



**Proposed  
Revision to Connecticut's  
State Implementation Plan**

**Vehicle Inspection and Maintenance Program**

**Connecticut Department of Environmental Protection  
September 12, 2007**



**CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION**

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i. Definitions and Abbreviations

“ASM 2525” or “Acceleration Simulation Mode Test” – An emissions test to analyze exhaust emissions of CO, NO, and HC performed at a steady state of twenty-five (25) miles per hour (mph) and utilizing a dynamometer load set to simulate twenty-five percent (25%) of the power required to accelerate the particular vehicle being tested at 3.3 mph per second until a speed of 25 mph is attained.

“CFR” – The Code of Federal Regulations.

“C.G.S.” – Connecticut General Statutes.

“CO” – Carbon monoxide.

“CO<sub>2</sub>” – Carbon dioxide.

“Contractor” – Applus+ Technologies, Inc., formerly known as Agbar Technologies, Inc., Delaware corporation.

“DEP” – The Connecticut Department of Environmental Protection.

“DMV” – The Connecticut Department of Motor Vehicles or its duly authorized agents or representatives.

“DoIT” – The Connecticut Department of Information Technology

“DTC” – Diagnostic Trouble Code.

“EDBMS” or “Emissions Database Management System” - A computer system used to keep track of all VIRs and relevant information.

“EPA” – The United States Environmental Protection Agency or its duly authorized agents or representatives.

“GVWR” – The gross vehicle weight rating which is defined and specified by each vehicle manufacturer for a single vehicle.

“HC” – Hydrocarbons.

“Inspection Agreement” –Contract between DMV and Applus+ Technologies, Inc. “For the Establishment and Operation of a Decentralized Motor Vehicle Inspection Program for The State of Connecticut.”

“I/M” – Enhanced Inspection and Maintenance.

“lbs.” – Unit of measurement, pounds.

“MIL” – Malfunction Indicator Light.

“NO”– Nitric oxide or nitrogen monoxide, the principle emitted gas that is measured, and used as a surrogate for NO<sub>x</sub> emissions.

“NO<sub>x</sub>” – Oxides of Nitrogen.

“OBDII” – The current On-Board Diagnostics (OBD) electronic system that includes the most up-to-date comprehensive system monitors starting with model year 1996 vehicles.

“PCTSI” or “Pre-Conditioned Two Speed Idle” – An emissions test to analyze exhaust emissions of CO and HC performed while the vehicle is idling, first at an accelerated vehicle engine Revolutions Per Minute (RPM) followed by a base idle at the engine’s default (no acceleration) idle RPM.

“QA/QC” – Quality Assurance/Quality Control.

“R.C.S.A.” – The Regulations of Connecticut State Agencies.

“SIP” or “State Implementation Plan” - For the purpose of this document, SIP refers to the State of Connecticut’s implementation plan for the vehicle I/M program.

“Test Station” – Test Centers used in the Connecticut I/M program.

“the State” – The State of Connecticut.

“VIN” – Vehicle Identification Number.

“VIR” – Vehicle Inspection Report as described in the DMV and EPA regulations.

“VOC” – Volatile Organic Compounds, used to express hydrocarbon emissions that also include aldehydes.

## EXECUTIVE SUMMARY

This State Implementation Plan (SIP) revision is required under federal regulations, 42 United States Code section 7511a, section 182(c)(3)(A) of the Clean Air Act Amendments of 1990 and ensures changes to Connecticut's vehicle inspection and maintenance program are fully documented. The structure of this document comports with requirements that have been established by the United States Environmental Protection Agency (EPA) for inspection and maintenance programs nationally. The vehicle inspection and maintenance program, designed to identify vehicles that emit pollutants that exceed acceptable standards and require such vehicles to get repaired, is an important part of the strategy to ensure that Connecticut is positioned to attain the National Ambient Air Quality Standard for Ozone. Connecticut's program, which dates back to 1983, has a long history of effectively reducing vehicle emissions and results in more emission reductions than any other state implemented reduction strategy. Current estimates indicate that in 2010, this program will result in approximately 19 of the 200 tons per day of air pollutant reductions that are included in Connecticut's 2007 Ozone Attainment Plan. The emission reductions resulting from this program are an integral part of our air quality attainment efforts and important as part of a balanced strategy that includes reductions from stationary, area and mobile source sectors.

Connecticut operated a centralized I/M program from 1983 to 2002. Connecticut amended its statutory authority to develop and implement a decentralized I/M program, which commenced on October 12, 2003. This change to a decentralized program improves the convenience to the public by decreasing the waiting time for emissions testing, directly involves the repair industry with the emissions testing and enhances opportunities for small business development. Connecticut's evaluation contained in this report has confirmed the current decentralized program is as effective as the EPA-approved centralized program, formerly implemented by Connecticut. The program described in the attached I/M SIP revision meets Connecticut's needs, but will be revisited in concert with the term of the I/M program's contracts.

## INTRODUCTION

This document outlines the Connecticut inspection and maintenance program with each section providing both the details on specific elements of the program, followed by citations to the statutory and regulatory authority to conduct these specific elements.

Connecticut is required to adopt and implement an enhanced inspection and maintenance (I/M) program, pursuant to 42 United States Code section 7511a, section 182(c)(3)(A) of the Clean Air Act Amendments of 1990. From 1983 to 2002, Connecticut operated a centralized I/M program. Connecticut's statutory authority, Connecticut General Statutes (C.G.S.) Section 14-164c, was amended on July 1, 2001, to develop and implement a decentralized I/M program, which began on October 12, 2003. Due to this program change, Connecticut is revising the state implementation plan (SIP) for submittal to the United States Environmental Protection Agency (EPA).

This SIP revision meets the requirements specified in section 182(c)(3) of the Clean Air Act and regulations promulgated thereunder, which requires any state, within which there is located a portion of an ozone nonattainment area classified as moderate or above, to provide for an I/M program to reduce emissions of hydrocarbons (HC) and oxides of nitrogen (NO<sub>x</sub>) from in-use motor vehicles.

This SIP revision is being submitted in accordance with regulations from 40 Code of Federal Regulations (CFR) Part 51. The State of Connecticut (or "the State") entered into a contract with Agbar Technologies, Inc. on January 10, 2003. Agbar Technologies, Inc. is now known as Applus+ Technologies, Inc. (Contractor). This contract (Inspection Agreement) stipulates, among other things, that the Contractor must provide the capacity to test all gasoline and diesel-fueled vehicles up to 10,000 pounds (lbs.) gross vehicle weight rating (GVWR). The Inspection Agreement is contained in Appendix 1.

### **1.0 Applicability**

#### **1.1 Connecticut I/M Program Meeting Federal SIP Requirements**

Connecticut will continue to implement the enhanced inspection and maintenance program statewide, although federal requirements originally mandated an enhanced program in only a portion of the state. As of January 1, 2007, the State tests 1984<sup>1</sup> and newer model year vehicles up to 10,000 lbs GVWR, except for vehicles that are less than four model years old, in order to meet short and long term emission reduction goals.

#### **1.2 Applicable Documentation for the Connecticut I/M Program**

The legal authority for the implementation of the Connecticut I/M Program is included in Appendix 2 and contains both statutory and regulatory authority. The Connecticut Department of Environmental Protection (DEP) and the Connecticut Department of Motor Vehicles (DMV)

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<sup>1</sup>Effective July 1, 1998, section 14-164c(c)(6) of the Connecticut General Statutes exempts vehicles manufactured twenty-five or more years ago from testing.

have adopted administrative regulations for the I/M program. DMV regulations govern the day-to-day administration and operation of the I/M program and the DEP regulations establish appropriate emission standards.

## **2.0 Enhanced I/M Standard**

### **2.1 Connecticut I/M Program Meeting Federal SIP Requirements**

Connecticut's I/M Program exceeds the scope of the federal requirements by increasing the number of vehicles subject to enhanced inspection and maintenance testing and standards. Approximately 60,000 vehicles were not required to be tested since they were either over the weight limit of 8500 GVWR, diesel powered or were between 20 to 24 years old. The Connecticut I/M Program tested 817,651 vehicles in 2006. Connecticut expanded model year exemptions to four years. Based on MOBILE6 and Connecticut's biennial I/M program evaluation, expanding model year exemptions to four years had negligible impact on the emission benefits from the program.

The I/M program uses the On-Board Diagnostics II (OBDII) test, the ASM 2525 test or the Pre-Conditioned Two-Speed Idle (PCTSI) test. EPA regulations call for 1986 and newer model years to be subject to the enhanced standard in limited geographical areas. Connecticut, however, tests vehicles manufactured less than 25 years ago using the enhanced standard, and also uses the enhanced standard throughout the entire State. Vehicles manufactured in 1996 and later model years are tested using the OBDII procedures. The I/M program addresses OBDII testing requirements, such as the performance standards, test procedure requirements and data reporting requirements. Vehicles manufactured in 1995 and earlier model years are subject to either the ASM 2525 or the PCTSI testing procedures. Additionally, the Connecticut's I/M program increases the number of vehicles subject to the enhanced standard by testing both gasoline and diesel motor vehicles through 10,000 lbs. GVWR, whereas EPA's I/M rulemaking only covers gasoline powered vehicles up to 8,500 lbs. GVWR.

### **2.2 Applicable Documentation for the Connecticut I/M Program**

Table 1 demonstrates that the Connecticut I/M program meets the low enhanced performance standard for I/M programs. The low enhanced performance standard is used because the 15% Reasonable Further Progress and 1999 Rate of Progress Plans show that the State meets its emissions reduction targets.

Applicable performance standards and modeling results are summarized in Table 1 below. The low enhanced performance standards shown in Table 1 were derived from MOBILE6.2 modeling input files provided by EPA. These input files were modified only to reflect meteorological conditions specific to Connecticut. The EPA's performance standard I/M program inputs were then replaced by the Connecticut I/M program inputs to calculate the effectiveness of the Connecticut program. Evaluation years were determined in consultation with EPA. Emission factors are evaluated for volatile organic compounds (VOC), carbon monoxide (CO), and oxides of nitrogen (NO<sub>x</sub>). Connecticut's demonstration of compliance with the low enhanced performance standard is documented with all of the applicable model year 2005 MOBILE6.2 modeling files provided in Appendices 3 and 4. The current decentralized

I/M program is used in the demonstration of compliance with both the performance standards and the former centralized program, previously approved by EPA. This table demonstrates that the decentralized program is as effective as the former EPA-approved centralized program and meets the performance standards in 2005, 2007 and 2009.

| <b>TABLE 1</b>                                      |                                                                   |                                                        |                                 |                                                          |                                                        |                                 |
|-----------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------|---------------------------------|----------------------------------------------------------|--------------------------------------------------------|---------------------------------|
| <b>Low Enhanced Performance Standard Evaluation</b> |                                                                   |                                                        |                                 |                                                          |                                                        |                                 |
| <b>Emission Factors</b>                             |                                                                   |                                                        |                                 |                                                          |                                                        |                                 |
| <b>(grams/mile)</b>                                 |                                                                   |                                                        |                                 |                                                          |                                                        |                                 |
|                                                     | <b>Metropolitan CT Area<br/>(Fairfield, Middlesex, New Haven)</b> |                                                        |                                 | <b>Greater CT Area<br/>(All other counties)</b>          |                                                        |                                 |
|                                                     | <b>Connecticut<br/>I/M<br/>Program<br/>Decentralized</b>          | <b>Connecticut<br/>I/M<br/>Program<br/>Centralized</b> | <b>Performance<br/>Standard</b> | <b>Connecticut<br/>I/M<br/>Program<br/>Decentralized</b> | <b>Connecticut<br/>I/M<br/>Program<br/>Centralized</b> | <b>Performance<br/>Standard</b> |
| <b>2005 Summer</b>                                  |                                                                   |                                                        |                                 |                                                          |                                                        |                                 |
| VOC                                                 | 1.002                                                             | 1.040                                                  | 1.074                           | 1.031                                                    | 1.069                                                  | 1.106                           |
| CO                                                  | 10.069                                                            | 10.513                                                 | 11.004                          | 10.174                                                   | 10.614                                                 | 11.106                          |
| NO <sub>x</sub>                                     | 1.923                                                             | 1.967                                                  | 2.025                           | 1.922                                                    | 1.966                                                  | 2.024                           |
| <b>2007 Summer</b>                                  |                                                                   |                                                        |                                 |                                                          |                                                        |                                 |
| VOC                                                 | 0.842                                                             | 0.881                                                  | 0.902                           | 0.866                                                    | 0.905                                                  | 0.928                           |
| CO                                                  | 7.772                                                             | 8.249                                                  | 8.538                           | 7.819                                                    | 8.291                                                  | 8.583                           |
| NO <sub>x</sub>                                     | 1.564                                                             | 1.608                                                  | 1.662                           | 1.562                                                    | 1.606                                                  | 1.660                           |
| <b>2009 Summer</b>                                  |                                                                   |                                                        |                                 |                                                          |                                                        |                                 |
| VOC                                                 | 0.705                                                             | 0.742                                                  | 0.753                           | 0.724                                                    | 0.761                                                  | 0.774                           |
| CO                                                  | 6.740                                                             | 7.200                                                  | 7.371                           | 6.752                                                    | 7.209                                                  | 7.380                           |
| NO <sub>x</sub>                                     | 1.289                                                             | 1.336                                                  | 1.389                           | 1.288                                                    | 1.335                                                  | 1.387                           |

### **3.0 Network Type and Program Evaluation**

#### **3.1 Connecticut I/M Program Meeting Federal SIP Requirements**

In 2003, Connecticut changed from the centralized test-only program that had been utilized for the previous twenty years to a decentralized test and repair infrastructure. This decentralized infrastructure meets all new I/M requirements, including but not limited to, OBDII testing requirements. The State entered into an Inspection Agreement with the Contractor on January 10, 2003, in accordance with the statutory authority as provided in Appendix 2. The State and the Contractor amended this agreement on October 8, 2004.

The Inspection Agreement includes the specific details of the day-to-day operation of the I/M program. As such, it is well suited to consolidating the particulars of the I/M program into an enforceable agreement that serves to satisfy both the applicable federal requirements for program implementation and any other requirements as directed by this SIP.

The Inspection Agreement provides that the Contractor will institute an evaluation program consistent with EPA regulations. The evaluation protocol may consist of monitoring the performance of ASM 2525 tests, OBDII tests, PCTSI tests and other tests as may be required on a random, representative sample of at least 0.1 percent of the vehicles subject to inspection. Data are collected as part of the regular data collection system during routine testing. The State will audit this process, analyze the results, and report them to EPA, as required.

DEP and DMV conduct I/M program evaluations through an ongoing process to quantify emission reduction benefits. The evaluation, based on data provided by the Contractor pursuant to the Inspection Agreement, indicates whether the program is meeting the emission reduction targets. The results of such evaluations shall be utilized to assess the actual effectiveness of the I/M program. In addition, such results shall be reported to EPA on a biennial basis, beginning in 2006. The raw evaluation test data will also be made available to EPA. The 2006 report can be found at: [http://www.ct.gov/dep/lib/dep/air/vehicle\\_emissions/imreport2004&2005.pdf](http://www.ct.gov/dep/lib/dep/air/vehicle_emissions/imreport2004&2005.pdf).

#### **3.2 Applicable Documentation for the Connecticut I/M Program**

The legal/regulatory definition of a decentralized network may be found in C.G.S. section 14-164c(e). Authority for the program evaluation is based on a subsection of that statute requiring the production of information necessary to perform the evaluation.<sup>2</sup> It authorizes the Commissioner of Motor Vehicles to require certain data from the Contractor operating the emission Test Stations. The Inspection Agreement between the Contractor and DMV is to serve as the apparatus for this information exchange requirement.

In addition, the Commissioners of Motor Vehicles and Environmental Protection are required to evaluate the program and report on its effectiveness to the legislative transportation committee of

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<sup>2</sup> C.G.S. Section 14-164c(e)(C), see Appendix 2.

the General Assembly.<sup>3</sup> The Inspection Agreement directs the Contractor to meet the requirements contained in 40 CFR 51.353 and described in subsection 3.1 above.

#### **4.0 Adequate Tools and Resources**

##### **4.1 Connecticut I/M Program Meeting Federal SIP Requirements**

States are required to document that adequate fees are collected to support the I/M program according to 40 CFR 51.354. The consumer inspection fee is currently set at twenty (20) dollars for a biennial emission test. DMV collects a fee of forty dollars upon initial registration of any vehicle that is four or fewer model years of age not previously registered in the state. This fee is deposited in the state's Special Transportation Fund. In addition, each new and renewal biennial registration includes a ten-dollar fee. This fee is identified as the 'federal Clean Air Act fee' and is split apportioned as follows: fifty seven and one half percent (57.5%) is deposited into the Special Transportation Fund and forty two and one half percent (42.5%) is deposited in a treasurer's account and credited to a separate, non-lapsing federal Clean Air Act account. Funding to support the Emissions Operating Budget is legislatively allocated from the Special Transportation Fund. The federal Clean Air Act account is used to pay the costs to state agencies of implementing the requirements of the federal Clean Air Act Amendments of 1990, including but not limited to the Connecticut I/M program. In FY 06 – 07, an estimated 7.8 million dollars, a portion of which included the existing balance of the dedicated I/M fund established in 1982, was utilized to support overall program costs covering necessary equipment and personnel expenditures.

Connecticut commits to maintaining an adequate staff of Field Agents and Contract Compliance Officers dedicated to overt and covert auditing, data analysis, program administration, enforcement, and the necessary other functions.

DEP has been given access to DMV's Emissions Database Management System (EDBMS), allowing DEP staff to analyze data and conduct other necessary data related functions.

##### **4.2 Applicable Documentation for the Connecticut I/M Program**

C.G.S. section 14-164c(k)<sup>4</sup> gives the Commissioner of Motor Vehicles statutory authority to charge an inspection fee of twenty dollars for a biennial emission test and a fee of forty dollars, in addition to any other fees, required for new registrations. C.G.S. section 14-49b<sup>5</sup> gives the statutory authority to charge the ten-dollar "federal Clean Air Act fee" for each new registration or renewal registration.

Appendix 5 contains budget information for the Connecticut I/M program. The budget contains the costs for oversight purposes and demonstrates that the program will maintain the funds to cover the costs of necessary administrative resources for several years. Appendix 6 is comprised of breakdowns of personnel distribution and major equipment procurement.

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<sup>3</sup> C.G.S. sections 14-164h(a) and (b), see Appendix 2.

<sup>4</sup> See Appendix 2.

<sup>5</sup> Ibid.

## **5.0 Test Frequency and Convenience**

### **5.1 Connecticut I/M Program Meeting Federal SIP Requirements**

The test frequency is biennial for all subject vehicles in the State.

There are approximately 300 official emissions inspection Test Stations, identified in Appendix 7, located throughout Connecticut in order to provide motorists convenient service as required by 40 CFR 51.355. The Inspection Agreement specifies that testing locations must be located such that all motorists shall enjoy reasonably convenient access to official emissions inspection Test Stations. In addition to being able to schedule appointments, any vehicle presented for inspection during Test Station operating hours will be inspected as described in the Inspection Agreement.

### **5.2 Applicable Documentation for the Connecticut I/M Program**

C.G.S. section 14-164c(c)<sup>6</sup> provides for "periodic inspection," and a biennial test frequency is authorized by C.G.S. section 14-164c(c).<sup>7</sup> The Regulations of Connecticut State Agencies (R.C.S.A.) also conform to the statutory mandate and the Federal program requirements.

The Inspection Agreement<sup>8</sup> provides additional documentation demonstrating that the Connecticut I/M program meets federal requirements for test frequency and convenience including, but not limited to, scheduling appointments, hours of operation and wait time issues.

## **6.0 Vehicle Coverage**

### **6.1 Connecticut I/M Program Meeting Federal SIP Requirements**

All gasoline and diesel powered light duty vehicles, light duty trucks, and heavy-duty vehicles up to 10,000 lbs. GVWR that are 24 model years old and newer, are subject to the program except for those exempted as listed below. A table showing the number of vehicles in each registration class in June 2005 is contained in Appendix 8, although not all vehicles are required to be tested. In addition to those vehicles listed in Appendix 8, approximately 4,000 fleet vehicles without Connecticut vehicle registrations operate in Connecticut. These are mainly United States Postal Service and United States General Services Administration vehicles.

Composite vehicles, a term used to include both home-made vehicles and kit cars, have been tested according to the standards in R.C.S.A. 22a-174-27. However, Connecticut is excluding the testing of these composite vehicles as a federally enforceable requirement of this SIP. As of July 1, 2007, these composite vehicles are no longer tested per Connecticut Public Act 07-167, which exempts them from inspection and maintenance emission testing through a revision of C.G.S. section 14-164 (c). These vehicles represent an insignificant contribution to

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<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

<sup>8</sup> See Appendix 1.

Connecticut's air quality concerns and do not affect the benefits of the I/M program as they comprise only 0.01% of all vehicles subject to emissions testing and seldom travel more than 2000 miles per year.

The following vehicles are exempt from the I/M requirement: vehicles in excess of 10,000 lbs. GVWR, electric vehicles, motor-cycles, farm vehicles, newer vehicles (four or fewer model years old, e.g. 2003 and newer at the time of registration in 2007), antique vehicles (25 model years and older), and vehicles operating with temporary registration<sup>9</sup>. The estimated number of exempt vehicles is contained in Appendix 9.

Private fleets and local government fleets are required to be inspected under C.G.S. section 14-164c(b). Federal fleet vehicles are required to meet the same requirements as other fleets.

DMV has implemented a fleet "self test" program running since August 1, 2005. To qualify as a "self test" operator, the entity must have a minimum of 25 emissions eligible vehicles in their inventory. The program would allow owners of 25 or more vehicles to self-inspect their vehicles. This fleet program may include a biennial self-inspection using OBDII or PCTSI testing of fleet vehicles. No dealers are allowed to participate in the "self test" program. Fleets tend to consist of newer, well-maintained vehicles and would be expected to have lower failure rates.

## **6.2 Applicable Documentation for the Connecticut I/M Program**

C.G.S. section 14-164c(c)<sup>10</sup> and the Inspection Agreement<sup>11</sup> provide the necessary documentation to demonstrate that the Connecticut I/M program meets federal requirements for vehicle coverage.

## **7.0 Test Procedure and Standards**

### **7.1 Connecticut I/M Program Meeting Federal SIP Requirements**

A matrix that outlines required test procedures is included as Appendix 10. All 1995 and older vehicles having a GVWR of 8,500 pounds or less, excluding full-time four wheel drive vehicles, will be subject to ASM 2525 testing as specified in EPA's Acceleration Simulation Mode Test Procedures, Emission Standards, Quality Control Requirements, and Equipment Specifications Final Technical Guidance (EPA420-B-04-011, July 2004), hereinafter referred to as the ASM 2525 test procedures. While the R.C.S.A. Section 22a-174-27 allows the use of ASM emission standards in both sections 85.1(a)(2) and (a)(3) of the ASM test procedures, Connecticut now conducts ASM 2525 testing using only the revised final ASM emission standards in section 85.1(a)(3). The light duty truck 2 vehicle class testing is conducted using the light duty truck 1 emission standards in section 85.1(a)(3). Vehicles subject to the ASM 2525 test must pass for HC, CO, and NO in order to pass the test.

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<sup>9</sup>The complete lists of exempt vehicles are included in C.G.S. Sec. 14-164c(e).

<sup>10</sup> See Appendix 2.

<sup>11</sup> See Appendix 1.

All 1996 and newer model year covered vehicles are subject to OBDII testing procedures, that meet the requirements in 40 CFR 51 and 40 CFR 85 and include all procedures set forth in 40 CFR 85.2222. OBDII testing is conducted consistent with EPA's guidance document, "Performing Onboard Diagnostic System Checks as Part of a Vehicle Inspection and Maintenance Program" (June 2001). As part of the I/M program evaluation, the DEP, in partnership with the DMV, has identified additional vehicle models that are not currently exempted from readiness by Appendix D of the guidance document but have 20% or greater not ready rates. Including these vehicles on the EPA readiness exemption list for OBDII testing is consistent with the intent of Appendix D. These vehicles are listed in the DEP I/M October 2006 program evaluation report, "Evaluation of Test Data Collected in 2004 and 2005 from Connecticut's Inspection/Maintenance Program," included as Appendix 11. The DEP will provide EPA with an updated list of vehicles having readiness issues in subsequent program evaluation reports. DEP, DMV and EPA recognize the importance of maintaining an updated list of vehicles identified as having readiness issues as an important tool to provide the operational flexibility needed in state I/M programs.

Any vehicle that can not be tested using either the OBDII test or the ASM 2525 test or that has a GVWR greater than 8,500 pounds and less than or equal to 10,000 pounds will be given a PCTSI test. Any vehicle subject to the PCTSI test must pass for both HC and CO. Any vehicle failing any part of the I/M test must pass a complete retest after obtaining the necessary repairs, except that a failure due to gas cap only will be retested for gas cap only.

A gas cap pressure test is required to be performed on all gasoline-powered vehicles being tested, except OBDII vehicles. That is, all vehicles (up to 10,000 pounds GVWR) except model year 1996 and newer vehicles with a GVWR less than 8,500 pounds. A description of the gas cap pressure test is included in Appendix 12. In addition, an inspection for the presence of a catalytic converter will be performed on all non-exempt vehicles.

Non-exempt vehicles are as stated in C.G.S. Section 14-164c(c).

## **7.2 Applicable Documentation for the Connecticut I/M Program**

The applicable regulations,<sup>12</sup> as well as the Inspection Agreement,<sup>13</sup> specify that each Test Station shall have one or more areas where a motorist may view the inspection of his or her vehicle in its entirety, either directly or via a TV monitor from a designated waiting area. The regulation and Inspection Agreement also specify that vehicles shall be rejected for unsafe conditions, including exhaust leaks, fluid leaks, tires with visible cords, or other conditions determined to be unsafe by the Contractor Test Station.

## **8.0 Test Equipment**

### **8.1 Connecticut I/M Program Meeting Federal SIP Requirements**

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<sup>12</sup> See Appendix 2.

<sup>13</sup> See Appendix 1.

According to the I/M Inspection Agreement, test equipment specifications shall be based on the specifications in the test procedures. Each Test Station shall be equipped with the necessary equipment for each the OBDII, ASM 2525, and PCTSI tests.

All test equipment shall be fully computerized and all processes shall be automated to the highest degree possible. All computerized equipment shall have lock out features to prevent tampering by unauthorized personnel. Contractor Field Service Technicians and DMV Field Agents have authorization to clear lock-outs or access the hardware for any purpose other than to perform an emissions test and shall be required to enter an access code that identifies them personally in order to do so. Test equipment shall be linked on a real-time basis to a central computer containing the EDBMS. All electronic system integrity checks shall be performed automatically.

The State or the Contractor maintains emission test equipment to accommodate new technology and changes to the program. See the Inspection Agreement and the Connecticut Emissions Program website<sup>14</sup> for additional information.

## **8.2 Applicable Documentation for the Connecticut I/M Program**

Pursuant to C.G.S. 14-164c(e)(B),<sup>15</sup> the test equipment standards are included in the Inspection Agreement<sup>16</sup> and meet the requirements of the OBDII and ASM 2525 testing procedures.

Test equipment specifications are further defined in section 14-164c-10a of the R.C.S.A.<sup>17</sup> This section requires each official emissions inspection Test Station to be equipped with emission analyzers approved by the Commissioner of Motor Vehicles in consultation with the Commissioner of Environmental Protection.

## **9.0 Quality Control**

### **9.1 Connecticut I/M Program Meeting Federal SIP Requirements**

The State has taken all steps necessary to meet the applicable I/M performance standard while ensuring that motorists receive consistent and accurate test results. The Inspection Agreement directs the Contractor to employ reliable equipment, accurate and complete maintenance operating procedures, adequate spare parts provisioning, and a competent operations and maintenance staff. Furthermore, the Contractor will establish and maintain a quality assurance program to ensure compliance with the Inspection Agreement and all applicable legal requirements; details are contained in The Quality Assurance/Quality Control Plan reproduced in Appendix 13. The record keeping procedures to be followed at all test sites and other locations are contained within the Inspection Agreement<sup>18</sup> and a description of the responsibility for record keeping is also included in Appendix 13.

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<sup>14</sup> <http://www.ctemissions.com/>

<sup>15</sup> See Appendix 2.

<sup>16</sup> See Appendix 1.

<sup>17</sup> See Appendix 2.

<sup>18</sup> See Appendix 1.

The Inspection Agreement contains the specifications to be used for all testing equipment approved for use in the I/M program. These specifications include minimum durability and functional requirements to ensure accurate measurement, processing and recording of test samples under a wide range of adverse ambient conditions. Guidance for these specifications is taken from the OBDII and ASM 2525 test procedures.

## **9.2 Applicable Documentation for the Connecticut I/M Program**

The Connecticut DMV regulations address de minimis levels of quality control in R.C.S.A. section 14-164c-10a. This section requires that all equipment and instrumentation be maintained in accordance with standards provided in 40 CFR 51.358 and 51.363(c). Such equipment is subject to both scheduled and unscheduled checks for accuracy and condition by DMV.

Quality control programs mandated by the I/M rule, 40 CFR 51.359, are implemented pursuant to C.G.S. section 14-164c(e)(B), (C) or (D), which authorize the Commissioner of Motor Vehicles to enter into a negotiated Inspection Agreement with a private contractor. Appendix 13 contains contractually stipulated provisions concerning quality control/quality assurance (QA/QC) and equipment calibration schedules. Appendix 13 also contains contractually stipulated provisions concerning data collection, record keeping, a program document responsibility/audit matrix and document security measures. However, specific details concerning document security have been omitted in recognition that such information is commercially valuable to any parties who are negotiating similar contracts. It is also in the best interest of program management to continue to hold any security procedures in confidence in order to ensure that such procedures do not become compromised.

## **10.0 Waivers and Compliance Via Diagnostic Inspection**

### **10.1 Connecticut I/M Program Meeting Federal SIP Requirements**

The current waiver rate of one percent, expressed as a percentage of initially failed vehicles, is used in the demonstration that the I/M program meets the applicable performance standard. The State commits to a waiver rate in practice that is equal to or lower than one percent. If the waiver rate reported to EPA in the biennial report exceeds this rate, the State will take corrective actions. The State will issue waivers only when the requirements of 40 CFR 51.360 are met.

In Connecticut, DMV is responsible for issuing waivers. DMV Field Agents issue waivers for vehicles meeting waiver criteria. The Field Agents shall: review repair receipts from a certified repair station to verify that the appropriate expenditures have been made; verify that only repairs germane to the test failure have been claimed; and verify that repairs have actually been made by visually inspecting the vehicle. Field Agents will check the emissions certificate for the odometer reading and model year and determine whether the vehicle is eligible for warranty repairs before issuing a waiver for a vehicle that is eligible for such repairs.

In addition to the above mentioned waiver program, the State shall also issue certificates of compliance via complete diagnostic inspection. Certification of compliance will be granted to the owners of those vehicles who are able to demonstrate that further emission related repairs

would not serve to bring the vehicle into compliance. These functional diagnostic waivers will be issued on a case-by-case basis at a Connecticut registered emissions diagnostic repair facility, or at DMV's Emission Division Technical Management Center, by a DMV employee in response to a request from a Connecticut certified repair person or a request from a motor vehicle owner. All waivers issued by DMV are valid for only one inspection cycle.

The State's I/M program requires motorists to make an expenditure of at least six hundred and sixty dollars (\$660) on actual, non-tampering related repairs to qualify for a waiver. The DMV has the authority to change the cost of repairs to qualify for a waiver to meet the requirements of 40 CFR 51.360. It is the State's intention to annually update the cost of repairs to qualify for a waiver.

An extension of time, not to exceed one inspection cycle, may be granted to obtain needed repairs on a vehicle in the case of economic hardship of the owner. Only one such extension may be granted for any vehicle. The DMV Field Agent issues time extensions.

The emissions certificate for failed vehicles alert motorists that they should pursue warranty repairs if the vehicle meets the age and mileage criteria. Emission inspectors provide motorists who fail the test with a copy of a brochure explaining warranty coverage.

## **10.2 Applicable Documentation for the Connecticut I/M Program**

C.G.S. section 14-164c (d) currently provides for waivers. This section states that the Commissioner of Motor Vehicles shall grant waivers from compliance with standards for vehicles which fail emission inspection and require an "unreasonable cost of repair" to bring the vehicles into compliance. This section has been amended to redefine "unreasonable cost of repair" as an amount in excess of the minimum expenditure amount required in 40 CFR 51.360.

In addition, R.C.S.A. section 14-164c-11a contains the relevant regulatory provision concerning waivers, which incorporate the federal waiver requirements into DMV regulations. This section will allow the State to issue a waiver if an "unreasonable cost" is required to bring the vehicle into compliance. An "unreasonable cost" will be defined in the regulations as that amount mandated in 40 CFR 51.360.

R.C.S.A. Section 14-164c-11a(c) was inaccurately transcribed during the adoption process but was intended to read as follows: Repairs required because of tampering with the air pollution control system or any emissions related mechanism shall not be included as expenditures, and waivers shall not be issued to vehicles for tampering related repairs. DMV recognizes this issue.

Section 14-164c-11a of the R.C.S.A., included in Appendix 2, also provides for functional diagnostic inspection waivers, but only for vehicles subject to the ASM 2525. The Inspection Agreement<sup>19</sup> specifies that the Contractor shall make each Test Station capable of performing diagnostic inspections. In addition, DMV's Emission Division Technical Management Center is outfitted with diagnostic capabilities.

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<sup>19</sup> See Appendix 1.

## **11.0 Motorist Compliance Enforcement**

### **11.1 Connecticut I/M Program Meeting Federal SIP Requirements**

Under DMV's motorist compliance enforcement program, all subject vehicles are denied registration unless valid proof of having passed a vehicle inspection test or received a waiver is provided. Valid proof of compliance is either compliance status on the EDBMS or possession of a Vehicle Inspection Report (VIR). The Connecticut State Police and other local police agencies have the authority to cite motorists who fail to comply with the registration requirement or any I/M requirement.

Subsection (n) of C.G.S. section 14-164c provides for a thirty-five dollar fine for the "first" infraction of applicable I/M statutes and regulations. The compliance enforcement process also includes the cost incurred by a motorist due to registration denial, subsequent renewal of registration and the inspection fee, plus a late fee of twenty dollars; thus the penalty system provides a meaningful deterrent. Although Connecticut has statutory and regulatory authority to suspend registrations for failure to comply with applicable I/M requirements, the program presently relies solely on registration denial.

Appendix 9 contains a listing of the number of motor vehicles that are either exempted from the I/M program, or unaccounted for by the I/M program.

Based upon an analysis of the registration database and test records from the existing program, 99% of the vehicles subject to I/M program testing actually show up to be tested. Noncompliance is greatly reduced by the registration denial enforcement method.

The State commits to the level of motorist enforcement necessary to ensure a compliance rate of no less than 96% among subject vehicles. This compliance rate reflects the compliance rate used in the program modeling demonstrations supplied in Appendices 3 and 4.

### **11.2 Applicable Documentation for the Connecticut I/M Program**

In Connecticut, registration denial I/M enforcement is provided for in C.G.S. section 14-164c as well as R.C.S.A. section 14-164c-4a(b).<sup>20</sup> These sections allow the Commissioner of Motor Vehicles to revoke the registration of any non-complying vehicles. Additional details on motorist compliance enforcement to satisfy the requirements of 40 CFR 51.361 are contained in the Inspection Agreement.<sup>21</sup>

## **12.0 Motorist Compliance Enforcement Program Oversight**

### **12.1 Connecticut I/M Program Meeting Federal SIP Requirements**

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<sup>20</sup> See Appendix 2.

<sup>21</sup> See Appendix 1.

The enforcement program is audited regularly and follows effective program management practices. Connecticut's motorist compliance program operates as follows: emission eligible vehicles are assigned an emission compliance date by the Emissions Data Base Management System (EDBMS) that is appended to their registration records through the Department of Information Technology (DoIT). EDBMS records emission related activity (inspections, waivers, time extensions) and downloads this compliance information to the DoIT record. The DoIT registration record is queried upon each initial registration or registration renewal. If subject vehicle is out of compliance, registration(s) is denied until proper proof, either electronically or paper, of emission compliance is presented. Additionally, this compliance information is accessible to law enforcement via the Connecticut On Line Law Enforcement Telecommunications System. With the advent of a new decentralized emission testing program, registration denial is processed via a computer matching program as is allowed by 40 CFR 51.361 (a).

The quality of the enforcement program's information base is assured through the following: use of data obtained at the test site; use of trackable serial numbers and other identifiers at each step of the inspection and registration process such that responsible personnel can be identified; initial inspection, confirmation, and follow-up of exempt vehicles and exemption-triggering registration changes; and periodic program documentation audits.

The State will permit EPA to conduct periodic audits of the State's I/M enforcement program.

## **12.2 Applicable Documentation for the Connecticut I/M Program**

The legal authority for the implementation of the I/M program is C.G.S. section 14-164c(e).<sup>22</sup> This legislation includes a delegation to the Commissioner of Motor Vehicles to enter into a negotiated Inspection Agreement, through which most of the program oversight elements will be implemented.

The Inspection Agreement<sup>23</sup> meets the extraordinarily extensive and complex data control requirements imposed by the EPA I/M program regulations to enable efficient oversight of the motorist compliance enforcement program.

## **13.0 Quality Assurance**

### **13.1 Connecticut I/M Program Meeting Federal SIP Requirements**

In accordance with 40 CFR 51.363, the Connecticut program performs both overt and covert performance audits. Additionally, Test Centers are video audited through remote visual observation during all scheduled operating hours. Overt audits of each Test Center are performed by DMV Emission Field Agents a minimum of three times a month. In an overt audit, the Test Center's operation is evaluated for contractually required customer service, proper test procedures and authenticity of the testing personnel. Covert audits are performed on each Test Center at least four times a year, both in response to customer complaints and as targeted follow-

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<sup>22</sup> See Appendix 2.

<sup>23</sup> See Appendix 1.

ups on previous overt, covert and trigger audit findings. Covert auditing, employing both tailpipe and OBD testable vehicles configured to fail, examine a Test Center's testing procedures and customer service as well as testing and repair fraud on both initial and retests.

Appendix 13 contains the QA/QC procedures set out within the Inspection Agreement. In order to evaluate the effectiveness of those QA/QC procedures, all DMV I/M program auditors shall be familiarized with applicable QA/QC procedures. Separate procedures shall be established for conducting overt and covert audits, though both shall include sufficient record keeping requirements to support the imposition of enforcement actions based on audit findings. Furthermore, all DMV auditors must complete formal training, including the following: instruction in the use of analyzers; the I/M program's rules and regulations; the basics of air pollution control, emission control basics and engine repair basics as they relate to emission control; evidence gathering; state administrative procedures; quality assurance practices; and covert audit procedures.

Overt audits include: a check of document security; record keeping practices, certifications and required display information; observation and written evaluation of each inspector's ability to perform the test procedure; and a quality control evaluation of test equipment. Test records are reviewed electronically once a month and by Test Station to flag statistically inconsistent or improbable results.

DMV will develop a comprehensive set of trigger reports to identify Test Stations performing fraudulent or inaccurate inspections. Trigger reports focus on finding the following types of fraud: Clean Scanning, which is performing an OBDII test on a fault-free vehicle instead of the vehicle that should be tested; and Clean Piping, which is performing a tailpipe test on a passing vehicle instead of the vehicle that should be tested. These reports will be generated daily/weekly to identify Test Stations performing improper inspections.

The QA/QC program shall conduct at least one covert audit per year of inspectors in high-volume Test Stations, defined as those performing more than 4000 tests per year. Each Test Station that conducts both testing and repair will have one covert vehicle visit per year. Covert vehicles will be set to fail various aspects of the inspection so as to reflect the full range of technology utilized by the I/M program. These procedures also require the remote observation of high-volume Test Stations. Covert auditors shall be able to access the vehicle-testing database, through a secure system operated by senior level DMV staff, to modify records so as to facilitate the covert audit process, and to further avoid detection.<sup>24</sup>

### **13.2 Connecticut I/M Program Meeting Federal SIP Requirements**

Any QA/QC programs associated with the inspection process may be administered by the Commissioner of Motor Vehicles pursuant to C.G.S. section 14-164c(e)(C).<sup>25</sup> This section allows the Commissioner of Motor Vehicles to enter into an inspection agreement with an independent contractor to implement the I/M program. Pursuant to this section, the inspection agreement must contain "surveillance privileges for the Commissioner to ensure compliance with

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<sup>24</sup> Additional details on quality assurance are contained in Appendix 13.

<sup>25</sup> Ibid.

standards, procedures, rules, regulations and laws." The Inspection Agreement allows for the implementation of a "Tracking System" to be used by both Contractor and the State to continually monitor the performance of Inspectors.

#### **14.0 Enforcement Against Contractors, Stations and Inspectors**

##### **14.1 Connecticut I/M Program Meeting Federal SIP Requirements**

The Inspection Agreement contains a Technical Disputes and Consultation procedure to be followed in the event of any dispute. Under the terms of the Inspection Agreement, the parties shall attempt to resolve any dispute with good faith. Any claim, which seeks an amount of damages of more than One Hundred Thousand (\$100,000) Dollars, is subject to "Non-Binding Proceeding" as specified in the Inspection Agreement. There shall be penalties incurred by the Contractor or Test Stations for improper conduct of inspections. The penalties shall escalate, based upon frequency of occurrence and relative severity in terms of a violation's direct impact on the emission reduction potential of the I/M program. The Penalty Schedule, as incorporated into the Inspection Agreement, is included within this SIP as Appendix 14.

