotion to attract customers like some operators do for the safety inspections which often generate other billable work. Generally, the emissions test does not result in extra billable work. Therefore, the operators have less of an incentive to discount the emissions test than they have for safety inspections. The fail rate for emissions tests is less than two percent. During our interviews, some operators told us that they can count on one hand the number of cars that have failed the emissions testing in the six months it has been required.

Many, if not most, operators based their price for the emissions tests on the cost of labor, cost of the equipment plus overhead costs. PennDOT estimates that the typical operator should take 12 minutes to perform the test. According to the operators we interviewed and the actual tests this Office observed, the time to perform the test was significantly greater. In fact, PennDOT's own demonstration emissions test took significantly longer because of an equipment communication failure. Absent any issues that may delay the process, operators reported that the tests take approximately 30 minutes to complete. This Office witnessed two tests by operators, as well as PennDOT's own demonstration test. None of these tests took less than 20 minutes. Two of the tests took 30 minutes. The reasons for the discrepancy between PennDOT's estimate and the operators' estimate include: physical set up of many shops which requires moving a variety of machines or vehicles in order to get the testing equipment into place; operators' inexperience with testing equipment; communication problems between the testing equipment and PennDOT's computers; and differences in the location of the OBD2 port in different vehicles.

Our sample survey of the emissions inspection stations showed that the average labor rate for services is approximately $55 per hour. In the sample, there were stations that charge up to $80 per hour. This means the labor price along for a typical test is around $25.

Another factor in the cost of the emissions test is the testing equipment. Operators complain about having to purchase a personal computer system loaded with Pennsylvania-specific software for a cost of $5,000 to $10,000. Operators in the Philadelphia region paid between $45,000 and $50,000 for a dynamometer in 1997 that is expected to be phased out over time as the OBD2 test becomes the dominant test. Operators in the Philadelphia region point

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10 An example of a delay is having to perform a "drive cycle" to get the vehicle ready for testing.

11 These problems could be caused by the operators' telephone lines or the type of modem used.

12 This Office reviewed actual invoices from suppliers to operators for the equipment.

13 Some operators in the Philadelphia region have reported that 75% of the vehicles tested are presently subject to the OBD2 test, meaning that most of their customers' vehicles are 1996
out that they were told by PennDOT that the personal computers used with the dynamometer would be upgradeable for use with the OBD2 test for much less than having to pay for a new OBD2-dedicated personal computer workstation. Instead, the operators had to purchase separate workstations for the OBD2 test.

PennDOT’s cost estimates were based on a three-year amortization schedule consistent with the three-year term of the settlement agreement and with generally accepted accounting principles. Under federal tax law, a significant capital expenditure may be amortized over the expected life of the equipment. The expected life of the OBD2 equipment is five years, but most of the dealers we interviewed had several reasons for amortizing the cost of the equipment over a one-year period. First, whatever amortization schedule may be appropriate, the purchase of these machines meant a significant cash outflow this year that operators, especially small operators, need to recoup. Second, the core of the OBD2 workstation is a personal computer which generally will become less valuable quickly as prices of personal computers decline. Third, there is considerable uncertainty about whether the testing standards will be changed by future litigation over Pennsylvania’s compliance with the Clean Air Act. The experience of the Philadelphia area operators with the purchase of expensive dynamometers fuels this uncertainty.

For many operators, overhead is a significant expense. Not every car requires the OBD2 test. While the new car dealers and chain service locations might do 10-20 tests a day, many smaller neighborhood garages were doing three to five tests. In theory, it might make sense for only those garages which do many emissions tests to purchase the equipment. However, no garage that does safety inspections can afford to refuse to offer the emissions test. To do so would mean referring a customer to a competitor for the first part of the annual inspection or subcontracting the testing to someone else. Neither alternative is very attractive to garages, and consumers would not want more stops to have their cars inspected. An emissions inspection is a prerequisite for the state safety inspection.

B. Business Format

A review of the prices demonstrated that certain inspection stations charge more for the emissions test. For example, emissions inspection stations based at new car dealerships may charge more because the labor rate at the service departments is typically higher. Inspection stations at a garage that has a very good reputation; a well-maintained facility; and, a correspondingly high labor rate are likely to charge a higher emissions test fee.