DMV I/M program management shall record all enforcement activities, including all warnings, fines, suspensions, revocations and other notices of violation.

In the case of inspector incompetence, the inspector, if not discharged, is to be retrained and must successfully demonstrate the ability to perform the test procedure prior to the restoration of testing privileges. For cases of inspector violations resulting from factors other than incompetence, the inspector shall, at a minimum, be suspended from testing for a period of six months. Such suspensions shall increase with the severity and frequency of violation, leading ultimately to permanent certification revocation.

An auditor is authorized to temporarily suspend a Test Station or test inspector upon finding a violation of program requirements or equipment failure.

##### **14.2 Applicable Documentation for the Connecticut I/M Program**

Legal authority for the enforcement of program requirements against contractors, inspection Test Stations and inspectors may be implied from the language of C.G.S. section 14-164c(e) which states: "The inspection agreement... authorized by this section shall be subject to other provisions as follows: ... (D) any other provision deemed necessary by the commissioner (DMV) for the administration of the inspection agreement." Appendix 2 contains the full text.

In addition to the previously mentioned statutory provisions, the Inspection Agreement provides that stipulated penalties be applied against the Contractor or its inspectors for violation of I/M program rules and procedures. The penalty chart can be found and contract provisions regarding suspension of operation are included in Appendix 14. A description of administrative and judicial procedures and responsibilities are provided in Appendix 13.

## **15.0 Data Collection**

### **15.1 Connecticut I/M Program Meeting Federal SIP Requirements**

Connecticut's I/M Program Data Management is shared between the Contractor, Applus+ Technologies, Inc., and a data management contractor, Sys Tech International. DMV owns the data.

The Inspection Agreement section concerning data ownership, including data collection and reports, directs the Contractor to work with the State to ensure that all inspection data analysis and reporting requirements are met. All data and reporting requirements shall be collected and retained within the EDBMS. Reporting requirements include, but are not limited to: test record number; inspection Test Station number; inspector number; test system number; date of the test; emission test start time; the time final emission scores are determined; vehicle identification number; license plate number; test certificate number; GVWR; model year, make and vehicle type of each vehicle tested; number of cylinders/engine displacement and transmission type for transient emission tests; odometer reading; category of test performed, (i.e., initial, first or second re-test); vehicle fuel type; type of preconditioning performed, if applicable; emission test sequences used; emission scores for HC, CO, carbon dioxide (CO<sub>2</sub>) and NO, including applicable standards; and the results of the evaporative system pressure and purge test or the results of an alternative test as approved by the Administrator.

In order to ensure collection of accurate data, the Inspection Agreement directs the Contractor to perform major upgrades in their current EDBMS systems. This will include upgrading both hardware and software to state of the art, if such update is required to maintain the performance and functionality of the EDBMS system, or any component thereof.

DMV shall gather and summarize the results of quality control checks performed on testing equipment. General information will be reported in the biennial I/M program evaluation.

### **15.2 Applicable Documentation for the Connecticut I/M Program**

Pursuant to C.G.S. section 14-164c(e)(B) the Commissioner of Motor Vehicles is authorized to require reports and documentation from official emission inspection Test Stations. The Inspection Agreement directs the Contractor to meet the requirements of 40 CFR 51.365 and all other data collection and reporting requirements imposed by 40 CFR 51.<sup>26</sup>

The Connecticut I/M program also includes a Data Management Agreement. The Data Management Agreement contains procedures for the format and transmission of any data, which are required to be gathered and reported.

## **16.0 Data Analysis and Reporting**

### **16.1 Connecticut I/M Program Meeting Federal SIP Requirements**

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<sup>26</sup> See Appendix 1.

The State in cooperation with the Contractor shall submit to EPA, a report containing summary data based upon program activities taking place in the previous test cycle. This report will provide statistics for the testing program, the quality control program, the quality assurance program and the enforcement program.

The State shall report on all changes made in the program design, funding, personnel levels, procedures, regulations, and legal authority. The report shall also detail and discuss any weakness or problems discovered in the program over the previous two-year period. In addition the report shall discuss the steps that were taken to address those problems, the result of any corrective actions, and any future efforts planned. The reports must meet the timeframes and contain all the information required by 40 CFR 51.366.

## **16.2 Applicable Documentation for the Connecticut I/M Program**

The Inspection Agreement<sup>27</sup> requires data analysis and reporting to allow for monitoring and evaluation of the program. According to the Inspection Agreement, this reporting requirement is the responsibility of the Contractor. The reporting requirement shall be a component of a QA/QC Plan within the Inspection Agreement. The Contractor shall communicate the required data to the State (DMV/DEP).

## **17.0 Inspector Training and Certification**

### **17.1 Connecticut I/M Program Meeting Federal SIP Requirements**

Connecticut I/M regulations require emission inspectors to be competent as demonstrated by such standards as the Commissioner of Motor Vehicles may prescribe. These standards will include training, certification and recertification every two (2) years. The Contractor will track inspector certifications and notify the inspectors' within ninety days of the certification's expiration. Training must include all of the elements required by 40 CFR 51.367. Inspector candidates will not be certified unless they have passed a written test with at least 80% correct responses and a practical hands-on examination. Inspector certification shall be valid for no more than two (2) years, at which time refresher training and testing shall be required prior to recertification.

Pursuant to the Inspection Agreement, the Commissioner of Motor Vehicles has the right to monitor and evaluate the training and competence of inspectors and their performance testing, and also to evaluate the effectiveness of the inspection process or any part thereof. The Commissioner of Motor Vehicles may review and evaluate the training and certification of inspectors, and may require changes in such programs from time to time upon a finding that testing procedures are not being followed. Alternative procedures for determining the competency of inspectors may be used if approved by the Commissioner of Motor Vehicles.

## **17.2 Applicable Documentation for the Connecticut I/M Program**

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<sup>27</sup> Ibid.

Statutory authority for an inspector certification program is included in C.G.S. section 14-164c(e)(A), which allows the Commissioner of Motor Vehicles, through the Inspection Agreement, to provide minimum requirements for the staff of Test Stations.<sup>28</sup> In addition to the aforementioned statutory mandate, section 14-164c-18a of the R.C.S.A. provides that, "All persons conducting emissions inspections shall be certified in accordance with the requirements of 40 CFR section 51.367. Under no circumstances shall the Contractor or any official emissions inspection Test Station cause or permit an emissions inspection or any part thereof to be performed by a person who is not currently certified. The Contractor will conduct an inspector training and certification program as described in the contract, including the elements of periodic retraining and re-certification of inspectors."<sup>29</sup>

The Inspection Agreement also states that the Contractor agrees that all inspectors employed by the Contractor shall be appropriately certified and approved to perform inspections as required in 40 CFR 51.367. The Inspection Agreement further details the complete inspector training and certification requirements.<sup>30</sup>

## **18.0 Public Information and Consumer Protection**

### **18.1 Connecticut I/M Program Meeting Federal SIP Requirements**

The State has an ongoing public information campaign. Pursuant to the Inspection Agreement, the Contractor has designed and implemented a public education program for the purpose of providing information to individuals, organizations and businesses, which will interface with the I/M program. The Information Program, at a minimum, describes:

1. Projected benefits of the I/M program;
2. Nature of the test, inspection Test Station locations and hours of operation;
3. Test procedure requirements;
4. Summary of vehicle pass/fail criteria;
5. Methods of selecting a convenient inspection Test Station
6. Effective techniques, as recommended by DMV, which can be employed in tuning, adjusting and otherwise maintaining a vehicle so as to increase the probability of operating within applicable State and Federal standards.

The Inspection Agreement requires that the Contractor implement a Customer Problem Resolution Plan to handle any consumer complaints concerning vehicle inspection activities. The Contractor shall provide a monthly report to DMV on the status of the Customer Problem Resolution Plan's Hotlines, website, and customer comment cards. The report summarizes all information related to the complaints received, Test Station issues, property damage and personal injury claims, average time to answer abandoned calls, and methods of resolution. On receipt of such report, DMV shall follow up on all complaints contained therein within a reasonable period of time. In the event of consumer complaints or disputes, DMV may order a retest at no expense to the customer in order to assist the resolution of such dispute. In the event the complaint raises

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<sup>28</sup> See Appendix 2 for regulation text.

<sup>29</sup> Ibid.

<sup>30</sup> See Appendix 1.

issues beyond the scope of expertise possessed by DMV, the complaint, with all relevant information and documentation, may be forwarded to the Department of Consumer Protection. A customer satisfaction and survey program shall be made an integral part of the public education program described above.

Connecticut motorists have several ways to register their emission testing complaints: (1) Testing Contractor's hotline; (2) DMV Emission Division dedicated line and a DMV Phone Center hotline; and (3) DMV and testing contractor website based e-mail complaint system. All received complaints are logged, researched and resolved via letter, e-mail or phone. All outstanding complaints are discussed with the testing contractor monthly.

To address the protection of whistleblowers plan requirements of 40 CFR 51.368(b), DMV has a dedicated phone number for the public to register a complaint of possible testing or repair fraud. This phone number is posted in every testing station. Authority for this plan is found in C.G.S. statutes: Sections 4-61dd and 31-51m.

Additional details on public information and consumer protection are provided in Appendix 6.

## **18.2 Applicable Documentation for the Connecticut I/M Program**

The public education and consumer protection program elements are outlined in and implemented by, the Inspection Agreement provided in Appendix 1.

## **19.0 Improving Repair Effectiveness**

### **19.1 Connecticut I/M Program Meeting Federal SIP Requirements**

DMV in conjunction with the Contractor is responsible for assisting repair facilities and technicians and shall either operate a hot-line service to answer questions or contract with a qualified third party to provide such service.

In cooperation with DMV, the Contractor will track the repair effectiveness performance of repair facilities. The State strives to provide the minimum information listed in 40 CFR 51.369 (b) or an alternative format conveying similar information on the ability of the repair facilities to provide effective and convenient repair to the public at the time of initial failure. A completed repair form is required in order to qualify for a free retest within thirty days of the failed inspection, pursuant to R.C.S.A. section 14-164c-9a(a).<sup>31</sup>

The Contractor shall cause the Test Stations to collect information on emissions repairs from motorists with failed vehicles at the time of re-inspection. Contractor shall develop forms, which it will require the Test Stations to distribute at the time of a vehicle's failure of an inspection that make data entry easy and help ensure the quality of repair information. This information shall identify the technician and the shop that performed the repairs. The Inspection Agreement requires the Contractor to develop an emissions repair effectiveness index in consultation with DMV and subject to its approval, which identifies those repair facilities with the greatest success

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<sup>31</sup> Appendix 2 contains the regulation text.

at repairing vehicles and with the lowest rate of waivers after their repairs. The index shall be weighted to emphasize improvement in a shop's success rate and shall be updated continuously and transmitted to the EDBMS for DMV to incorporate it into the repair shop information in the EDBMS system. Upon printing an inspection failure report, a directory of certified repair facilities, which identifies such repair facilities closest to the Test Station, will be provided to the motorist whose vehicle fails an inspection.

DMV, in conjunction with the Contractor, is implementing a training program to upgrade the diagnostic and repair skills of the vehicle inspection program's current and future repair technicians. To qualify for a waiver, vehicle repairs must be performed by a State recognized mechanic who completed the training and passed an examination. Motorists who fail will receive a diagnosis of the likely reasons for failure and a list of State recognized repair facilities that employ certified repair technicians; their success record will be included.

## **19.2 Applicable Documentation of the Connecticut I/M Program**

Additional details on improving repair effectiveness are provided in Appendix 2, including the R.C.S.A. sections 14-164c-14a and 14-164c-15a, which authorize DMV's Connecticut Repair Technician and Certification Program.

## **20.0 Compliance with Recall Notices**

### **20.1 Connecticut I/M Program Meeting Federal SIP Requirements**

The Inspection Agreement directs the Contractor to provide an emissions recall information system that will provide a complete corrective action process for handling all vehicles targeted for emissions recall repairs, as outlined in Appendix 6. The system will ensure that all vehicles are identified and entered into the system, and that action is initiated on them, a resolution is achieved, and a detailed status is maintained and made available to DMV.

## **20.2 Applicable Documentation for the Connecticut I/M Program**

R.C.S.A. section 14-164c-5a(c)<sup>32</sup> provides the State with the regulatory authority to require vehicle owners to comply with recall notices in order to complete vehicle emissions inspection. The QA/QC Plan<sup>33</sup> also contains information on emissions-control warranties and recalls. Connecticut has established a quality control program, but a recall compliance plan has not yet been implemented. DMV will maintain a recall campaign database that will be updated quarterly as part of this plan. Connecticut will require compliance with recall notices when the information necessary to identify recalled vehicles is made available by EPA. This information will consist of lists of VINs with unresolved recalls in a computerized database, which can be integrated with EDBMS.

## **21.0 On-Road Testing**

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<sup>32</sup> See Appendix 2.

<sup>33</sup> See Appendix 13.

## **21.1 Connecticut I/M Program Meeting Federal SIP Requirements**

The on-road testing program shall be conducted via remote sensing. Measurements of HC, CO, NO and/or CO<sub>2</sub> shall be taken.

A minimum of 0.5 percent of the fleet, or 20,000 vehicles, whichever is less, shall receive valid remote sensing tests per inspection cycle. A valid remote sensing test is defined as any remote sensing test where the data received are sufficient to determine a subject vehicle's identity and emissions. The State conducts as many remote-sensing tests as necessary to obtain the required number of valid tests.

Connecticut has authority to enforce off-cycle inspections, but due to concerns over falsely failing clean vehicles, has decided not to do so. When EPA develops reliable on-road testing criteria, Connecticut will enforce the standards.

## **21.2 Applicable Documentation for the Connecticut I/M Program**

On-road testing is conducted pursuant to the legal authority in C.G.S. section 14-164c (j). The Inspection Agreement directs the Contractor to provide on-road inspections (Article III, Section B, 11j.) of no less than 0.5 percent of the vehicles subject to the I/M requirements contained herein. The Contractor is directed to utilize state of the art remote sensing technology to administer such on-road tests.<sup>34</sup>

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<sup>34</sup> See Appendix 2 for regulation text and Appendix 1 for Inspection Agreement.

## **Appendix 1**

State of Connecticut  
Inspection Agreement

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**STATE OF CONNECTICUT  
DEPARTMENT OF MOTOR VEHICLES  
AND  
AGBAR TECHNOLOGIES, INC.**

**Contract**

For the Establishment and Operation of a  
Decentralized Motor Vehicle Inspection Program for  
The State of Connecticut

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**CONTRACT BY AND BETWEEN THE STATE OF CONNECTICUT  
AND AGBAR TECHNOLOGIES, INC. FOR THE ESTABLISHMENT  
AND OPERATION OF A DECENTRALIZED MOTOR VEHICLE  
INSPECTION PROGRAM FOR THE STATE OF CONNECTICUT**

**THIS CONTRACT** is made and entered into as of this \_\_\_\_\_ Day of December, 2002, by and between the **STATE OF CONNECTICUT** (“**State**”), acting herein through its duly authorized representative, the **DEPARTMENT OF MOTOR VEHICLES** (“**Department**” or “**DMV**”), under the authority of Sections 4-8, 14-3 and 14-164c of the Connecticut General Statutes, as amended, and **AGBAR TECHNOLOGIES, INC.** (“**Contractor**”), a corporation having its principal place of business at 444 North Michigan Avenue, Suite 1110, Chicago, Illinois 60611.

**WHEREAS**, on October 15, 2001 the State, through the Department, issued its Request for Proposals Title: Motor Vehicle Emissions Inspections Request Number: DMV 101021 (the “**RFP**”);

**WHEREAS**, subsequent to that date, the DMV provided additional Information for Prospective Providers Under DMV Request for Proposals, Number DMV 101021, Motor Vehicle Emission Inspections (the “**Information**”) which modified, supplemented and amplified certain provisions of the RFP;

**WHEREAS**, Contractor timely submitted its response to the RFP and the Information by the December 17, 2001 RFP due date, which response included three parts (the “**Response**”); and

**WHEREAS**, it is intended by the parties hereto that the terms, conditions and specifications in the RFP, the Information and the Response shall be incorporated herein and shall be considered integrated into this Contract;

**NOW THEREFORE**, the State, through the Department and Contractor, for and in consideration of the mutual covenants and other good and valuable consideration set forth herein, do hereby agree to the terms of the Contract as set forth herein.

**ARTICLE I.**

**STATUTORY AUTHORITY**

A. VIP Contract Award.

This Contract between Contractor, a corporation qualified and registered to do business in the state of Connecticut, acting herein through its duly authorized representative, and the Department, acting herein through its Commissioner, under the authority of Sections 4-8, 14-3 and 14-164c of the Connecticut General Statutes, as amended, provides for the creation, operation and maintenance of a network of independently owned and operated vehicle inspection facilities for conducting enhanced vehicle emission inspections of all non-exempt motor vehicles

for the VIP for a period of six (6) years from the Program Commencement Date or on such later date as may be directed by the State Representative in accordance with the provisions hereof. This Contract further provides for an option to extend the period of performance for one (1) year exercisable by the State as more particularly described herein.

B. CAAA.

Pursuant to the Clean Air Act Amendments of 1990, and the regulations of the United States Environmental Protection Agency (codified at Title 40, Part 51, Subpart S) (the “CAAA”), the State is required to adopt High-Tech I/M Emissions test procedures, emissions standards, quality control processes and equipment utilization criteria in order to carry out the objectives of the CAAA. Contractor and the State intend to comply with all legal and regulatory requirements as they relate to vehicle emissions testing, whether such requirements are embodied in federal or state statutes or regulations or whether embodied in federal or state implementation procedures adopted by the appropriate oversight agencies.

C. C.G.S.

Chapter 246a of Title 14 of the Connecticut General Statutes, as amended by Public Acts 01-09 (Special Session) and 02-70, and as codified at C.G.S. Section 14-164c, authorizes the Commissioner of the DMV to enter into an emissions inspection agreement or agreements with an independent contractor to provide for the equipping, maintenance, or operation of emissions inspection stations to provide emissions inspections. In accordance with the cited authority, such agreement or agreements may provide for the performance of the Inspections by licensed motor vehicle dealers and repairers using certified emissions Inspectors.

D. Selection.

The Commissioner of the DMV has determined that Contractor has the capability, resources, technical, and management skills to adequately perform the tasks required to conduct, equip, manage, and maintain the VIP and has selected Contractor to perform those tasks and services.

## ARTICLE II.

### ABBREVIATIONS AND DEFINITIONS

The meaning of abbreviations and terms (or pronouns used in place of them) used in this Contract shall be interpreted in accordance with the abbreviations and definitions contained in this Article II.

A. Definitions.

“*Acceptance Test Plan*” or “*ATP*” – Has that meaning set forth in Section XXIII.D.

**“Applicable Legal Requirements”** - All applicable legal and regulatory requirements governing vehicle emissions testing facilities and procedures, including C.G.S. Section 14-164c, as amended by Public Acts 01-09 (Special Session) and 02-70, the CAAA, the EPA Regulations, the SIP, the DMV Regulations, and the DEP Regulations, as amended and in effect from time to time during the term of this Contract.

**“Approved”, “directed”, “ordered”, or their derivatives** – Approved, directed or ordered by the State Representative in writing unless otherwise expressly indicated.

**“BAR” or “BAR 97”** – California Bureau of Automotive Repair.

**“CAAA”** – The Clean Air Act Amendments of 1990, 42 U.S.C. § 7407, as the same may be amended from time to time and the EPA Regulations relating thereto.

**“CFR”** – The Code of Federal Regulations, as the same may be amended from time to time.

**“C.G.S.”** – The Connecticut General Statutes, as the same may be amended from time to time.

**“Contract”** – Shall have that meaning set forth in Section III.A.1.

**“Contractor”** - Agbar Technologies, Inc., a Delaware corporation.

**“Contractor-equipped Station”** – A Station that uses a Workstation provided by Contractor.

**“Contractor’s Fee”** - The amount that Contractor is entitled to receive from the Inspection Fee for each paid Inspection, which fee shall be paid by each Station to Contractor.

**“Contractor’s Proprietary Software”** – Shall have that meaning set forth in Section VIII.A.6.

**“CT2001-D”** – Has that meaning set forth in Section XXIII.I.1.a.

**“Days”** - Calendar days, unless otherwise designated.

**“Department”** – The Connecticut Department of Motor Vehicles or its duly authorized agents or representatives.

**“DEP”** – The Connecticut Department of Environmental Protection or its duly authorized agents or representatives.

**“DEP Regulations”** – Those regulations promulgated by DEP providing for emissions standards for motor vehicle inspection pursuant to the statutory authority of C.G.S. Section 14-164c, as the same may be amended from time to time.

“**DMV**” – The Connecticut Department of Motor Vehicles or its duly authorized agents or representatives.

“**DMV Regulations**” - Those regulations promulgated by DMV providing for the establishment and operation of a periodic motor vehicle emissions inspection program pursuant to the statutory authority of C.G.S. Section 14-164c, as the same may be amended from time to time.

“**Documentation**” – Has that meaning set forth in Section VIII.A.2. hereto.

“**EDBMS**” – The State’s Emissions Database Management System.

“**Effective Date**” - The date on which this Contract is approved by the Attorney General of the State.

“**EPA**” – The United States Environmental Protection Agency or its duly authorized agents or representatives.

“**EPA Regulations**” - Final rules of the EPA establishing performance standards and other requirements for vehicle inspection programs pursuant to Section 182 of the CAAA appearing at 40 CFR Part 51, Subpart S as adopted on November 5, 1992, as amended from time to time and 40 CFR Parts 85 and 86 (OBD inspection requirements), as the same may be amended from time to time, and all EPA technical guidance publications issued in connection therewith.

“**Escrow Deposit Materials**” – Shall have that meaning set forth in Section VIII.F.

“**Escrowed Source Code**” – Shall have that meaning set forth in Section VIII.F.

“**Expiration Date**” - The date on which the Contract is scheduled to be completed if it were to be performed to its conclusion (of the initial term or any extension period) without being terminated earlier or otherwise canceled.

“**Fleet**” – The total number and population of Connecticut-registered motor vehicles (or those required by law to be registered by the DMV that are subject to the VIP that have a GVWR of 10,000 lbs. or less, and are twenty-five (25) model years of age or less but more than four (4) model years of age, (as determined on January 1, 2003 and each January 1<sup>st</sup> thereafter), with model year 1978 deemed as the oldest model year in the Fleet, and with such 1978 model year vehicles eliminated from the Inspection population on January 1, 2003; and with model years 2000 and newer excluded, with such 2000 model year vehicles included in the Fleet on and after January 1, 2004). On each January 1<sup>st</sup>, the oldest year shall be excluded from the Fleet and the fourth model year from the previous year shall be included in the Fleet.

**“Government Codes”** – All federal, state and local government code requirements including, but not limited to, employment, occupational safety, building standards, building safety, fire codes and public building requirements for use by the handicapped.

**“GVWR”** – The gross vehicle weight rating which is defined and specified by each vehicle manufacturer for a single vehicle.

**“Information”** – The Information for Prospective Providers under DMV Request for Proposals, Number DMV 101021, Motor Vehicle Emission Inspections.

**“Inspection”** - The emissions inspection of a motor vehicle conducted by an Inspector at a Station using the System in accordance with the terms of C.G.S. Chapter 246a, and in accordance with the terms of this Contract.

**“Inspection Fee”** - The fee set by the State and charged to a vehicle owner for an Inspection.

**“Inspection Protocol”** – Has that meaning set forth in Section XXIII.F.

**“Inspector”** - An individual who is properly trained and certified by Contractor to conduct Inspections in accordance with EPA Regulations.

**“Intellectual Property Rights”** – All United States and foreign copyright, trademark, patent and trade secret rights.

**“Lane”** - A portion of a Station which is comprised of a Workstation with work positions to conduct Inspections.

**“Mini-VID”** – Contractor’s central computer systems, communication devices and software that Contractor shall establish and maintain to collect, store, analyze and report data of the VIP pursuant to the terms of this Contract.

**“Modification(s)”** – Has that meaning set forth in Section VIII.A.8.

**“New System Software”** – Has that meaning set forth in Section VIII.A.9.

**“Notice to Proceed”** - The official notice from the Department to proceed with the work under the Contract.

**“OBD II”** - The On-Board Diagnostics electronic system that is required to be installed in all 1996 and newer motor vehicles and that detects, stores, and reports information on the operating conditions of a vehicle’s emissions control system as referenced and described in 40 CFR Parts 85 and 86.

**“OPM”** – The Office of Policy and Management of the State or its duly authorized agents or representatives.

“**OSHA**” – The Occupational Safety and Health Act, as the same may be amended from time to time.

“**Plans**” - The schedules and exhibits attached (and to be attached) hereto which establish the technical specifications and performance criteria for creation and operation of the VIP.

“**Pre-conditioned 2 Speed Idle Test**” – The exhaust emissions test described in 40 CFR (Chapter 1, Part 85, Section 85.2220).

“**Program**” or “**VIP**” – The State’s Vehicle Inspection Program.

“**Program Commencement Date**” – The earliest of the date on which Contractor’s performance of Inspections under the VIP begins or the date designated by the State Representative in his Notice to Proceed which date shall be no later than eight (8) months from the issuance of the Notice to Proceed, or such other date as set forth in Section III.B.4 hereto.

“**Proprietary Software**” – Software developed and offered for sale or licensed to others by Contractor or its subcontractor(s) and used in the operation of the VIP in a Workstation or the Mini-VID.

“**QA/QC Plan**” – Has that meaning set forth in Section XXIII.B.1.

“**Quarterly Performance Evaluation**” – Has that meaning set forth in Section V.E.

“**Reminder Notices**” – Has that meaning set forth in Section III.B.3.a.

“**RPM**” - Engine revolutions per minute.

“**Scheduled Hours**” - Those hours during which the Stations are scheduled to be open for Inspections, as set forth in Section III.B.5.

“**Self-financed Station**” – A Station that acquires a Workstation provided by Contractor at such Station’s expense.

“**SIP**” – The State of Connecticut’s implementation plan for air pollution reduction emissions inspections (as the same may be amended from time to time) which is required by the CAAA.

“**Software**” – Has that meaning set forth in Section VIII.A.1.

“**Source Code**” – Those statements in a computer language, which when processed by a compiler, assembler or interpreter become executable by a computer.

“**State**” - State of Connecticut and/or its duly authorized agents or representatives.

**“State Representative”** – The DMV Commissioner or his/her designee.

**“Station” or “Stations”** - Those independently owned facilities which have, by agreement with Contractor, opted to participate in the VIP as an inspection facility as evidenced by the execution of a Station Agreement, including Contractor-equipped Stations and Self-financed Stations.

**“Station Agreement”** – The agreement between Contractor and each Station within the VIP as more fully described in Section X.B.

**“Station Network”** - The entire system of Stations.

**“Sticker”** – The label that may be affixed to the windshield of a motor vehicle to evidence compliance with the VIP requirements.

**“Subcontractor’s Software”** – Has that meaning set forth in Section VIII.A.7.

**“System”** - All of the Stations, Workstations, Mini-VID, Testing Interface Application, diagnostic equipment and other personal property used by the Contractor or provided by Contractor to the Stations and DMV to be used in the VIP or its administration.

**“Technical Specifications”** - The Management and Technical Proposal for: Motor Vehicle Emissions Inspections Request Number: DMV #101021 Parts I and II submitted by Contractor to the Department on December 17, 2001.

**“Testing Interface Application” or “Testing Interface Application Software”** – Has that meaning set forth in Section VIII.A.4.

**“Third Party Software”** – Has that meaning set forth in Section VIII.A.5.

**“Updates”** – Has that meaning set forth in Section VIII.E.

**“VIN”** – Vehicle Identification Number.

**“VIP” or “Program”** – The State’s Vehicle Inspection Program.

**“VIP Assets”** - The property used by Contractor and the Contractor-equipped Stations in the performance of the Contract as more particularly set forth in **Schedule 9**.

**“VIR”** - Vehicle Inspection Report as described in the DMV and EPA Regulations.

**“Workstation”** - The complete set of hardware, software, testing equipment and accessories residing at a Station and necessary to conduct Inspections, including equipment used for quality control. This includes, but is not limited to, the computer, modem, printer, test and

communications software to connect to the EDBMS, emissions analyzer, dynamometer, flow measurement device, gas cap tester, OBD scan tool, RPM sensor, and operating manuals.

“*Workstation Software*” – Has that meaning set forth in Section VIII.A.3.

### ARTICLE III.

#### DOCUMENTS AND PERFORMANCE

##### A. Documents.

1. Contract. The following documents (collectively, the “**Contract**”) represent the entire and integrated agreement between the parties hereto:

- a. The RFP;
- b. The Information;
- c. The Response (including the Technical Specifications); and
- d. This document and all Exhibits or Schedules attached hereto (the “**Agreement**”).

2. Order of Precedence. In the event of a conflict between or among any of the documents which comprise this Contract as set forth in Section III.A.1 above, this Agreement prevails over the Response, which prevails over the Information, which prevails over the RFP, unless expressly stated otherwise in this Agreement. The absence of any specific provision in a higher-order document shall not be deemed to be in conflict with any provision of a lower-order document that includes terms in addition to or more stringent than those in such higher-order document, unless expressly stated otherwise. In any matter in which a higher-order document is silent, the commitments, representations, promises, obligations and performance specifications and standards of the lower-order documents shall *continue in effect* and be deemed in addition to or an elaboration of those of the higher-order document.

3. Applicable Legal Requirements. In the event of changes in legal or regulatory requirements, Contractor’s performance and all Stations, operations and procedures shall comply at all times with all Applicable Legal Requirements, whether or not expressly so stated in any provision of this Contract.

##### B. VIP.

1. VIP. Contractor shall implement and carry out the VIP in accordance with the Contract and all Applicable Legal Requirements. Contractor shall furnish the necessary personnel, facilities, equipment, subcontractors and expertise necessary for, or incidental to, the implementation and operation of the VIP in accordance with the terms and conditions of this Contract.

2. The System. Contractor shall provide the State with a decentralized System which is comprised of a network of no fewer than 300 Contractor-equipped Stations and may also include no more than 200 Self-financed Stations. The first 275 Contractor-equipped Stations shall be established based on the relative vehicle population domiciled in each county as a percentage of the State vehicle population, as set forth in **Schedule 1** attached hereto. Fifty (50) of the 300 Contractor-equipped Stations shall be equipped to perform diesel test Inspections. Contractor shall ensure that such diesel Stations are appropriately distributed throughout the State, taking into consideration population density, county configurations, and anticipated utilization, subject to the Department's approval. At least one (1) diesel Contractor-equipped Station shall be established in each county. Each Station shall be equipped by Contractor with the requisite Workstation necessary for conducting Inspections as set forth herein and the Testing Interface Application to send and receive data from and to the EDBMS. Each Workstation shall be equipped to store up to five hundred (500) Inspection reports and three (3) still photographs of each Inspection at times where the EDBMS is not accessible to receive such Inspection data transfers. Contractor shall contract with each Station to make available sufficient space for the creation and operation of a Lane for the purpose of conducting Inspections according to all Applicable Legal Requirements and according to the terms and conditions set forth in this Contract. Contractor shall be prohibited from selecting any facility as a Station which facility cannot perform all aspects of all tests required under this Contract within a Lane (except with respect to diesel, as stated above). Contractor shall oversee and manage the operation of the System to ensure the Stations' compliance with the terms hereof. Contractor's obligation to provide and maintain throughout the term of this Contract no fewer than 300 Contractor-equipped Stations is absolute irrespective of the number of Self-financed Stations that may be established. In the event at any time or times any Contractor-equipped Station drops out of the VIP, Contractor shall have sixty (60) Days to replace such Station with a Contractor-equipped Station.

3. The Stickers.

a. The DMV intends to use its best efforts to eliminate the use of windshield Stickers in the Program. If the Stickers have been eliminated from the Program, in addition to those responsibilities of Contractor set forth in the Public Education and Information Plan outlined in **Schedule 4** hereto, Contractor shall provide regular monthly mailings, continuing throughout the term of the Contract, to the currently registered owners of vehicles which have been scheduled for Inspections (hereinafter referred to as "**Reminder Notices**"). The Department shall provide to Contractor the information for the mailings which shall include the name and address information from its current Master Registration file, in a standard computerized format, for all mailings required by this Article. Such information for the Reminder Notices shall be prepared by means of a matching process conducted by the EDBMS vendor (to match and correlate scheduled Inspection dates, vehicle VIN numbers and current registered owners). Contractor shall be responsible for all supplies, materials and costs, including printing and postage costs, of the Reminder Notices. Contractor shall meet and cooperate fully with the EDBMS vendor to establish the necessary communications links and procedures for the transmission and receipt of the correct information. All Reminder Notices shall be mailed not more than sixty (60) nor less than forty-five (45) Days prior to the scheduled Inspection month.

b. If the Stickers are not eliminated from the VIP for any reason, including, but not limited to, legislative direction or enactment, the Department may require Contractor to use either (i) preprinted windshield Stickers or (ii) print-on-demand Stickers for Fleet vehicles.

(i) Preprinted Windshield Stickers. If preprinted windshield Stickers are used, then in cooperation with the Department, Contractor shall distribute to each Station pass/fail Stickers of a type, quality and design substantially in conformity with the Stickers used by the Department previously in its emissions testing program. Each Station, after conducting the Inspection, shall affix such Sticker to each tested vehicle in accordance with the Inspection results.

(ii) Print-on-Demand Stickers. In the event that the Department determines that it will use print-on-demand Stickers, then the Stickers utilized by Contractor shall be of a type, quality and design substantially in conformity with the Stickers used by the Department previously in its emissions testing program. Such print-on-demand Stickers shall be printed and affixed to each tested vehicle by each Station after conducting the Inspection in accordance with the Inspection results.

Contractor shall be responsible for the procurement, cost, distribution and security of all Stickers, whether preprinted or print-on-demand, as well as all issues with respect to System reliability, quality assurance and Inspection results as more fully established herein, and shall ensure that it has taken those steps necessary to prevent fraudulent activity, properly reacts to fraudulent activity once detected and identifies processes in order to avoid the recurrence of such fraudulent activity with respect to such Inspections and the distribution of the pass/fail Stickers. Contractor, as part of its anti-fraud program, shall develop an electronic process for the distribution of the pass/fail Stickers or the distribution of stock to be used for print-on-demand Stickers to each Station and shall conduct routine physical audits with respect to the distribution and handling of the Stickers. Contractor shall provide the Department with satisfactory proof of the conduct of quarterly physical audits and monthly electronic audits. Where Contractor detects missing, lost or stolen Stickers, or stock to be used in the printing of Stickers or instances of fraud, Contractor shall notify the Department within twenty-four (24) hours of such detection.

c. Contractor shall submit, in a timely manner, and the Department shall review, the proposed content of any mailings required in this Section III.B.3 which shall be subject to the approval of the State Representative pursuant to Section XXI.C. Contractor may use the services of a qualified subcontractor to perform any of its responsibilities under this Section. Subject to the review of the Department and the approval of the State Representative, such subcontractor may be permitted to include within the mailings selected advertising materials and/or public service announcements. Such approval shall be deemed granted for each subsequent mailing where the content of the subsequent mailing is identical to that previously approved mailing. The State Representative may withdraw any approval if in writing mailed to Contractor.

4. Implementation. Contractor and the Department have agreed that it is in the best interest of the VIP for the parties to perform in accordance with the schedule set forth in the Implementation Schedule attached hereto as Schedule 2. As part of the implementation

process, the parties have agreed to use their best efforts to have the Program Commencement Date begin seven (7) months from the Notice to Proceed. In the event, however, that this seven (7) month goal is not achievable, the parties agree that the Program Commencement Date will be a date no later than eight (8) months after the Notice to Proceed, which date shall be confirmed by the State Representative in the Notice to Proceed. As of the Program Commencement Date, at least 250 Contractor-equipped Stations shall each be fully equipped with a Workstation and operational pursuant to Section III.B.9.c(i). Contractor shall identify the first 275 Stations to achieve, on a proportionate basis, that geographic distribution established in **Schedule 1** hereto. The selection and geographic distribution of the final 25 Stations shall be the product of consultation between Contractor and the State Representative, and Contractor and State Representative shall have ninety (90) Days from the Program Commencement Date to identify such 25 Stations. The remaining 25 Contractor-equipped Stations shall each be fully equipped with a Workstation and operational within three (3) months following the earlier of the Department's direction as to location and identity of each of such 25 Stations or the expiration of the ninety (90) Day consultation period. In the event that these final 25 Contractor-equipped Stations are not fully-equipped with a Workstation and operational within forty-five (45) Days after the expiration of this timeframe, the State may deem such failure to be a material breach and give notice of termination of this Contract pursuant to Section XII.C.1.f.

5. Scheduled Hours and Wait Times. It is further acknowledged and agreed that Contractor understands that the reliability of the System is a significant element of the performance criteria set forth herein. In an effort to enhance acceptance of the System by the public, Contractor has agreed it shall establish a standard minimum schedule for hours of operation throughout the Station Network, which shall be Mondays through Fridays from 8 a.m. to 5 p.m. and Saturdays from 8 a.m. to 1 p.m. exclusive of federal and state holidays (the "**Scheduled Hours**"), and shall list each Station location, telephone number and hours of operation on the Program website created and maintained by Contractor as set forth in **Schedule 5**. No exceptions to the Scheduled Hours shall be permitted without the knowledge and consent of the State. Each Station shall be further required to administer Inspections on an appointment and drive-up basis. Contractor shall require the Stations to perform such that any Inspection which is scheduled by appointment (solely for such Inspection) shall be tracked by the Station and completed within thirty (30) minutes of the scheduled appointment time. Any Inspection initiated from a drive-up request shall be initiated within twenty (20) minutes of the vehicle's arrival. If a vehicle owner is late for an Inspection appointment, then such Inspection shall be treated as a drive-up Inspection.

6. Workstation Repairs. Contractor shall maintain sufficient spare parts and accessory equipment to ensure that all Workstations are repaired and the Lanes operational within a period of twenty-four (24) hours of a breakdown or technical operating problem which affects a Station's ability to perform Inspections. If any Lane cannot be put into service within such twenty-four (24) hour period, Contractor will provide DMV a status report, which will include the reason for the delay and an estimate of when such Lane will be placed back in service. Contractor will provide a daily status report to DMV until such Lane is in service. If such Station is not back in service within the twenty-four (24) hour service standard, the State Representative, in his reasonable discretion, may impose penalties and those liquidated damages in accordance with Article V hereto if the problems occurring at such Station are persistent and repetitive in nature.

7. Re-tests. In the event a vehicle fails its paid Inspection, such vehicle may then be re-tested at any Station within thirty (30) Days from the date such vehicle fails such paid test, free of charge. After obtaining a free re-test or after a lapse of the thirty (30) Day period for a free re-test, the vehicle may be re-tested at any Station and will be subject to the Station receiving an Inspection Fee for that re-test; but if that vehicle fails the subsequent paid re-test, it shall be permitted to receive a single re-test free of charge at any Station within thirty (30) Days of the most recent test failure. The cycle of a paid re-test followed by a free re-test as detailed above shall be continuous. No vehicle, however, shall be issued more than a total of three (3) fail VIRs during a biennial Inspection cycle. Any request by a vehicle owner for a test challenging the Inspection results shall be conducted at the original Station conducting such original Inspection within five (5) business days of the Inspection, free of charge.

8. Re-tests for Pre-Contract Inspection Failures. Because the emissions testings of motor vehicles in the State was suspended as of June 28, 2002, and because emissions testing will not recommence until the Program Commencement Date, as of such Date, there will be vehicles subject to Inspections that will have failed such test under the predecessor program without having been provided the right and opportunity to the single free re-test within thirty (30) Days of the initial test. Contractor shall provide this single free re-test without either Contractor or the Station receiving compensation for the re-test from the State, the vehicle owner or any other party. The State shall provide Contractor with the vehicle information necessary to identify such failed vehicles no later than thirty (30) Days prior to the Program Commencement Date.

9. Period of Performance.

a. Time is of the essence for performance under the Contract by the parties.

b. Notice to Proceed.

(i) Promptly after the Effective Date, but no sooner than Contractor's performance of those obligations set forth in Sections V.A and XV.E, the Department shall issue a Notice to Proceed to Contractor forthwith after execution and approval of the Contract by the parties.

(ii) Contractor shall provide the Department with a list of qualified businesses that have submitted an application to participate in the VIP and that meet the minimum qualifications based upon such applications as set forth herein within ninety (90) Days after the Notice to Proceed is issued.

(iii) The Department shall notify Contractor of those businesses that it deems ineligible to participate in the VIP within one hundred four (104) Days after the Department issues the Notice to Proceed.

c. Unless the State Representative directs otherwise in writing, Contractor shall not be permitted to commence operation of the VIP until the State Representative determines that:

(i) No fewer than 250 Stations have been provided with Workstations and any other equipment required by this Contract and such Stations meet the acceptance test requirements set forth in the Acceptance Test Plan;

(ii) Such Stations have each executed a Station Agreement with Contractor; and

(iii) Such Stations have had those facility modifications required for Workstation installation.

d. If Contractor, by the Program Commencement Date, has substantially performed its obligations as required in the Implementation Schedule by such date and has 250 or more Stations operational, the State Representative may, by written notice to Contractor, delay the commencement of the operation of the VIP for a period of up to ninety (90) Days. In such event, such delay shall be deemed a Change Order and the equitable adjustment to which Contractor shall be entitled shall be subject to the provisions of Article XI. The State Representative shall not assess liquidated damages against Contractor for such period.

10. Contract Term; Expiration. This Contract shall expire six (6) years from the Program Commencement Date unless the Department, at its option, and no later than six (6) months prior to such expiration, notifies Contractor in writing that it is extending the Contract for an additional period of one (1) year.

11. Contractor's Responsibilities. Contractor's responsibilities are set forth in this Contract and shall include the following tasks throughout the term of the Contract:

a. Building public understanding and acceptance of the decentralized VIP;

b. Answering questions and resolving problems raised by motorists and Stations;

c. Developing a Station Network that ensures public convenience in consultation with the Department and establishes fair and effective rules for Station participation;

d. Specifying, providing, installing, and maintaining Workstations and the Inspection Protocol to meet the VIP's objectives and using its best efforts to ensure the accuracy of Inspections;

e. Managing the Station Network to prevent Inspection errors and fraud;

f. Evaluating the VIP and using the results of the evaluation to propose to the Department improvements to the VIP;

g. Building and operating the Mini-VID that effectively and efficiently supports Inspections, Station Network management, and other components of the VIP consistent with the EDBMS in accordance with standards and specifications established by the

Department and DOIT in accordance with Section XVI.A.7, provided the State provides Contractor with the standards and specifications associated with the EDBMS within sixty (60) Days following the Notice to Proceed. In the event that Contractor does not receive such standards and specifications within such sixty (60) Day period, the State shall pay Contractor on a time and materials basis at its hourly rate of \$150 for any work done to accommodate a redesign of the Mini-VID pursuant to a Change Order.

h. Training and certifying Inspectors to correctly and efficiently perform Inspections;

i. In cooperation with the Stations, collecting and managing Inspection Fees;

j. Performing on-road testing using remote sensing as required pursuant to 40 CFR Sections 51.351 and 51.371 and the SIP;

k. Contractor shall furnish to the State and shall maintain two (2) complete Workstations with diesel testing equipment which Workstations shall be comprised of the equipment necessary to perform Inspections. Contractor shall also provide the State, upon the State's reasonable request, with the technical assistance and cooperation that the State may require in order to comply with 40 CFR 51.353 and the SIP; and

l. Any other Contractor responsibilities related to the development and implementation of the VIP as set forth in the Contract.

12. VIP Improvements. As a routine part of its management responsibilities, Contractor shall propose improvements that increase the effectiveness, efficiency and convenience of any aspect of the VIP throughout the term of the Contract. Implementation of such improvements shall be done in consultation with the Department, and may be pursuant to a Change Order.

13. Implementation Schedule. The Implementation Schedule is attached hereto as Schedule 2. To ensure that Contractor performs the services necessary for a successful implementation of the VIP and to obtain the data necessary for obtaining the maximum emissions credits from the EPA, Contractor shall develop and implement the VIP, and the State shall cooperate therewith, in accordance with the Implementation Schedule, the Contract, and the other Plans attached hereto. Contractor shall meet all dates set forth in the Implementation Schedule. In the event the State fails to meet any implementation dates set forth herein or the Implementation Schedule, such action items shall be deemed approved by the State and Contractor shall not assert that such failure to respond shall be a breach of the State's obligations hereunder.

14. Pre-Approved Plans. The Plans listed below and appended hereto are incorporated by reference in the Contract. Contractor shall be obligated to adhere to the terms of such Plans as set forth herein, unless the Department consents in writing to any changes to such procedures or processes.

a. Implementation Schedule attached hereto as Schedule 2.

b. The Acceptance Test Plan Outline (“**ATP Outline**”) attached hereto as **Schedule 3**.

c. The Public Education and Information Plan (“**PEI**”) outline attached hereto as **Schedule 4**.

d. Customer Problem Resolution Plan attached hereto as **Schedule 5**.

15. Plans to be Approved After the Effective Date. The Plans listed below, when approved by the Department, shall be incorporated by reference into the Contract. Contractor shall notify the Department in writing on a monthly basis about its progress in developing and implementing the Plans for which it is responsible by indicating which tasks it has completed. In addition, Contractor shall review the Plans as needed to recommend changes or improvements to such Plans, which changes may require a Change Order pursuant to Article XI.

a. EDBMS Integration Plan;

b. QA/QC Plan;

c. Acceptance Test Plan;

d. Public Education and Information Plan; and

e. Workstation Specifications.

16. Progress Updates.

a. Contractor shall discuss its progress with the Department on a weekly basis beginning from the Notice to Proceed, describing Contractor’s implementation of the VIP in accordance with the Implementation Schedule and the other Plans developed and approved in accordance with the Contract. Contractor shall notify the Department in writing and orally at such discussions of any actual or anticipated delays and how these delays may affect compliance with the Implementation Schedule or the planned Program Commencement Date, and Contractor’s recommended or actual solution(s) to any delays or problems.

b. Within two (2) business hours after Contractor’s receipt of notice, Contractor shall notify the Department of any accidents that occur during the Inspection process and result in injuries to workers, customers, or third parties or in damage to a motor vehicle or property.

C. VIP Requirements.

1. Inspection Procedures. Contractor shall, and shall cause Stations to, provide for the Inspections of the Fleet, subject to the Applicable Legal Requirements. The “primary Inspection procedure” (as defined by EPA Regulations) to be administered for 1996 model year Fleet vehicles and newer shall be the OBD II Inspection. The primary Inspection procedure for 1995 and older model year Fleet vehicles shall be ASM 25/25. The primary

Inspection procedure for all diesel-powered vehicles less than 8501 lbs. GVWR, regardless of model year, shall be the Opacity Test (as defined by the EPA Regulations). The Inspection procedure for all Fleet vehicles shall include the Gas Cap Leak Test (as defined by the EPA Regulations). The primary Inspection procedure for diesel vehicles greater than 8500 lbs. GVWR shall be the Snap Idle Test. Visual Inspection for the presence of the catalytic converter shall be performed on all Fleet vehicles up to 8500 lbs. GVWR. For 1995 and older model year vehicles, the Pre-conditioned 2 Speed Idle Test shall be the secondary Inspection procedure for all Fleet vehicles, to be administered to vehicles with GVWR of more than 8500 lbs. and to certain other vehicles in lieu of, or in addition to a primary test in the circumstances specified in Section III.C.3. The Inspection frequency for each Fleet vehicle shall be biennial (in accordance with the schedule and Inspection date as assigned by DMV). The State makes no representations or commitments with respect to the volume of vehicles subject to Inspection and the State does not guarantee Contractor a minimum number of paid Inspections.

2. Fleet. Notwithstanding the definition of the Fleet, no motor vehicle that is identified as exempt from the VIP, in accordance with the provisions of C.G.S. § 14-164c (c) shall be required to be inspected at any time. The State Representative may, at any time during the term of the Contract, direct changes in the composition of the Fleet. If any such change involves the addition of vehicles to the Fleet, Contractor shall, immediately upon receipt of written notice of the change, make provision for Inspection of all such vehicles, in accordance with such Inspection procedure for such additional vehicles as may be directed by DMV, subject to the provisions of Article XI. If any such change involves a one percent (1%) or greater reduction of what the Fleet would have been in the absence of such change in any year of the Contract, Contractor and the Department will negotiate an equitable adjustment to the Contractor’s Fee, in accordance with Article XI.

3. VIP Tests. The VIP requirements as herein described are summarized in the following Table:

|                                                      |               | TEST TYPE             |              |                              |                           |
|------------------------------------------------------|---------------|-----------------------|--------------|------------------------------|---------------------------|
| MODEL YEAR                                           | ASM/25/25     | OBD II                | GAS CAP LEAK | PRE-CONDITIONED 2 SPEED IDLE | PRESENCE OF CAT CONVERTER |
| 1999+                                                | (a)           | <8501 lbs.<br>(a)     | ALL          | >8500 lbs.                   | <8501 lbs.                |
| 1996-1998                                            | (b) (a)       | <8501 lbs.<br>(b) (a) | ALL          | >8500 lbs.                   | <8501 lbs.                |
| 1995 and older                                       | <8501 lbs.    |                       | ALL          | >8500 lbs.                   | <8501 lbs.                |
| 25 model years and older and 4 model years and newer | <b>EXEMPT</b> |                       |              |                              |                           |

a. ASM back up test for vehicles for which data communication link cannot be made during the first test cycle after the Program resumes.

b. ASM test for vehicles identified by USEPA Guidance as problematic for OBD test.

c. Full-time 4-wheel drive and traction control vehicles that cannot be deactivated will receive a Pre-conditioned 2 Speed Idle Test. Other 1995 and older vehicles that cannot be tested on the dynamometer shall receive a Pre-conditioned 2 Speed Idle Test when approved by the State Representative.

*Note:* Test frequency shall be biennial for all vehicles required to be tested.

*Note:* Handicapped drivers of pre-1996 model year vehicles may request and shall receive a Pre-conditioned 2 Speed Idle Test.

*Note:* Diesel vehicles less than 8501 lbs. GVWR shall receive an opacity test.

*Note:* Diesel vehicles of all model years greater than 8,500 lbs. shall receive a snap idle test.

4. VIN Checks. Contractor shall make such contractual arrangements and shall take such administrative actions as are necessary for all of the Stations to perform VIN checks on all vehicles which appear for an Inspection which have not yet been issued a permanent Connecticut registration by DMV. This includes vehicles bearing (i) marker plates issued by any other jurisdiction, (ii) dealer, repairer, recycler or other distinguishing plates, or (iii) temporary (cardboard) plates issued by DMV. The Inspector shall enter the VIN from the subject vehicle (window plate, inside driver's door, trunk etc.) into the Workstation. The Workstation in conjunction with the Mini-VID shall be configured so that the Inspector can verify the VIN for the subject vehicle (using VINA software or equivalent) using the Mini-VID, without access to the EDBMS.

#### ARTICLE IV.

##### COLLECTION OF FEES AND PAYMENT TO CONTRACTOR

A. Fee Collection and Inspection. For each and every Inspection performed at a Station except for necessary re-tests as described above in Sections III.B.7 and 8, Contractor shall:

1. Cause the Station to collect from the motorist an Inspection Fee established by the State Representative and existing from time to time for each Inspection of a motor vehicle performed at each Station in accordance with DMV Regulations and for each and every Inspection, where an Inspection Fee is due;

2. Regardless of whether a fee is due, cause the Inspector to create an electronic record at the Workstation and transmit that record to the EDBMS through the Testing Interface Application; and

3. Cause the Station to accept payment of the Inspection Fee in any form customarily accepted by the Station for other services rendered.

B. Fees. During the initial term and the option term of this Contract, Contractor shall receive a maximum fee from each Station of \$7.50 for each paid Inspection of a motor vehicle and such fee shall not be increased.

C. EDBMS Fees. During the first three (3) years after the Program Commencement Date, within ten (10) Days of the end of each month, Contractor shall deliver to the Department \$.50 for each paid Inspection recorded on the EDBMS during such month. For the remaining years including any option term, within ten (10) Days of the end of each month, Contractor shall deliver to the Department \$.75 for each paid Inspection recorded on the EDBMS during such month.

D. Collections. The State shall not be responsible for the collection of the Stations' payments to Contractor under the Contract or for future collections of the Inspection Fee. Contractor shall include in its Station Agreements a prohibition for any Station to collect from any motorist any amount less or more than the Inspection Fee for each Inspection performed and for which such Inspection Fee is due.

## ARTICLE V.

### LIQUIDATED DAMAGES

A. Security Fund.

1. Contractor shall establish, no later than one (1) week after the Effective Date, for the benefit of the State, a lock box or blocked account which shall have deposited in it the amount of Two Hundred Thousand Dollars (\$200,000.00) as security for the performance by Contractor of its obligations hereunder (the "**Fund**"). The Fund shall be established as a condition precedent to the State's issuance of the Notice to Proceed. The Fund shall be restricted to permit withdrawals solely by the State through individuals designated by the State Representative. The State shall have exclusive signatory control over the Fund and, subject to the terms of this Article V, shall be permitted to withdraw such monies from the Fund that it, in its sole and absolute discretion, believes are due and owing to the State under this Article. No other pre-conditions shall exist for the withdrawal of any money from such Fund. In the event the Fund is diminished below the required funded amount, Contractor shall replenish the Fund within seven (7) Days of its receipt of written notice from the Department establishing the amount that must be deposited in order to replenish the Fund.

2. Contractor shall maintain the Fund at \$200,000 until at least 275 Stations are operating. Thereafter, upon written confirmation by the State Representative that all 275 Stations are operating, the balance of the Fund shall be maintained at \$100,000. Unless the State Representative determines otherwise, the State Representative shall confirm that all such Stations are operating within fifteen (15) days following Contractor's notice to the State of same. Upon written confirmation by the State Representative that all 275 Stations are operating, the State shall remit to Contractor any funds held in the Fund above the \$100,000 funding level required herein within fifteen (15) Days of the State Representative's delivery of such written confirmation. In the event the Fund is diminished below the required funded amount, Contractor

shall replenish the Fund within seven (7) Days of its receipt of written notice from the Department establishing the amount that must be deposited in order to replenish the Fund.

3. Contractor hereby assigns, pledges and grants to the State a security interest in all of Contractor's right, title and interest in and to the Fund and all proceeds thereof. Contractor agrees to execute, at the State's request, such documents as are reasonably necessary for the State to perfect its security interest therein. Contractor shall, pursuant to an agreement in form and substance satisfactory to the State, cause the financial institution to agree to comply, without further consent of Contractor, at any time with instructions from the State to such financial institution directing the disposition of funds from time to time credited to such account.

4. Immediately following expiration or termination of this Contract and final resolution of all of the State's outstanding claims and any disputes between the parties, the State will withdraw and remit to Contractor any balance remaining in the Fund, and will execute and file a termination statement of any financing statement(s) filed to perfect its security interest in the Fund.

**B. Liquidated Damages for Failure to Meet Contract Performance Requirements.**

1. The parties agree that if Contractor fails to meet the performance standards set forth in this Article, the State will sustain significant and unquantifiable damages. Therefore, the parties agree that if Contractor fails to meet the performance standards set forth in this Article, the damages shall be as described below, which amount shall represent the State's sole and exclusive remedy only for such failure(s) to meet the specific performance standards set forth in this Article.

2. If Contractor fails to meet any performance standard set forth in this Agreement, the Department shall notify Contractor that liquidated damages may be imposed if Contractor fails to meet such identified performance standard in the following quarter. If liquidated damages are imposed in the following quarter (due to Contractor's continued failure to meet the particular performance standard), the Department is hereby authorized to withdraw from the Fund that amount assessed by the Department against Contractor as being owed under this Article.

3. Notwithstanding Section V.B.2 above, the State Representative may immediately assess liquidated damages if Contractor:

a. by the Program Commencement Date has fewer than 275 but at least 250 Stations operational, but by the close of a thirty (30) Day period following the Program Commencement Date: (i) has 275 Stations operational, then the State Representative will not assess any liquidated damages; or (ii) does not have 275 Stations operational, then the State Representative may assess Contractor \$150 per Day per Station beginning from the Program Commencement Date until such date as each such Station becomes operational;

b. by the Program Commencement Date has fewer than 250 Stations operational, the State Representative may: (i) delay commencement of the operation of the VIP until such time as Contractor has at least 250 Stations operational; and/or (ii) assess (regardless of whether the operation of the VIP has been delayed) Contractor \$7500 per Day until such time

as Contractor has 250 Stations operational and thereafter may assess Contractor the liquidated damages set forth in Section V.B.3.a (ii) until Contractor has 275 Stations operational;

c. fails to have the remaining 25 Stations operational within the timeframe set forth in Section III.B.4, the State Representative may assess Contractor \$150 per Station per Day;

d. fails to replace a Station within the timeframe set forth in Section III.B.2, the State Representative may assess Contractor \$150 per Station per Day;

e. fails to have 275 Stations operational within eleven (11) months following the Notice to Proceed, the State may deem such failure to be a material breach and give notice of termination of this Contract pursuant to Section XII.C.1.f; and

f. fails to have the remaining 25 Stations operational within forty-five (45) Days following the timeframe set forth in Section III.B.4, the State may deem such failure to be a material breach and give notice of termination of this Contract pursuant to Section XII.C.1.f.

4. The Contract requirements for the quarterly performance evaluations, as described in Section E of this Article, and as incorporating by reference all applicable terms, specific standards and obligations of Contractor under the Contract, together with the liquidated damages to be assessed by the State for failures of adequate performance, are as follows:

a. Failure to conduct Inspector training, to perform the Public Education and Information Plan, or to adequately perform all aspects of the Customer Problem Resolution Plan, including, but not limited to, providing a Station and motorist information call system and related tracking system as set forth in the Public Education and Information Plan and Customer Problem Resolution Plan but excluding compliance with call volume exceeding 800 calls per Day during the first sixty (60) Days following the Program Commencement Date, \$10,000 per quarterly evaluation period;

b. Failure to maintain the overall Workstation operational, functional and accuracy standards in accordance with the terms of this Contract, to adhere to the requirements for regular Workstation maintenance, repairs and equipment replacements, including all applicable response times, and times for restoration of full Workstation operation pursuant to Sections III.B.6 and XXIII.H, \$10,000 per quarterly evaluation period;

c. Failure to perform Program management responsibilities, including, but not limited to, appropriate fiscal accounting related to the Contract, discipline of Stations and Inspectors, fraud prevention and detection, monitoring of adherence to VIP standards, timely and accurate transfer of Inspection data, and all Program evaluation and quality assurance tasks, \$10,000 per quarterly evaluation period.

d. Failure to deliver a complete and timely performance report or to implement previous recommendations on a schedule as agreed between the Department and Contractor, \$10,000 per quarterly evaluation period.

e. The following performance standards shall apply when access to the EDBMS can be established and maintained by the Testing Interface Application as reported in the biweekly communication and System availability reports provided by the EDBMS vendor and/or the Connecticut Department of Information Technology:

(i) Failure of the Testing Interface Application to instantly transfer complete and accurate Inspection data to the EDBMS on a real time basis shall result in notification to Contractor to take immediate, corrective action. If the deficiency identified to Contractor is not remedied and if any Station or Stations continue to perform Inspections for which the data is inaccurate, incomplete or is not transmitted in a timely fashion as set forth below, Contractor shall, after the passage of forty-eight (48) hours from notification, be subject to the charges stated below in Section V.B.4.e (ii), and any other appropriate contractual remedy; and

(ii) Notwithstanding the expressed requirement for instantaneous transfer of all data to the EDBMS set forth above, the separate charges listed within this subparagraph may not be imposed on Contractor by the State unless the Testing Interface Application fails to transfer the necessary motor vehicle Inspection data to the EDBMS within eight (8) minutes from the completion of the Inspection where such failure is attributable to the Contractor's performance hereunder and is not attributable to downed power lines, service problems with the VIP Internet service provider, unavailability of the EDBMS or as a result of an event of force majeure. Subject to the provisions of Section V.B.4.e (i), such failure to transfer will result in a charge of \$25 for each offense, per Station, up to a maximum of \$100 per Day, per Station. Once Contractor resolves the problem at the violating Station, any subsequent offense which occurs within thirty (30) Days shall result in a penalty assessment of \$50 per Station and per offense, up to a maximum of \$200 per Day, per Station. For the purposes of this Section V.B.4.e, failure to transmit accurate or complete Inspection data within the time required shall include, but not be limited to, any instance of:

(A) transmission of data that is not in the format or does not contain all required data elements, as agreed and specified by the Department, Contractor and EDBMS vendor; or

(B) transmission of false or incorrect data, including, but not limited to, pass/fail results, Station number, date and time of Inspection and required calibration and imaging data.

5. Contractor may appeal to the State Representative any assessment of liquidated damages which may be imposed. Unless such appeal is filed within fifteen (15) Days after the assessment of liquidated damages, the assessment shall be deemed final. The State Representative's failure to issue a final determination within thirty (30) Days after receiving Contractor's appeal shall be considered a denial by the State of Contractor's appeal. Any continuing dispute as to the liquidated damages assessed shall be governed by Article XXIV.A (Disputes).

6. The Department may recover liquidated damages only one time for any particular failure, act or omission by Contractor giving rise to a claim under this Section V.B,

regardless of whether such failure, act or omission by Contractor would permit the Department to otherwise claim a violation of more than one clause of Sections V.B.2 and/or V.B.4. The Department may unilaterally assess and withdraw liquidated damages authorized pursuant to the Contract, without a Contract amendment or Change Order.

C. Detection and Penalties for Improper Conduct of Inspections by Test Stations.

1. Surveillance. The EPA Regulations provide certain rights to and impose certain requirements on the State to undertake covert and overt surveillance activities for the purpose of evaluation of the VIP, including, but not limited to, surveillance of Contractor, the Stations, and the VIP operations. Included in such State activities and powers are the rights to inspect the operations, check the equipment functions and calibration and review the various records of Contractor and/or Stations as they relate to operation of the VIP. In addition, the EPA Regulations establish rights of the State to impose penalties against Contractor, the Stations, and employees of Stations. Contractor shall undertake its own quality control review in a format and in accordance with procedures established by the Department and as set forth in Section XXIII.B, to comply with the performance standards imposed by EPA Regulations.

2. Sanctions. In light of the foregoing rights and obligations, Contractor agrees that it shall be primarily responsible for the administration and implementation of sanctions against Stations that fail to adhere to Contract requirements. Contractor shall, within twenty-four (24) hours of learning of a Station’s wrongful act or omission, inform the State in writing, of any violation or failure on the part of a Station with respect to the proper performance of the VIP or use of VIP Assets as identified and listed below in Table A. Contractor shall inform all designated Stations of all applicable Contract requirements and shall incorporate by reference the following provisions of Table A into all of its Station Agreements with the Stations. Contractor shall take appropriate and necessary actions to impose such sanctions, listed in Table A, up to and including termination of the Station or Inspector from the VIP, and shall provide the State with notice and pertinent information concerning each case in which such sanctions are imposed.

**Table A**  
**Inspection Station Violations**

| <b>Type of Violation</b>                                                             | <b>1st Offense</b> | <b>2nd Offense</b> | <b>3rd or Subsequent Offense</b> |
|--------------------------------------------------------------------------------------|--------------------|--------------------|----------------------------------|
| Creating a False Test Record                                                         | Expulsion          |                    |                                  |
| Intentionally or Negligently Passing a Failing Vehicle, or Failing a Passing Vehicle | Suspension         | Expulsion          |                                  |
| Inaccurate or Fraudulent Reporting or Record Keeping                                 | Warning            | Suspension         | Expulsion                        |
| Failure to Maintain Security Over Program Equipment or Documents                     | Suspension         | Expulsion          |                                  |
| Misuse of Compliance Stickers, or Other Control Documents                            | Suspension         | Expulsion          |                                  |
| Failure to Comply with Department Direction                                          | Suspension         | Expulsion          |                                  |

| Type of Violation                                                                                 | 1st Offense | 2nd Offense | 3rd or Subsequent Offense |
|---------------------------------------------------------------------------------------------------|-------------|-------------|---------------------------|
| Concerning Test Procedures or Standards                                                           |             |             |                           |
| Alteration or Misuse of VIR's                                                                     | Suspension  | Expulsion   |                           |
| Failure to Administer Proper Test Procedure                                                       | Warning     | Suspension  | Expulsion                 |
| Failure to Use Correct Test Standards                                                             | Warning     | Suspension  | Expulsion                 |
| Failure to Issue VIR                                                                              | Warning     | Suspension  | Expulsion                 |
| Test by Uncertified Personnel                                                                     | Warning     | Suspension  | Expulsion                 |
| Failure to Issue Correct Compliance Sticker                                                       | Warning     | Suspension  | Expulsion                 |
| Failure to Perform Gas Cap Test                                                                   | Warning     | Suspension  | Expulsion                 |
| Failure to Correctly Enter Test Data or Record                                                    | Warning     | Suspension  | Expulsion                 |
| Failure to Exclude Unsafe or Uncooperative Vehicle or Owner from Testing                          | Warning     | Suspension  | Expulsion                 |
| Failure to Maintain Software Integrity or Security                                                | Suspension  | Expulsion   |                           |
| Charging for a Free Reinspection (within thirty (30) Days of initial failure)                     | Suspension  | Expulsion   |                           |
| Inexcusable Delay or Refusal to Perform Inspection                                                | Suspension  | Expulsion   |                           |
| Failure to Inform Customer of Late Inspection                                                     | Warning     | Suspension  | Expulsion                 |
| Failure to Have Customer Exit Vehicle for Inspection, or to Provide Safe Exiting and Waiting Area | Warning     | Suspension  | Expulsion                 |
| Failure to Maintain Service During Operating Hours, or Inexcusable Downtime                       | Warning     | Suspension  | Expulsion                 |
| Failure to Collect Proper Fee                                                                     | Suspension  | Expulsion   |                           |
| Incorrect or Unnecessary Repairs to a Vehicle                                                     | Warning     | Suspension  | Expulsion                 |
| Sale of Unnecessary Product or Service                                                            | Warning     | Suspension  | Expulsion                 |
| Creating a False Test Record (ghost testing)                                                      | Expulsion   |             |                           |
| Use of Test Application Interface Internet Connection for unauthorized purposes                   | Warning     | Suspension  | Expulsion                 |
| Use of Workstation for unauthorized purposes                                                      | Warning     | Suspension  | Expulsion                 |
| Failure to display the Inspection Customer's Bill of Rights signage                               | Warning     | Suspension  | Expulsion                 |

3. Violations. Notwithstanding the provisions related to suspension or expulsion set forth above, each Station designated and hired by Contractor shall be fully responsible for the performance of Inspections and related duties in accordance with all Applicable Legal Requirements, Contract requirements and specifications, and VIP rules and procedures. The Inspection services offered by each Station and participation in the VIP shall be subject to suspension or termination, at any time and Contractor shall impose such suspension or

termination in all cases where warranted for violations as described herein. Determination of second and subsequent violations shall be made on the basis of previous violations in the same category within a three (3) year period.

4. Suspension. A Station may not perform Inspections during any period that it is under suspension. Violation of this requirement shall subject the Station to expulsion from the VIP. Suspensions shall be imposed for periods determined by Contractor in accordance with the severity of the offense and surrounding relevant facts and circumstances and in accordance with a penalty schedule to be furnished by the Department to the Contractor.

5. VIP Participation Privilege. To the extent permitted by law, the participation of each Station in the VIP shall be deemed a privilege that is conditional at all times upon the proper performance of all VIP duties and that is terminable in the event of nonperformance, or improper or deficient performance, without recourse against or liability on the part of Contractor or the State.

6. Nonexclusive Remedy. Imposition of a sanction under the schedule set forth in Table A shall not preclude other administrative action against Contractor, a Station or any employee of a Station as permitted under the terms of this Contract or any Station Agreement, nor shall it bar criminal prosecution, if appropriate.

D. Standards for Inspectors and Sanctions Against Inspectors.

1. Surveillance. Contractor shall provide in all of its Station Agreements that all employees of the Stations designated and certified as Inspectors shall be employed and assigned on the express condition of proper and satisfactory performance of all duties related to the administration of Inspection procedures. The Station Agreement shall require the Station to inform each such employee clearly of such requirement and the conditions of employment as an Inspector and that the employee will be subject to video surveillance and unannounced inspections. Upon a violation of VIP rules and procedures set forth below in Table B, an Inspector shall be subject, at a minimum, to the imposition of the applicable suspension as contained in Table B.

2. Suspension and Revocation. Upon a finding of incompetence of or violation of procedures, statutes or regulations by an Inspector by the State or Contractor, the Inspection privileges of such Inspector shall be suspended or revoked and a mandatory retraining of such Inspector at Station's expense shall be required prior to restoration of Inspection privileges. Suspension or revocation of the certification of an Inspector shall completely bar an Inspector from any involvement in the VIP during such suspension or revocation. Such Inspector may be reassigned to a position where there is no direct involvement in the VIP.

3. Penalty. The State Representative may report to Contractor any reliable evidence in his possession of violations by an employee of a Station or Contractor, which evidence shall be examined and appropriate action taken by Contractor in accordance with 40 C.F.R. Section 51.364 within a reasonable time. If Contractor does not take action, the State may impose a penalty against Contractor as provided in this Article V. The following schedule

of suspensions designated as Table B shall apply to the specified types of violations by Inspectors.

**Table B**  
**Sanctions Applicable to Emissions Inspectors**

| <b>Type of Violation</b>                                                                                                                  | <b>1<sup>st</sup> Offense</b>         | <b>2<sup>nd</sup> Offense</b> | <b>3rd or Subsequent Offense</b> |
|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-------------------------------|----------------------------------|
| Issuance or possession of altered, forged, stolen or counterfeit Certificate of Emissions Inspection                                      | 1 year                                | Permanent                     |                                  |
| Intentionally improperly passing or failing a vehicle                                                                                     | 6 months                              | Permanent                     |                                  |
| Furnish, lend, give, sell or receive a Certificate of Emissions (VIR or sticker) Inspection without Inspection                            | 1 year                                | Permanent                     |                                  |
| Fraudulent Record Keeping                                                                                                                 | 1 year                                | Permanent                     |                                  |
| Faulty Inspection                                                                                                                         | 2 months                              | 1 year                        | 3 years                          |
| Failure to Produce Records Upon Demand by Quality Assurance Officer or other Duly Authorized State of Connecticut Representative or Agent | Suspension until records are produced |                               |                                  |
| Improper Record Keeping                                                                                                                   | Warning                               | 2 months                      | 6 months                         |
| Improper Inspection                                                                                                                       | Warning                               | 2 months                      | 6 months                         |
| Improper Assigning of Certificate of Emissions Inspection                                                                                 | Warning                               | 2 months                      | 6 months                         |
| Improper Security of Certificate of Emissions Inspection                                                                                  | Warning                               | 2 months                      | 6 months                         |
| Unclean Inspection Area                                                                                                                   | Warning                               | 1 month                       | 4 months                         |
| Careless Record Keeping                                                                                                                   | Warning                               | 1 month                       | 4 months                         |
| Failure to Give VIR to Customer                                                                                                           | Warning                               | 1 month                       | 4 months                         |

4. Review Period. Determination of second and subsequent violations shall be made on the basis of previous violations in the same category within a three (3) year period.

5. Nonexclusive Remedy. Imposition of a sanction under the above schedule set forth in Table B shall not preclude other administrative action against Contractor, a Station or any employee of a Station as permitted under the terms of this Contract or any Station Agreement, nor shall it prohibit criminal prosecution, if appropriate.

E. Quarterly Performance Evaluation.

Every three months following the Commencement Date, the Department may complete an evaluation of Contractor's performance (the "**Quarterly Performance Evaluation**"), which shall be based on information in the EDBMS, other information provided by Contractor, and on monitoring activities of the State. The Department may seek Contractor's input in performing these evaluations. If Contractor fails to meet the minimum performance standard(s) set forth in this Article, the State is presumed to have suffered damages due to such failure. To compensate the State for the costs of such failure, and subject to Section V.B.4, the State may retain those funds deposited in the Fund in the amount determined during the Quarterly Performance Evaluation which shall be deemed payment from Contractor in accordance with this Article, except as otherwise provided.

## ARTICLE VI.

### FORCE MAJEURE

A. Force Majeure. An event of force majeure may include, but is not limited to, acts of God or a public enemy, wars, fires, floods, epidemics, quarantine restrictions, strikes, labor disputes, unforeseen freight embargoes, or unusually severe weather; any law, order or regulation of the United States Government or of any government having jurisdiction or of any agency, commission, court or other instrumentality of any one or more of such governments (excluding regulations which may be promulgated by the Department or DEP pertaining to the VIP), national emergencies; cable cuts; acts of the local telephone exchange company; or acts of any other third party not under Contractor's reasonable control.

B. Exclusions. In no event shall Contractor's or a Station's failure to obtain necessary permits or approvals in a timely manner excuse it from meeting the dates or times of performance required by the Contract. The time of performance under the Contract may be extended to the extent of the delays excused by force majeure, provided that the party whose performance is affected notifies the other promptly of the existence and nature of such delay.

## ARTICLE VII.

### OWNERSHIP AND USE OF DATA

A. Direct Reporting. It is the intention of the parties hereto that Contractor shall participate with the Department and EDBMS vendor in creating a VIP data collection system which enables Contractor and the Department to obtain all Inspection and VIP information from each Station instantaneously. It is acknowledged by the parties hereto that the EDBMS shall be the authoritative, dispositive data base source of the emissions data and that the EDBMS shall receive unaltered Inspection results directly from each of the Stations.

B. Compliance. Contractor shall instruct each person and subcontractor having any involvement with the collection, storage, or development of data or data security information on appropriate procedures to ensure that Contractor fulfills its obligations under this Contract.

C. Access to EDBMS. Contractor shall be authorized to inquire into data located on the EDBMS only to the extent allowed by the EDBMS application. Contractor will not have

direct access to view data located on the EDBMS. Contractor is allowed to simultaneously with or subsequent to the EDBMS update, receive a copy of such data sent to and stored by the EDBMS. Contractor shall create and maintain the Mini-VID and shall retain the Mini-VID as a backup source for the Department in the event the Department requires access to such data, to the extent set forth in the Response. The Mini-VID shall store and maintain data and communications among Contractor, the Stations, the Station Network and the Department as set forth in the Response. If the EDBMS is not operational by the Program Commencement Date, Contractor shall retain the data on the Mini-VID and supply the Inspection records to the Department until the EDBMS is operational. Contractor and subcontractors shall not sell, disseminate or otherwise transfer any data or information to third parties without the prior written approval of the Department except that Contractor may make such data or information available to its contractors who are fulfilling Contractor's performance obligations under the Contract.

D. Data Ownership. All Inspection data collected, maintained or developed in the performance of the Contract shall be the property of the State, including, but not limited to, Contractor specific data not explicitly required by the Department. This also includes, but is not limited to, Station supporting information such as customer appointments, which Contractor may store, report upon, and/or perform an analysis upon during the life of the Contract. The State grants to Contractor a perpetual, royalty-free license to use the Inspection data, in aggregate form only, for the limited purpose of evaluating and improving the management and operation of the System and similar vehicle inspection systems managed by Contractor. Contractor agrees to provide the Department with a copy of all Inspection data stored on its Mini-VID in a mutually agreed format every six (6) months beginning six (6) months following the Program Commencement Date. All Inspection data in the Mini-VID shall be transferred to the State at the expiration or earlier termination of the Contract in the format(s) agreed to by the parties.

## ARTICLE VIII.

### OWNERSHIP AND USE OF SOFTWARE

A. Additional Definitions. For purposes of this Contract, including this Article VIII, the following terms shall be defined as follows:

1. The term "**Software**" means all object code for all Contractor's Proprietary Software, Subcontractor's Software, New System Software, Modifications, and Updates, used in any way in the System or otherwise required for the State or a successor entity to operate and maintain the VIP upon the Contract's expiration or termination, but excluding Third-Party Software and the EDBMS.

2. The term "**Documentation**" means the foundation documents that describe the design details; functional characteristics; technical specifications; and operating requirements of the Workstations, Mini-VID, and Testing Interface Application including, without limitation, all hardware, Software and communications components thereof.

3. The term "**Workstation Software**" means all Software required for the operation of a Workstation.

4. The term “**Testing Interface Application Software**” means all Software required for the operation of the interface that allows communications between the Workstations and the EDBMS in both object code and Source Code.

5. The term “**Third-Party Software**” means object code developed by any third-party other than Contractor or Contractor’s subcontractor(s), which is incorporated into or used in the Mini-VID, a Workstation, or the Testing Interface Application including any Updates installed pursuant to Section VIII.E.2.

6. The term “**Contractor’s Proprietary Software**” means Software that was developed by Contractor itself, or that was developed by a subcontractor of Contractor as a “work for hire” and is currently owned by Contractor.

7. The term “**Subcontractor’s Software**” means Software that was developed by, and remains the intellectual property of, a subcontractor of Contractor and is licensed, on an exclusive or non-exclusive basis, to Contractor for use in the System.

8. The term “**Modifications**” means Source Code and object code that is developed by Contractor or by its subcontractor(s) to modify or integrate existing Contractor’s Proprietary Software, Subcontractor’s Software and/or Third-Party Software to meet the performance requirements of the System, the Workstation Specifications, and Testing Interface Application Specifications. A Modification for purposes of this Contract must be a discreet and identifiable section of code which is not so imbedded in Contractor’s Proprietary Software, Subcontractor’s Software or Third Party Software as to be inseparable or indistinguishable therefrom.

9. The term “**New System Software**” means object code that does not exist as of the Effective Date, and which is/was developed by Contractor or by its subcontractor(s) to meet the performance requirements of the System, the Workstation Specifications, and Testing Interface Application Specifications.

10. The term “**Update(s)**” has that meaning set forth in Section VIII.E.

B. Software Schedules.

Schedules which identify all Software by function (i.e., Workstation Software, Testing Interface Application Software, and Software for the Mini-VID) and by type (i.e., Contractor’s Proprietary Software, Subcontractor’s Software, Third-Party Software, Modifications, or New System Software) are attached to this Contract as **Schedule 6**. Contractor shall update **Schedule 6** to reflect all additions or modifications implemented during the term of this Contract, including any extensions thereof, within thirty (30) Days following installation of any new or modified Software or Third-Party Software.

C. Ownership of the Testing Interface Application Software and Modifications. The Source Code and object code of the Testing Interface Application Software and Modifications whether developed by Contractor or by its subcontractor(s), shall be deemed to be a “work for hire” and all rights, title and interest therein shall vest in the State and all such code shall be and remain the property of the State. The State’s ownership rights include the right to copy, use,

disclose, publish, create derivative works from or duplicate such code in any manner and for any State purposes without compensation to or approval by Contractor or Contractor's subcontractor(s); provided, however, that the State agrees that it will not license or in any way transfer (directly or indirectly) the Testing Interface Application Software or the Modifications to any competitor of Contractor, unless such competitor replaces or succeeds Contractor as the manager of the VIP. All such State-owned Software shall clearly and conspicuously disclose that such code is "Property Of The State Of Connecticut".

D. Software Licenses.

1. During the term of this Contract, including any extensions thereof, Contractor hereby grants to the State a limited, non-exclusive and royalty-free sub-license to use the Workstation Software and license to use the Mini-VID Software solely in connection with the State's rights and obligations under this Contract. Contractor shall obtain written confirmation, reasonably acceptable to the State, of Contractor's right to sub-license the Workstation Software from its subcontractor(s). Except as otherwise provided under this Contract, this sub-license and license shall automatically terminate upon the termination or expiration of this Contract.

a. The State shall not reverse engineer, decompile, or disassemble any of the Workstation Software, Mini-VID Software or Third-Party Software, or use, transmit, or otherwise transfer any such Software to any third party.

b. All copies of any of the Contractor's Proprietary Software and Subcontractor's Software shall bear Contractor's and/or its suppliers' copyright notice(s) and such other proprietary legends as may appear on such Software upon its receipt by the State. The State shall not remove any such notices or legends.

c. The State shall treat all Contractor's Proprietary Software and Subcontractor's Software as confidential and shall not use, copy, disclose, or permit any State personnel to use, copy, or disclose, such Software for any purpose that is not specifically authorized under this Contract. Any third party desiring to use such Software may do so only with specific prior consent of Contractor or its subcontractor (as applicable) and a mutual written agreement between such third party and Contractor and/or subcontractor.

d. All rights in the Contractor's Proprietary Software and Subcontractor's Software not expressly granted herein are reserved to Contractor and its subcontractor(s), which shall retain ownership of all such Software.

2. If this Contract is terminated by the State pursuant to Article XII, or upon expiration of this Contract, at the election of the State, the license and sublicense granted by Contractor pursuant to Section VIII.D.1 shall continue in force and effect pursuant to Article XII or Article XIII of this Contract, as applicable, unless terminated by Contractor based upon the State's violation of any of the restrictions set forth in Section VIII.D.1.a above.

3. The State hereby grants to Contractor a perpetual, non-exclusive and royalty-free license to use the Testing Interface Application Software and the Modifications, including the limited right to sub-license such Testing Interface Application Software and/or the

Modifications solely in connection with Contractor's operation or management of a motor vehicle emissions Inspection testing program for a governmental entity. All copies of the Testing Interface Application Software and Modifications shall bear the State's copyright notice(s) and such other proprietary legends as may otherwise be required by the State. Contractor shall not remove any such notices or legends. Contractor shall treat the Testing Interface Application Software and the Modifications as confidential and shall not use, copy, disclose or permit any of Contractor's personnel to use, copy or disclose such Software for any purpose that is not specifically authorized under this Contract. Any violation by Contractor of the requirements or limitations set forth in this Section VIII.D.3 shall, at the election of the State, result in the termination of Contractor's license to use and to sub-license the Testing Interface Application Software and the Modifications.

E. Upgrades, Enhancements and New Releases.

1. During the term of this Contract, including any extension thereof, Contractor and, if applicable, Contractor's subcontractor, shall install, run and maintain all upgrades, enhancements, and new releases (each, an "Update") of Contractor's Proprietary Software and the Subcontractor's Software.

2. During the term of this Contract, including any extensions thereof, Contractor shall install, run and maintain all Updates of Third-Party Software if such Update is required to maintain the performance and functionality of the System, or any component thereof.

3. During the term of this Contract, including any extensions thereof, Contractor shall develop, test, install, run and maintain any Modification to the Workstation Software, Testing Interface Application Software or other System Software (if any) that is required to comply with new or revised security requirements adopted by the Department, the Connecticut Department of Information Technology or the EDBMS vendor. Any such required changes shall be subject to the engineering allowance of 1,000 hours proposed by Contractor and after all such hours have been expended, shall be subject to the Change Order process in Article XI.