Alternatively, pricing at franchised service facilities was lower. Such facilities rely upon volume to make up for the low price. With a higher volume, the likelihood increases that a

\[ \text{and newer.} \]

\[ ^{14} \text{One garage owner we interviewed pointed to a whole service bay that was occupied by a largely unused dynamometer.} \]
vehicle will come in that required some other service or parts. Those other services or parts may have nothing to do with the emissions equipment on the vehicle. A low price may also be used to drive business to the franchised service facility for other products, such as tires, batteries or mufflers and services by having created the impression that the facility generally prices lower than others.

The price of the emissions test at independent neighborhood repair facilities may vary from low to high depending on the facility’s unique cost structure.

III. Collusion

House Resolution No. 577 was prompted, in part, by allegations that high emission testing fees resulted from collusion among inspection station operators. Unlawful collusion under the federal antitrust law occurs when two or more competing businesses agree to fix or stabilize prices. The key to proving collusion is proving an agreement. A unilateral decision by a business to charge high prices is not unlawful. My Office found no evidence of widespread collusion among inspection station operators. In fact, the variety of prices available in most communities and the general reduction in prices which has occurred since the tests initially were required, suggests the opposite. We cannot say, at this time, that there is no collusion in setting prices in specific local communities. We have not reviewed the price practices in each local community. There have been allegations of several instances where groups of three or four operators have met and agreed on emissions testing fees. We are in the process of reviewing the evidence in specific communities where there is some claim that prices have been set by collusion. We will report back to the General Assembly should we find enough evidence to warrant action.

This Office learned through its questioning of a number of operators that they had contacted other operators to survey pricing. Such conduct is not actionable under the federal antitrust laws. Surveying has been further facilitated by DEP and PennDOT via the Drive Clean PA website. Most operators acknowledged using the Drive Clean PA website to learn of their competitors’ pricing. A service station organization circulated a warning to operators of the potential antitrust consequences of discussing prices for the purpose of restraining trade.¹⁵

¹⁵The document is attached as Exhibit 2.
IV. **Recommendation for Legislative Changes**

The House of Representatives requested:

[t]hat the Attorney General of the Commonwealth investigate the possibility of collusion among the garage owners in the establishment of their emissions testing fees and whether there may be any violation of the Unfair Trade Practices and Consumer Protection Law or any other statutes . . . 16


The resolution also states:

[t]hat the Attorney General report the progress of the investigation to the House of Representatives within 90 days following the adoption of this resolution, including any recommendations for legislative changes necessary to provide consumer relief and protection . . .


This Office does not have specific recommendations for legislation. Prices are moderating as more consumers use PennDOT's Drive Clean PA website and garages become more experienced. Although PennDOT estimated that the price for the test was significantly lower than most consumers have experienced, accurately estimating prices of a new service in a market where several different business models compete (i.e., new car dealership, neighborhood garage and franchised service center) is difficult.

V. **Conclusion**

The review undertaken by this Office in response to the request by the House of Representatives found no evidence sufficient to support a violation of the federal antitrust laws.

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A RESOLUTION

1 Requesting the Attorney General of the Commonwealth to
2 investigate the possibility of collusion in the establishment
3 of fees within this Commonwealth as it pertains to motor
4 vehicle emissions testing and any potential violations of the
5 Unfair Trade Practices and Consumer Protection Law; and
6 directing the Legislative Budget and Finance Committee to
7 prepare a report on the actual costs incurred by emission
8 inspection stations.

9 WHEREAS, In 2002, Citizens For Pennsylvania's Future
10 (PennFuture) and the Clean Air Council initiated two lawsuits
11 over the Commonwealth's slow progress in implementing auto
12 emissions inspection procedures mandated by the Environmental
13 Protection Agency; and
14 WHEREAS, In May 2003, the Department of Transportation and
15 the Department of Environmental Protection announced an
16 agreement to settle these lawsuits over Pennsylvania's program
17 for automobile emissions testing. The changes called for in this
18 agreement bring the State's emissions testing program into
19 compliance with Federal air quality standards while having a
20 minimal effect on most of the State's drivers; and