F. Escrow.

Upon the Program Commencement Date, Contractor will place a copy of the source code for the Workstation Software, the Testing Interface Application Software and all other System Software (if any) excluding the Mini-VID Software and any Third-Party Software (the "**Escrowed Source Code**") and all Documentation related thereto (including a list of Third-Party Software used to develop, test, install, configure, run, maintain or service any and all components of the System) (collectively the "**Escrow Deposit Materials**"), in escrow pursuant to an Escrow Agreement substantially in the form of the agreement attached hereto as **Schedule 7** with an escrow agent reasonably acceptable to the State. Contractor agrees that it shall update the Escrow Deposit Materials to reflect all changes made to such Software within thirty (30) Days following the implementation of any change. All fees associated with establishment and maintenance of the Escrow Account shall be borne by Contractor. In the event that the State terminates this Contract pursuant to Article XII and purchases the VIP Assets pursuant to Sections XII.F through H, Contractor shall, within ten (10) Days of demand by the

State, provide directly to the State, without charge, one (1) copy of the most current version of the Escrow Deposit Materials. In the event that Contractor does not provide such Escrow Deposit Materials to the State within ten (10) Days of the State's demand, the State may obtain the Escrow Deposit Materials from the escrow agent pursuant to the terms and conditions of the Escrow Agreement. Subject to the provisions of Section XII.D of this Contract, the State shall have a non-exclusive, non-transferable license to use the Source Code (including any and all Updates) and the Documentation in accordance with the Contract and the Escrow Agreement. The State acknowledges and agrees that the license granted to the Escrowed Source Code hereunder transfers neither title nor proprietary rights to the State with respect to the Escrowed Source Code or the Documentation. The State shall use the Escrowed Source Code and Documentation only for the maintenance, support, enhancement, improvement and/or updating of the System as permitted under this Contract. The State may contract with another party (or parties) to maintain, support, enhance, improve and/or update the System provided that the State requires such party (or parties) to sign a non-disclosure agreement which acknowledges the limitations on the State's right to use the Escrowed Source Code and Documentation and that the Escrowed Source Code and Documentation remain the sole and exclusive property of Contractor or, if applicable, Contractor's subcontractor(s). Nothing in this Subsection F shall limit or be deemed a waiver of any other remedies available to Contractor under law, equity or contract with respect to any confidentiality breach or other breach by the State under the terms of this Contract.

## **ARTICLE IX.**

### **MAINTENANCE OF HARDWARE AND SOFTWARE**

A. Maintenance. Contractor shall provide maintenance and support of all Workstation hardware and software, and the Testing Interface Application, required to perform emissions related functions under the Program and to interface with, transfer data to and receive data from the EDBMS pursuant to Articles VII, VIII, IX and XXIII. Contractor shall ensure that all Workstation hardware and software are configured in a standard manner across all Stations. Contractor shall provide to the Department a document outlining this standard configuration as part of the Workstation Specifications. Whenever the configuration is planned to change, Contractor shall submit at least thirty (30) Days in advance, the planned change to the Department for its review and acceptance. Any configuration change shall be made throughout the entire Station Network unless approved otherwise by the Department. The Workstation hardware and software shall be maintained in operable condition and shall be supported by the manufacturer/vendor of the component (or authorized support provider which may be Contractor) at all times. Contractor shall maintain all Software and Third Party Software as set forth in Articles VII and VIII.

B. Obsolescence. If any hardware component is no longer supported by the manufacturer or vendor or other appropriate support provider (including Contractor), such hardware shall be regarded as not current and Contractor shall replace such hardware with hardware that is so supported. If any needed and agreed to Update requires a hardware upgrade to perform at the same level as prior to the Update, Contractor shall upgrade the hardware at the State's expense, unless such Update(s) were changed in Contractor's discretion in which case Contractor shall bear the expense of any hardware upgrade.

## ARTICLE X.

### SUBCONTRACTING BY CONTRACTOR

A. Subcontracts. The State shall not be obligated or bound by any provisions contained in a subcontract to which it is not a party. Contractor agrees to provide the State Representative with a list of all major subcontractors to be used by Contractor in performance of the Contract and to include all standard contract provisions required where applicable State and federal laws and regulations require such inclusion.

B. Stations.

1. Requirements Met. Contractor shall ensure that each Station meets the qualifications to participate in the VIP, as required pursuant to Applicable Legal Requirements and this Contract.

2. Station Agreement. The DMV has reviewed Contractor's initial form of the Station Agreement which sets forth the terms under which Contractor shall provide each Station access to the System and the EDBMS for Inspections, and the terms under which each Station shall conduct Inspections. The Department's review has been limited to an assessment of the initial Station Agreement's compliance with law and the terms and conditions of this Contract. If Contractor wishes to make any substantive changes to such form agreement, it shall submit the proposed revised agreement to the Department for approval pursuant to Section XXI.C, which approval will also be limited to an assessment of the Station Agreement's compliance with law and the terms and conditions of this Contract. It is hereby acknowledged by Contractor that the Department is not reviewing or approving the business arrangements embodied in the Station Agreement. The State is not a party to and shall not be bound by any provision of any Station Agreement.

3. Contractor Responsibility. The Station Agreement shall clearly communicate to the Stations that Contractor has primary responsibility for administering each Station's day-to-day participation in the VIP.

4. Contractor Obligations Regarding Stations. Contractor shall further:

- a. Upon notice from the Department that a Station is no longer authorized to conduct Inspections, Contractor shall prevent such Station from conducting Inspections.
- b. Require each Station to follow the Inspection process set forth in the Inspection Protocol.
- c. Cause each Station to make Inspections available for all motor vehicles subject to Inspection under the VIP (except as provided in Section III.B.2 with respect to diesel vehicles).
- d. Require each Station to comply with Applicable Legal Requirements.

e. Prohibit Inspections at a Station until the applicable acceptance test procedures (as provided in the Acceptance Test Plan) for the Station have been completed successfully.

f. Cause all electronic communications between Contractor and each Station or the Station Network to be automatically transmitted, in their entirety, to the EDBMS.

g. Enforce the provisions of Sections V.B, C, and D.

5. Station Termination. Nothing in this Contract limits the right of Contractor to terminate the participation of any Station upon the Station's material breach of its Station Agreement, including but not limited to failure of the Station to make required payments.

C. Consumable Supplies. Prior to the Program Commencement Date, Contractor shall provide to the Department Contractor's price list for the consumables to be supplied by Contractor to the Stations. The Department may undertake a review of Contractor's consumable price list for the purpose of ensuring that Contractor is providing the Stations with consumable pricing at commercially competitive prices. The State Representative may determine whether such prices are "commercially competitive" by surveying prices that other repair garages pay for consumable items from manufacturers of similar test equipment in three (3) other states with market-based testing programs. If the State Representative conducts such review then, the State Representative shall then average such prices which average shall be deemed the commercially competitive pricing. If the State Representative determines, based on this methodology, that Contractor's consumable pricing is not commercially competitive, the State Representative may direct Contractor to re-price its consumable supply prices in accordance with the average price established. The State Representative shall have fifteen (15) business days after receipt of a list of those states with market-based testing programs to reach a determination of such pricing. The pricing of such consumables by Contractor may be reviewed on each anniversary of the Program Commencement Date and Contractor shall remain subject to the State Representative's process and rights set forth herein. Contractor shall provide the following types of supplies, up to the maximums listed below on a per Station basis, to the Stations. As part of the Workstation, Contractor shall provide each Contractor-equipped Station with the following consumable items:

1. two (2) short hoses (8 ft.);
2. one (1) long hose (17 ft.);
3. two (2) probe tips;
4. two (2) probe handles;
5. two (2) in-line filters;
6. two (2) bowl filters;
7. one (1) brass Y-connector;
8. one (1) male quick disconnect;

9. one (1) female quick disconnect;
10. one (1) high cal gas;
11. one (1) low cal gas;
12. one (1) zero gas;
13. one (1) printer cartridge;
14. one (1) keyboard cover;
15. one hundred (100) blank Inspection reports; and
16. one (1) oxygen sensor.

## **ARTICLE XI.**

### **CHANGES**

A. Department Changes. The State Representative may, by means of a written Change Order, and without notice to the surety, make changes within the general scope of the Contract concerning the duties to be performed by Contractor. Contractor agrees to act upon and to implement such requested changes in the time and manner directed.

B. Contractor Changes. Contractor may initiate discussions with and propose changes to the State. In the event the State is interested in proceeding with such change or changes, the State shall issue its Change Order in conformity with the preceding Section.

C. Equitable Adjustment. If a Change Order is believed by Contractor to have a material impact on the scope of its contracted services, Contractor may send a written notice to the State Representative together with an estimate of the equitable adjustment that would be required for performance of the changed work, and any effect of the change on unchanged work. The Department shall, subject to its receipt and review of such further information from Contractor as it may reasonably request, notify Contractor promptly whether the amount of the equitable adjustment requested is approved and whether Contractor should proceed with the work as changed. The Department may elect to negotiate with Contractor concerning any aspect of a change that is directed to be made. If the parties cannot agree on an equitable adjustment to this Contract or any other aspect of a Change Order, the parties may proceed with the dispute resolution process set forth in Section XXIV.A, but such process shall not preclude the Department from making a unilateral determination as to the amount, if any, of an equitable adjustment, and from ordering Contractor to proceed with the work under the Contract and under any Change Order.

D. Amendment. Changes as described herein shall be made by a written and dated Change Order, executed by the State Representative except that, if the change has a total cost to the State of more than One Hundred Thousand Dollars (\$100,000), or otherwise results in a

substantial modification of the VIP (in the State's reasonable opinion), such change may be made only in the form of an amendment to the Contract, duly executed by the parties and approved by the Attorney General.

E. Program Changes. In the event of (1) any changes in the SIP or in the requirements of federal or State laws and regulations governing motor vehicle emissions inspection which do not result in the termination of this Contract by the State pursuant to Section XII.A., but which would have the effect of substantially increasing or decreasing Contractor's costs or responsibilities, or (2) improvements in available and approved vehicle emissions inspection and maintenance procedures, equipment and/or technology not otherwise required to be provided by Contractor by the terms of this Contract but which would, in the judgment of the State Representative as set forth in a written notice to Contractor, result in greater effectiveness or efficiency, or greater customer convenience or service, the parties agree to negotiate in good faith an amendment to this Contract, including a means of additional compensation to be paid to Contractor, if appropriate, to accommodate such changes to the VIP.

## **ARTICLE XII.**

### **TERMINATION**

If the State terminates the Contract pursuant to this Article XII, the State's goal shall either be to discontinue the VIP developed and implemented pursuant to the Contract or to continue the VIP with another entity or entities. All termination provisions shall be construed in accordance with these goals.

#### **A. Termination Upon Repeal or Change in Law, Etc.**

1. In addition to any other right of termination set forth in this Contract, the State shall have the unilateral and unrestricted right to terminate this Contract upon at least ninety (90) Days' prior written notice by the State Representative to Contractor in the event of State abandonment or postponement of the VIP contemplated by this Contract or a change in the method or scope of vehicle emission inspection which is so substantial as to have the effect of rendering the equipment or any material part thereof, or the services to be performed by Contractor under this Contract, obsolete, unsuitable or unnecessary in the reasonable judgment of the State Representative, in each case as a result of any one or more of the following:

a. Repeal or rescission, in whole or in part, or substantial modification of, the provisions of the CAAA or the EPA Regulations;

b. Any action of the EPA substantially postponing or delaying required implementation of the enhanced vehicle inspection program contemplated by this Contract;

c. Repeal or rescission, in whole or in part, or substantial modification of the provisions of C.G.S. Section 14-164c, as amended, or the DMV Regulations or the DEP Regulations;

d. The EPA's rejection, in whole or in part, or the EPA's substantial modification of, the SIP; or

e. Any order or decision of a court of competent jurisdiction invalidating in whole or in substantial part, or substantially postponing or delaying the effectiveness of, any of the legal or regulatory requirements referenced in this Section XII.A.

2. Upon termination by the State pursuant to Section XII.A.1 above, the Department shall, in good faith, seek the appropriation of funds and, subject to the availability of such funds, the State shall either: (a) pay to the Contractor in full satisfaction of all claims by Contractor for compensation or for damages allegedly caused by such termination, the sum of \$17,798,998, reduced by \$247,208 per month for each month or portion thereof beginning on the Program Commencement Date and continuing through the month in which such termination is effective, without proration for any partial month(s); or (b) acquire title to the VIP Assets pursuant to Section XII.F.3 and Section XII.G.2, below. The lack of available funds to make this payment shall not prevent the State from exercising its right to terminate the Contract pursuant to this Section XII.A. Upon payment of the amount set forth in Section XII.A.2(a), above, the State shall be absolutely and forever relieved and released from any obligations it may have to Contractor pursuant to the provisions of the Contract. The payment set forth in Section XII.A.2(a) shall be reduced by all amounts realized by Contractor as a result of its efforts to mitigate losses as set forth in Section XII.I. below and, at the State's option exercisable within one hundred twenty (120) Days of termination, Contractor shall transfer title to all VIP Assets not liquidated by Contractor to the State.

B. Termination Without Cause.

1. Contractor shall not terminate the Contract without cause.

2. Subject to the availability of funds (the determination of which shall be made solely by the State) sufficient to satisfy the State's obligation to either: (i) pay Contractor equitable compensation for such termination pursuant to Section XII.B.3 below if the State elects not to acquire the VIP Assets pursuant to Section XII.F.2; or (ii) acquire title to the VIP Assets pursuant to Section XII.F.2. and Section XII.G.2, below, the State may terminate the Contract without cause by delivering a written notice to Contractor at least ninety (90) Days prior to the effective date of such termination.

3. Upon termination by the State without cause pursuant to Section XII.B.2 above, and subject to the availability of funds, the State shall pay to the Contractor in full satisfaction of all claims by the Contractor for compensation or for damages allegedly caused by such termination, the sum of \$17,798,998, reduced by \$247,208 per month for each month or portion thereof beginning on the Program Commencement Date and continuing through the month in which such termination is effective, without proration for any partial month(s). Upon payment of such amount, the State shall be absolutely and forever relieved and released from any obligations it may have to Contractor pursuant to the provisions of the Contract. The payment set forth in this Section XII.B.3 shall be reduced by all amounts realized by Contractor as a result of its efforts to mitigate losses as set forth in Section XII.I., below and, at the State's option

exercisable within one hundred twenty (120) Days of Termination, Contractor shall transfer title to all VIP Assets not liquidated by Contractor to the State.

C. Termination for Cause.

1. State's Termination. Notwithstanding the foregoing, the State may terminate the Contract for cause effective upon a date certain determined by the State Representative and set forth in a written notice to the Contractor, if Contractor:

a. files for or is adjudged bankrupt; is subject to an involuntary bankruptcy filing which is not withdrawn or dismissed within forty-five (45) Days from such filing; makes a general assignment for the benefit of its creditors; or appoints a receiver or a trustee to administer Contractor's property;

b. abandons all of the work under the Contract;

c. assigns the Contract or claims thereunder without the prior written consent of the State;

d. is indicted on criminal charges thus jeopardizing performance of the Contract;

e. participates in fraudulent activities thus jeopardizing performance of the Contract; or

f. fails or refuses to perform one or more of its material obligations under the Contract, including, but not limited to, obligations pursuant to Articles XVIII and XXII through XXIV and Contractor has not cured such breach within a period of sixty (60) Days from notice of such claimed breach to the State's reasonable satisfaction. The State's Representative, in his sole discretion, may extend the time for Contractor to cure such breach for an additional period if, in the judgment of the State's Representative, Contractor is making substantial progress toward a cure and requires such additional time to complete the work.

2. Post-Termination by the State. Following the effective date of the State's termination of the Contract for cause, the State may elect one of the following options, which election shall be final and irrevocable:

a. (i) complete the work, or any part thereof, and charge the State's costs of completing the work, or any part thereof, to Contractor; and/or (ii) terminate the VIP; or

b. give notice of a claim under the Performance Bond provided by Contractor pursuant to Article XVII.

The State may also opt to acquire all or a portion of the VIP Assets, pursuant to Sections XII.F and G, regardless of such election.

D. State Default and Contractor's Remedy.

1. If the State fails or refuses to perform one or more of its material obligations under the Contract, Contractor may notify the State Representative, in writing, that it will terminate the Contract if the State has not within sixty (60) Days cured its performance hereunder or otherwise provided assurance reasonably acceptable to Contractor that it will take actions necessary to resolve the claimed defect in its performance. If, after the expiration of such sixty (60) Day period, the State has not either cured such default or provided Contractor with reasonable assurance that such default will be cured, Contractor may issue to the State a written notice of termination, effective upon its receipt by the State.

2. If Contractor terminates the Contract in accordance with the provisions of this Section XII.D, such termination shall be regarded as for all purposes equivalent to and as having the same effect as a termination, as hereinabove described in Section XII.A. above, and Contractor, subject to the availability of funds, shall receive the payment set forth in Section XII.B.3 above. Receipt of such payment shall be Contractor's sole and exclusive remedy.

3. Nothing in this Section shall be construed as a waiver of any defenses, at law or in equity, which the State may have to Contractor's claim of default and its claimed right of termination on such basis. In no event shall the State be liable for consequential damages of Contractor suffered (or allegedly suffered) by Contractor as a result of the State's breach (or alleged breach) of its obligations under the Contract.

E. Payments to the State Upon Termination for Cause Pursuant to Section XII.C.

Upon termination of the Contract by the State for cause pursuant to Section XII.C., if the termination occurs at any time prior to five (5) years after the Program Commencement Date, Contractor shall pay the State as liquidated damages for Contractor's default the sum of Two Million Dollars (\$2,000,000). If the termination occurs during the sixth (6<sup>th</sup>) year of the operation of the VIP, then Contractor shall pay the State as liquidated damages for Contractor's default the sum of One Million Dollars (\$1,000,000). If the termination occurs during the option year, if the State exercises its option to extend the period of performance, Contractor shall pay the State Five Hundred Thousand Dollars (\$500,000) as liquidated damages for Contractor's default.

F. Acquisition of VIP Assets.

1. If the State elects to terminate the Contract for cause pursuant to the provisions of Section XII.C above, it (or a subsequent contractor designated by the State) shall have the right, but not the obligation, to acquire from Contractor subject to the availability of funds: (a) any or all of the VIP Assets, as set forth on **Schedule 9** (excluding the Mini-VID hardware and software) pursuant to Section XII.G.1, net of the payment due from Contractor to the State under Section XII.E; and/or (b) all of Contractor's rights and interest in and to the Station Agreements. The State may exercise such option by sending Contractor written notice no later than seventy-five (75) Days after (i) the date certain set forth in the State Representative's written notice terminating the Contract if such termination is pursuant to

Sections XII.C.1.a-e; or (ii) the expiration of Contractor's right to cure pursuant to Section XII.C.1.f.

2. If the State elects to terminate the Contract for convenience pursuant to the provisions of Section XII.B above, the State (or a subsequent contractor designated by the State) shall have the right, but not the obligation, to acquire from Contractor: (a) any or all of the VIP Assets, as set forth on **Schedule 9** (excluding the Mini-VID hardware and software); and (b) all of Contractor's rights and interest in and to the Station Agreements. The State may exercise such option by sending Contractor written notice with the State's notice terminating the Contract.

3. If the State elects to terminate the Contract pursuant to the provisions of Section XII.A. above, the State (or a subsequent contractor designated by the State) shall have the right, but not the obligation, to acquire from Contractor: (a) any or all of the VIP Assets, as set forth on **Schedule 9** (excluding the Mini-VID hardware and software); and (b) all of Contractor's rights and interest in and to the Station Agreements. The State may exercise such option by sending Contractor written notice with the State's notice terminating the Contract.

4. Contractor represents and warrants to the State that the VIP Assets set forth on **Schedule 9** constitute all of the assets which comprise the System as of the Effective Date and that such assets are sufficient to operate the VIP in accordance with this Contract except for those functions performed by the EDBMS.

G. Purchase Price for Acquired VIP Assets.

1. The purchase price for the VIP Assets acquired pursuant to the provisions of Section XII.F.1 shall be the sum of \$14,239,858 reduced by \$197,776 per month or portion thereof for each month beginning on the Program Commencement Date and continuing through the month in which termination is effective without proration for any partial month(s).

2. The purchase price for the VIP Assets acquired pursuant to the provisions of Section XII.F.2 or Section XII.F.3 shall be the sum of \$17,798,998 reduced by \$247,208 per month or portion thereof beginning on the Program Commencement Date and continuing through the month in which termination is effective without proration for any partial month(s).

H. Transfer of VIP Assets. If the State exercises its option to acquire title to the VIP Assets as set forth on **Schedule 9** (excluding the Mini-VID hardware and software) and/or Contractor's rights and interest in and to the Station Agreements as set forth in Section XII.F.1, Section XII.F.2, or Section XII.F.3, above and upon the State's payment of the applicable purchase price:

1. Contractor shall transfer forthwith to the State or a subsequent contractor all VIP Assets set forth on **Schedule 9** (excluding the Mini-VID hardware and software) as directed by the State and within the time frame directed by the State, and in the same condition as such VIP Assets were in during the last three (3) months preceding termination of the Contract save for ordinary wear and tear;

2. Contractor shall assign and transfer forthwith to the State or a subsequent contractor all of Contractor's rights and interest in and to the Station Agreements.

3. All VIP Assets (excluding the Mini-VID hardware and software) to be transferred to the State or to a third party pursuant to this Contract shall be transferred free and clear of all monetary and non-monetary encumbrances and in good repair and working order (reasonable wear and tear excepted). All Station Agreements to be assigned to the State or to a third party pursuant to this Contract shall be in full force and effect up to the date of termination of this Contract and Contractor shall not be in material default of any of Contractor's obligations under any such Station Agreement.

4. The State may, at its option, require Contractor to incur costs for effecting the orderly transfer of the Inspection operations of the Stations, the VIP Assets (excluding the Mini-VID hardware and software) and the Station Agreements. Such costs may include, but are not limited to, the cost of training State or subsequent contractor personnel in the use of the Workstations. In the event that Contractor incurs costs as herein described, the State shall reimburse Contractor for such costs within forty-five (45) Days of Contractor's submission of its invoice.

5. Irrespective of whether the State requires Contractor to incur the costs described in Subsection XII.H.4 above, Contractor agrees that it will cooperate with the State or a subsequent contractor to effect such an orderly transfer and will do nothing to prevent or impede such transfer. Without limiting the generality of the immediately preceding sentence, Contractor agrees to provide in any contract, agreement, license, assignment or other conveyance to be executed by it and to maintain in any contract, agreement, license, assignment or other conveyance previously executed by it, for the purpose of equipment, parts, tools software or services for use in the performance of this Contract, the right of Contractor, without qualification, to convey, transfer or assign to the State or a subsequent contractor any of Contractor's rights and obligations under such contract, agreement, license, assignment or conveyance. Any provision of any transaction entered into by Contractor with any supplier, sub-contractor, Contractor-equipped Station owner or any other person or entity, shall be consistent with the termination and acquisition provisions of this Contract, shall be commercially reasonable and shall not impose upon the State or any subsequent contractor any monetary or other burden greater than that which would have been imposed upon Contractor in the absence of such termination.

6. Contractor shall assign to the State or to a subsequent contractor any warranties which Contractor has from third parties and the license for all Workstation Software pursuant to Section VIII.D.2.

7. Both parties agree to execute such documents and as may be reasonably necessary to effect the transactions described herein.

I. Contractor's Obligation To Liquidate the VIP Assets.

In the event that the State: (a) terminates this Contract pursuant to Section XII.A. and does not elect to acquire title to the VIP Assets pursuant to Section XII.F.3; or (b) terminates this Contract pursuant to Section XII.B and does not elect to acquire title to the VIP Assets pursuant to Section XII.F.2; or (c) Contractor terminates the Contract pursuant to Section XII.D, then, at the option of the State, Contractor shall be required to take all reasonable measures to liquidate

and dispose of the VIP Assets. Following such disposition, Contractor shall apply all proceeds (after deduction of Contractor's reasonable sales expenses) realized from such disposition to amounts which would be due to Contractor as a payment from the State pursuant to Section XII.A.2 or Section XII.B.3. In disposing of the VIP Assets, Contractor shall make reasonable and good faith efforts to maximize the amounts to be received. Unless otherwise agreed, if Contractor has not disposed of all of the VIP Assets within ninety (90) Days of the termination of the State's right to acquire the VIP Assets under Section XII.F, Contractor, if so directed by the State Representative, shall have the same disposed of by public auction or sale within the succeeding ninety (90) Days. All proceeds from such public auction or sale (after deducting Contractor's reasonable sales expenses) shall be applied as set forth above. As used in this Section XII.I, "VIP Assets" does not include the Mini-VID hardware and software.

### **ARTICLE XIII.**

#### **OPTION TO ACQUIRE AT END OF CONTRACT PERIOD**

The State shall have the right, but not the obligation, to acquire the VIP Assets effective on the first Day immediately succeeding the last Day of the term of the Contract, including any extension of the term of the Contract. In the event the State elects to exercise this right, it must be exercised by the State by written notice to Contractor no later than six (6) months prior to the expiration of the term of the Contract, including any extension thereof. The purchase price for the VIP Assets acquired pursuant to the exercise of such option shall be One Dollar (\$1.00). In the event the State elects to exercise the right to acquire the VIP Assets as provided in this Article XIII, all of the provisions of Section XII.H shall be applicable with respect to such acquisition and transfer of VIP Assets. The State may designate a third party to acquire the VIP Assets at the end of the Contract period. The State shall provide for such designation in the notice required in this Article XIII. As used in this Article XIII, "VIP Assets" does not include the Mini-VID hardware and software.

### **ARTICLE XIV.**

#### **AUDITS OF CONTRACTOR**

The State may audit Contractor's performance of its duties and responsibilities under the Contract at any time. The State shall have access to such books and records of Contractor that the State, in its sole discretion, deems as necessary solely for the purpose of allowing the State to carry out its responsibilities under the Contract and under all Applicable Legal Requirements, including, but not limited to, permitting the State to conduct financial audits, program compliance audits and surveillance of the VIP. Contractor shall cooperate, and in its Station Agreements shall require all Stations to cooperate, during any audit process to the maximum extent practicable and shall further require all Stations to permit authorized representatives of the State to enter and remain on the premises of any Station for the purpose of conducting audit or surveillance activities.

**ARTICLE XV.**

**INSURANCE**

A. Commerical General Liability. Contractor, at its sole expense, agrees to secure and keep in full force and effect at all times during the term of this Contract a commercial general liability insurance policy or policies. Contractor, at a minimum, must secure two million dollars (\$2,000,000) of coverage with combined single limit per occurrence for bodily injury, personal injury and property damage. The policy or policies shall be provided by an insurance company or companies licensed to do business in the State of Connecticut. Coverage shall include Premises and Operations, Independent Contractors, Products and Completed Operations, Contractual Liability and Broad Form Property Damage coverage. If a general aggregate is used, the general aggregate limit shall apply separately to this Contract or the general aggregate limit shall be twice the occurrence limit. Said policy or policies shall cover all of Contractor's activities under this Contract and shall state that it is primary insurance in regard to the State, its officers and employees. The State shall be named as an additional insured.

B. Other Insurance. In addition, Contractor shall at its sole expense maintain in effect at all times during the performance of its obligations hereunder the following additional insurance coverages with limits not less than those set forth below with insurers and under forms of policies approved by the State Insurance Commissioner to do business in Connecticut:

| <u>Coverage:</u>                   | <u>Minimum Amounts and Limits:</u>                                                                                                                                                          |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Workers' Compensation:          | Connecticut Statutory Requirements.                                                                                                                                                         |
| 2. Employer's Liability:           | Minimum limits of \$100,000 each accident, \$500,000 Disease – Policy limit, 100,000 each employee.                                                                                         |
| 3. Automobile Liability Insurance: | \$1,000,000 combined single limit per accident for bodily injury or property damage. Coverage extends to owned, hired and non-owned automobiles in the course of work under this Agreement. |

None of the requirements contained herein as to types, limits, and approval of insurance coverage to be maintained by Contractor are intended to and shall not in any way limit or qualify the liabilities and obligations assumed by Contractor under this Contract.

C. Statutory Changes. If the State revises statutory minimum limits of liability from those currently in effect, Contractor shall amend its insurance coverage accordingly upon receipt of notice from the State.

D. Insurance Provisions. Contractor shall obtain the following provisions in all applicable and corresponding coverage:

1. The State of Connecticut, its officers, officials, employees, agents, boards and commissions shall be named as Additional Insured. The coverage shall contain no specialty limitations on the scope of protection afforded to the State;

2. Contractor shall assume any and all deductibles in the described insurance policies;

3. Contractor's insurer shall have no right of recovery or subrogation against the State of Connecticut;

4. The described insurance shall be primary coverage to all other insurance that may be available;

5. Any failure to comply with the claim reporting provisions of the policy shall not affect coverage provided to the State;

6. Each required insurance policy shall not be suspended, voided, cancelled or reduced except after thirty (30) Days' prior written notice by certified mail, has been given to the State of Connecticut;

7. Each policy shall be issued by an insurance company authorized to issue such policy by the State of Connecticut, Department of Insurance; and

8. Contractor shall include all subcontractors as insureds under its policies or shall collect separate certificates evidencing the necessary insurance from each subcontractor.

E. Verification of Insurance Coverage. Contractor shall deliver certificates of insurance relating to all of the above referenced coverages to the State at the time of the execution of this Contract as evidence that policies providing such coverage and limits of insurance are in full force and effect, which certificates shall provide that no less than thirty (30) Days' advance notice will be given in writing to the State prior to cancellation, termination or alteration of said policies of insurance. Said certificates shall clearly identify the State, its officers, employees, agents, boards and commissions as an Additional Insured. All certificates are to be received and approved by the State before work commences.

F. Subcontractor Insurance Coverage Requirements.

1. Stations' Coverage. Contractor shall require all Stations, at their sole expense, to secure and keep in full force and effect at all times during the term of their respective Station Agreements, garage/garage keepers' insurance policy or policies. Contractor shall require that all Stations, at a minimum, secure One Hundred Thousand Dollars (\$100,000) of such coverage per occurrence for property damage. Contractor shall require that such policy or policies shall be provided by an insurance company or companies licensed to do business in the State of Connecticut. If a general aggregate is used, the general aggregate limit shall apply separately to the Station Agreement or the general aggregate limit shall be twice the occurrence limit. Contractor shall require that all garage/garage keeper policies cover all of the Stations' activities under the Station Agreement and state that it is primary insurance in regard to

Contractor, its officers and employees. Contractor shall require that it be named as an Additional Insured.

2. Subcontractors' Coverage. Contractor shall require that all subcontractors (including but not limited to the Stations) at their sole expense maintain in effect at all times during the term of their respective agreements with Contractor the following additional insurance coverages with limits not less than those set forth below with insurers and under forms of policies approved by the State Insurance Commissioner to do business in Connecticut:

| <u>Coverage:</u>                   | <u>Minimum Amounts and Limits:</u>                                                                                                                                                          |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Workers' Compensation:          | Connecticut Statutory Requirements.                                                                                                                                                         |
| 2. Employer's Liability:           | Minimum limits of \$100,000 each accident, \$500,000 Disease – Policy limit, 100,000 each employee.                                                                                         |
| 3. Automobile Liability Insurance: | \$1,000,000 combined single limit per accident for bodily injury or property damage. Coverage extends to owned, hired and non-owned automobiles in the course of work under this Agreement. |

None of the requirements contained herein as to types, limits, and approval of insurance coverage to be maintained by Contractor's subcontractors are intended to and shall not in any way limit or qualify the liabilities and obligations assumed by Contractor under this Contract.

If the State revises statutory minimum limits of liability from those currently in effect, Contractor shall include language in its subcontracts that requires the amendment of all subcontracts insurance coverage accordingly upon receipt of notice from the State.

G. Verification of Subcontractors Insurance Coverage. Contractor shall deliver certificates of insurance relating to all of the required subcontractors' coverages referenced above to the State promptly following execution of the agreement between Contractor and each subcontractor, as evidence that policies providing such coverage and limits of insurance are in full force and effect, which certificates shall provide that no less than thirty (30) Days' advance notice will be given in writing to Contractor prior to cancellation, termination or alteration of said policies of insurance. Said certificates shall clearly identify Contractor as an Additional Insured. All certificates with respect to a subcontractor are to be received and approved by Contractor before any such subcontractor commences work.

## **ARTICLE XVI.**

### **WARRANTIES**

A. Contractor's Representations and Warranties. Contractor represents and warrants to the State that:

1. the execution and delivery of this Contract is within the power and authority of Contractor and is not in contravention of any law, organizational document, bylaw, agreement or undertaking to which Contractor is a party and no consent, license or approval is or will be necessary for the valid execution and delivery of this Contract;

2. there is no action suit, proceeding or investigation at law, in equity, or before any court, public board, arbitrator, or body, pending or, to Contractor's knowledge, threatened against or affecting it, which could or might materially adversely affect its obligations hereunder or any of the transactions contemplated hereunder;

3. the System, including all Software installed in or used in connection with the System (excluding Third-Party Software and data) and the State and Contractor's use of the System and Software as contemplated under this Contract does not and shall not (a) infringe any Intellectual Property Rights of any third party; or (b) violate any law, statute, ordinance or regulation;

4. except with respect to Third-Party Software and data, Contractor holds all right, title and interest in, or has sufficient right, title and interest to grant the licenses and rights to the System and the Software granted to the State hereunder and, with respect to Third-Party Software and Subcontractor's Software, Contractor has entered into license agreements which permit Contractor to use such Third-Party Software and Subcontractor's Software, and to permit the State and third parties to use such Third-Party Software and Subcontractor's Software, as expressly permitted under this Contract;

5. upon installation of the Workstations, the System and the Software will not (and upon implementation of any Update thereafter, the Update will not), in all cases excluding Third-Party Software, the EDBMS and data, contain any timebombs, cancelbots, viruses, Trojan horses, worms or other similar computer programming routines, that damage, detrimentally interfere with, restrict or prevent the operation of the Software or the System; surreptitiously intercept, or appropriate any component of the System, the Software, data or personal information of the State or of motor vehicle registrants, or that are intended to do so (collectively, "**Security Defects**");

6. the System and the Software each shall perform substantially in accordance with all plans, specifications and schedules which are incorporated into this Contract, including, without limitation, the performance requirements set forth in Article III, but Contractor does not warrant that the System will be uninterrupted or error free;

7. Contractor shall maintain, in connection with the System and Software maintained and/or operated by or on behalf of Contractor, commercially reasonable (or more stringent if so provided in the Workstation Specifications) access controls and filters, authorization and authentication policies, intrusion and misuse detection controls, virus detection and eradication software, information security vulnerability and risk management controls and policies, and similar information security controls, devices and policies in accordance with applicable DMV and Connecticut Department of Information Technology ("**DOIT**") standards and policies, and Contractor shall use commercially reasonable efforts to maintain the security and integrity of the System and the Software against Security Defects and otherwise protect the

integrity and confidentiality of the Software, the System, the data, the EDBMS and all data processed in relation thereto;

8. Contractor shall use commercially reasonable acceptance testing and problem resolution procedures before implementing any and all Updates to the System;

9. **Schedule 6** fully and accurately describes all Software and Third-Party Software installed in or otherwise necessary for use in connection with the System and the VIP as of the Effective Date;

10. the Documentation is complete and contains all information reasonably necessary to configure, operate, restore and maintain the System and the Software;

11. Contractor has all permits, licenses, franchises and other similar authorizations necessary for its performance under this Contract and is not aware of any state of facts that would make it impossible or impractical to obtain any similar authorization necessary for such performance. Contractor is not in violation, nor will the Contract cause a violation of the terms or provisions of any such franchise, permit, license or similar authorization;

12. Contractor warrants that the services and/or work product shall fully comply with the Contract and shall be performed with reasonable care in a diligent, workmanlike and competent manner that shall comply with all federal, state and local laws, regulations, mandates and/or requirements, and Contractor shall cure defects, if any, in a reasonable time; and

13. Contractor represents that the VIP satisfies the requirements of all Applicable Legal Requirements, including EPA Regulations, the SIP, the DMV Regulations and the DEP Regulations.

B. **Third Party Warranties.** Contractor hereby warrants the assignability and assigns to the Department any and all express and implied warranties, including (if applicable) implied warranties of merchantability and fitness for a particular purpose, that are furnished by its vendors or manufacturers to Contractor for any equipment Contractor transfers to the Department.

## **ARTICLE XVII.**

### **PERFORMANCE BOND**

Contractor shall furnish the State with an annually renewable performance bond with surety within ten (10) Days after the issuance of the Notice to Proceed with Contractor and surety jointly and severally liable. The performance bond shall be duly executed for the benefit of the State and conditioned for the performance and fulfillment of the Contract with the State and include a protection of the State from all liens and damages arising out of the Contractor's work. At a minimum, the surety bond shall be in the amount of \$5,000,000. Failure to provide and/or maintain the required bond during the term of this Contract may result, at the option of the State Representative, in cancellation of the award and/or termination of the Contract pursuant to Section XII.C.1.f. The bond shall provide that the surety's obligations shall in no way be

reduced or affected in the event that the State recovers liquidated damages from Contractor pursuant to Section XII.E. hereof. A copy of the Contractor's performance bond form is attached hereto as **Schedule 10**, and its terms incorporated herein. The State's acceptance of such bond and reliance upon it as security constitutes its acknowledgement and agreement as to the terms under which it is offered and issued by the surety. In the event that the State gives notice to Contractor pursuant to Section XII.C.1, the State will simultaneously send a copy of such notice (and any subsequent related notices) to the surety by registered mail, at the address set forth in the bond.

## ARTICLE XVIII.

### NONDISCRIMINATION AND EXECUTIVE ORDERS

#### A. Nondiscrimination and Executive Orders.

1. Definitions. For the purposes of this Section XVIII.A., "*minority business enterprise*" means any small contractor or supplier of materials fifty-one percent (51%) or more of the capital stock, if any, or assets of which is owned by a person or persons (a) who are active in the daily affairs of the enterprise, (b) who have the power to direct the management and policies of the enterprise, and (c) who are members of a minority, as such term is defined in Subsection (a) of C.G.S. Section 32-9n; and "*good faith*" means that degree of diligence which a reasonable person would exercise in the performance of legal duties and obligations. "*Good faith efforts*" shall include, but not be limited to, those reasonable initial efforts necessary to comply with statutory or regulatory requirements and additional or substituted efforts when it is determined that such initial efforts will not be sufficient to comply with such requirements. For the purposes of this Section, "*Commission*" means the Commission on Human Rights and Opportunities. For the purposes of this Section, "*Public Works Contract*" means any agreement between any individual, firm or corporation and the State or any political subdivision of the State other than a municipality for construction, rehabilitation, conversion, extension, demolition or repair of a public building, highway or other changes or improvements in real property, or which is financed in whole or in part by the State, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees.

#### 2. Contractor Obligations.

a. Contractor agrees and warrants that in the performance of the Contract such Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, mental retardation or physical disability, including, but not limited to, blindness, unless it is shown by such Contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the State of Connecticut. Contractor further agrees to take affirmative action to insure that applicants with job related qualifications are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, mental retardation or physical disability, including, but not limited to, blindness, unless it is shown by such Contractor that such disability prevents performance of the work involved.

b. Contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of Contractor, to state that it is an “affirmative action-equal opportunity employer” in accordance with regulations adopted by the Commission.

c. Contractor agrees to provide each labor union or representative of workers with which such Contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such Contractor has a contract or understanding, a notice to be provided by the Commission advising the labor union or workers’ representative of Contractor’s commitments under this Section, and to post copies of the notice in conspicuous places available to employees and applicants for employment.

d. Contractor agrees to comply with each provision of this Section XVIII.A and C.G.S. Sections 46a-68e and 46a-68f and with each regulation or relevant order issued by said Commission pursuant to C.G.S. Section 46a-56, as amended by Section 5 of Public Act 89-253, C.G.S. Section 46a-68e and Section 46a-68f.

e. Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records, and accounts concerning the employment practices and procedures of Contractor as related to the provisions of this Section XVIII.A and Section 46a-56. If the contract is a Public Works Contract, Contractor agrees and warrants that it will make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on such public works project.

f. Contractor agrees to comply with the terms of the Americans with Disabilities Act of 1990 (the “ADA”) (42 USC Sec. 12101 et seq.) during the term of this Contract. Contractor represents that it is familiar with the terms of the ADA and that it is in compliance with the ADA. Failure of Contractor to satisfy this standard as the same applies to performance under this Contract, either now or during the term of this Contract as it may be amended, will render this Contract voidable at the option of the State upon notice to Contractor. Contractor warrants that it will hold the State harmless and will indemnify the State from any liability which may be imposed upon the State as a result of any failure of Contractor to be in compliance with the ADA.

3. Good Faith Efforts. Determination of Contractor’s good faith efforts shall include, but shall not be limited to, the following factors: Contractor’s employment and subcontracting policies, patterns and practices; affirmative advertising, recruitment, and training; technical assistance activities and such other reasonable activities or efforts as the Commission may prescribe that are designed to ensure the participation of minority business enterprises in public works projects.

4. Documentation. Contractor shall develop and maintain adequate documentation, in a manner prescribed by the Commission, of its good faith efforts.

5. Contractor shall include the provisions of Subsection 2.b. of this Section in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and such provisions shall be binding on a subcontractor, vendor or manufacturer

unless exempted by regulations or orders of the Commission. Contractor shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions, including sanctions for noncompliance in accordance with C.G.S. Section 46a-56; provided, if such Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Commission, Contractor may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the State and the State may so enter.

6. Regulatory Compliance. Contractor agrees to comply with the regulations referred to in this Section XVIII.A as they exist on the date of this Contract and as they may be adopted or amended from time to time during the term of this Contract and any amendments thereto.

7. Additional Obligations.

Contractor agrees to the following provisions: Contractor agrees and warrants that in the performance of this Contract, such Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of sexual orientation, in any manner prohibited by the laws of the United States or of the State of Connecticut, and that employees will be treated when employed without regard to their sexual orientation; Contractor agrees to provide each labor union or representative of workers with which such Contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such Contractor has a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or workers' representative of Contractor's commitments under this Section XVIII.A, and to post copies of the notice in conspicuous places available to employees and applicants for employment; Contractor agrees to comply with each provision of this Section XVIII.A and with each regulation or relevant order issued by said Commission pursuant to C.G.S. Section 46a-56; and Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records, and accounts concerning the employment practices and procedures of Contractor which relate to the provisions of this Section XVIII.A. and C.G.S. Section 46a-56.

8. Subcontracts. Contractor shall include the provisions of Subsections XVIII.A.2.b and 7 in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and such provisions shall be binding on a subcontractor, vendor or manufacturer unless exempted by regulations or orders of the Commission. Contractor shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with C.G.S. Section 46a-56; provided, if such Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Commission, Contractor may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the State and the State may so enter. Contractor agrees to comply with the regulations referred to in this Section as they exist on the date of this Contract, and as they may be adopted or amended from time to time during the term of this Contract and any amendments thereto.

B. Executive Order No. Three.

1. Part of Contract. The Contract is subject to the provisions of Executive Order No. Three of Governor Thomas J. Meskill, promulgated June 16, 1971, and, as such, the Contract may be cancelled, terminated or suspended by the State Labor Commissioner for violation or noncompliance with said Executive Order No. Three, or any State of Connecticut or Federal law concerning nondiscrimination, notwithstanding that the Labor Commissioner is not a party to this Contract. The parties to this Contract, as part of the consideration hereof, agree that said Executive Order No. Three is incorporated herein by reference and made a part hereof. The parties agree to abide by said Executive Order and agree that the State Labor Commissioner shall have continuing jurisdiction with respect to contract performance in regard to nondiscrimination until the Contract is completed or terminated prior to completion.

2. Guidelines. Contractor agrees, as part consideration hereof, that this Agreement is subject to the Guidelines and Rules issued by the State Labor Commissioner to implement Executive Order No. Three, and that it will not discriminate in its employment practices or policies, will file all reports as required, and will fully cooperate with the State of Connecticut and the State Labor Commissioner.

3. This Contract is subject to the provisions of Executive Order No. Seventeen of Governor Thomas J. Meskill, promulgated February 15, 1973, and, as such, the Contract may be cancelled, terminated or suspended by the DMV (pursuant to Section XII.C.1.f) or the State Labor Commissioner for violation of or noncompliance with said Executive Order No. Seventeen, notwithstanding that the Labor Commissioner is not a party to this Contract. The parties to the Contract, as part of the consideration thereof, agree that Executive Order No. Seventeen is incorporated herein by reference and made a part hereof. The parties agree to abide by said Executive Order and agree that DMV and the State Labor Commissioner shall have joint and several continuing jurisdiction in respect to Contract performance in regard to listing all employment openings with the Connecticut State Employment Service.

C. Violence in the Workplace Prevention. This Contract is subject to the provisions of Executive Order No. 16 of Governor John G. Rowland promulgated August 4, 1999 and, as such, the Contract may be canceled, terminated or suspended by the State for violation of or noncompliance with said Executive Order No. Sixteen. The parties to this Contract, as part of the consideration hereof, agree that said Executive Order No. Sixteen is incorporated herein by reference and made a part hereof. The parties agree to abide by such Executive Order.

**ARTICLE XIX.**

**NO THIRD-PARTY RELIANCE**

No persons other than the parties to the Contract may rely on this Contract.

**ARTICLE XX.**

**NON-DISCLOSURE**

A. By Contractor. Contractor and its subcontractors and their respective agents shall not release or disclose to any member of the public, press, business entity or any official body or any third party unless the State provides prior written consent permitting such release or disclosure: (i) any information concerning the services provided pursuant to the Contract or any part hereof; or (ii) all data provided to Contractor by the State or developed internally by Contractor with regard to the State or the VIP, including, but not limited to, all files, records, documents or other information as designated, whether prepared by the State or others, which may come into Contractor's possession during the term of this Contract. Contractor shall forever keep all such information confidential, except where disclosure of such information by Contractor is required by law, rule or regulation and such disclosure will be limited to that actually so required. Where such disclosure is required, Contractor will provide advance notice to the State of the need for the disclosure. Further, Contractor and its subcontractors and their respective agents shall not disclose any information in violation of the Driver Privacy Protection Act, 18 U.S.C. §2721, C.G.S. Section 14-10, or any other applicable state laws and shall not market any data or information with respect to the VIP whether or not obtained as a result of the performance of their responsibilities hereunder or under the Station Agreements.

B. By the State. The State and its contractors and their representatives and agents shall not release or disclose to any member of the public, press, business entity, any official body, or any third party, any proprietary and confidential information of Contractor or its subcontractors that it knows or should reasonably know is proprietary or confidential, including by way of example and not limitation, software, technical specifications, business and management plans, and financial information, unless Contractor (or its subcontractor) gives the State prior consent permitting any such release or disclosure. The State shall forever keep all such information confidential, except where disclosure is required by law, rule or regulation and such disclosure will be limited to that actually so required. Where such disclosure is required, the State will provide advance notice to Contractor of the need for the disclosure. The provisions of this Section XX.B. shall not prevent disclosure of such proprietary or confidential information pursuant to Section VIII.F.

C. Exceptions. Unless provided to the contrary pursuant to law (including, but not limited to the Driver Privacy Protection Act), Sections XX.A and B shall not apply to any information that: (a) is in the public domain; (b) was previously received by the receiving party from a third party without restriction and not in violation of any nondisclosure obligation; or (c) was independently developed by the receiving party without access to the disclosing party's information.

**ARTICLE XXI.**

**APPROVALS**

A. Plans. Contractor shall submit the Plans not yet approved for approval by the Department. The Plans shall:

1. contain, at a minimum, those requirements more particularly set forth herein;

2. be developed in substantial conformity to the RFP, the Information and the Response, unless otherwise indicated in the Contract or mutually agreed by the parties; and

3. include sufficient detail to allow the Department to monitor the progress of Contractor in the development, implementation, and administration of the VIP.

B. Schedule. The approval of such Plans and Contractor's submission of other procedures, protocols, reports, specifications, test results, or materials shall be in accordance with and so as not to delay the schedule established in the Implementation Schedule. Any Plan, procedure, protocol, report, specification, test result, or material not approved by execution of the Contract shall be subject to the approval process described below.

C. Process. The Department shall approve, approve conditionally, or reject critical Plans, procedures, protocols, reports, specifications, test results, or materials tendered by Contractor during performance (as defined in Section XXI.E) within fourteen (14) Days after receipt of same, and any other submissions within twenty (20) Days after their receipt. The Department's failure to so act shall be deemed to be an acceptance of the submission, to the extent that such submission does not change the terms of the Contract.

D. Part of Contract. The parties regard the performance provisions contained in Plans, procedures, reports, and specifications, once approved by the Department, as contract provisions as if fully set forth in the Contract; and a material or substantial violation of any such provisions of an approved plan, procedure, report or specification may be the basis for termination of the Contract for cause.

E. Critical Submissions. The following are deemed to be critical plans, procedures, protocols, reports, specifications, test results, or materials:

1. Workstation Specifications;
2. Testing Interface Application specifications;
3. Workstation design acceptance test procedures;
4. Workstation bay acceptance test procedures;
5. Mini-VID acceptance test procedures;
6. Workstation design acceptance test results;
7. Workstation bay acceptance test results;
8. Testing Interface Application acceptance test results; and
9. Materials for distribution at seminars conducted for prospective Stations.

F. Pre-approval Activity. Any work undertaken by Contractor pursuant to any Plans, procedures, protocols, reports, specifications, test results, or other materials prior to obtaining the Department's approval or expiration of the period for approval as set forth in Section XXI.C and as required by the Contract shall not entitle Contractor to a Claim, Change Order or fee adjustment. Notwithstanding anything to the contrary, Contractor shall not commence Inspections until the Department has reviewed and accepted Contractor's reports indicating that Contractor has successfully completed acceptance testing for the Mini-VID, Testing Interface Application, Workstation design and Workstation Lanes.

G. Approved Plans. The parties agree that upon execution of the Contract, the Department has approved of the following Plans:

1. Station Selection process (**Schedule 1**);
2. DMV VIP Implementation Schedule (**Schedule 2**);
3. Acceptance Test Plan Outline (**Schedule 3**);
4. Public Education and Information Plan Outline (**Schedule 4**);
5. Customer Problem Resolution Plan (**Schedule 5**);
6. Source Code Escrow Agreement (**Schedule 7**); and
7. Workstation Specifications Draft (**Schedule 8**).

H. Future Submissions. Contractor shall furnish the Department with the following Plans, protocols, results, and specifications within the time frames more particularly described in the Implementation Schedule:

1. acceptance test results for items for which Contractor is responsible;
2. QA/QC Plan;
3. final Workstation Specifications;
4. Testing Interface Application Design; and
5. Inspection Protocol.

I. Diesel Requirements. Contractor shall:

1. take measures to communicate to the public about the diesel emissions Inspection program;
2. ensure that the customer problem resolution hotline can respond to questions regarding diesel vehicles in the VIP;

3. take steps to recruit diesel Stations including outreach to the diesel inspection industry; and

4. use the Workstation Specifications.

## ARTICLE XXII.

### TRAINING

#### A. Training Requirements.

##### 1. Overview.

a. Contractor shall develop a comprehensive training program and materials for the training and certification of all Station personnel conducting Inspections in Connecticut, subject to State approval. The State shall have a perpetual license to all Intellectual Property Rights thereto including to any derivative works created by the State and shall have the right to provide a sublicense to any subsequent contractor operating the VIP or a successor vehicle inspection program in Connecticut. Contractor shall provide comprehensive training and certification to all Station personnel conducting Inspections in Connecticut. Contractor shall state clearly in its Station Agreements that only certified Inspectors shall be authorized to conduct Inspections and that each Inspector shall be required to pass an iris scan to proceed with each Inspection. Contractor shall aggressively suspend by locking out a Station and/or removing the Workstation at any Station that violates this requirement. Contractor shall revoke any certification of any Inspector who allows non-certified inspectors to use the Inspector's identity to conduct Inspections, and Contractor shall require such Inspectors to successfully complete re-certification training prior to reinstatement. Contractor shall charge the Station for this re-certification class.

b. In addition, Contractor shall require that its Connecticut field staff and department managers successfully complete Contractor's Inspector training program as a condition of continued employment. As part of the training program, Contractor shall ensure that all Inspectors learn and demonstrate proficiency in customer service/safety procedures, Station safety procedures, Inspection equipment safety procedures, and dynamometer drive testing.

c. In addition to orientation training, Contractor shall provide its technical staff with specialized training with an emphasis on calibration, troubleshooting, repair, and preventive maintenance of the Workstation. Contractor's technical staff shall train Connecticut-based technicians in the proper and safe use/maintenance of the Workstation as well as safe handling of calibration gas and cylinders. Contractor shall also provide on-the-job training to these technicians as they assist in the installation of the Workstations at the Stations.

d. Contractor shall structure a training program to provide the necessary resources, support and training for at least 600 Inspectors (not to exceed two (2) per Contractor-equipped Station) as well as a limited number of selected DMV staff. In the event that any Contractor-equipped Station leaves the Network and is replaced by a new Contractor-

equipped Station, Contractor shall train up to two (2) Inspectors free of charge for such new Station. In the event that any Contractor-equipped Station desires more than two (2) individuals to attend the initial training sessions at any time during the term of the Contract, and for each Inspector at any Self-financed Station, Contractor shall have the right to charge any such Station a training fee not to exceed \$150 per individual.

2. Curriculum Development and Review.

Contractor shall work closely with Connecticut industry personnel and DMV (and/or its agent) to develop and provide training materials and booklets, multi-media materials, and test and evaluation forms that are technically proficient yet user friendly. Contractor's implementation training manager and its curriculum coordinator shall work with the State to develop such materials.

3. Inspector Training Program Content and Structure.

Contractor shall design and distribute the Inspector training materials in packages that are both informative and interesting, and will serve as long-term reference materials. The Inspector training program must include at a minimum the following topics:

- a. Air pollution problems, causes and effects;
- b. Purpose, function and goal of the VIP;
- c. Inspection regulations and procedures;
- d. Emission control device function, configuration and inspection;
- e. Inspection procedures;
- f. Quality control and Workstation maintenance procedures;
- g. Station monitoring and quality assurance;
- h. Explanation of Inspection failure;
- i. Proper instructions for motorists with failed vehicles;
- j. Customer relations, public education, damage and complaint handling;
- k. Ethics and fraud prevention;
- l. Penalties for fraud/bribery;
- m. Attempted fraud/bribery reporting;
- n. Safety and health protection measures;

- o. Explanation of improper Inspections;
  - p. Penalties for improper Inspections;
  - q. Legal and professional liabilities associated with improper Inspections; and
  - r. OBDII - background, purpose, and description of features.
4. Initial Inspector Training. Initial Inspector training shall consist of:
- a. Eight (8) hours of home study consisting of:
    - (i) Basic emissions inspection background information, four-gas theory, causes and effects of pollution and an overview of the VIP;
    - (ii) Workbooks and other information available on the Program website; and
    - (iii) Verification of successful self-study by testing prior to classroom training.
  - b. Four (4) hours of classroom instruction, consisting of:
    - (i) Basic emissions inspection background information; four-gas theory; causes and effects of pollution; and an overview of the VIP;
    - (ii) Inspectors shall be aided by workbooks, in-class videos, and other information available on the Program website;
    - (iii) Workstation equipment and software familiarization;
    - (iv) Safety and health requirements for Stations and Inspectors;
    - (v) Technical details of the Inspection procedures and the rationale for their design.
  - c. Four (4) hours of hands-on hardware and software training, consisting of service bay training on the ASM and OBD II equipment in an environment that simulates the configuration of a Lane, including:
    - (i) Familiarization with Inspection procedure software screens and systems;
    - (ii) Proper DLC (OBDII) location and connection;
    - (iii) Discussion of dynamometer purpose/operation;
    - (iv) Setting up a vehicle for an Inspection;

- (v) Driving on the dynamometer;
- (vi) Performing the Inspection;
- (vii) Emergency procedures, braking and safety precautions;
- (viii) Q/A, Q/C, calibration and user-related maintenance;
- (ix) End of Inspection and shutdown; and
- (x) Dynamometer demonstration.

5. The Inspector Training Program.

The training program must employ an assortment of techniques and DMV approved materials and be conducted in a variety of settings, both for convenience of Inspectors and to aid in retention of subject matter. The Inspector training program must include at a minimum the following features:

- a. Development and support by Contractor personnel with years of decentralized vehicle inspection program experience;
- b. Cooperation and coordination with experienced DMV and Connecticut industry personnel;
- c. Design and development with the Inspector in mind;
- d. Geographically dispersed training locations throughout the State for convenience of the Inspectors;
- e. Evening and weekend training sessions; and
- f. A combination of multi-media, classroom and hands-on training to provide additional convenience of and interest for Inspectors.

6. Inspector Training Locations and Schedules.

a. Contractor shall utilize its Connecticut training center as well as geographically distributed locations (e.g., hotel conference rooms, large dealerships, technical schools, etc.) for the classroom portion of the initial Inspector training effort. Contractor shall supply all trainees with hands-on training and testing as part of the commissioning of the individual Workstation at each Station. Contractor shall coordinate and schedule hands-on training to allow DMV personnel to monitor and evaluate individual trainee performance and results.

b. Contractor shall start classroom training approximately ninety (90) Days prior to the Program Commencement Date; hands-on training shall be location dependent. Contractor shall continue to offer the initial training modules throughout the term of this

Contract to accommodate Inspectors who may come into the Program after the Program Commencement Date. Contractor shall also offer re-certification/refresher training throughout the term of this Contract at Contractor's Connecticut training center.

c. Contractor shall offer, as much as possible, flexible training schedules for the convenience of Inspectors and instructors. Contractor shall provide flexibility to minimize inconvenience and time away from work for Inspection personnel. Contractor shall develop a complete schedule and present it to DMV at least four (4) weeks in advance of the training program commencement date. Contractor shall forward class rosters, test scores and Inspector training details to DMV on a monthly basis.

7. Scheduling and Incentives.

a. Contractor shall ensure that initially Inspectors are able to select from pre-determined training dates by calling a special hotline number. Contractor shall offer this hotline service beginning during the early phases of implementation. Contractor shall provide toll-free service and a limited number of operators for this specialized purpose. Contractor's hotline staff shall forward training and scheduling requests to Contractor's training staff in Connecticut for follow-up and scheduling. Within four (4) months following the Notice to Proceed, Contractor shall schedule training through Contractor's headquarters office in Connecticut and schedules and class materials shall be available on a website. Once an Inspector has selected and been confirmed for a training class, Contractor shall send such Inspector an information package and registration form. Contractor shall use this form to create an Inspector-tracking database as set forth in Section XXII.C.

b. Contractor shall offer incentives to Inspectors to encourage early registration. Contractor shall use commercially reasonable efforts to offer a variety of incentives, including encouraging tool and equipment manufacturers to provide demonstration equipment for the training classes, or asking manufacturers to provide, so Contractor may offer, free tool packages to, for example, the first 100 Inspectors who register and successfully complete training. Contractor shall not allow sales presentations or other marketing efforts in the training program.

8. Instructors. Contractor shall provide qualified and experienced instructors. Contractor technicians who shall teach Workstation procedures in the service bays shall assist classroom instructors. Contractor's training effort shall be supervised and overseen by Contractor's implementation training manager and its curriculum coordinator. Contractor shall provide corporate support as it deems necessary, from a personnel and materials perspective.

9. Safety in Loaded Testing.

a. Contractor shall ensure that Inspectors are properly trained in the use of all Inspection equipment and that they fully comprehend its limitations in terms of safe operation. Contractor shall provide a safety component in the training program to incorporate sound safety practices as they relate to all the functions and activities associated with the loaded testing of vehicles.

b. Contractor shall include applicable guidelines and rules developed by OSHA and the applicable equipment manufacturers in the training materials. Contractor shall require in its Station Agreements that all safety notices and instructions developed by the manufacturers of the emissions testing equipment and the dynamometers shall be clearly posted at each Station.

10. Certification and Licensing Requirements. Contractor's training modules shall include a certification test that shall be developed jointly by Contractor and DMV and shall serve as the basis for Inspector certification from Contractor. Once an Inspector has completed training and passed the test with a minimum score of 80, Contractor shall forward his/her test score and certification to DMV for recording in the EDBMS. Certification shall be valid for no more than two (2) years.

11. Re-Certification. Contractor shall provide refresher training and testing at no charge every two (2) years for certified Inspectors due for certification renewal to maintain Inspector's skill level. Contractor's re-certification program shall include four (4) hours of classroom instruction and testing and focus on programmatic and/or regulatory updates/changes, software upgrades/changes, safety/health, and customer service/assistance.

12. Training Issues.

a. Contractor's Industry Outreach/Training Manager shall work with the training and technical staffs of the Department's Emissions division on the development of both Inspector and repair technician training programs.

b. Contractor's training manager shall work with the Department during implementation to assure that Connecticut Inspection regulations and procedures are properly presented in the Inspector training courses conducted by Contractor. Contractor's training manager shall also continue to work with the Department throughout the term of this Contract on Inspector re-certification and/or update courses. During both the implementation and operational stages of the Program, this individual shall also be available to DMV emissions training staff to provide input on the content of repair technician training programs that will be offered by DMV.

13. Inspector Training on Refusing Vehicles for Inspection. Contractor shall develop Workstation software that shall screen out vehicles that yield invalid results due to a sample dilution (i.e., insufficient exhaust volume due to faulty or intentionally altered vehicle exhaust system). Contractor shall provide all Inspectors with training to identify conditions which present, or could present, a safety hazard or prevent a valid Inspection including, but not limited to:

a. Fluid leaks (other than condensation water from air conditioning units);

b. Visibly leaking, missing or inaccessible exhaust system components;

- c. Tires, wheels, studded tires or other unsafe conditions that make a vehicle unsafe to operate on the dynamometer;
- d. Animals in a vehicle;
- e. Missing or unverifiable Vehicle Identification Number (VIN); and
- f. Uncooperative vehicle operator.

14. Inspector Training to Prevent Vehicle and Consumer Accidents.

a. Contractor shall develop a training program for accident prevention, which training shall include at a minimum traffic control, vehicle preparation procedures (e.g., transmission in proper gear, engine off, etc.), dynamometer operation and emergency shutoff procedures, proper use of vehicle restraint equipment, and safe test area housekeeping procedures and responsibilities. Contractor shall require that its Stations maintain at a minimum full compliance with all applicable local, state and federal health and safety requirements for employees and consumers.

b. Contractor shall require that in the event of an incident that results in vehicle damage or a personal injury to a consumer, all Stations report them to the Department's emissions Program Manager within one (1) business day of occurrence. Contractor has twenty-four hours to advise DMV of any accidents of which Contractor becomes aware. Contractor shall maintain a file of all damage claims and report activity and disposition to DMV bi-weekly.

B. Industry Outreach. Contractor's Industry Outreach/Training Manager shall also serve as a conduit for technical and public information between the automotive service industry and DMV. This individual shall help resolve concerns that both the industry and DMV have on Inspections, repair, and related issues. In addition, the industry outreach manager shall work with Contractor's public education contractor on the development of public Inspection and repair information.

C. Tracking System.

1. Database. Contractor shall develop a database of Inspector information for use by both Contractor and the State. Beginning with registration for training, Contractor shall collect Inspector information from registration forms, tests and certification files and enter this information into the Inspector database. This database shall be the source of a tracking system to support curriculum evaluation and pass/fail trend analysis. Contractor shall update regularly the Inspector files with data collected from the training program. The database shall contain at a minimum the following information:

- a. Inspector's name, certification number and expiration date;
- b. Inspector's home address and telephone number;
- c. Inspector's Station number, address and telephone number;

- d. Initial training date(s) and test score(s);
  - e. Refresher/remedial training date(s) (if applicable);
  - f. Audit information if any deficiencies or problems are identified;
- and
- g. Inspector's status (active, suspended etc.).

2. Access. Contractor shall continually work with DMV to ensure accuracy and availability of Inspector data. Contractor shall develop, in concert with the State, parameters for releasing information to the public and potential employers consistent with Article XX. DMV may use the information provided within the database tracking system as it deems appropriate, and shall determine whether to make any such information available to future employers of the Inspector, subject to Article XX.

3. Monitoring. Contractor's database tracking system shall be developed to allow DMV and Contractor to continually monitor the performance of Inspectors and, pursuant to Section V.D, to lock out Inspectors who fail to meet training requirements or who conduct improper testing. In the case of simple operator error, Contractor shall provide required remedial training (at the Station's expense) and shall, in its discretion, determine whether to lock out the Inspector. In the case of Inspector fraud, Contractor shall lock out such Inspector immediately upon learning of the fraud.

4. Remedial Training. Contractor shall require Inspectors who have been identified as conducting improper tests through operator error to obtain remedial training at the HQ training center at the Station's expense. Contractor shall ensure that any remedial training be conducted by experienced personnel who can observe and work with the Inspector in question.

### **ARTICLE XXIII.**

#### **ADDITIONAL PROGRAM REQUIREMENTS**

A. Management Requirements. Contractor shall provide the Department with a description of Contractor's internal control systems for the detection and deterrence of conflicts of interest. Contractor has provided the Department with a list of its key personnel and their roles for work performed under the Contract. Contractor shall notify the Department prior to:

- 1. making a significant reduction in its staffing levels; or
- 2. replacing or significantly reallocating any key personnel identified on the list provided.

B. QA/QC Plan.

1. Objectives. Contractor shall develop and implement a Quality Control/Quality Assurance Plan ("**QA/QC Plan**"). The Plan shall be designed to assist Contractor in ensuring that:

- a. the System meets the accuracy requirements for the VIP;
- b. Workstations are properly calibrated and maintained;
- c. quality control data is accurately collected;
- d. Stations maintain consistent adherence to Inspection protocols; and
- e. that aberrations from standard procedures are detected and reported.

2. Process. The Plan shall:

- a. describe how Contractor will meet each of the Plan's objectives;
- b. include automated procedures consistent with the Response;
- c. specify that quality control data, including control charts and other analyses, shall be provided through the Testing Interface Application; and
- d. provide for the quarterly review of the QA/QC Plan by Contractor and the Department to further improve effectiveness of the VIP.

3. Standards and Procedures. The Plan shall specifically describe each of the following (Contractor shall develop each of these prior to the Program Commencement Date and modify them thereafter, subject to approval of the Department):

- a. each quality control procedure and its frequency;
- b. all quality control standards and Workstation lockout thresholds;
- c. the data collection method for each quality control procedure;
- d. the tracking and monitoring of quality control activities;
- e. all control charts and methods for calculating control chart limits;
- f. proposed "fit for use" limits;
- g. proposed responses to out-of-limit conditions; and
- h. such other statistics as Contractor may, in its discretion, calculate, or that are required pursuant to the terms of this Contract.

4. Workstation Quality Control Procedures. The Plan shall include quality control procedures and standards for Workstations that are appropriate to the System. The Plan shall provide for monitoring by Contractor throughout the life of the Contract of the following: (i) quality control procedures performed throughout the Station Network, and (ii) the Workstations' compliance with all applicable performance standards in the Plan and the

Workstation Specifications. The Plan shall include trends analysis and exception analysis on the Workstation quality control data collected under the Plan.

5. Quality Control for Test Procedures.

a. Contractor shall implement quality control procedures and criteria for each of the emissions test protocols for gasoline and diesel vehicles, which procedures and criteria shall address, at a minimum:

- (i) dynamometer controller checks;
- (ii) inertia weight loading;
- (iii) vehicle distance traveled during the drive cycle;
- (iv) vehicle stalls; and
- (v) speed excursion limits.

b. The Plan shall provide that a vehicle shall be retested if the Workstation has determined that a vehicle has violated one of the above-referenced criteria due to a malfunction in the vehicle.

c. The Plan shall provide that if a vehicle violates one of the above-referenced criteria as a result of a known Workstation malfunction, then the Workstation shall: (i) record the Inspection in the EDBMS as incomplete with no change in the vehicle's Inspection status, and (ii) prevent further use of the Workstation for testing until the malfunction is corrected.

d. The Plan shall provide that if a vehicle fails any one of the above-referenced criteria as a result of a known Inspector error, the Workstation shall offer the Inspector the opportunity to repeat the Inspection. If the Inspector cannot or chooses not to repeat the Inspection properly, then the Plan shall require the Workstation to preclude printing of a sticker (if print-on-demand stickers are used) and to record the Inspection in the EDBMS as incomplete with no change in the vehicle's Inspection status.

e. For each case identified above, the Plan shall specify that the Workstation print an explanation for the motorist that clearly indicates the reason why the Inspection was incomplete and instruct the motorist on how to meet the vehicle's Inspection requirement.

6. Statistical Process Control.

a. Contractor shall create Statistical Process Control ("SPC") reports that will provide the basis for Program evaluation and corrective measures.

b. SPC procedures include identification and grouping of appropriate data elements within the Testing Interface Application and applying particular mathematical

formulas, which will separate random variation from special-cause variation. Special-cause variation could be due to operator error, equipment malfunctions, or other unknown sources. The procedures also include mathematical development of control limits that represent the boundary between random variations and special-cause variations.

c. The following SPC components will be included in the various data analysis and reporting described below:

- (i) Tabular Data Summary;
- (ii) Control Chart Data;
- (iii) Out of Limit Variance Report;
- (iv) Corrective Action Plan and Tracking/Report; and
- (v) Trend Analysis.

d. Contractor shall analyze data collected in the Program to identify suspect Stations or Inspectors using Inspection results analysis (described in Section XXIII.B.7) of the following:

- (i) Number of offline Inspections;
- (ii) Short periods between Inspections;
- (iii) ASM failures;
- (iv) Passing Inspections;
- (v) Gas cap failures;
- (vi) OBD failures;
- (vii) After hours Inspections; and
- (viii) Aborted Inspections.

e. Special SPC programs for OBD II Inspections. The following specific areas shall be addressed:

- (i) Stations performing questionable OBD II Inspections based on PCM Module ID, PID Count, Monitors Supported and other parameters; and
- (ii) Identification of equipment that fails to communicate with vehicles as indicated by record audits.

f. In addition to analyzing Program data to identify Stations suspected of performing improper Inspections, Contractor will analyze QA data of individual Workstations.

7. Inspection Results Analysis. The Plan shall describe the software Contractor shall use to analyze Inspection results for: (1) patterns that indicate improper Inspections, and (2) substantial deviations by Inspectors and Workstations from the Station Network averages for parameters such as composite emissions, pass rates, and waivers. The Plan shall specify how Contractor shall set criteria for Inspection result patterns and deviations and the investigations and appropriate corrective actions that shall be taken by Contractor in response to such patterns and deviations. Contractor shall provide training to the Department's staff in the interpretation of such Inspection results. The Plan shall also specify the trend and exception analysis that Contractor shall perform on Inspection data as part of Contractor's program to identify improper Inspections.

8. Quality Control Reports. The Plan shall provide for quality control reports from Contractor to the Department summarizing the performance of Contractor's quality control program. The quality control reports shall analyze unacceptable statistical deviations, identify patterns that may predict future problems, and describe the steps that have been or will be taken to remedy such problems. The Plan shall specify the schedule for Contractor's periodic quality control reports that it shall provide through the EDBMS.

9. Additional QA/QC Requirements. In addition to the above requirements, the QA/QC Plan shall address the following:

a. include all elements described in the Technical Specifications.  
These include:

- (i) Fraud Detection and Prevention;
- (ii) Sticker Inventory/Control and Security (if applicable); and
- (iii) Quality Assurance provisions;

b. define quality assurance staff and the organization to oversee such functions, including that specific number of technicians and field service representatives to be assigned thereto;

c. specifically identify the number and frequency of individual QA/QC elements;

d. require Stations experiencing higher volume testing (greater than 4,000 Inspections a year) to have more frequent on-board calibration and quality control checks than standard BAR97. Intervals for calibrating the high volume Stations (greater than 4,000 Inspections a year) shall be 24 hours (versus 72 hours for lower volume Stations) for gas calibration, leak check, transport time, dynamometer coast down and gas cap tester;

e. include the following provisions concerning Sticker security (if applicable), in addition to those mentioned in the Technical Specifications:

- (i) Stickers will be stored in a secure area; and
- (ii) Written procedures for the storing and issuing of Stickers.

f. require special attention to nondispersive ultraviolet (“**NDUV**”) since NDUV measurements for NO<sub>x</sub> have not been approved by BAR or incorporated in any decentralized inspection programs, and require frequent quality control and audits until enough data has been collected for the Department to reasonably evaluate this protocol. Contractor shall provide a span check and calibration every seventy-two (72) hours for each Station with an annual Inspection volume less than 4,000 and a span check every twenty-four (24) hours for each Station with an annual Inspection volume of 4,000 or more. Acceptance tests for the NDUV system should be defined if BAR approval has not been obtained;

g. require hardware audit procedures based on Workstation Specifications; and

h. incorporate OBD II Inspections. The following specific areas shall be addressed:

(i) Record audits (reporting) – Programs for data analysis routines shall be written to identify Stations performing questionable OBD II Inspections based on PCM Module ID, PID Count, Monitors Supported and other parameters. OBD II statistics shall be compiled to report on the effectiveness of OBD II Inspections (all other elements of record auditing referred to elsewhere in the Technical Specifications shall also be incorporated into the QA/QC Plan); and

(ii) Checks of equipment that fails to communicate with vehicles as indicated by record audits.

C. Safety and Environmental Management Responsibilities.

Contractor shall provide the Stations with information to enable them to manage, and its Station Agreements shall require the Stations to manage, the safety of all VIP operations and compliance with all those environmental laws, regulations and best practices limited strictly to the Stations’ operation as part of the VIP. Contractor’s responsibility shall include the provision of informational materials to the Stations, compliance assistance, advice and referrals. Any gross or repeated failures on the part of Stations to adhere to those applicable safety and environmental management requirements shall be grounds for expulsion from the VIP. More particularly, and without limitation, the responsibilities of Contractor shall include occupational safety measures associated with the use and risks from potential improper use of the Workstation; corrective measures for any occupational safety problem that may result from proper or improper use of the Workstation; safe handling and storage of any flammable or asphyxiating gases used with the Workstation; a strategy to encourage Stations and registered repair technicians to practice good environmental management at their place of business.

D. Acceptance Test Plan and Procedure. The general requirements of the ATP are included in **Schedule 3** attached hereto. It is anticipated that, in addition to the attached ATP outline, Contractor shall develop acceptance test procedures similar in scope and content to Contractor's ATP utilized in its Washington vehicle inspection program. This ATP shall incorporate those additional provisions required by the Workstation Specifications and the Technical Specifications. These provisions include, but are not limited to, the following:

1. ATP for the NDUV NO<sub>x</sub> measurement system to ensure EPA required accuracy;
2. Proper operation of the video monitoring system; and
3. Proper operation of the iris scanning system.

Acceptance testing shall be performed prior to the Program Commencement Date in order to ensure that accurate and complete Inspections are performed by the Stations for all vehicles subject to the VIP. Acceptance testing shall verify that, in addition to the general requirements set forth in the preceding sentences, any and all OBD II equipped vehicles (with properly functioning equipment) can be tested in such a manner that properly communicates with the Workstation and the Testing Interface Application.

E. Station Recruitment Requirements. Contractor shall recruit Stations in accordance with the general criteria presented to the Department in the Technical Specifications, consistent with the Station Selection Process in **Schedule 1**, and in conformity with the schedule described in Section III.B.4. In addition, Contractor shall consider and apply, in its good faith judgment, the following minimum requirements:

1. Contractor-equipped Stations.

Contractor shall offer the use of no more than one (1) Workstation, except as the State Representative and Contractor may otherwise agree may be necessary to achieve optimal geographic distribution, for no additional fees to a prospective Station, provided that:

- a. the Workstation is configured for ASM and Pre-conditioned 2 Speed Idle Testing of gasoline vehicles as described in the Workstation Specifications;
- b. Contractor provides maintenance for the Workstation for the duration of the Contract and the consumables listed in Section X.C with the Workstation;
- c. Stations have a choice of above-ground or in-ground dynamometer configurations;
- d. Contractor installs the Workstation at no cost to the Station, except that the Station is responsible for preparing its facility for the installation (as set forth below), and Contractor may charge a Station if Contractor must make multiple installation visits to a Station due to a lack of preparedness on that Station's part;

e. the Station assumes all costs for facility preparation required for the installation of the Workstation, including but not limited to telephone lines, electrical service, and pit construction for in-ground dynamometers;

f. Contractor provides the Station with a list of the specifications and requirements for the Workstation sufficient for the Station to perform all such facility preparation work; and

g. Contractor may offer Stations the option of having Contractor perform such facility preparation work for a fee.

2. Geographic Distribution.

a. Within the scope of the Contract, Contractor shall ensure that Stations for gasoline and diesel vehicles are: (i) sufficiently numerous and dispersed to allow motorists access to a Station convenient to their home or workplace, including motorists in rural areas such as the western and eastern portions of the State; (ii) sufficiently numerous and concentrated within densely populated urban areas of the State to provide convenient service with minimal wait times; and (iii) at all times generally in compliance, on a proportionate basis, with the geographic distribution plan included in the Station Selection Process Plan attached as **Schedule 1.**

b. During the first six (6) months after the Notice to Proceed and every two (2) years thereafter, Contractor shall provide a written evaluation of whether the distribution of all Stations is sufficient to provide convenient service throughout the State. The evaluation shall specify how convenience is measured, subject to the approval of the Department. If needed, Contractor shall devise and implement measures to address significant inconveniences to the public caused by a lack of a sufficient number of Stations in a particular area.

c. Contractor shall furnish the Department with: (i) an assessment of whether the distribution of the fifty (50) Stations testing diesel vehicles is sufficient to adequately serve the Fleet, within fourteen (14) months after the Program Commencement Date and every two (2) years thereafter; and (ii) a contingency plan that proposes specific actions the Department, Contractor, and other private businesses might take to address any significant deficiencies in the geographical distribution of Stations. This contingency plan may include the promotion of Inspection businesses using mobile test equipment tailored to serve those markets.

3. Standards for Stations to Join the Station Network. Contractor shall develop and apply, subject to approval by the Department, clear and objective standards that a business must meet to become a Station, including, but not limited to, the following:

a. creditworthiness of the Station;

b. hours and days of operation convenient to motorists;

c. an adequate performance record as a dealer or repairer licensed by the DMV's Dealers and Repairers Division with respect to compliance with DMV regulations; and

d. a record of compliance with other state laws and regulations, including those for environmental protection as evidenced by an absence of citations for violations.

4. Recruitment. Contractor shall run recruiting seminars as described in its Technical Specifications. Contractor shall develop the content, schedule, and locations for these seminars in close consultation with the Department. When recruiting Stations, Contractor shall, at a minimum:

a. devote sufficient resources both to mass marketing and to one-on-one relationship building with owners of prospective Stations;

b. address the concerns and needs of Station owners and Inspectors;

c. help businesses analyze the economic feasibility of joining the Station Network;

d. reach out to, and encourage and facilitate participation from, all segments of the existing inspection industry and all geographic areas of the State;

e. inform prospective Stations on how to participate in the VIP and obtain a Workstation;

f. aggressively pursue minority and women-owned businesses to participate in the VIP; and

g. provide a process to assess Station needs.

5. Self-Financed Stations.

a. Contractor shall allow Self-financed Stations to purchase their own Workstations from Contractor. Until the Program Commencement Date, Contractor shall offer for sale to the Self-financed Stations its standard-equipped Workstation (with two-wheel dynamometer) and installation services for \$48,590 and monthly maintenance service on such Workstation during the term of the Contract for \$291 per month. Prices for other Workstation configurations (e.g., with a four-wheel dynamometer) and related services shall be calculated in a manner comparable to that used to determine the price of the standard-equipped Workstation. After the Program Commencement Date, Contractor may increase the price of its Workstations and maintenance services offered to the Self-financed Stations by an amount consistent with industry practices. Contractor may offer financing or standard lease terms for Workstations. Contractor shall offer Self-financed Stations the same consumables as those offered to Contractor-equipped Stations at the prices as provided in Section X.C. Contractor shall require in its Station Agreement with Self-financed Stations that the Stations obtain their maintenance and consumables from Contractor.

b. Workstations provided to any Self-financed Station shall meet or exceed the specifications of the Workstation in a Contractor-equipped Station. Contractor shall require Self-financed Stations to:

(i) sign an agreement fundamentally the same as the Station Agreement signed by Contractor-equipped Stations, absent those provisions concerning equipment supply and ownership;

(ii) comply with all quality assurance and quality control rules and regulations, Contractor's auditing program, and all other Applicable Legal Requirements; and

(iii) purchase only Workstations that are approved by the Department and provided by Contractor.

F. Inspection Protocol.

1. Contractor shall submit a proposed Inspection Protocol to the Department which includes emissions Inspection protocols for all gasoline and diesel vehicles including drive cycles and emissions cutpoints (determined by the State). Contractor shall design the Inspection Protocol to minimize the amount of time required to perform an Inspection, eliminate duplicate steps, maximize accuracy, and minimize noise. Contractor shall take reasonable steps to optimize the accuracy and efficiency of the Inspection Protocol. The Inspection Protocol shall be consistent with the Workstation Specifications and the requirements of the RFP and the Response. The Inspection Protocol shall fully document all Inspection procedures used in the VIP. All terms of the Inspection Protocol shall be subject to the Department's approval.

2. An "Emissions Inspection Functional Guide" ("**Guide**") shall be proposed to describe all elements of the Inspection Protocol including all screen prompts, and shall be organized in the same sequence as the Inspection procedure. For example, the Guide will begin with instructions and concomitant screen prompts for signing on to the Workstation and end with customer interaction instructions for re-test procedures for failing vehicles. The Guide shall be designed as a manual for use by Inspectors and DMV and Contractor employees and shall describe all steps in the VIP Inspection procedures. The Guide shall include flowcharts and "decision trees" as necessary. This Guide shall serve as a functional guide intended to serve as a computer (Workstation) reference. The Guide shall be part of the training manual.

The Guide shall include in appendices, (a) definitions of the vehicle test record ("**VTR**") fields including the screen identifications, field screen names which correspond to the test record and whether the fields are completed by the Mini-VID, Inspector, Workstation or DMV or Contractor; (b) the actual time required to complete each test element; and (c) a glossary of terms.

3. The Guide shall include the following items:

a. flow charts outlining the test protocol for each type of vehicle emissions test showing each step in the protocol and the overall flow of the Inspections;

- test is inappropriate;
- b. Pre-conditioned 2 Speed Idle Test for vehicles for which the ASM
  - c. a gas cap test protocol(s) appropriate for all vehicles;
  - d. OBD II test protocol;
  - e. second and third chance-to-pass procedures and algorithms for the
  - f. a strategy to handle vehicles with known patterns of false failures;
  - g. alternative test protocols for all-wheel drive vehicles;
  - h. provisions for alternative fuel vehicles;
  - i. provisions to minimize manual data entry;
  - j. minimum standards and procedures a Station shall use to ensure safety for Inspectors, customers, and property during dynamometer operation;
  - k. automatic identification of proper procedures for vehicles with all-wheel drive, ABS and traction-control including a description of how Contractor shall identify such vehicles and the specific procedures the Inspectors shall use with each type of vehicle, provided that the data for identifying such vehicles is made available to Contractor by the Department or another source such as EPA;
  - l. procedures for handling unusual circumstances such as aborted or interrupted Inspections, unsafe vehicles, vehicles that do not match their registration data, and vehicles not registered in the State; and
  - m. specific preconditioning cycles to ensure vehicles are not improperly failed.