Exhibit 1
WHEREAS, The Commonwealth has begun to implement emissions testing changes by expanding the test to additional counties within this Commonwealth where emissions testing did not previously occur; and

WHEREAS, The garages conducting the emissions tests are left to establish their own fees; and

WHEREAS, The garages in the Philadelphia and Pittsburgh regions have been conducting emissions testing for over ten years with an average fee for such tests of between $28 and $44. These fees are based on equipment purchased at a cost of approximately $16,000 to $60,000; and

WHEREAS, The garages in the counties where emissions testing was initiated in December 2003 are charging consumers anywhere from $20 to $70. These fees are based on equipment purchased at a cost of approximately $5,000 to $8,000; and

WHEREAS, Media reports have shown that garage owners in the expanded regions have communicated with one another in order to establish fees; and

WHEREAS, Consumers may be experiencing artificially high fees for emissions testing as a result of complicity among the garages; therefore be it

RESOLVED, That the House of Representatives request that the Attorney General of the Commonwealth investigate the possibility of collusion among the garage owners in the establishment of their emissions testing fees and whether there may be any violation of the Unfair Trade Practices and Consumer Protection Law or any other statutes; and be it further

RESOLVED, That the Attorney General report the progress of the investigation to the House of Representatives within 90 days following the adoption of this resolution, including any
recommendations for legislative changes necessary to provide consumer relief and protection; and be it further

RESOLVED, That the Legislative Budget and Finance Committee study and issue a report on the actual costs incurred by emission inspection stations for the performance of emissions tests implemented after November 30, 2003. In preparing this study, the Legislative Budget and Finance Committee shall consider the cost of the testing equipment as well as other factors such as the total amount of time necessary to complete the test, appropriate overhead and other costs of doing business; and be it further

RESOLVED, IN REVIEWING THE COST OF TESTING EQUIPMENT, THAT THE LEGISLATIVE BUDGET AND FINANCE COMMITTEE REPORT ON THE REASON FOR THE SIGNIFICANT DIFFERENCES BETWEEN INITIAL DEPARTMENT OF TRANSPORTATION ESTIMATES OF $750-$1,200 AND $2,500-$7,000 PER UNIT AND THE $5,000-$7,000 PER UNIT COST FOR EQUIPMENT AS FINALLY CERTIFIED BY THE DEPARTMENT; AND BE IT FURTHER

RESOLVED, That the Legislative Budget and Finance Committee submit its report to the Transportation Committee of the House of Representatives within 120 days following the adoption of this resolution.
IT IS UNDERSTOOD THAT IN TODAY'S SESSION, WE WILL NOT DISCUSS ANY ISSUES WHICH WOULD VIOLATE ANTITRUST GUIDELINES.

ANTITRUST GUIDELINES

AVOIDING VIOLATIONS OF THE ANTITRUST LAWS IS THE RESPONSIBILITY AND LEGAL OBLIGATION OF THE BUSINESS OWNER. ANY DISCUSSION OF CURRENT PRICES OR DISCOUNTS WITH A COMPETITOR SHOULD BE AVOIDED. IN OUR INDUSTRY, THIS INCLUDES DISCOUNTS, TIME, HOURLY RATES CHARGED TO INSURANCE COMPANIES, INDIVIDUALS, FLEET OWNERS, DEALERS OR OTHER SHOPS FOR REPAIRING VEHICLES.

SURVEYS OF PRICES, DISCOUNTS AND COSTS ARE PERMISSIBLE BUT ONLY UNDER STRICT GUIDELINES AND ONLY IF THEY ARE NOT PART OF A CONSPIRACY TO FIX PRICES OR TO OTHERWISE RESTRAIN TRADE.

COST STUDIES, WHICH LEAD TO PRICE FIXING OR PRICE-STABILIZING AGREEMENTS VIOLATE THE ANTITRUST LAWS.

REMEMBER, THE PRICES CHARGED MUST BE CALCULATED AND DETERMINED BY THE BUSINESS OWNER ALONE. THESE PRICES SHOULD TAKE INTO ACCOUNT THE COST OF DOING BUSINESS AND INCLUDE ALLOWANCES FOR REASONABLE PROFIT.