4. The parties may mutually agree to change the components of the Inspection Protocol. Such changes shall not be subject to Article XI where such change:

- a. may be performed within the 1,000 hours engineering credit for software development as proposed by Contractor;
- b. is made to correct errors made by Contractor or any of its suppliers or subcontractors; or
- c. is within configurable tables and standards.

G. Repair Effectiveness Monitoring.

1. Contractor shall cause the Stations to disseminate information on emissions repairs to motorists with failed vehicles at the time of the Inspection failure.

Contractor shall cause the Stations to collect information on emissions repairs from motorists with failed vehicles at the time of re-inspection. Contractor shall develop forms, which it will require the Stations to distribute at the time of a vehicle's failure of an Inspection, that make data entry easy and help ensure the quality of repair information. This information shall identify the technician and the shop that performed the repairs. The Workstation software shall prompt an Inspector automatically to enter such emissions repair information prior to a re-Inspection.

2. In cooperation with the Department, Contractor shall develop an emissions repair effectiveness index which identifies those repair facilities with the greatest success at repairing vehicles and with the lowest rate of waivers after their repairs. The index shall be weighted to emphasize improvement in a shop's success rate and shall be updated continuously and transmitted to the EDBMS for the Department to incorporate it into the repair shop information in the EDBMS. Contractor shall develop its repair effectiveness index in consultation with the Department and subject to its approval.

3. At a minimum, Contractor shall require each Station to provide to each motorist whose vehicle fails an Inspection, a directory of licensed repair shops which identifies such repair shops closest to the Station. The directory shall include the emissions repair effectiveness indices. The Workstation shall generate this directory automatically upon printing an Inspection failure report. The Workstation shall be able to print the directory of such listed shops in any municipality at the motorist's request.

#### H. Workstation Maintenance Requirements.

1. Contractor shall maintain the Workstations pursuant to Article IX, to meet the performance standards established in the Workstation Specifications throughout the life of the Contract. This requirement applies to Workstations for both Contractor-equipped and Self-financed Stations. Contractor shall provide the Department with documentation of its Workstation maintenance procedures or specifications upon request.

2. Contractor shall achieve a call response time of one (1) business day or less, and establish a maximum time during which any Workstation may be inoperable due to Workstation failure that is not caused by the Station or the Department.

3. Contractor shall provide for:

- a. quarterly preventative maintenance visits for each Workstation that includes functional checks, accuracy checks, leak checks, filter replacement, worn hose and probe replacements, expired oxygen and/or NOx cell replacements and cleaning;
- b. quality control and quality assurance checks to be performed by service technicians;
- c. service technicians to be adequately equipped with trucks, tools and spare parts inventory; and
- d. procedures for service technicians to identify and report indicators of equipment tampering and improper Inspections.

I. Workstation Specifications.

1. Contractor shall provide detailed equipment specifications for the Workstations, a draft of which is attached hereto as **Schedule 8** (“**Workstation Specifications**”). These Workstation Specifications shall be based upon the following:

- a. CT DMV CT 2001-D Analyzer System Specifications for Emissions Test Equipment to Be Used in Decentralized Test-Only and Test-and-Repair Inspection Facilities, Ver. 1.0, October 29, 2001 (hereafter “**CT2001-D**”);
- b. the RFP; and
- c. the Technical Specifications.

Contractor shall revise the CT2001-D as reasonably necessary to create the Workstation Specifications in conformance with the RFP, Technical Specifications, and this Contract.

2. Compliance with BAR97.

a. If the Workstation has not been BAR97 certified, it shall be demonstrated to meet the BAR97 specification particularly in the areas of ambient temperature operation, Vibration and Shock (BAR97 section 5.4.14) and Electric Noise Tests (BAR97 section 5.4.13); and

b. The Workstation shall meet all applicable Government Codes, of normal industry standards and consumer safety standards.

3. OBD Communications Performance Standard. During the first year of the Program, the Workstation must be capable of communicating with 97% of the vehicles subject to OBD testing (excluding those vehicles with damaged connectors). For subsequent years of the Program, the equipment must communicate with 99% of such vehicles (including those supporting the Controller Area Network protocol, ISO 11898).

4. OBD Software. The Workstation Specifications will include an OBD II Inspection procedure revised from the CT2001-D as follows:

a. All references and procedures associated with OBD II-Only Stations will be removed;

b. Vehicles that do not communicate will receive key on engine off (“**KOEO**”), key on engine running (“**KOER**”) and ASM tests; and

c. During the first two (2) year test cycle, vehicles that are not ready for OBDII testing will receive ASM tests. Vehicles that are “not ready” shall mean those vehicles exceeding the EPA’s permitted number of monitors (for vehicle models of 2000 or older – two (2) monitors; for vehicle models of 2001 and newer – one (1) monitor). Vehicles that fail to communicate with the Testing Interface Application will receive an ASM test. Vehicles with illuminated MILs (commanded-on) or other reasons for failure, e.g., KOEO visual failure, will

fail their Inspections (they will not receive back-up ASM Inspections). This phase-in period is not to be confused with the EPA phase-in option whereby failing OBD vehicles receive ASM Inspections.

d. The Department may require other changes in test logic, such as simplifying re-test logic by eliminating the previous catalyst fail re-test requirement, while Contractor is developing the Workstation Specifications. Any such changes shall be identified by DMV prior to finalizing the Workstation Specifications.

5. Hand-held OBD Unit. Any handheld OBD II units must meet all OBD requirements specified in the CT 2001-D, with the changes specified above.

6. Video. All video “snap shots” shall be transmitted to the Mini-VID to be stored for three (3) months. Every three (3) months Contractor shall provide the Department with a disk containing such video.

7. On-Site Sticker Printing. The Workstation shall allow for future “on-site” Sticker printing with minimal modifications, provided, however, that Contractor shall not be required to equip any Workstation with any hardware or software for the printing of such Stickers without a Change Order agreed to by the parties in accordance with Article XI.

8. E-mail. The Workstation will retain and be able to display the last twenty-five (25) Department messages.

9. Aborted Inspection. The Workstation shall create an Inspection record for each aborted Inspection. Allowable “reason codes for aborts” will be provided to Contractor by the Department. The Workstation will require a reason code to be entered into the Inspection record and will transmit the Inspection record to the EDBMS pursuant to Section XXIII.I.16. The System shall not allow “abort” Inspection records to be deleted from the Workstations for thirty (30) Days.

10. Pre-conditioned 2 Speed Idle Tests.

a. Handicapped drivers of pre-1996 model year vehicles shall be provided a Pre-conditioned 2 Speed Idle Test if requested or if they are unable to exit their vehicle;

b. All non-diesel powered vehicles with a GVWR of greater than 8500 lbs. shall receive a Pre-conditioned 2 Speed Idle Test;

c. 1995 and older full-time 4-wheel drive and traction control vehicles that cannot be disabled shall receive a Pre-conditioned 2 Speed Idle Test; and

d. Other 1995 and older vehicles unable to be tested on the dynamometer shall receive a Pre-conditioned 2 Speed Idle Test when approved by the State Representative. In such cases the Workstation will require an appropriate approval code to be entered into the Inspection record.

11. Snap Idle Test (BAR97 Section 4.18.4). The snap idle test shall be used only for diesel vehicles with a GVWR of greater than 8,500 lbs.

12. Workstation Descriptions. Contractor shall provide the Department and each Station a complete description of the Workstation equipment, accessories, and consumables that Inspectors shall use to perform Inspections, including, but not limited to a computer, modem, printer, barcode scanner, test and communications software, gas analyzers, flow measurement device, opacity meter, gas cap tester, and OBD scan tool. The description also shall describe:

- a. the accuracy and response time for detecting oxygen, CO<sub>2</sub>, total hydrocarbons, CO, and NO<sub>x</sub>;
- b. the formulas the Workstation shall use for emissions calculations;
- c. safeguards and security features designed to ensure Inspection;
- d. mechanisms that ensure proper Inspector identification;
- e. operator, vehicle and facility safety features;
- f. the installation requirements and options;
- g. any choices of equipment or configurations offered for the Workstations;
- h. the capability of the OBD scan tool and how Contractor shall use OBD technology to improve Program effectiveness (e.g., in diagnostics); and
- i. for diesel Workstations, the performance standards that the diesel Workstations shall meet and the technical specifications for the opacity test equipment including accuracy and response time.

13. Dynamometers.

- a. The Workstation Specifications shall provide detailed descriptions of the dynamometers, including:
  - (i) accuracy and methods for measuring test distance, vehicle speed and timing;
  - (ii) absorption unit load simulation technology type, range, accuracy, system response characteristics and inertial weight step increments;
  - (iii) roll size, configuration and coupling;
  - (iv) noise reduction technology; and
  - (v) vehicle restraint system.

b. The Workstation Specifications shall describe in detail the algorithms and techniques for:

(i) calculating appropriate tire-roll interface loss for each vehicle, using data provided by the EPA or the Department;

(ii) characterization of parasitic horsepower losses; and

(iii) tracking and monitoring of parasitic losses.

14. Sample Collection. The Workstation Specifications shall describe sample collection equipment, including:

a. flow rate;

b. collector or probe design; and

c. acceptable background concentrations and corrective measures.

15. Software. The Workstation Specifications shall describe Workstation software that fully and automatically controls and monitors the Inspection process. The software, to the extent reasonable and practical, shall:

a. ensure that quality control standards are met, the Inspection procedures are followed, and the Inspection record is complete;

b. automatically select the appropriate Inspection protocols for each vehicle;

c. lead an Inspector through each step in the pre-inspection screening, Inspection, quality control procedures, maintenance procedures, and any other procedure that is required of an Inspector, in a user-friendly manner;

d. prompt the Inspector to make proper entries from a menu of choices and prevent progress through the Inspection if the Inspector does not provide proper responses;

e. provide that data acquisition, quality control, and Inspection functions be performed without the need for the Inspector to manually enter data;

f. allow testing of vehicles for diagnostic purposes;

g. allow Inspections to be performed only by certified Inspectors which certification shall be ensured by an iris scan security procedure;

h. be designed to minimize the ability of Inspectors to conduct improper Inspections;

i. identify Inspectors, auditors, or authorized maintenance persons by automated and secure means, including the iris scan security procedure;

j. provide Inspectors with access to on-line training opportunities and help files, including VIP regulations provided to Contractor by the Department;

k. determine from the EDBMS whether a vehicle has been subject to an emissions recall but has not had the repairs performed to the extent such data is made available by EPA or the Department; and

l. print information on such recalls for the motorists in the VIRs, advising them to obtain the appropriate repairs.

16. Data Transfer Requirements.

a. The Workstation Specifications shall provide a description of how the System will create records of all Inspections and of quality control, audit, calibration, graphic images, repair data and maintenance procedures and all other data retained by Contractor and/or agreed upon data specified by the EDBMS vendor and the Department, and shall accurately transmit this data to the EDBMS using the EDBMS vendor and Department specified protocols and methods.

b. The Workstation Specifications shall provide that in normal operation the Testing Interface Application shall transmit all Inspection records to the EDBMS prior to printing (if applicable) a Sticker and VIR. The Workstation Specifications shall provide for the ability to conduct a set number of Inspections while off-line from the EDBMS when connection to the EDBMS cannot be established and/or maintained long enough to perform the required testing functions. The Workstation Specifications shall provide for automatic lockout if the number of such off-line Inspections is exceeded or if the Workstation is out of contact with the EDBMS for longer than a set period of time. The Workstation Specifications shall allow for the limit for such off-line Inspections and the time limit for such non-communication to be changed remotely from either the EDBMS or the Mini-VID. The Specifications shall require that the Testing Interface Application transmit Inspection and other required data from off-line operations to the EDBMS immediately after communications can be reestablished. It is Contractor's responsibility to attempt re-connection at a minimum of six (6) times an hour until communication is established and the results of off-line operation Inspections and other process data can be sent to the EDBMS.

c. The Workstation Specifications shall require that: (i) the Testing Interface Application provide a means of verifying successful transfer of all records to the EDBMS; (ii) each Workstation retain records of all transmissions to the EDBMS for at least thirty (30) Days; and (iii) all performance standards for data transfer also apply to diesel testing with allowances for differences in the test technology.

17. Windshield Stickers and Vehicle Inspection Reports.

a. If it is agreed by the parties that the Workstations will generate a windshield Sticker at the conclusion of each Inspection, the Workstation Specifications will

detail: (i) the requirement that the Workstations generate a windshield Sticker at the conclusion of each Inspection; (ii) a standard for the windshield Sticker stock to be employed; (iii) examples of the format and content for all Stickers; and (iv) a description of the bar coding standards Contractor shall employ.

b. The Workstation Specifications shall require that the Workstations generate a VIR at the conclusion of each Inspection. The Workstation Specifications shall include: (i) a standard for the paper stock; (ii) examples of the format and content for all VIRs, including repair data collection forms, repair shop lists for motorists with failed vehicles, instructions for motorists with failed vehicles, and diagnostic information for failed vehicles; and (iii) a description of the bar coding standards Contractor shall employ.

c. Contractor shall design the Sticker, if applicable, and the VIR, subject to DMV approval, to be clear and easily understandable for motorists and law enforcement officials. The VIR and Sticker shall clearly indicate whether the vehicle has passed, failed, or has received a waiver. The Sticker shall indicate the date on which it expires and include bar-coded vehicle identification. The VIR shall indicate the date by which the next Inspection must be performed on the vehicle and include bar coded vehicle identification.

#### 18. Workstation Diagnostic Capabilities.

a. The Workstation Specifications shall provide details of the diagnostic capabilities of the Workstations with examples of printouts that will be generated by the Workstations.

b. The Workstations shall provide a printout for the Inspector to provide to the motorist and electronic access by the Inspector to detailed information regarding vehicles failing emissions tests to assist repair technicians in narrowing the range of potential repairs for these vehicles. This information shall, at a minimum, include:

- (i) a comparison of emission rates for failed vehicles with average emission rates for passing vehicles of similar type and age;
- (ii) identification of potential repairs;
- (iii) information about pattern failures; and
- (iv) data on repairs of similar failures for the same type of vehicles.

c. The Workstations shall support an interface with commonly available electronic repair information systems. The Workstation Specifications shall describe this interface.

#### J. Inspection Customers' Bill of Rights.

1. Within each Station, the following information shall be prominently displayed so as to be easily accessible for viewing by members of the public:

- a. The hours of operation for Inspections;
  - b. The statutory fee to be charged as the Inspection Fee;
  - c. Notification that there shall be no sales tax charged on the Inspection Fee;
  - d. Notification that emissions repairs need not be done at the same facility in which the Inspection is performed;
  - e. A statement that the solicitation, offering and/or acceptance of a fee to pass a vehicle is illegal and anyone committing such violation will be prosecuted;
  - f. The toll-free telephone numbers and hours of operation for Contractor's Customer Service hotline and the DMV; and
  - g. Any other items of information as may be directed by the State Representative.
2. The parties shall meet to discuss the actual format of these public notices, which will be paid for out of Contractor's Public Education and Information funds in an amount not to exceed Two Hundred Dollars (\$200) per Station.
  3. The failure to display this notice will be a Station violation as detailed in Article V.C.

## **ARTICLE XXIV.**

### **MISCELLANEOUS**

#### **A. Disputes and Consultation.**

1. In the event of any dispute arising out of or relating to the performance of the Contract, and to the respective obligations of the parties hereunder, the parties covenant and agree that, except as provided in Section XXIV.A.2, they will follow the procedure set forth herein in order to attempt to achieve a good faith and businesslike resolution of the dispute, as a condition precedent to the bringing of any action at law before any court or other adjudicative body having jurisdiction over the parties and the subject matter of such dispute. The party claiming the existence of the dispute shall notify the other in writing, and shall give a plain statement of the facts, together with a reference to the provisions of the Contract on which such party relies for its position, and any applicable provisions of law. The parties shall, not more than five (5) business days after the giving of such notice, unless the parties agree to an extension of such time, meet for the purpose of such consultation and negotiation as may be necessary to achieve a resolution of their differences. If the parties are unable, after such meeting or meetings between their authorized representatives, to reach an agreement, they shall, not more than thirty (30) Days after receipt of the original notice of the dispute, unless the parties agree to an extension of such time, reduce their respective positions to writing and exchange such written positions concerning all matters that remain unresolved between them.

2. In the event of any dispute concerning any matter in which either party reasonably and in good faith believes that it will suffer irreparable harm if the dispute remains unresolved for the period of time for consultation as hereinabove set forth in Section XXIV.A.1, the provisions of the said Section XXIV.A.1 shall not apply, and the party claiming such irreparable harm may bring an action for equitable relief in any court having jurisdiction over the parties and subject matter of the dispute.

3. The failure by the Contractor to bring an action at law or in equity with respect to any claim within one (1) year after such claim arises (whether or not at the time the claim arises the existence of such claim including, but not limited to, the facts and circumstances giving rise to such claim, are known or unknown to Contractor) shall constitute a waiver of such claim or demand and shall bar the Contractor from instituting any such action against the State, its officers, agents or employees.

4. Notwithstanding any other provision of this Section or of the Contract, the parties understand and agree that the State does not herein waive or relinquish in any manner or degree its rights to or defenses of sovereign immunity, as the same exist under Connecticut law.

B. Notice.

1. Any notices, including any approval, conditional approval or rejection of any Plan, procedure, protocol, report, specification, test result and other material required or permitted under the Contract from the State or the Department shall be executed by the Commissioner of the Department. Any Plan, procedure, protocol, report, specification, test result and other material submitted by Contractor to the Department for approval shall be submitted to the Department in accordance with Section XXIV.B.2 below.

2. All notices required under the Contract shall be in writing and shall be deemed sufficiently served if served by registered or certified mail or national private courier, as follows:

***To the State of Connecticut:***

Commissioner of Motor Vehicles  
State of Connecticut  
Rowland Government Center  
55 West Main Street  
Waterbury, CT 06702-2004

***To Contractor:***

Agbar Technologies, Inc.  
444 North Michigan Avenue  
Suite 1110  
Chicago, Illinois 60611  
Attn: Legal Risk Manager

3. Each party authorizes the other to rely upon approval by the parties named above, or their respective successors or assigns in substitution or addition hereto by notice in writing to the party so relying. Any party may change its address for the purpose of receipt of notices by providing written notice to the other parties in accordance with this Section XXIV.B.

The Department shall designate person(s) who shall be the point(s) of contact for each Plan to be developed pursuant to Section III.B.15.

C. Entire Agreement. This Contract (including the Schedules and documents incorporated by reference) embodies the entire agreement between the State and Contractor on the matters specifically addressed herein. The parties shall not be bound by or be liable for any statement, representation, promise, inducement, or understanding of any kind or nature not set forth herein. This Contract shall supersede all prior and contemporaneous agreements (written or oral) between the parties and their predecessors. Except as provided in Article XI, no changes, amendments, or modifications of any of the terms or conditions of the Contract shall be valid unless reduced to writing, signed by both parties, and approved by the Attorney General or his Deputy. This Contract shall inure to the benefit of each party's successors and permitted assigns.

D. Independent Contractor. Contractor and the agents, subcontractors, or employees of Contractor, in the performance of this Contract, shall act in an independent capacity and not as officers or employees of the State, nor as agents of the State. Contractor shall maintain complete control over its employees and all of its subcontractors. Contractor shall perform all services in accordance with its methods, subject to compliance with this Contract and all applicable laws and regulations.

It is acknowledged that services rendered by Contractor to the State hereunder do not in any way conflict with other contractual commitments with or by Contractor. If applicable, Contractor shall deliver copies of any and all current license(s) and registration(s) relating to the services to be performed under this Agreement to the State, at the time of execution of this Agreement, as evidence that such are in full force and effect.

E. Laws and Regulations. This Contract shall be interpreted under and governed by the laws of the State of Connecticut. Contractor and its employees and representatives shall at all times comply with all applicable laws, ordinances, statutes, rules, regulations and orders of governmental authorities, including those having jurisdiction over its registration and licensing to perform services under this Contract.

F. Non-Waiver. None of the conditions of this Contract shall be considered waived by the State or Contractor unless given in writing. No such waiver shall be a waiver of any past or future default, breach, or modification of any of the conditions of this Contract unless expressly stipulated in such waiver.

G. Assignment. This Contract shall not be assigned by either party without the express prior written consent of the other. Any attempted assignment in violation of this Section shall be void.

H. Severability. If any part or parts of this Contract shall be held to be void or unenforceable, such part or parts shall be treated as severable, leaving valid the remainder of this Contract notwithstanding the part or parts held to be void or unenforceable.

I. Third Parties. The State shall not be obligated or liable hereunder to any party other than Contractor.

J. Effect of State Payment. In no event shall the making by the State of any payment to Contractor constitute or be construed as a waiver by the State of any breach of covenant, or any default which may then exist, on the part of Contractor and the making of any such payment by the State while any such breach or default exists shall in no way impair or prejudice any right or remedy available to the State in respect to such breach or default.

K. Conflict of Interest. Contractor, its officers, employees, parent, subsidiary or affiliate shall not now or at any time during the term of the Contract be engaged in the business of maintaining or repairing vehicles in the State, except that Contractor shall not be precluded from maintaining or repairing any vehicle owned or operated by Contractor; nor shall it engage in the Inspection of motor vehicles in the State, except as expressly set forth herein.

L. Indemnity.

1. Indemnification to the State.

a. Contractor shall indemnify, keep and save harmless the State, its officers, agents, officials and employees from and against any and all third party suits, actions, legal or administrative proceedings, claims, demands, damages, liabilities, monetary loss, interest, attorney's fees, costs and expenses of whatsoever kind or nature ("**Claim(s)**") arising out of the performance of this Contract, including those arising out of injury to or death of Contractor's employees, subcontractors, or a member of the general public, whether arising before, during, or after completion of the services hereunder and in any manner directly or indirectly caused, occasioned or contributed to in whole or in part, by reason of any act, omission, fault or negligence of Contractor or its employees, agents, subcontractors or a member of the general public.

b. Contractor shall, at its own expense, appear, defend and pay all charges of attorneys and all costs and other expenses arising therefrom or incurred in connection therewith, and if any judgment shall be rendered against the State in any such action, Contractor shall, at its own expense, satisfy and discharge the same. Contractor expressly understands and agrees that any insurance protection obtained by Contractor shall in no way limit the responsibility to indemnify, keep and save harmless and defend the State as herein provided.

2. Indemnification Requirements For All Contractor Subcontracts.

a. Contractor shall require in all applicable subcontracts that subcontractors indemnify and shall defend and hold harmless Contractor, its officers, and its employees from and against any and all Claims arising out of the performance of the subcontracts, including those arising out of injury to or death of Contractor's and/or the subcontractor's employees, contractors, or employees of the State or a member of the general

public, whether arising before, during, or after completion of the services pursuant to the subcontract and in any manner directly or indirectly caused, occasioned or contributed to in whole or in part, by reason of any act, omission, fault or negligence of the subcontractor or its employees, agents, contractors.

b. Contractor shall require that all its subcontractors, at their own expense, appear, defend and pay all charges of attorneys and all costs and other expenses arising therefrom or incurred in connection therewith, and if any judgment shall be rendered against Contractor in any such action, the subcontractor shall, at its own expense, satisfy and discharge the same.

c. Contractor shall ensure that its subcontractors expressly understand and agree that any insurance protection obtained by any subcontractor shall in no way limit the responsibility of the subcontractor to indemnify, keep and save harmless and defend the Contractor as provided in this Contract.

M. Infringement of Patents and Copyrights.

1. Contractor, at its own expense, will defend any claim or suit which may be brought against the State for the infringement of United States patents or copyrights arising from Contractor's or the State's use of any equipment, materials, or information prepared or developed in connection with performance of this Contract and in any suit will satisfy any final judgment for such infringement. The State will give Contractor prompt written notice of any such claim or suit and full right and opportunity to conduct the defense thereof, together with full information and all reasonable cooperation.

2. If principles of governmental or public law are involved, the State may participate in the defense of any such action, but no costs or expenses shall be incurred for the account of Contractor without Contractor's prior written consent.

3. If in Contractor's opinion, the equipment, materials, or information mentioned are likely to or do become the subject of a claim or infringement of a United States patent or copyright, then without diminishing Contractor's obligation to satisfy any final award, Contractor may, with the State Representative's written consent (which consent shall not be unreasonably withheld or delayed), substitute other equally suitable equipment, materials and information, or at Contractor's option and expense, obtain the right for Contractor and/or the State (as the case may be) to continue the use of such equipment, materials and information.

N. Government Codes. Contractor's performance will conform to, and Contractor shall require each Station's performance to conform to, all applicable Government Codes.

O. Conduct of Work/Key Personnel.

1. Unless otherwise provided herein, Contractor, with due diligence shall furnish all necessary qualified personnel, material, facilities, and equipment, managing and directing same to complete the work described in this Contract. Contractor's work shall be monitored by the State Representative; provided, however, the existence or absence of such

monitoring shall not relieve Contractor of any of its performance obligations under this Contract or the Technical Specifications.

2. Contractor has identified individuals who shall be domiciled in Connecticut for the purpose of managing the System and providing repair services to the System. The key personnel specified in the Technical Specifications are considered to be essential to the work being performed hereunder. Prior to substantially changing the assignment of any of such key personnel, Contractor shall notify the State Representative in writing, reasonably in advance, of the reason(s) therefor and shall make such changes only where Contractor is able to provide personnel with substantially equivalent competence and experience as compared to those individuals being replaced.

P. Survival. The rights and obligations of the parties which by their nature survive termination or completion of the Contract, including, but not limited to, those set forth in sections relating to indemnity, nondisclosure and confidentiality, shall remain in full force and effect.

Q. Section Headings. The Article and Section headings and references contained herein are for the convenience of the parties only and shall not be construed or interpreted as limiting, affecting or modifying, in any way, the terms and conditions of this Contract.

[Remainder of page intentionally left blank; signature page follows.]

**IN WITNESS WHEREOF**, The State, by the Commissioner of the Department of Motor Vehicles, sets its hand and seal to this Contract, on the last Day and year so indicated.

**WITNESSES:**

\_\_\_\_\_  
  
\_\_\_\_\_

**CONTRACTOR**

Agbar Technologies, Inc.

By: \_\_\_\_\_

Name:

Its:

Date: \_\_\_\_\_

**WITNESSES:**

\_\_\_\_\_  
  
\_\_\_\_\_

**STATE OF CONNECTICUT**

By its DEPARTMENT OF MOTOR  
VEHICLES

By: \_\_\_\_\_

, Commissioner

Date: \_\_\_\_\_

Approved as to form by the Attorney General,  
this \_\_\_\_ day of December, 2002.

By: \_\_\_\_\_

Name:

## SCHEDULE 1

### STATION SELECTION PROCESS

#### Geographic Distribution

Contractor has established eight (8) “Geographic Convenience Regions,” which are the counties listed in the table referenced below. The first 275 Contractor-equipped Stations shall be allocated to the Geographic Convenience Regions based on the following:

- ◆ There will be such number of Stations with diesel test equipment as set forth in the table below, in each of the counties in the State; and
- ◆ The first 275 Workstations and Stations will be allocated based on the percentage of vehicle population in each county compared to the total vehicle population in the State.

The following table illustrates Contractor’s county-by-county Workstation distribution for the Stations. Contractor, however, reserves the right to change the distributions and modify the selection process subject to the Contract and based on acceptance criteria and convenience factors that may change during the implementation process.

**Table 2-13**

| County        | Vehicle Registrations (Attach. B) | Percentage of Total Registrations (%) | Number of Test Stations | Diesel Units | Reserved Units |
|---------------|-----------------------------------|---------------------------------------|-------------------------|--------------|----------------|
| Fairfield     | 636,871                           | 26.11                                 | 72                      | 13           | 6              |
| Hartford      | 610,385                           | 25.02                                 | 68                      | 13           | 6              |
| Litchfield    | 150,588                           | 6.17                                  | 17                      | 3            | 2              |
| Middlesex     | 124,399                           | 5.10                                  | 13                      | 3            | 2              |
| New Haven     | 548,573                           | 22.49                                 | 62                      | 10           | 4              |
| New London    | 189,243                           | 7.76                                  | 21                      | 3            | 2              |
| Tolland       | 106,668                           | 4.37                                  | 11                      | 3            | 2              |
| Windham       | 72,592                            | 2.98                                  | 8                       | 2            | 1              |
| <b>TOTAL:</b> | <b>2,439,319</b>                  | <b>100%</b>                           | <b>275</b>              | <b>50</b>    | <b>25</b>      |

## SCHEDULE 2

### DMV VIP IMPLEMENTATION SCHEDULE

| ITEM                                                                                                                        | DUE DATE*                   | DMV APPROVAL* | RESPONSIBILITY         |
|-----------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------|------------------------|
| Draft Workstation Specification                                                                                             | prior to contract execution |               | DMV                    |
| Sticker specification                                                                                                       | prior to contract execution |               | DMV                    |
| ATP Plan Outline                                                                                                            | prior to contract execution |               | Agbar/DMV              |
| Public Education Plan Outline                                                                                               | prior to contract execution |               | Agbar                  |
| Customer Problem Resolution Plan                                                                                            | prior to contract execution |               | Agbar                  |
| Implementation Schedule                                                                                                     | prior to contract execution |               | Agbar                  |
| Notice to Proceed                                                                                                           | Day 0                       |               | DMV                    |
| Geographic Distribution Plan                                                                                                | Day 25                      | Day 39        | Agbar/DMV              |
| Diesel Equipment Distribution Plan                                                                                          | Day 25                      | Day 39        | Agbar/DMV              |
| Safety and Environmental Management Information                                                                             | Day 30                      | Day 44        | Agbar/DMV              |
| Submit Draft #2 Hardware and Software Specifications for Mini-VID and Workstation System (including EDBMS interface)        | Day 30                      |               | Agbar/DMV/EDBMS Vendor |
| JAD Sessions for Specifications and Test Procedures                                                                         | Day 30 through 35           |               | DMV/Agbar              |
| Finalize Station Selection Criteria                                                                                         | Day 30                      | Day 44        | Agbar/DMV              |
| Station and Technician Recruitment Plan (including final contract forms for Contractor-equipped and Self-financed Stations) | Day 45                      | Day 59        | Agbar/DMV              |
| Submit Final Hardware/Software Specification                                                                                | Day 45                      | Day 59        | Agbar/DMV              |
| Hold Recruitment Seminars                                                                                                   | Day 45 through 70           |               | Agbar                  |
| EDBMS Integration Plan                                                                                                      | Day 60                      | Day 64        | Agbar/DMV              |
| QA/QC Plan                                                                                                                  | Day 60                      | Day 64        | Agbar/DMV              |
| Submit Final Public Education and Information Plan                                                                          | Day 60                      | Day 74        | Agbar/DMV              |
| Strategy for Testing Deferred Vehicles Determined                                                                           | Day 90                      | Day 90        | Agbar/DMV              |
| Submit List of Qualified Business Applicants                                                                                | Day 90                      | Day 104       | Agbar/DMV              |
| Submit Final Sticker Design                                                                                                 | Day 90                      | Day 104       | Agbar/DMV              |
| Submit Draft ATP Document                                                                                                   | Day 90                      | Day 104       | Agbar/DMV              |
| Stations Required to Submit Signed Contracts to Agbar                                                                       | Day 120                     |               | Agbar                  |
| Submit Final ATP Document                                                                                                   | Day 120                     | Day 139       | Agbar                  |
| Submit Training Materials                                                                                                   | Day 120                     | Day 139       | Agbar                  |
| Submit Final QA/QC Plan                                                                                                     | Day 150                     | Day 157       | Agbar                  |
| ATP Sessions                                                                                                                | Day 150 through 180         |               | Agbar/DMV              |
| Training Classes                                                                                                            | Day 180 through 240         |               | Agbar                  |
| General Mailing to All CT Resident Addresses                                                                                | Day 210                     |               | Agbar                  |
| Identify Pre-Contract Inspection Failure for Database                                                                       | Day 210                     |               | DMV                    |

| ITEM                                                              | DUE DATE*                          | DMV APPROVAL* | RESPONSIBILITY |
|-------------------------------------------------------------------|------------------------------------|---------------|----------------|
| Policies on Suspension and Termination of Stations and Inspectors | Prior to Program Commencement Date |               | DMV            |
| Program Start                                                     | Day 240                            |               | Agbar          |
| Final 25 Stations Operational                                     | 90 Days after DMV approval         |               | Agbar          |

\*If contracted due date falls on a weekend or holiday, the next business day becomes the due date, and if subsequent DMV approval is required, then the due date for such approval will be extended by the same period of time.

### SCHEDULE 3

#### ACCEPTANCE TEST PLAN OUTLINE

The objective of this Acceptance Testing Procedures Plan (“**ATP Plan**”) is to demonstrate that each Station and the Station Network is ready to conduct accurate and consistent Inspections in accordance with the Inspection protocols required by the Department. Contractor shall (1) not commence mandatory Inspections until Contractor and the Department have successfully completed acceptance testing of the Mini-VID and Testing Interface Application and the Workstations and (2) prohibit Inspections at any Station until successful completion of the ATP for the Stations.

Contractor shall:

1. allow the Department to monitor Contractor’s acceptance testing;
2. provide the Department with access to all ATP data generated under the ATP;
3. record acceptance testing results for each Station in the Database; and
4. cooperate with the Department in conducting its own independent acceptance tests.

The Department reserves the right to reject any work, materials, and equipment which fail to meet the appropriate specifications regardless of whether or not the work, materials or equipment was the subject of prior acceptance test procedures.

Contractor shall develop the ATP and submit those to the Department for approval. The ATP shall address Workstations for both gasoline and diesel vehicles. These ATPs shall include a timeframe for implementation of any necessary corrections.

The ATP shall demonstrate to the Department that:

1. Workstation designs meet the performance standards and requirements of the Workstation Specifications;
2. the Workstation software meets the performance standards and requirements of the Workstation Specifications;
3. the Testing Interface Application meets the performance standards and requirements of the Testing Interface Application specifications;
4. the Mini-VID meets the performance standards and requirements of the Mini-VID specifications;

5. each Workstation connected to the EDBMS meets the performance standards for accuracy and all other required Workstation functions in the Workstation Specifications as defined in the ATP; and
6. trained Inspectors can easily and accurately conduct Inspections and calibrate and maintain the Workstations.

### **Task Outline**

Contractor shall complete at a minimum the following tasks subject to the approval of the Department according to the schedule in the Implementation Schedule:

1. develop Workstation, Mini-VID and Testing Interface Application design acceptance testing procedures (“ATP”) including both Design Verification ATP and Design Performance ATP;
2. develop Workstation, Mini-VID and Testing Interface Application bay ATP including both Initial Installation Bay ATP and Final Commissioning Bay ATP;
3. perform Workstation, Mini-VID and Testing Interface Application Design Verification ATP;
4. perform Workstation, Mini-VID and Testing Interface Application Design Performance ATP;
5. perform Workstation, Mini-VID and Testing Interface Application Initial Installation Bay ATP;
6. perform Workstation, Mini-VID and Testing Interface Application Final Commissioning Bay ATP;
7. beta test Workstation, Mini-VID and Testing Interface Application units; and
8. perform Station and Inspector database ATP.

Contractor shall deliver to the Department all draft-final ATP within one hundred twenty (120) Days from receipt of the Notice To Proceed. Prior to this date, Contractor shall submit working drafts of the ATP to the Department to obtain feedback and avoid delays on approval of the final ATP.

### **Acceptance Test Procedures Outline**

The ATP shall include at a minimum to the following activities:

- 1. Workstation, Mini-VID and Testing Interface Application Design Verification ATP.**
  - a. verification of relevant, previously completed third party certifications including BAR97 certification;
  - b. review of proposed software algorithms; and
  - c. performance of visual observations of pre-production units for confirmation of design changes required by the applicable specifications.
  
- 2. Workstation, Mini-VID and Testing Interface Application Design Performance ATP.**
  - a. receipt of three production Workstation units from the manufacturer for testing under ambient conditions including connection to the EDBMS and Mini-VID through the Testing Interface Application;
  - b. testing of hardware performance including items such as anti-tampering features, accuracy, response time, measurement range, noise, and peripheral device function;
  - c. testing of signal compensations and sensor calculation algorithms including sensor input and system output for the dynamometer and gas analyzers; and
  - d. testing for compliance of software menus and paths plus software functions and outputs to all applicable specifications.

The Workstation, Mini-VID and Testing Interface Application Design Performance ATP shall include a contingency approval mechanism. This mechanism will allow Contractor to approve conditionally Workstation designs for use in the VIP if they deviate from the Workstation Specifications in minor ways that do not affect the ability of the Workstation to accurately test vehicles and transmit data to the Mini-VID and EDBMS. Such conditional approval for Workstation design shall obligate the Workstation manufacturer to correct the minor design noncompliance at its (or Contractor's) own cost. No contingent approvals shall occur without the Department's prior approval.

- 3. Workstation Initial Installation Bay ATP.**
  - a. Hardware check-out including at a minimum:
    - (i) workstation nameplate and serial number;
    - (ii) visual inspection of monitor to ensure proper display;

- (iii) visual inspection to ensure PC is booting from hard drive;
  - (iv) modem-dial tone check;
  - (v) full keyboard key test to ensure Workstation is accepting input;
  - (vi) floppy drive check;
  - (vii) vehicle inspection report test; and
  - (viii) barcode scan.
- b. Cabinet and miscellaneous check-out including at a minimum:
- (i) check all key locks;
  - (ii) security (check registration/switches/printer by monitoring discrete signals as they are toggled from the field service representative menu);
  - (iii) presence of probes (dual); and
  - (iv) presence of filter replacements.
- c. Calibrations including at a minimum:
- (i) check gas bottle presence and regulator pressure;
  - (ii) perform analyzer gas calibration;
  - (iii) perform leak check through the analyzer menu;
  - (iv) dynamometer calibration;
  - (v) perform A/D calibration through FSR menu;
  - (vi) perform torque cell calibration through analyzer menu;
  - (vii) perform parasitics test through the analyzer menu;
  - (viii) perform coast down check through the analyzer menu; and
  - (ix). perform gas cap calibration check through the analyzer menu.
- d. Miscellaneous performance checks including at a minimum:
- (i) ambient meter checks;

- (ii) perform drive cycle with initial software and print a report as confirmation; and
  - (iii) gas leak test (pressurization of gas line and monitoring for decay).
- e. Workstation Final Commissioning Bay ATP:
  - (i) rectification of issues discovered in Initial Installation Bay ATPs;
  - (ii) installation of final approved software version;
  - (iii) verification of proper node identification;
  - (iv) installation of inspector identifications;
  - (v) verification of database communication and records transfer accuracy; and
  - (vi) perform a full Inspection on a sample of Workstations.
- f. Workstation Beta Testing.
  - (i) identification of acceptable beta test facility partners;
  - (ii) installation of 6 beta systems from the manufacturer;
  - (iii) training beta site Inspectors;
  - (iv) data collection from voluntary Inspections;
  - (v) beta user meetings to obtain early reactions from Inspectors and motorists for incorporation into public education strategies; and
  - (vi) assessment of the suitability of major design features of the Workstations for the VIP.

## SCHEDULE 4

### PUBLIC EDUCATION AND INFORMATION PLAN OUTLINE

A. In extension and not in limitation of the obligations and representations contained in the Response, Contractor shall design and implement a public education program for the purpose of providing information to individuals, organizations and businesses which interface with the VIP. Contractor's budget for such program is \$2,343,403. As part of Contractor's Public Education and Information program, Contractor shall be responsible for one (1) general mailing to all Connecticut resident addresses containing pertinent facts with respect to the establishment and operation of the VIP, to be made approximately thirty (30) Days prior to the Program Commencement Date. On or before sixty (60) Days following the Notice to Proceed, Contractor shall submit a detailed outline of the proposed public education program for approval by the State Representative. Information to be used in the public education program shall describe:

- ◆ Projected benefits of the VIP.
- ◆ Nature of the tests, location and hours of operation of the Stations.
- ◆ Procedures for completing Inspection requirements.
- ◆ Summary of vehicle pass/fail criteria.
- ◆ Methods to assist in selecting a convenient Station.
- ◆ Effective techniques which can be employed in tuning, adjusting and otherwise repairing a vehicle to increase the probability of causing such vehicle to operate in compliance with applicable State and Federal standards.
- ◆ Listings of certified emissions repair technicians to be given to vehicle owners who fail their emissions inspection.
- ◆ Individuals, organization and businesses within Connecticut to which the VIP information shall be directed include representatives of the news media, automobile repair businesses, dealers, community groups (civic, service, fraternal, professional), educational institutions, governmental employee and industrial employee groups.

B. Contractor shall use its best judgment in selecting the methods and media for dissemination of information and educational materials. Contractor shall consider the use of radio, television, newspaper and other publications, billboards, signs, direct mail and physical distribution of material. Contractor shall use, at Contractor's discretion, tours, demonstrations and conferences.

In implementing the public education program, the State and Contractor shall inform each other of any forthcoming participation in activities or events involving any of the individuals, organizations or businesses that interface with the VIP.

C. The following items arising out of Contractor's expenditure of the public education and information funds identified in this Plan shall have the prior approval of the State Representative:

- ◆ Press releases (except those which relate to approved days and hours of operation and changes thereto and releases which contain previously approved material in substantially the same form and context as previously released).
- ◆ Advertising copy intended for use by Contractor in advertising media such as radio, television, newspapers or other publication and billboards. Contractor shall, in the case of print media advertising, submit for approval the final layout of the proposed ad. In the case of electronic media advertising, Contractor shall first submit proposed advertising copy with a brief description (if appropriate) of the finally produced ad (voices, actors, background and length). Following approval of the copy and production concept, Contractor shall, following production, submit the finally produced ad for approval prior to airing.
- ◆ Content of pamphlets intended for distribution by Contractor and the State as part of the public education activities for the VIP in Connecticut in implementing the public education and information program. Contractor shall use resources and educational methods such as a toll free line(s), internet site, published material, graphic aids, public opinion surveys, direct mailings and commercial advertising.

D. Contractor shall submit for approval by the State Representative an annual detailed outline of the proposed public education program for the new year. The first letter outline detailing the proposed public education program shall be submitted for approval in January 2003. The report shall describe:

- ◆ Public education and information objectives.
- ◆ Planned use of resources and educational methods.
- ◆ Suggested levels and degrees of State participation in various elements of the public education and information program.
- ◆ Anticipated major milestones and events.

## SCHEDULE 5

### CUSTOMER PROBLEM RESOLUTION PLAN

#### **I. Contractor Customer Resolution Team.**

Senior Manager Responsible for the Customer Resolution Plan: The implementation of the Customer Problem Resolution Plan shall be directed and managed by a senior manager to be designated by Contractor. The Senior Manager shall be assisted by Contractor's VIP Manager, Assistant VIP Manager, Industry Outreach Manager, Ombudsman, Quality Assurance Manager and Public Relations Manager.

#### **II. General Requirements.**

Contractor will have primary responsibility for individual customer problem resolution. Contractor shall conduct customer problem resolution activities in order to ensure that citizens' specific questions, complaints, and general concerns about the Inspection are resolved. Contractor shall provide the resources and personnel necessary to respond promptly and accurately to and to resolve specific questions raised or problems encountered by individual customers related to the Inspection process. To address and track customer complaints, Contractor shall:

1. Provide a state-of-the-art motorist information call center, a system for electronically tracking and storing customer complaints via e-mail and on the hotline database. Contractor personnel receive and review all customer concerns quickly and conveniently;
2. Order and use toll-free "800" phone numbers for use as the Customer "hot line" and as the Station Support "hot line;"
3. Use a complaint tracking application and inter-company e-mail to expedite complaint handling by Contractor team members and personnel, and providing daily action reports to DMV, including assignment of a full-time staff member to coordinate all complaints;
4. Clearly define lines of responsibilities and actions at all levels within Contractor, ensuring complaints are handled properly and expeditiously;
5. Develop and distribute customer comment cards to Stations for both motorist and Station personnel;
6. Develop a customer service/complaint handling training component for Station owners and Inspectors outlining communications techniques and problem solving skills; and
7. Create a customer satisfaction index pinpointing problem areas or services within the VIP and providing a mechanism to address them.

### **III. Customer Hotline.**

Contractor will provide and maintain a toll-free motorist hotline number that will be staffed with personnel who have the resources to respond promptly and accurately to and resolve questions or problems raised by customers of the VIP. All telephone inquiries will be answered within three (3) minutes or sooner. Hotline operators will have the training and sensitivity to handle any situation that may arise and to quickly determine the best course of action to resolve the problem. The hotline shall provide “one-call service” for motorist inquires to minimize multiple referrals.

Every caller to the hotline will be treated with respect, fairness, and objectivity. Motorists will receive a quick, personalized response to each request for information or assistance. When customers call the hotline, Contractor will insure that:

- ◆ Motorists receive prompt, courteous treatment;
- ◆ Callers receive informed explanations of the VIP and its goals, requirements, and foundation in law;
- ◆ Motorists have their complaints handled quickly and empathetically; and
- ◆ Operators have access to timely VIP information.

To accomplish this, Contractor shall:

- ◆ Train and motivate its customer service representatives in its headquarters office;
- ◆ Ensure that key individuals in its management team and staff focus on customer service as a priority of the VIP;
- ◆ Minimize problems that would result in low customer satisfaction levels;
- ◆ Utilize web technology to provide on-screen help pages for its operators so they can serve all callers promptly and effectively; and
- ◆ Develop and utilize a knowledge base based on Contractor’s experience in rolling out similar vehicle inspection programs.

Hotline and management staff will be trained in all aspects of the VIP to ensure that a caller’s questions and complaints receive appropriate attention. Additionally, hotline staff will have access to network systems and the VIP website pages to access inspection and VIP information instantaneously so they may refer to electronic and printed information about the VIP. They will be able to initiate complaint tickets and provide problem resolution during the call. If appropriate, hotline staff may be able to review test records from the Mini-VID or direct callers to review or download public communications brochures, forms, and notices that are available on the Program website or refer them to additional information published by Contractor, DEP, or DMV that may be of assistance.

Contractor will develop and provide training materials and training classes for its operators and for DEP and DMV staff. Training will encompass VIP operations, rules and regulations, inspection procedures, and public communications information. Training will enable hotline operators and VIP staff to respond accurately to questions and complaints. Training will take place in Contractor's Connecticut headquarters and coincide with other staff and VIP training that will be provided.

Calls requiring immediate attention will be quickly referred to Contractor's management staff for resolution. Contractor's public information, VIP management, and technical staff will be located in the same office with the hotline staff and will be used as resources in resolving issues, especially those that require immediate attention.

To assist in evaluating the effectiveness of the VIP and public communications activities, Contractor will track calls, complaints, and questions. Contractor will use the VIP website e-mail functions to communicate between hotline staff and Contractor's management staff and to forward inquiries to DEP and DMV as necessary. Contractor will track and create logs for complaints and problems and will use a state-of-the-art computer application for this task.

Hours of operation for the hotline will be Monday through Saturday, 8:00 a.m. to 6:00 p.m., EST/EDT, excluding holidays. The hotline shall have and maintain the capacity to answer a call volume of 1200 calls per Day for the first thirty (30) Days from the Program Commencement Date; 1000 calls per Day for the period thirty-one (31) to sixty (60) Days from the Program Commencement Date; and 800 calls per Day for the period after sixty (60) Days from the Program Commencement Date.

#### **IV. Station Support Hotline.**

Contractor shall provide a convenient means for Stations to bring questions, problems and suggestions to the attention of Contractor and have them resolved in a timely manner. Such questions, problems and suggestions may cover all aspects of becoming a Station, Station Agreements, equipment servicing and licensing. Contractor shall track all issues raised by the Stations and its response to those issues and make the information available to Stations and to DMV. Contractor shall develop and use a Station Support Hotline for this purpose. Inquiries to this hotline shall be responded to within three (3) minutes or sooner.

Contractor shall provide the Station Hotline Personnel with general VIP information and the Station enrollment package; train the Station Support Hotline Personnel by providing one week of classroom instruction and one week of supervised on the job training; begin taking calls from inspection stations for all administration support, i.e., how do I become a Station, Station Agreements and VIP requirements; and full ramp-up of the Station Administration Hotline will occur no less than sixty (60) Days before the first Station goes on line.

Not less than sixty (60) Days before the first Station commences official Inspections, Contractor shall complete implementation of a technical component of the Station Support Hotline by:

1. Providing the station technical hotline personnel with general VIP information and the Workstation Specifications;
2. Training the station technical support hotline personnel by providing one week of classroom instruction and one week of supervised on the job training; and
3. Begin taking calls from Stations for all technical support, i.e., “I’m getting security login errors when my Workstation tries to connect to the System, I’m having problems with my Workstation,” etc.

Contractor shall repeat the recruiting and training process for the Station Support Hotline throughout the implementation period and the life of the Contract when transition between the VIP implementation phases or VIP changes are reasonably likely to increase call volumes. During anomalous spike periods, Contractor shall exercise reasonable efforts to handle call volumes beyond the limits defined in this Plan.

#### **V. Program Website.**

Contractor shall provide and maintain a VIP website that contains not only relevant VIP information but allows motorists to:

- ◆ View and select all or individual Station addresses;
- ◆ Obtain local maps and directions to the Station of their choice;
- ◆ Access general VIP information;
- ◆ Print public communications materials; and
- ◆ Submit questions for VIP personnel.

The communications system is designed to provide customers with numerous methods to not only access information about the Connecticut VIP but also to interact with appropriate personnel and receive responses to their questions and concerns.

The website will be promoted in public education materials and over the hotline. The website will be easy and fast, even with the 28.8k modem connection that most motorists have in their homes. Contractor will work with its creative partners and with DEP and DMV to develop a website that provides quick access to other VIP information, answers to frequently asked questions and printable, public communications materials like brochures and FAQs.

Since the decentralized network will have at least 300 Stations for motorists to choose from, the locations of the Stations will not initially be familiar to the motorists in Connecticut. Contractor shall prepare and modify the Program website to the full extent necessary to apprise motorists of inspection locations.

## **VI. Station Locator.**

In accordance with its Response, as incorporated in the Contract, Contractor shall create a business relationship for the website with MapQuest that will provide for a direct link to MapQuest information so motorists can obtain local maps of Station locations. The website will contain names, addresses, and telephone numbers for all Stations that can be sorted by zip code. Motorists will be able to easily access this list, enter the zip code where they live or work and obtain a list of the ten Stations closest to them. By clicking on a specific Station, the link to MapQuest will automatically return a printable, local map along with specific directions to the Station they have selected. See the Public Information Section of the Response (Section IV.F.3) for a sample website, as it will appear for motorists accessing the Program website Station locator.

## **VII. Customer Comment Cards.**

Contractor shall develop and take all steps necessary for the distribution and use of a consumer comment card (pre-addressed to DMV headquarters) for Inspectors to provide to motorists to register complaints, compliments, and suggestions regarding the VIP and service. Contractor will distribute the cards to the Stations as part of the material distribution tasks.

If a motorist Station mails a complaint or a compliment, Contractor shall process the card at its headquarters office. The information will be entered into the Mini-VID, reviewed by Contractor management, forwarded to the appropriate person or DMV office daily for review and action, and tracked for reporting.

## **VIII. Reporting.**

Contractor shall provide monthly reports to the Department on the status of the Hotlines, website and customer comment cards including:

- ◆ Number of calls, complaint tickets, and complaints passed to DMV;
- ◆ Complaint tickets closed, open, and unresolved from DMV;
- ◆ Property damage and personal injury claims;
- ◆ All other significant Station issues;
- ◆ Categories of complaints and solutions; and
- ◆ Average time to answer abandoned calls.

Contractor shall use knowledge gained from problem resolution activities to update the website and other public information materials.

## **IX. On-going Satisfaction Studies.**

On going efforts to measure customer satisfaction will consist of collecting and assessing customer comment cards that are distributed to vehicle owners at the emissions inspection stations and during special events. Contractor shall periodically sample consumer attitudes towards VIP convenience, station appearance and operations, service quality, employee performance, Hotline usage, public communications campaign, and overall satisfaction with the inspection process. Contractor shall compile and report results to DMV on a monthly basis during the first two years of the VIP and on a quarterly basis thereafter. Where appropriate, Contractor shall use the results in VIP communications to motivate Stations, demonstrate VIP success, and for other purposes.

Additionally, Contractor will track and report on the nature and number of inquiries received at the hotline and track the problem resolution process as the VIP proceeds. Though not scientifically statistically sound, these research tools provide an easy to understand method to identify hot buttons and common problems that can be easily corrected before they show up in the wider VIP population.

## **X. Handling Customer Complaints.**

Contractor shall develop a customer complaint handling VIP and provide instruction in customer complaint handling to Inspectors and Contractor staff.

## **XI. Receiving Complaints at the Stations.**

The first and likely only point of contact most motorists will have with the VIP will be the vehicle inspector. Complaints that are made in person to the Inspector or Station owner will be resolved, if possible, by the Inspector.

## **XII. Receiving Complaints at the Customer Hotline.**

When necessary or appropriate, customers will be referred to the motorist hotline. Consumer and motorist complaints may be received through the toll-free hotline at Contractor's headquarters. Automated recordings shall be used to direct callers to specific sources of information or will provide a means for the caller to access a hotline operator. Operators will use automated tools like the website to access timely information. The website will enable constant information sharing between parties.

Hotline staff will have access to call data, historical data, and telephone system data to produce reports and to assist the hotline staff to continually improve its level of service by identifying call statistics and areas for improvement.

Hotline operators will have the authority and responsibility to handle and resolve most complaints. Contractor's staff, within the scope of this Contract and VIP regulations, will attempt to resolve a problem or complaint quickly and to the mutual benefit of the customer and

the VIP. Regardless of complaint resolution, the hotline operator will report and track the complaint so it can be logged into the electronic tracking system.

### **XIII. Dealing with Abusive and/or Obstructive Motorists.**

Contractor hotline personnel shall be trained to deal with abusive or obstructive motorists. Contractor's training shall specifically address volatile situations and provide Contractor personnel with the skills necessary to avoid confrontations if possible and to deal with them when they occur.

### **XIV. Responding to Consumer and Customer Complaints That Cannot Be Resolved by Hotline Operators.**

In some cases, hotline operators will need to refer callers to Contractor management or to the Department for resolution for their problems. In the case of referral to Contractor management, the same mechanisms used to track hotline calls and problems will be utilized by Contractor management to keep track of requests for assistance that go outside of the hotline staff. In some cases, hotline operators will refer callers to the Department staff for problem resolution. Contractor hotline operators will track only the pass-off of information to the Department and return reports provided by state personnel regarding resolution.

### **XV. Management Responsibilities.**

1. Contractor's Director of Marketing shall have corporate responsibility for the customer service effort. He will:
  - ◆ Hire and train the Connecticut Public Relations Manager;
  - ◆ Structure hotline and website operations in conjunction with the Public Communications Manager; and
  - ◆ Insure smooth implementation and operation of the Customer Service Plan.
2. The Connecticut Public Relations Manager will have the authority and responsibility to implement and manage the Customer Service Plan and insure it is flexible to meet changing needs of the VIP. The primary responsibilities of the Public Relations Manager will be to:
  - ◆ Manage development and operation of the hotline and website;
  - ◆ Interface with website developers and telephone system suppliers to insure timely implementation of the hotline and website;
  - ◆ Hire and train hotline operators for the VIP;
  - ◆ Oversee day-to-day operations of the hotline and website;

- ◆ Insure timely changes are made to the hotline and website; and
  - ◆ Provide timely reports to the State.
3. Hotline operators will be responsible to:
- ◆ Receive training and understand the rules and regulations of the VIP such that they can answer calls and answer hotline callers' questions;
  - ◆ Be courteous and helpful to all callers;
  - ◆ Provide timely information updates and manage their phone system;
  - ◆ Provide weekly reports on call activities; and
  - ◆ Maintain information in the hotline database.

**XVI. Implementation Schedule.**

1. Contractor shall hire the Public Relations Manager within sixty (60) Days after the Notice to Proceed.
2. The Public Relations Manager will develop, in conjunction with the Director of Technology and VIP Manager, specifications for the telephone hotline system within ninety (90) Days after Notice to Proceed.
3. The Public Relations Manager will begin work with the website development team within 120 Days after Notice to Proceed.
4. The Public Relations Manager will develop and obtain State approval for hotline recording scripts within 180 Days after Notice to Proceed.
5. The website will be activated within 180 Days after Notice to Proceed.
6. The Public Relations Manager will hire and train the hotline staff between 180 Days and 210 Days after Notice to Proceed.
7. The hotline and website will begin operations 195 Days after Notice to Proceed.

**XVII. Telephone System.**

Contractor shall install a robust and flexible internal telephone communication system to facilitate management communications. Through its administrative offices Contractor shall provide industry and Department personnel access to VIP information to expedite requests and facilitate problem resolution. This system shall provide the infrastructure for both internal and

external communications including motorist and industry hotline operations. It shall include 24 telephone lines in Contractor's Connecticut headquarters, 4 of which will be used for hotline operations.

### **XVIII. Electronic Mail and Website.**

Contractor shall install a PC based network communications system that will provide management with e-mail addresses and access to Contractor's network capabilities. Department staff shall have direct-to-staff communications capability via an interface with the EDBMS. Stations will be able to link to Contractor's staff via Contractor's e-mail system. The e-mail system shall be available 24-hours a Day.

Contractor shall also provide the motoring public with access to appropriate headquarters administrative staff via e-mail through the website. Contractor managers and staff shall not be identified by name on the website e-mail system; rather, they shall be assigned aliases that will automatically be inserted when public e-mails are sent or received. For example, the VIP PR Manager might be identified as "AgbarManager@VIPwebsite.com" but the alias will automatically route the mail to the manager's PC at the station under his or her Contractor name. E-mail addresses for public consumption will be publicized in informational brochures that will be available at the inspection stations as well as on the VIP website. Contractor shall also work with the Department to include an e-mail address and website location(s) to be included in registration renewal notifications that are sent to motorists.

### **XIX. Network Communications System.**

Contractor will implement a network communications system based on the data network described in Section V Data Management of the Technical Specifications. The network communications system will not only collect and store backup data from the inspection network; it will provide a means for Contractor management, Department personnel, and Station owners to obtain pertinent data to facilitate VIP communications. This system will provide data for:

- ◆ Hotline operators who need to access Inspection data to answer questions from motorists;
- ◆ Contractor management who need Inspection data to manage the network operations;
- ◆ Department personnel who need Inspection data to facilitate field auditing and regulatory functions; and
- ◆ EDBMS personnel in the event they require backup systems or information for the EDBMS.

A unique feature of this system is Contractor's "Flash-Com" messaging capability that allows Contractor to communicate directly with Inspectors and Station owners regarding the VIP.

## **XX. Hotline Development and Operator Training.**

Telephone lines and systems shall be installed and hotline numbers will be ordered by Contractor. Contractor shall work with its communications provider to develop a hotline number that can be converted to a memorable acronym such as 1-800-NEW-TEST or similar acronym.

VIP hotline service shall be established entirely in Connecticut and shall be designed and operated by Connecticut employees who understand the context in which the VIP will be operated. DEP and DMV personnel will have direct and daily access to hotline personnel to resolve questions and problems that may arise.

Publicity materials regarding the hotline shall be developed by Contractor. Hotline telephone numbers shall be defined and the numbers integrated into the advertising and collateral materials. Scripts for hotline operators and frequently asked questions (FAQ's) will be developed. Software shall be created by Contractor to handle mapping, station locator, and Problem Resolution ticketing. Hotline operators shall be hired and trained by Contractor. DEP and DMV staff will be invited to participate in the training. Contractor shall initiate hotline operations pursuant to the Implementation Schedule, in time to provide motorists with answers to questions that will be generated as a result of publicity surrounding the changes to the VIP.

**SCHEDULE 6**

**CONTRACTOR SOFTWARE LIST**

| <b>Contractor Equipped Workstation Software</b> |                                      |
|-------------------------------------------------|--------------------------------------|
| <b>Module</b>                                   | <b>Type</b>                          |
| SysTech Custom Inspection Application Software  | Subcontractor's Proprietary Software |
| Microsoft Windows XP                            | Third-Party Software                 |
| Microsoft IIS 5.0                               | Third-Party Software                 |
| Microsoft Internet Explorer 6                   | Third-Party Software                 |

| <b>Testing Interface Application</b>                                             |                                                      |
|----------------------------------------------------------------------------------|------------------------------------------------------|
| <b>Module</b>                                                                    | <b>Type</b>                                          |
| SysTech communication layer for Internet based EDBMS and Mini-VID communications | Subcontractor's Proprietary Software that State owns |

| <b>Mini-VID Software</b>           |                                        |
|------------------------------------|----------------------------------------|
| <b>Module</b>                      | <b>Type</b>                            |
| Custom CT2002 Mini-VID Software    | Contractor's Proprietary Software      |
| MS SQL Ent Server 2K               | Third-Party Software (Microsoft)       |
| MS SQL Ent Server 2K calcs         | Third-Party Software (Microsoft)       |
| MS 2000 Adv Server                 | Third-Party Software (Microsoft)       |
| MS 2000 Server                     | Third-Party Software (Microsoft)       |
| Norton Antivirus                   | Third-Party Software (Symantec)        |
| ArcServer 2000 Ent Ed + SQL Agents | Third-Party Software (Computer Assoc.) |
| VINA Decoding Software             | Third-Party Software (Polk)            |

## SCHEDULE 7

### SOURCE CODE ESCROW AGREEMENT

Account Number \_\_\_\_\_

**THIS AGREEMENT (“Agreement”)** is effective \_\_\_\_\_, 2002 among **DSI TECHNOLOGY ESCROW SERVICES, INC. (“DSI”), AGBAR TECHNOLOGIES, INC. (“Depositor”)** and **THE STATE OF CONNECTICUT**, acting by its **DEPARTMENT OF MOTOR VEHICLES (“Preferred Beneficiary”)**, who collectively may be referred to in this Agreement as the parties (**“Parties”**).

- A. Depositor and Preferred Beneficiary have entered or will enter into a Contract for the establishment and operation of a decentralized motor vehicle inspection program for the State of Connecticut which involves rights in certain proprietary technology of Depositor (hereinafter referred to in this Agreement as the **“Emissions Testing Contract”**).
- B. Depositor desires to avoid disclosure of its proprietary technology except under certain limited circumstances.
- C. The availability of the proprietary technology of Depositor is critical to Preferred Beneficiary in the fulfillment of its statutory obligations and, therefore, Preferred Beneficiary needs access to the proprietary technology under certain limited circumstances.
- D. Depositor and Preferred Beneficiary desire to establish an escrow with DSI to provide for the retention, administration and controlled access of the proprietary technology materials of Depositor.
- E. The parties desire this Agreement to be supplementary to the Emissions Testing Contract pursuant to 11 United States [Bankruptcy] Code, Section 365(n).

#### **ARTICLE 1 -- DEPOSITS**

- 1.1 Obligation to Make Deposit. Upon the Program Commencement Date (as defined in the Emissions Testing Contract), Depositor shall deliver to DSI the proprietary technology and other materials (**“Deposit Materials”**) required to be deposited by the Emissions Testing Contract or, if the Emissions Testing Contract does not identify the materials to be deposited with DSI, then such materials will be identified on **Exhibit A**. If **Exhibit A** is applicable, it is to be prepared and signed by Depositor and Preferred Beneficiary. DSI shall have no obligation with respect to the preparation, signing or delivery of **Exhibit A**.
- 1.2 Identification of Tangible Media. Prior to the delivery of the Deposit Materials to DSI, Depositor shall conspicuously label for identification each document,

magnetic tape, disk, or other tangible media upon which the Deposit Materials are written or stored. Additionally, Depositor shall complete **Exhibit B** to this Agreement by listing each such tangible media by the item label description, the type of media and the quantity. **Exhibit B** shall be signed by Depositor and delivered to DSI with the Deposit Materials. Unless and until Depositor makes the initial deposit with DSI, DSI shall have no obligation with respect to this Agreement, except the obligation to notify the parties regarding the status of the account as required in Section 2.2 below.

- 1.3 Deposit Inspection. When DSI receives the Deposit Materials and **Exhibit B**, DSI will conduct a deposit inspection by visually matching the labeling of the tangible media containing the Deposit Materials to the item descriptions and quantity listed on **Exhibit B**. In addition to the deposit inspection, Preferred Beneficiary may elect to cause a verification of the Deposit Materials in accordance with Section 1.6 below.
- 1.4 Acceptance of Deposit. At completion of the deposit inspection, if DSI determines that the labeling of the tangible media matches the item descriptions and quantity on **Exhibit B**, DSI will date and sign **Exhibit B** and mail a copy thereof to Depositor and Preferred Beneficiary. If DSI determines that the labeling does not match the item descriptions or quantity on **Exhibit B**, DSI will (a) note the discrepancies in writing on **Exhibit B**; (b) date and sign **Exhibit B** with the exceptions noted; and (c) mail a copy of **Exhibit B** to Depositor and Preferred Beneficiary. DSI's acceptance of the deposit occurs upon the signing of **Exhibit B** by DSI. Delivery of a copy of the signed **Exhibit B** to Preferred Beneficiary is Preferred Beneficiary's notice that the Deposit Materials have been received and accepted by DSI.
- 1.5 Depositor's Representations. Depositor represents to DSI and Preferred Beneficiary as follows:
  - a. Depositor lawfully possesses all of the Deposit Materials deposited with DSI;
  - b. With respect to all of the Deposit Materials, Depositor has the right and authority to grant to DSI and Preferred Beneficiary the rights as provided in this Agreement;
  - c. The Deposit Materials are not subject to any lien or other encumbrance;
  - d. The Deposit Materials consist of the proprietary technology and other materials identified either in the Emissions Testing Contract or **Exhibit A**, as the case may be; and

- e. The Deposit Materials are readable and useable in their current form or, if any portion of the Deposit Materials is encrypted, the decryption tools and decryption keys have also been deposited.
- 1.6 Verification. Preferred Beneficiary shall have the right, at Preferred Beneficiary's expense, to cause a verification of any Deposit Materials. Preferred Beneficiary shall notify Depositor and DSI of Preferred Beneficiary's request for verification. Depositor shall have the right to be present at the verification, but Depositor's failure to attend shall not delay or postpone any verification. A verification determines, in different levels of detail, the accuracy, completeness, sufficiency and quality of the Deposit Materials. If a verification is elected after the Deposit Materials have been delivered to DSI, then only DSI, or at DSI's election an independent person or company selected and supervised by DSI, may perform the verification.
- 1.7 Deposit Updates. Unless otherwise provided by the Emissions Testing Contract, Depositor shall update the Deposit Materials within thirty (30) Days of each release of a new version of the product/component which is subject to the Emissions Testing Contract. Such updates will be added to the existing deposit. All deposit updates shall be listed on a new **Exhibit B** and Depositor shall sign the new **Exhibit B**. Each **Exhibit B** will be held and maintained separately within the escrow account. An independent record will be created which will document the activity for each **Exhibit B**. The processing of all deposit updates shall be in accordance with Sections 1.2 through 1.6 above. All references in this Agreement to the Deposit Materials shall include the initial Deposit Materials and any updates.
- 1.8 Removal of Deposit Materials. The Deposit Materials may be removed and/or exchanged only on written instructions signed by Depositor and Preferred Beneficiary, or as otherwise provided in this Agreement.

## **ARTICLE 2 -- CONFIDENTIALITY AND RECORD KEEPING**

- 2.1 Confidentiality. DSI shall maintain the Deposit Materials in a secure, environmentally safe, locked facility which is accessible only to authorized representatives of DSI. DSI shall have the obligation to reasonably protect the confidentiality of the Deposit Materials. Except as provided in this Agreement, DSI shall not disclose, transfer, make available, or use the Deposit Materials. DSI shall not disclose the content of this Agreement to any third party. If DSI receives a subpoena or any other order from a court or other judicial tribunal pertaining to the disclosure or release of the Deposit Materials, DSI will immediately notify the parties to this Agreement unless prohibited by law. It shall be the responsibility of Depositor and/or Preferred Beneficiary to challenge any such order; provided, however, that DSI does not waive its rights to present its position with respect to any such order. DSI will not be required to disobey any order from a court or other judicial tribunal. (See Section 7.5 below for notices of requested orders.)

- 2.2 Status Reports. DSI will issue to Depositor and Preferred Beneficiary a report profiling the account history at least semi-annually. DSI may provide copies of the account history pertaining to this Agreement upon the request of any party to this Agreement.
- 2.3 Audit Rights. During the term of this Agreement, Depositor and Preferred Beneficiary shall each have the right at its expense to inspect the written records of DSI pertaining to this Agreement. Any inspection shall be held during normal business hours and following reasonable prior notice.

### **ARTICLE 3 -- GRANT OF RIGHTS TO DSI**

- 3.1 Title to Media. Depositor hereby transfers to DSI the title to the media upon which the proprietary technology and materials are written or stored. However, this transfer does not include the ownership of the proprietary technology and materials contained on the media such as any copyright, trade secret, patent or other intellectual property rights.
- 3.2 Right to Make Copies. DSI shall have the right to make copies of the Deposit Materials as reasonably necessary to perform this Agreement. DSI shall copy all copyright, nondisclosure, and other proprietary notices and titles contained on the Deposit Materials onto any copies made by DSI. With all Deposit Materials submitted to DSI, Depositor shall provide any and all instructions as may be necessary to duplicate the Deposit Materials including but not limited to the hardware and/or software needed.
- 3.3 Right to Transfer Upon Release. Depositor hereby grants to DSI the right to transfer the Deposit Materials to Preferred Beneficiary upon any release of the Deposit Materials for use by Preferred Beneficiary in accordance with Section 4.5. Except upon such a release or as otherwise provided in this Agreement, DSI shall not transfer the Deposit Materials.

### **ARTICLE 4 -- RELEASE OF DEPOSIT**

- 4.1 Release Condition. As used in this Agreement, "Release Condition" shall mean the conditions set forth in Section VIII.F of the Emissions Testing Contract.
- 4.2 Filing For Release. If Preferred Beneficiary believes in good faith that a Release Condition has occurred, Preferred Beneficiary may provide to DSI written notice of the occurrence of the Release Condition and a request for the release of the Deposit Materials. Upon receipt of such notice, DSI shall provide a copy of the notice to Depositor by commercial express mail.
- 4.3 Contrary Instructions. From the date DSI mails the notice requesting release of the Deposit Materials, Depositor shall have seven (7) business days to deliver to DSI contrary instructions ("**Contrary Instructions**"). Contrary Instructions shall

mean the written representation by Depositor that a Release Condition has not occurred or has been cured. Upon receipt of Contrary Instructions, DSI shall send a copy to Preferred Beneficiary by commercial express mail. Additionally, DSI shall notify both Depositor and Preferred Beneficiary that there is a dispute to be resolved pursuant to Section 7.3 of this Agreement. Subject to Section 5.2 of this Agreement, DSI will continue to store the Deposit Materials without release pending (a) joint instructions from Depositor and Preferred Beneficiary; (b) dispute resolution pursuant to Section 7.3; or (c) order of a court.

- 4.4 Release of Deposit. If DSI does not receive Contrary Instructions from the Depositor, DSI is authorized to release the Deposit Materials to the Preferred Beneficiary or, if more than one beneficiary is registered to the deposit, to release a copy of the Deposit Materials to the Preferred Beneficiary. This Agreement will terminate upon the release of the Deposit Materials held by DSI.
- 4.5 Right to Use Following Release. Unless otherwise provided in the Emissions Testing Contract, upon release of the Deposit Materials in accordance with this Article 4, Preferred Beneficiary shall have the right to use the Deposit Materials for the sole purpose of continuing the benefits afforded to Preferred Beneficiary by the Emissions Testing Contract. Preferred Beneficiary shall be obligated to maintain the confidentiality of the released Deposit Materials.

## **ARTICLE 5 -- TERM AND TERMINATION**

- 5.1 Term of Agreement. The initial term of this Agreement is for a period of one year. Thereafter, this Agreement shall automatically renew from year-to-year unless (a) Depositor and Preferred Beneficiary jointly instruct DSI in writing that the Agreement is terminated; or (b) DSI instructs Depositor and Preferred Beneficiary in writing that the Agreement is terminated for nonpayment in accordance with Section 5.2 or by resignation in accordance with Section 5.3. If the Deposit Materials are subject to another escrow agreement with DSI, DSI reserves the right, after the initial one year term, to adjust the anniversary date of this Agreement to match the then prevailing anniversary date of such other escrow arrangements.
- 5.2 Termination for Nonpayment. In the event of the nonpayment of fees owed to DSI, DSI shall provide written notice of delinquency to all parties to this Agreement. Any party to this Agreement shall have the right to make the payment to DSI to cure the default. If the past due payment is not received in full by DSI within one month of the date of such notice, then DSI shall have the right to terminate this Agreement at any time thereafter by sending written notice of termination to all parties. DSI shall have no obligation to take any action under this Agreement so long as any payment due to DSI remains unpaid.
- 5.3 Termination by Resignation. DSI reserves the right to terminate this Agreement, for any reason, by providing Depositor and Preferred Beneficiary with 60-days'

written notice of its intent to terminate this Agreement. Within the 60-day period, the Depositor and Preferred Beneficiary may provide DSI with joint written instructions authorizing DSI to forward the Deposit Materials to another escrow company and/or agent or other designated recipient. If DSI does not receive said joint written instructions within 60 days of the date of DSI's written termination notice, then DSI shall destroy, return or otherwise deliver the Deposit Materials in accordance with Section 5.4.

- 5.4 Disposition of Deposit Materials Upon Termination. Subject to the foregoing termination provisions, and upon termination of this Agreement, DSI shall destroy, return, or otherwise deliver the Deposit Materials in accordance with Depositor's instructions. If there are no instructions, DSI may, at its sole discretion, destroy the Deposit Materials or return them to Depositor. DSI shall have no obligation to destroy or return the Deposit Materials if the Deposit Materials are subject to another escrow agreement with DSI or have been released to the Preferred Beneficiary in accordance with Section 4.4.
- 5.5 Survival of Terms Following Termination. Upon termination of this Agreement, the following provisions of this Agreement shall survive:
- a. Depositor's Representations (Section 1.5);
  - b. The obligations of confidentiality with respect to the Deposit Materials;
  - c. The rights granted in the sections entitled Audit Rights (Section 2.3), Right to Transfer Upon Release (Section 3.3) and Right to Use Following Release (Section 4.5), if a release of the Deposit Materials has occurred prior to termination;
  - d. The Depositor's obligation to pay DSI any fees and expenses due;
  - e. The provisions of Article 7; and
  - f. Any provisions in this Agreement which specifically state they survive the termination of this Agreement.

## **ARTICLE 6 -- DSI'S FEES**

- 6.1 Fee Schedule. Except if expressly stated otherwise, Depositor shall pay to DSI its standard fees and expenses applicable to the services provided. DSI shall notify Depositor for payment of DSI's fees at least sixty (60) Days prior to any increase in fees. For any service not listed on DSI's standard fee schedule, DSI will provide a quote prior to rendering the service, if requested.
- 6.2 Payment Terms. DSI shall not be required to perform any service unless the payment for such service and any outstanding balances owed to DSI are paid in

full. The initial fees and setup fees are due upon receipt of a signed contract or receipt of the Deposit Materials whichever is earliest. All other fees are due upon receipt of invoice. If invoiced fees are not paid, DSI may terminate this Agreement in accordance with Section 5.2.

## ARTICLE 7 -- LIABILITY AND DISPUTES

- 7.1 Right to Rely on Instructions. DSI may act in reliance upon any instruction, instrument, or signature reasonably believed by DSI to be genuine. DSI may assume that any officer of a party to this Agreement who gives any written notice, request, or instruction has the authority to do so. DSI will not be required to inquire into the truth or evaluate the merit of any statement or representation contained in any notice or document. DSI shall not be responsible for failure to act as a result of causes beyond the reasonable control of DSI.
- 7.2 Indemnification. DSI shall be responsible to perform its obligations under this Agreement and to act in a reasonable and prudent manner with regard to this escrow arrangement. Depositor agrees to indemnify, defend and hold harmless DSI from any and all claims, actions, damages, arbitration fees and expenses, costs, attorney's fees and other liabilities (“**Liabilities**”) incurred by DSI relating in any way to this escrow arrangement unless such Liabilities were caused solely by the negligence or willful misconduct of DSI. Provided that DSI has acted in the manner required by this Section 7.2, DSI shall not be responsible for any claims, actions, damages, arbitration fees and expenses, costs or other liabilities incurred as a result of DSI’s acting in accordance with instructions received from the Preferred Beneficiary.
- 7.3 Dispute Resolution. Any dispute between Depositor and Preferred Beneficiary relating to or arising from this Agreement shall be resolved in an action brought in the Connecticut Superior Court, Hartford Judicial District. DSI shall not be a party to such action, but reserves the right to intervene therein. A final judgment in any such action shall be dispositive and DSI shall take such actions as shall be necessary to give effect to such final judgment. Nothing in this Section shall be construed as a waiver of any defenses, at law or in equity, which the Preferred Beneficiary may have including, without limitation, its rights to or defenses of sovereign immunity.
- 7.4 Controlling Law. This Agreement is to be governed and construed in accordance with the laws of the State of Connecticut, without regard to its conflict of law provisions. The parties further agree that the Uniform Computer Information Transactions Act (UCITA) will not apply to this Agreement.
- 7.5 Notice of Requested Order. If any party intends to obtain an order from the arbitrator or any court of competent jurisdiction which may direct DSI to take, or refrain from taking any action, that party shall:

- a. Give DSI at least two business days' prior notice of the hearing;
- b. Include in any such order that, as a precondition to DSI's obligation, DSI be paid in full for any past due fees and be paid for the reasonable value of the services to be rendered pursuant to such order; and
- c. Ensure that DSI not be required to deliver the original (as opposed to a copy) of the Deposit Materials if DSI may need to retain the original in its possession to fulfill any of its other duties.

## **ARTICLE 8 -- GENERAL PROVISIONS**

- 8.1 Entire Agreement. This Agreement, which includes Exhibits described herein, embodies the entire understanding among the parties with respect to its subject matter and supersedes all previous communications, representations or understandings, either oral or written. DSI is not a party to the Emissions Testing Contract between Depositor and Preferred Beneficiary and has no knowledge of any of the terms or provisions of any such Emissions Testing Contract. DSI's only obligations to Depositor or Preferred Beneficiary are as set forth in this Agreement. No amendment or modification of this Agreement shall be valid or binding unless signed by all the parties hereto, except that Exhibit A need not be signed by DSI, Exhibit B need not be signed by Preferred Beneficiary and Exhibit C need not be signed.
- 8.2 Notices. All notices, invoices, payments, deposits and other documents and communications shall be given to the parties at the addresses specified in the attached Exhibit C. It shall be the responsibility of the parties to notify each other as provided in this Section in the event of a change of address. The parties shall have the right to rely on the last known address of the other parties. Unless otherwise provided in this Agreement, all documents and communications may be delivered by First Class mail.
- 8.3 Severability. In the event any provision of this Agreement is found to be invalid, voidable or unenforceable, the parties agree that unless it materially affects the entire intent and purpose of this Agreement, such invalidity, voidability or unenforceability shall affect neither the validity of this Agreement nor the remaining provisions herein, and the provision in question shall be deemed to be replaced with a valid and enforceable provision most closely reflecting the intent and purpose of the original provision.
- 8.4 Successors. This Agreement shall be binding upon and shall inure to the benefit of the successors and assigns of the parties. However, DSI shall have no obligation in performing this Agreement to recognize any successor or assign of Depositor or Preferred Beneficiary unless DSI receives clear, authoritative and conclusive written evidence of the change of parties.

8.5 Regulations. Depositor and Preferred Beneficiary are responsible for and warrant compliance with all applicable laws, rules and regulations, including but not limited to customs laws, import, export, and re-export laws and government regulations of any country from or to which the Deposit Materials may be delivered in accordance with the provisions of this Agreement.

**AGBAR TECHNOLOGIES, INC.**

Depositor

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Its: \_\_\_\_\_

Date: \_\_\_\_\_

**STATE OF CONNECTICUT-DEPT. OF  
MOTOR VEHICLES**

Preferred Beneficiary

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Its: Commissioner

Date: \_\_\_\_\_

**DSI TECHNOLOGY ESCROW SERVICES, INC.**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

Date: \_\_\_\_\_

**MATERIALS TO BE DEPOSITED**

Account Number \_\_\_\_\_

Depositor represents to Preferred Beneficiary that Deposit Materials delivered to DSI shall consist of the following:

**AGBAR TECHNOLOGIES, INC.**  
Depositor

**STATE OF CONNECTICUT-DEPT. OF  
MOTOR VEHICLES**  
Preferred Beneficiary

By: \_\_\_\_\_  
Name:  
Its:

By: \_\_\_\_\_  
Name:  
Its: Commissioner

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**DESCRIPTION OF DEPOSIT MATERIALS**

Depositor Company Name \_\_\_\_\_

Account Number \_\_\_\_\_

Product Name \_\_\_\_\_ Version \_\_\_\_\_

*(Product Name will appear as the Exhibit B Name on Account History report)*

**DEPOSIT MATERIAL DESCRIPTION:**

| Quantity | Media Type & Size         | Label Description of Each Separate Item |
|----------|---------------------------|-----------------------------------------|
| _____    | Disk 3.5" or _____        |                                         |
| _____    | DAT tape _____mm          |                                         |
| _____    | CD-ROM                    |                                         |
| _____    | Data cartridge tape _____ |                                         |
| _____    | TK 70 or _____ tape       |                                         |
| _____    | Magnetic tape _____       |                                         |
| _____    | Documentation             |                                         |
| _____    | Other _____               |                                         |

**PRODUCT DESCRIPTION:**

Environment \_\_\_\_\_

**DEPOSIT MATERIAL INFORMATION:**

Is the media or are any of the files encrypted? Yes / No If yes, please include any passwords and the decryption tools.

Encryption tool name \_\_\_\_\_ Version \_\_\_\_\_

Hardware required \_\_\_\_\_

Software required \_\_\_\_\_

Other required information \_\_\_\_\_

I certify for **Depositor** that the above described Deposit Materials have been transmitted to DSI:

**DSI** has inspected and accepted the above materials *(any exceptions are noted above)*:

Signature \_\_\_\_\_

Signature \_\_\_\_\_

Print Name \_\_\_\_\_

Print Name \_\_\_\_\_

Date \_\_\_\_\_

Date Accepted \_\_\_\_\_

Exhibit B# \_\_\_\_\_

Send materials to: DSI, 9265 Sky Park Ct., Suite 202, San Diego, CA 92123 (858) 499-1600

**DESIGNATED CONTACT**

Account Number \_\_\_\_\_

Notices, deposit material returns and communications to Depositor should be addressed to:

Invoices to Depositor should be addressed to:

Company Name: Agbar Technologies, Inc.  
Address: 444 North Michigan Ave.  
Chicago, IL 60611

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Designated Contact: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Facsimile: \_\_\_\_\_  
E-mail: \_\_\_\_\_

Contact: \_\_\_\_\_  
\_\_\_\_\_  
**P.O.#, if required:** \_\_\_\_\_  
E-mail: \_\_\_\_\_

Notices and communications to Preferred Beneficiary should be addressed to:

Company Name: Connecticut Dept. of Motor Vehicles  
Address: Rowland Government Center  
55 West Main St.  
Waterbury, CT 06702

Designated Contact: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Facsimile: \_\_\_\_\_  
E-mail: \_\_\_\_\_

Requests from Depositor or Preferred Beneficiary to change the designated contact should be given in writing by the designated contact or an authorized employee of Depositor or Preferred Beneficiary.

Contracts, Deposit Materials and notices to DSI should be addressed to:

Invoice inquiries and fee remittances to DSI should be addressed to:

DSI Technology Escrow Services, Inc.  
Contract Administration  
9265 Sky Park Court, Suite 202  
San Diego, CA 92123  
Telephone: (858) 499-1600  
Facsimile: (858) 694-1919  
E-mail: ca@dsiescrow.com  
Date: \_\_\_\_\_

DSI Technology Escrow Services, Inc.  
PO Box 45156  
San Francisco, CA 94145-0156  
  
(858) 499-1636  
(858) 499-1637

## **SCHEDULE 8**

### **WORKSTATION SPECIFICATIONS DRAFT**

The State and Contractor agree to the draft specifications appended hereto except that the State shall require Contractor and Contractor agrees to provide each Workstation with the capability to determine the climatic conditions that exist at each Station and to develop that software that enables each Workstation to be calibrated at each Station based on such site specific climatic data.

**SCHEDULE 9**

**VIP ASSETS**

| <b>Contractor Equipped Workstation Hardware</b>                      |
|----------------------------------------------------------------------|
| 2WD Dynamometer                                                      |
| Cooling Fan                                                          |
| Gas Analyzers (NDIR microbench, UV, 02) w/Sample Conditioning System |
| Diesel Opacity Meter w/Calibration Glass Filters                     |
| 2 Wireless Video Cameras                                             |
| Iris Recognition System                                              |
| 2D PDF 417 Barcode                                                   |
| OBDII Unit                                                           |
| OBDII Unit Tester                                                    |
| Regulator                                                            |
| Calibration Gas                                                      |
| Test Station PC w/1 spare PCI modem                                  |
| Printer                                                              |
| Cabinet                                                              |
| Wireless Handheld OBD II Mobile Computer                             |
| Zero Air Generator                                                   |
| Fuel Cap Tester w/Cal Kit                                            |
| Wireless 3-Button Remote Control                                     |
| RPM Tachometer                                                       |
| Weather Station                                                      |
| Cables                                                               |
| Documentation                                                        |

| <b>Contractor Equipped Workstation Software</b> |
|-------------------------------------------------|
| SysTech Custom Inspection Application Software  |
| Microsoft Windows XP                            |
| Microsoft IIS 5.0                               |
| Microsoft Internet Explorer 6                   |

| <b>Contractor Equipped Workstation – Other</b>        |
|-------------------------------------------------------|
| Shipping                                              |
| Installation                                          |
| Spare Parts in Agbar inventory on date of termination |
| Sales Taxes                                           |

| <b>Testing Interface Application</b>                                             |                                                      |
|----------------------------------------------------------------------------------|------------------------------------------------------|
| <b>Module</b>                                                                    | <b>Type</b>                                          |
| SysTech communication layer for Internet based EDBMS and Mini-VID communications | Subcontractor's Proprietary Software that State owns |

| <b>Mini-VID Software</b>           |                                        |
|------------------------------------|----------------------------------------|
| <b>Module</b>                      | <b>Type</b>                            |
| Custom CT2002 Mini-VID Software    | Contractor's Proprietary Software      |
| MS SQL Ent Server 2K               | Third-Party Software (Microsoft)       |
| MS SQL Ent Server 2K calcs         | Third-Party Software (Microsoft)       |
| MS 2000 Adv Server                 | Third-Party Software (Microsoft)       |
| MS 2000 Server                     | Third-Party Software (Microsoft)       |
| Norton Antivirus                   | Third-Party Software (Symantec)        |
| ArcServer 2000 Ent Ed + SQL Agents | Third-Party Software (Computer Assoc.) |
| VINA Decoding Software             | Third-Party Software (Polk)            |

| <b>Mini-VID Hardware</b> |
|--------------------------|
| Devices                  |
| Switch                   |
| Firewall                 |
| RAS Device               |
| Communication/RAS Server |
| Internet Router          |
| 2* Cluster Server Nodes  |
| Cluster Storage          |
| Rack                     |
| UPS                      |
| Backup Changer           |
| DLT4 Tapes               |
| KVM                      |
| KVM Cables               |
| Network Printer          |
| CAT5e Cable              |
| Mounting Cords           |
| Patch Panel              |
| Documentation            |

**SCHEDULE 10**

**PERFORMANCE BOND**

**Bond No.:** \_\_\_\_\_

**KNOW ALL MEN BY THESE PRESENTS**, that we, **AGBAR TECHNOLOGIES, INC.**, as Principal, (hereinafter called the “**Principal**”), and **INTERNATIONAL FIDELITY INSURANCE COMPANY**, as Surety, (hereinafter called the “**Surety**”), are held firmly bound unto **THE STATE OF CONNECTICUT** acting through the **DEPARTMENT OF MOTOR VEHICLES**, as Obligee, (hereinafter called the “**Obligee**”), in penal sum of **FIVE MILLION AND NO/100 DOLLARS (\$5,000,000.00)**, good and lawful money of the United States of America, for the payment of which, well and truly to be made, we bind ourselves, our heirs, administrators, executors, successors, assigns, jointly and severally, firmly by these presents.

**WHEREAS**, the Principal has entered into a certain written contract with the Obligee dated the \_\_\_\_\_ day of \_\_\_\_\_, 2002 (hereinafter called the “**Contract**”), which Contract is incorporated herein by reference and;

**NOW THEREFORE**, the condition of this obligation is such that, if the Principal shall indemnify the Obligee for any and all loss that the Obligee may sustain by reason of the Principal’s failure to comply with the terms and conditions of said Contract, then this obligation shall be null and void, otherwise it shall remain in full force and effect.

**PROVIDED** that:

1. The term of this Bond is for the period commencing \_\_\_\_\_ and expiring on \_\_\_\_\_, unless released by the Obligee prior thereto. However, the term of this Bond may be renewed for an additional one (1) year period by the issuance of a Continuation Certificate by the Surety. The liability of the Surety under this Bond and all continuation certificates issued in connection therewith shall not be cumulative and shall in no event exceed the amount set forth in this Bond or in any additions, riders or endorsements properly issued by the Surety as supplements thereto.
2. Neither non-renewal by the Surety nor failure of the Principal to provide the Obligee with a replacement bond shall constitute default under this Bond.
3. Surety shall notify both the Principal and Obligee in writing at least ninety (90) days prior to the initial or subsequent expiration date of this Bond of its intent not to issue a Continuation Certificate.
4. In the event the Principal shall be declared by the Obligee to be in default under the Contract, the Obligee shall provide the Surety with a copy of the written statement sent to Principal setting forth the particular facts of said default and any other notices pertaining to such default, simultaneously with each such notice

given by the Obligee to Principal, which notice(s) shall be sent to the Surety by registered mail to the address in Section 12 below. Neither non-renewal by the Surety, nor the failure or inability of the Principal to file a replacement bond in the event of non-renewal, shall itself constitute a loss to the Obligee recoverable under this Bond or any continuation thereof.

5. Upon receipt of the notice of default, the Surety will have the right and opportunity during the cure period (if any) provided in the Contract, at its option, and in its sole discretion, to cure the default.
6. Without waiving any legal rights and remedies, after receiving notice of a claim by Obligee under Article XII.C.2.b of the Contract, the Surety will, at its option, and in its sole discretion, advise the Obligee within a reasonable period of time of its election to (i) assume the remainder of the Contract and to perform or sublet same; (ii) to tender to the Obligee funds sufficient to compensate the Obligee for its actual and reasonable costs incurred for completion of the Contract solely due to such default and termination, which funds shall be paid from time to time as soon as practical after such costs have been determined, up to an amount not to exceed the penal sum of the Bond; or (iii) otherwise respond to the Obligee's notice of a claim. In no event shall Surety be liable for fines, penalties, liquidated damages or forfeitures assessed against the Principal.
7. Without waving any legal rights and remedies, Surety acknowledges the Obligee's interest in the uninterrupted continuation of the Vehicle Inspection Program in the event of termination of the Contract and the Obligee's claim under this Bond pursuant to Section XII.C.2.b of the Contract.
8. In no event shall Surety be liable to Obligee in any amounts whatsoever unless Obligee has terminated the Contract for cause in accord with Section XII.C.1 of the Contract.
9. In no event shall Surety be liable to Obligee in any amounts whatsoever where Obligee exercises its post-termination option pursuant to Section XII.C.2.a. In the event that the Obligee exercises its option to purchase the program assets pursuant to Section XII.F and G, Surety shall have no obligation under this Bond to reimburse the Obligee for any amounts paid by the Obligee for said assets.
10. The Surety's obligations under this Bond shall in no way be reduced or affected in the event the Obligee recovers liquidated damages from the Principal pursuant to Section XII.E of the Contract.
11. The Obligee's acceptance of this Bond and reliance upon it as security constitutes its acknowledgement and agreement as to the terms under which it is offered and issued by the Surety.

12. All notices, demands and correspondence with respect to this Bond shall be in writing and addressed to:

***The Surety at:*** One Newark Center, Newark, NJ 07102

***The Principal at:*** Legal Risk Manager, 444 North Michigan Avenue, Suite 1110, Chicago, IL 60611

***The Obligee at:*** Commissioner of Motor Vehicles, State of Connecticut, Rowland Government Center, 55 West Main Street, Waterbury, CT 06702-2004.

**SIGNED, SEALED AND DATED** this \_\_\_\_\_ day of \_\_\_\_\_, 2002.

Principal:  
**AGBAR TECHNOLOGIES, INC.**

By: \_\_\_\_\_  
Name:  
Title:

Surety:  
**INTERNATIONAL FIDELITY INSURANCE COMPANY**

By: \_\_\_\_\_  
Name:  
Title:

HTFD/60175.13/AXG/94850v9

**FIRST AMENDMENT TO THE CONTRACT  
REGARDING THE CONNECTICUT MOTOR  
VEHICLE EMISSIONS INSPECTION PROGRAM  
BY AND BETWEEN THE STATE OF  
CONNECTICUT AND AGBAR TECHNOLOGIES, INC.**

This First Amendment (hereinafter the "Amendment") is made to the Contract (hereinafter the "Contract") that became effective on January 10, 2003, by and between the State of Connecticut (hereinafter referred to as the "State"), acting through its Commissioner of the Department of Motor Vehicles, Gary J. DeFilippo, under the authority of Sections 4-8, 14-3 and 14-164c of Connecticut General Statutes, as amended, and Agbar Technologies, Inc., (hereinafter referred to as the "Contractor"), a Delaware corporation having a principal place of business at 444 North Michigan Avenue, Suite 1110, Chicago, Illinois 60611, acting through CHRISTOPHER A. STOCK, its EXECUTIVE VICE PRESIDENT, duly authorized by the said corporation.

*Handwritten initials: RD, MAA, GP*

**WITNESSETH:**

WHEREAS, effective January 10, 2003, the State and the Contractor entered into the Contract for the administration and operation of the Connecticut vehicle emissions inspection program, and

WHEREAS, the Contractor began performance of Inspections under the Contract on October 17, 2003, but the performance of Inspections was suspended on April 22, 2004, by direction of the State Representative, and

WHEREAS, the State and the Contractor desire an Amendment to the Contract to reflect changes in circumstances and in the original terms of the Contract, and to supplement those terms, and

WHEREAS, the State and the Contractor have conducted negotiations for this Amendment in good faith, and

WHEREAS, the parties have conducted acceptance testing and field testing at selected Stations of the Program Software and other systems and equipment, and have determined that Inspections may resume on November 12, 2004 (hereinafter referred to as the "Restart Date"), and

*Handwritten initials: MS, 1/38, JSA*

WHEREAS, the parties, by entering into this Amendment neither admit nor deny any allegations made each against the other and agree that no provision of this Amendment or any effort exerted to negotiate it or statement made in said negotiations or during the acceptance testing and field testing of the Program hardware and software shall be deemed an admission of liability or responsibility for any events leading up to or allegedly causing the suspension or any other event arising from or relating thereto,

NOW, THEREFORE, the said parties for good and valuable consideration, the receipt of which is hereby acknowledged, agree to amend the Contract as follows:

1. Article II, Section A. entitled "Definitions" is amended by deleting the definition of "Reminder Notices" and substituting the following in lieu thereof:

"Reminder Notice - The official written notice mailed by the State to the owner of a registered motor vehicle to inform such owner that such vehicle is subject to VIP requirements and has been scheduled for an Inspection."

2. Article II, Section A. entitled "Definitions" is amended by adding the following sentence to the definition of Program Commencement Date:

"The parties stipulate and agree that the Program Commencement Date is September 19, 2003."

3. Article III, Section B., paragraph number 3 entitled "The Stickers" is deleted from the Contract, in its entirety, and the following is substituted in lieu thereof:

"Reminder Notices.

(a) The State shall be wholly responsible for the preparation and mailing of Reminder Notices to the owners of registered motor vehicles that are scheduled for Inspections. The State shall provide to the Contractor the schedule prepared by the State for the mailing of the Reminder Notices, and all revisions or amendments thereto, which schedule shall include the dates of mailings, the planned number of mailings on each date and the corresponding dates by which each vehicle for which a notice shall be sent shall be required to be inspected. Based on the schedule, an electronic file will be produced and delivered to the Contractor in a form such that it can be installed on the Program website for reference by the general public indicating the VIN of the vehicle and the date by which the vehicle identified must be inspected. The format of

the file shall be identical to that which was delivered to the Contractor for this purpose prior to April 22, 2004.

(b) The Contractor shall have the right to consult with the State concerning the form and the content of the Reminder Notice. The State Representative reserves the authority to determine the form and content of such Notice, but if the Contractor believes for any reason that the form or content of such Notice, as proposed, is unacceptable, the Contractor may present its concerns in writing to the State Representative. The State Representative shall provide a written response to the Contractor to inform the Contractor of the final decision of the State in this matter.

(c) (i) During the term of the Contract, the State shall establish a schedule so that every registered motor vehicle that is subject to VIP requirements for an Inspection is notified to appear for the Inspection not less frequently than once every two (2) years. To that end, the State shall adopt and administer a system to mail Reminder Notices to the owner of each vehicle in the Fleet and implement and enforce a program to deny registration renewals for any vehicle that has not been inspected as required by applicable law.

(ii) For the period commencing on the Restart Date (or on such later date as the required number of Stations are fully operational, in accordance with the Contract requirements) and ending on October 17, 2005 (or on such later date as may be established by reference to the Restart Date), the State has, as of the date of execution of this Amendment, prepared and provided to the Contractor a schedule for the mailing of Reminder Notices. The State shall mail the number of Reminder Notices indicated by the schedule, which shall be substantially in the form of Exhibit A attached to this Amendment and made a part hereof, unless the schedule is revised by the State to reflect actual changes that occur in the size of the Fleet after the date of approval of this Amendment.

(iii) For each twelve month period after October 17, 2005 (or after the revised end date of the initial period of Inspections), and for the remaining period of the Contract, the State will mail the number of Reminder Notices indicated by schedules prepared by the State and provided to the Contractor, to meet the objective of scheduling every registered motor vehicle that is subject to VIP requirements for an Inspection not less frequently than once every two (2) years based upon its originally assigned inspection date. The State shall send Reminder Notices to the registered owners of vehicles in the Fleet in order to maintain a level frequency of Inspections throughout each month.

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(iv) The Contractor and the State understand and agree that the actual number of Reminder Notices issued is a function of the actual size of the Fleet. The size of the Fleet may vary over the term of the Contract. The State will provide the Contractor with all of its calculations of Fleet size and other work product and information on which it relied to prepare the schedules for the mailing of the Reminder Notices. The Contractor shall have access to the State's Emissions Data Base Management System (hereinafter "EDBMS") for purposes of determining the number of notices that shall be sent or have been sent and shall be allowed to run queries on the data base whenever it determines that it needs to obtain information and data from the EDBMS. However, DMV shall suspend or revoke such access if it is determined that the Contractor has violated any statutes or policies regarding EDBMS data including, but not limited to, violations of driver privacy laws, sale of data, unauthorized distribution of data, corruption of data, and use of data for commercial purposes.

(v) The Contractor may provide, not more frequently than once every two months, written notice to the State of any claimed Shortfall in such number of Reminder Notices issued. Any such claim shall include a plain statement of the facts on which the Contractor relies. The State Representative shall promptly consider the merits of the Contractor's claim and will either provide for an increase in the number of Reminder Notices issued or inform the Contractor in writing as to the reasons why the State elects not to take such action, together with any other relevant information.

(vi) If the Contractor has made one or more such claim in a timely manner and if the State has not acted in accordance with the Contractor's request to increase the number of Reminder Notices issued, the Contractor may, at any time after October 17, 2005 (or the revised ending date of the above-stated initial period of performance), and not more frequently than annually thereafter, make a claim for its actual damages, suffered by reason of the State's failure to require Inspections of all vehicles subject to VIP requirements, which damages shall be determined and calculated in accordance with the provisions of subsection (e) of this section.

(vii) As used in this subsection and in subsection (e) of this section, "Shortfall" means a failure on the part of the State to mail the number of Reminder Notices required by the established schedule, as the same may be revised from time to time in accordance with changes in the actual size of the Fleet.

(d) The State shall deny the renewal of a motor vehicle registration and shall refuse to issue any such registration to the owner of a motor vehicle, subject to the inspection requirements of chapter 246a of the C.G.S., which has been

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scheduled for an official emissions Inspection and which has failed to appear for such Inspection within thirty-one (31) days of the assigned date, or within thirty-one (31) days of a previously failed Inspection. The State shall permit registration or renewal of registration for any such motor vehicle only upon presentation of a Vehicle Inspection Report (hereinafter "VIR"), evidencing the meeting of inspection requirements, or presentation of evidence that such motor vehicle has qualified for a one-cycle waiver, in accordance with applicable state and federal regulations. In addition, the State shall publish a bulletin to all Connecticut law enforcement agencies (and shall issue subsequent bulletins from time to time as reasonably requested by the Contractor) and shall post on the electronic vehicle registration file that is accessed by law enforcement agencies a message indicating whether or not each motor vehicle subject to emissions testing requirements is in compliance with such requirements, in order to enable citations to be issued by law enforcement personnel whenever it is determined that such vehicle is being operated without a valid inspection or exemption.

(e) Due to the difficulty and practical impossibility of determining the Contractor's actual damages suffered by reason of the State's failure to issue the required number of Reminder Notices, the State and the Contractor herein stipulate and agree that such damages will be calculated at the rate of fifty cents (\$0.50) times the number of notices less than the required number issued for each of the above-stated periods of performance. If the State denies the Contractor's claim for damages or fails to make timely payment, the Contractor may proceed in the manner provided for the resolution of disputes under the Contract by Article XXIV, Section A, as amended. The State shall not be responsible for any Shortfall attributable to: (1) a reduction in the size of the Fleet; or (2) an agreed cessation of the performance of Inspections; or (3) the inability to properly perform a sufficient number of Inspections due to no fault of either party. In addition, the State reserves all defenses to any such claim or claims that are available to it under the Contract.

4. The provisions of Article III, Section B., paragraph number 4 entitled "Implementation" shall remain in force and effect, except that the Contractor shall have ninety (90) days from the date of approval of this Amendment to provide not less than 275 Stations, and the parties shall consult to identify the remaining 25 Stations within one hundred fifty (150) days from the date of approval of this Amendment. The Contractor's obligation to have the number of Stations operational as provided herein shall be excused for so much time as a significant number of Stations engage in concerted action and refuse to perform testing such that the Contractor is prevented by such concerted action from having the requisite number of Stations operational.

5. In Article III, Section B., paragraph number 10 delete "six (6) years from the Program Commencement Date" and insert "on May 9, 2010."

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6. In Article IV, "Collection of Fees and Payment to Contractor", delete Section C. in its entirety and substitute the following in lieu thereof:

"EDBMS Fees." Commencing on the Restart Date and for the remaining term of the Contract, Contractor shall within ten (10) Days of the end of each month deliver to the Department \$.50 for each paid Inspection recorded on the EDBMS during such month, or part thereof."

7. In Article V, Section B., paragraph number 3, subparagraphs a. and b., delete each of the references to "Program Commencement Date" and substitute "Restart Date set forth in this Amendment" in lieu thereof.

8. In Article V, Section B., paragraph number 3, subparagraphs c. and f., after the reference to Section III. B.4, insert "as amended by this Amendment."

9. Add new Section J. to Article XII, "Termination", to read in its entirety as follows:

"J. Modification to Amortization Schedule. The monthly reduction amount calculation as stated in Section A., paragraph number 2., Section B., paragraph number 3., and Section G., paragraph numbers 1. and 2., shall be tolled for the months of May, June, July, August, September and October, 2004, it being the intent of this provision that no such reductions be taken for each month during which Inspections under the Program were not performed by direction of the State Representative. Field or beta testing is not considered conducting Inspections under the Program for purposes of this provision."

10. Add new Section D. to Article XXII, "Training", to read in its entirety as follows:

"D. Inspector Retraining. The Contractor shall provide retraining for all Inspectors prior to the Restart Date, in accordance with the standards and requirements of this Article."

11. In Article XXIII, "Additional Program Requirements", Section B., paragraph number 9. add the following new subsections i. and j. to read in their entirety as follows:

"i. Notwithstanding the provisions of subparagraphs d. and f. of this paragraph, the Contractor shall require all Stations to perform calibrations every 24 hours for a period of six (6) months beginning on the Restart

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Date. The State Representative shall reassess the need for 24-hour calibrations after a period of three (3) months and will inform the Contractor whether or not 24-hour calibrations will continue for the remainder of the six (6) month period. The Contractor shall not be compensated for its expenses related to the 24-hour calibration for the said six (6) month period. After the first six (6) month period of 24-hour calibrations, if the State desires to extend the 24-hour calibration process or otherwise alter it from Contract requirements, the State Representative shall provide written direction to the Contractor in regard to the frequency of the intervals for calibrations. If, after the said six (6) month period, the calibration schedule as directed by the State Representative requires more frequent calibrations than as stated in subparagraphs d. and f. and if the Contractor believes that such schedule and the responsibilities of performance pertaining thereto have the effect of directly increasing the cost of the Contractor's performance, the Contractor shall be permitted for itself and on behalf of the Stations to treat such direction by the State Representative as initiating a Change Order, in accordance with the provisions of Article XI.

j. In order to facilitate the performance of twenty-four (24) hour calibrations at the Stations in accordance with the provisions of this Amendment, the Contractor shall promptly provide each Station with an unrestricted and irrevocable credit for the purchase of consumable supplies, including all items identified in Article X, Section C. of the Contract. The credit shall be in the amount of two thousand (\$2000) dollars per Station, except as otherwise provided herein. If any such credit is not used in full by any Station for any reason, including the termination of the Station's participation in the Program, the Contractor shall apply and extend the remaining balance of the credit, on an equal apportionment basis, to all other Stations. Upon presentation of an invoice and documents evidencing the extension of the credit as herein described to any Station, the State shall make payment of an equal amount to Contractor. For each participating Station as of the Restart Date, a full credit of \$2000 will be issued. For each new participating Station entering the Program after the Restart Date, the allocation of \$2000 will be reduced by \$333.34 for each full month beyond the Restart Date. The State shall not incur nor have any further obligation of any kind to the Contractor or to any Station in connection with this paragraph. The State shall have the right to audit the relevant records of the Contractor and the Contractor shall make all such records available, on reasonable notice, to the State's representative. The prices charged to the Stations by the Contractor for consumable items shall be as stated on the price list submitted to the State in accordance with the provisions of Article X, Section C. of the Contract."

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12. In Article XXIV, Miscellaneous, delete Section A, subparagraphs 1., 2., and 3, in their entirety and renumber subparagraph 4. as subparagraph 3, and insert the following:

A. Disputes, Technical Disputes and Consultation.

1. In the event of any dispute under the Contract and this Amendment and Exhibits attached hereto, including any technical dispute as hereinafter described, the parties covenant and agree that they will follow the procedure set forth herein to resolve said dispute.

a. As used in this section, the following words and phrases shall have the following meanings:

(i) "Claim" shall have the meaning set forth in Conn. Gen. Stat. § 4-141 as amended from time to time and is currently defined as "a petition for the payment or refund of money by the state or for permission to sue the state." It is expressly understood, however, that the provisions of this section as to formal Mediation and the specified Non-Binding Proceeding may not be used to resolve any single Claim, as defined, which seeks an amount of damages of less than One Hundred Thousand (\$100,000) Dollars alone. Such Claim must be brought with other Claims so that the amount of alleged damages, in the aggregate, are equal to or greater than One Hundred Thousand (\$100,000) Dollars.

(ii) "Non-Binding Proceeding" is a confidential, non-binding procedure intended to assist the parties in reaching a negotiated resolution of the Claim(s), and is an extension of the non-binding Mediation procedure set forth in this section.

(iii) "Notice of Claim" shall mean a written notice submitted to the State Representative that shall contain, at a minimum, as to each Claim and item of Claim, a specified dollar amount, and the alleged facts and circumstances on which each such Claim is based, together with the provisions(s) of the Contract on which each such Claim is based, together with supporting documents and calculations.

(iv) "Mediator" shall mean the individual selected as provided herein to work with the parties to reach an agreed resolution of the Claims.

2. a. The parties shall attempt to resolve each dispute under the Contract pursuant to this section by means of good faith consultation, prior to the invocation of the additional procedures set forth herein. The party claiming the existence of the dispute shall notify the other in writing within five (5) business days after the dispute arises, and shall give a plain written statement of the

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facts, together with a reference to the provisions of the Contract on which such party relies for its position, and any applicable provisions of law. The parties shall meet for the purpose of such consultation and negotiation as may be necessary to achieve a resolution of their differences not more than five (5) business days after the receipt of such notice, unless the parties agree to an extension of time. If, after such meeting or meetings between their authorized representatives, the parties are unable to reach an agreement, they shall reduce their respective positions to writing and exchange such written positions concerning all matters that remain unresolved between them, not more than thirty (30) days after receipt of the original notice of the dispute, unless the parties agree to an extension of time. If the State fails to adhere to the time frames set forth herein, the State shall be deemed to have waived such time requirements. The failure by either party to adhere to these requirements shall not operate to toll the statute of limitations set forth in Chapter 53 of the Connecticut General Statutes.

b. (i) Any Claim that remains unresolved after the parties follow the process in section 2.a herein, or if the State has waived such procedures, shall be subject to non-binding mediation as a condition precedent to either party invoking the Non-Binding Proceeding as defined above and as described more fully below. The parties shall endeavor to resolve all such unresolved Claims by third-party, non-binding mediation. Each request for mediation shall be in writing and shall be filed with the other party to the Contract. The parties agree that they shall share the fees charged by the Mediator and any other related costs of the mediation equally. The parties further agree that, for administrative purposes only, the Mediator may be under contract with the State which will not affect his or her status as a neutral. The mediation shall be held in Hartford, Connecticut, unless another location is mutually agreed upon.

(ii) The parties agree to consult promptly and in good faith to select a Mediator.

c. (i) In the event that the parties do not come to an agreement in mediation, at the request of the Contractor any Claim or aggregated Claims that are represented by the Contractor to be in excess of One Hundred Thousand (\$100,000) Dollars and that remain unpaid or otherwise unresolved after mediation or after thirty (30) Days after the start of the first mediation session unless the parties agree otherwise, shall be subject to a Non-Binding Proceeding before the Mediator which shall result in a written recommendation rendered by the Mediator. Any request to institute a Non-Binding Proceeding shall be made within one year of the initial notice of the dispute. The Mediator shall hear the parties' Claims and defenses, and shall submit within thirty (30) Days after the conclusion of the Non-Binding Proceeding, unless the parties agree otherwise, a written document containing specific findings of fact and conclusions of law

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which document shall constitute the Mediator's recommendations as to such Claims and defenses. The parties agree that the Rules of Evidence of the State of Connecticut shall apply in the Non-Binding Proceeding. The parties further agree that they will use the procedures set forth in rules R-23 through R-33 of the Construction Industry Dispute Resolution Procedures of the American Arbitration Association in effect as of July 1, 2001 as guides for the conduct of the Non-Binding Proceeding. The parties agree that upon the filing of the request for Non-Binding Proceeding, they promptly will have a preliminary conference with the Mediator for the purpose of establishing the procedures. In the event of a dispute regarding such procedures, the Mediator has the authority to impose such procedures as he or she deems appropriate for the proceedings. The parties agree to share all costs and expenses of the Non-Binding Proceeding equally. Each party shall allow the other to examine and copy any non-privileged documents which may be relevant either to the claims or defenses asserted in the proceeding. Such non-privileged documents shall be used only for negotiation and settlement purposes or in the Non-Binding Proceeding of the respective Claims and defenses of the parties. Confidential bid, business and financial information constituting trade secrets shall be treated as trade secrets for purposes of dispute resolution in accordance with all provisions of this section, and shall not be disclosed by the State to any person that is not a party to the proceedings, unless an official finding to the contrary is made by the Connecticut Freedom of Information Commission or by any court.

(ii) The parties agree that a single Mediator will preside at the Non-Binding Proceeding.

d. If, after the rendering of the Mediator's non-binding advisory recommendation, either party disagrees with the decision and the parties are unable to resolve their Claims, then the Contractor may submit a Claim to the Office of the Claims Commissioner seeking permission to sue the State, pursuant to the procedures set forth in Conn. Gen. Stat. Chapter 53, §§ 4-141 et seq. In the proceeding before the Claims Commissioner, either party may choose to submit to the Claims Commissioner the non-binding advisory recommendation of the Mediator. Either party may contest the Mediator's written findings of fact and conclusions of law before the Claims Commissioner. It is understood that the Claims Commissioner will proceed in accordance with statutory mandates, and that the parties do not have the power to direct the Claims Commissioner to grant permission to sue. It is further expressly understood that the non-binding advisory recommendations of the Mediator are inadmissible, and may not under any conditions whatsoever, nor for any reason whatsoever, be offered or received into evidence in any proceedings before any Connecticut court, or in any other legal or equitable proceedings besides those before the Claims Commissioner.

  
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e. Nothing herein is to be construed as a waiver by the State of any provision of the statute of limitations contained in Chapter 53 of the Connecticut General Statutes.

f. In the event there is a dispute between the parties regarding the Contractor's compliance with technical program requirements for Inspections, the parties agree to follow the procedure set forth in this section as an express condition precedent to the use of the hereinabove stated procedures for dispute resolution under the Contract as set forth in Article XXIV A.1.a. and 2.b.(i) through 2.d. as amended in this First Amendment. As used herein, "technical Program requirements" include, but are not limited to, the proper and correct functioning of all components of the CDAS units and the mini-VID and all related computer systems, software and Station equipment, and "technical compliance" means the Contractor's substantial compliance with technical Program requirements of the Contract as amended.

(i) First, when any issue arises that implicates or has the potential to implicate the Contractor's technical compliance, the technical staff of either party shall have the obligation to promptly notify and disclose in writing the existence of the issue and all relevant facts to the appropriate staff members of the other party who for this purpose shall be the Program Manager of either party. Upon any such notification, the other party has an obligation to respond and to consult promptly, within forty-eight (48) hours or before the close of business on the next business day, which ever is later, with the party raising the issue(s). The parties shall work together to define the scope of the issue(s), the remedial steps necessary and the timetable for resolution. The parties agree to take all actions necessary to ensure that their senior management personnel, who for this purpose are Agbar's Vice President of Operations, Craig Venet, 444 North Michigan Ave., Chicago, Ill 60611, for the Contractor and Richard Cosgrove, Chief Administrative Officer for the DMV, and their designated successors are advised on a daily basis of the existence and the current status of such issue(s) and the steps being taken toward resolution.

(ii) Second, in the event that the parties are unable to resolve the issue(s) by the collaborative consultation process set forth above, the party raising the issue (complaining party) will notify the other party (receiving party) in writing of the issue(s) and provide the relevant facts, in sufficient detail for the receiving party to respond.

(iii) Third, within twenty-four hours of receipt of such notice of an unresolved issue(s), or the close of the next business day, whichever is later, the receiving party will transmit a substantive response in writing to the complaining party.

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(iv) Fourth, in the event that the parties agree to the position of the State Representative, the Contractor agrees to work expeditiously and the State agrees to cooperate to the extent necessary to resolve the issue(s) and achieve technical compliance.

(v) Fifth, in the event that a disagreement persists as to any aspect of the issue(s) or either party's responsibility under the Contract, to resolve the issue(s), the matter will be submitted to a mutually acceptable and designated individual, hereinafter referred to as the "Technical Expert." The Technical Expert shall act as a neutral. For administrative purposes only, the Technical Expert will be under contract with the State, which will not affect his or her status as a neutral. The Technical Expert will, within 5 business days after receipt of a written submission of an issue, review the record of the submissions by the parties, conduct any further inquiry or investigation that he or she deems necessary and conduct any tests or experiments that he or she deems necessary and shall thereafter make an assessment of whether there is substantial technical compliance. Such assessment shall be expeditiously reduced to a writing by the Technical Expert and furnished to both parties, but in any event not later than 10 business days from receipt of the submission, unless expressly agreed to by the parties in writing.

(vi) Sixth, if the Contractor contests the report and determination of the issue(s) by the Technical Expert, or claims that any work required is not within the scope of the Contract or that the Contractor is otherwise entitled to additional compensation, the Contractor may proceed to invoke the dispute resolution procedures as set forth in this section.

(vii) Seventh, if the State Representative contests the report and determination of the issue(s) by the Technical Expert, or claims that work is within the scope of the Contract and that the State is entitled to the work for no additional compensation to the Contractor, then the State Representative may direct the Contractor in writing to proceed with the work, and the Contractor may proceed in accordance with Article XXIV A.1.a. and 2.b.(i) through 2.d. as amended in this First Amendment.

(viii) The parties agree that, if any technical dispute arises, the parties will work together in good faith and expeditiously to achieve the resolution or the work-around that will cause the least interruption to the Program. The parties agree to share all costs and expenses related to the participation of the Technical Expert, as described above. The Technical Expert shall not have any liability of any kind to either party for any statement or action taken within the scope of his or her above-described responsibilities.

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(ix) The parties shall consult promptly and in good faith to select a Technical Expert, who shall be a person of stature and experience within the field of motor vehicle emissions testing.

13. Article XXIV, Paragraph E. is amended by adding the following after the word "Contract" at the end of the second sentence:

"and including the provisions of Sections 1-79 to 1-101, inclusive, of the Connecticut General Statutes and Public Act 04-245, as the same may apply to the Contractor or its authorized agents."

14. Add new Section R. to Article XXIV, "Miscellaneous", to read in its entirety as follows:

"R. Public Education Budget. Prior to the execution of this Amendment, the State and the Contractor have conducted a review of the Public Education and Information Plan as described in Schedule 4 to the Contract, including the Contractor's claimed expenditures to date from the established budget for such Plan. The parties stipulate and agree that the remaining budget amount under Schedule 4 for the VIP, as of September 15, 2004 is \$394,849.04. The Contractor is authorized to expend additional amounts from the Public Relations budget for the cost of public relations material that it has been directed by the State to issue for the purposes of the restart of the VIP. Contractor will submit to the State an appropriate record and accounting of such additional expenditures made after September 15, 2004. On and after the effective date of this Amendment, the Contractor shall not be permitted to claim an expenditure from the Public Relations budget as a result of any retainer or other similar contractual fee that it pays to any subcontractor unless such retainer is approved by the State. All other expenditures claimed shall be supported by the Plan, as submitted by the Contractor and as approved by the State, unless otherwise expressly approved by the State."

15. Add new Section S. to Article XXIV, "Miscellaneous", to read in its entirety as follows:

"S. Workstation Modifications and Improvements

1. Prior to the execution of this Amendment, the State obtained an independent performance audit of the VIP conducted by Gordon-Darby, Inc. and dated May 20, 2004 ("Report"). The Contractor acknowledges that it has been provided with a copy of the Report, as on file at the Department of Motor Vehicles and the Transportation Committee of the

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General Assembly. The Report offers various opinions, audit conclusions, and recommendations concerning the Workstations and software (hereinafter referred to as the "audit conclusions"), and establishes certain levels of importance, designated as Level 1 (highest priority) to Level 5 (lowest priority). All of the audit conclusions which the State has designated to be implemented are described in Exhibit "B" attached hereto and made part of this Amendment.

At the State's direction, the Contractor has implemented and shall implement selected changes, modifications, or additions to address the audit conclusions, grouped in accordance with the said priority Levels 1 through 5 in Exhibit B. The Contractor will not request a Change Order for costs which arise from the implementation of changes, modifications or additions required for the Level 1 through Level 4 conclusions. The implementation of changes, modifications or additions arising from or related to said audit conclusions shall be completed as indicated on Exhibit B within the times hereinafter stated. In addition, the State and the Contractor agree that the allowance for upgrades, enhancements and new releases of software set out in Article VIII.E. 3 of the Contract is "expended."

a. With the exception of the audit conclusions pertaining to weather stations (designated in the Report as I16, I72, I87 and L76) the State acknowledges that the Contractor has implemented all audit conclusions designated in the Report and on Exhibit B as "closed" or as Level 1 as of the Restart Date.

b. The remaining audit conclusions, with the exception of those designated as "unscheduled" or "closed", have been grouped into proposed software updates and scheduled for implementation as provided in Exhibit B. It is expressly understood that any period of time set for the implementation of software version revisions and upgrades shall run for a particular revision in sequence from the agreed date of implementation of the prior version. For example, the time for implementation of revision 4.08 will commence from the date the State authorizes in writing the release to the field of the revision designated 4.07.

c. Version 4.07 as defined in Exhibit B shall be ready for approval by the State and implementation in the field within forty-five (45) days of the Restart Date.

d. Version 4.08 as defined in Exhibit B, will be ready for approval by the State and implementation in the field within forty-five (45) days after the agreed date of implementation of version 4.07.

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e. Audit conclusions that have been identified for inclusion in version 5.01 or that have been designated as "unscheduled" (other than Level 5 audit conclusions) will be ready for approval within ninety (90) days following the implementation of version 4.08. It is understood and agreed that certain audit conclusions designated as "unscheduled" on Exhibit B may be closed or deemed resolved by agreement of the parties.

f. The State and the Contractor agree to consult as to the means to address all audit conclusions designated in the Report as Level 5. Consultation will occur within six (6) months of the Restart Date. If, following such consultation the State Representative directs the Contractor to perform additional work in connection with a Level 5 audit conclusion that has not been addressed previously, such direction shall be deemed a Change Order in accordance with the provisions of Article XI.

g. The time periods provided in this section may be extended by written consent of the State which consent shall not be unreasonably withheld. In the event that the State Representative changes the scope of work to be included in a software version beyond that described in Exhibit B, the time for implementation shall be equitably adjusted.

2. Unless otherwise directed in writing by the State Representative, the Contractor shall provide and install weather stations and related software modifications in accordance with Contract requirements and as referenced in the Report, on all of the CDAS units by no later than April 1, 2005.

3. In Article V, Section B., "Liquidated Damages for Failure to Meet Performance Requirements," paragraph 4.b., place subparagraph heading "(i)" before the text and insert the following new subparagraph "(ii)":

"(ii) In addition and not in limitation of the provisions of subparagraph (i), the parties agree that the State may impose liquidated damages, in the amounts stated herein, for failure to provide and implement in a timely manner the Workstation modifications and improvements described in subparagraphs 1 and 2 of paragraph 15 of this First Amendment, as amending Article XXIV of the Contract. The assessment of liquidated damages shall apply and may be made with respect to each of the said modifications and improvements (namely, software versions 4.07, 4.08, 5.01 and related changes, and the installation of weather stations) in the amount of \$10,000 per quarterly evaluation period for each such deliverable. Quarterly evaluation periods under the Contract shall commence on the Restart Date. For the purpose of the assessment of liquidated damages as provided herein, evaluations shall be made and liquidated damages may be assessed, notwithstanding the provisions of Article V. B. 6., in each

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quarterly period in which each of the deliverables remains due, in accordance with the agreed upon schedule, which are substantially incomplete or unacceptable for Program use. (For example, if in the second quarterly evaluation period, three of the deliverables remain outstanding, the State may assess \$30,000 liquidated damages.) The exercise by the State of any of its rights pursuant to this subparagraph shall not preclude the State from exercising any of its rights or remedies under the Contract, including its rights pursuant to Article XII.

16. In Article XXIII, "Additional Program Requirements", Section I., paragraph number 2, "Compliance with BAR97", insert the following subparagraph c.:

"c. The Contractor shall reimburse the State for the actual contract cost of the consultant hired to assist in the BAR97 certification process, in an amount not to exceed twenty thousand dollars (\$20,000)."

17. Contractor acknowledges the receipt from the State of a letter dated August 20, 2004, addressed to Commissioner Gary J. DeFilippo from Commissioner Arthur J. Rocque, Jr. of the Connecticut Department of Environmental Protection regarding the test standards to be used in the conduct of ASM 25/25 testing. The State directed changes in testing standards that are contained in the software version 4.05 and beyond, which it has represented implement the test standards described in Commissioner Rocque's letter. Notwithstanding any provision of the Contract including the technical specifications to the contrary, the Contractor has implemented and is using the said standards effective on the Restart Date, unless and until otherwise directed in writing by the State Representative. The State also acknowledges that in some cases changes may have to be made to the EDBMS to implement standards referred to above for which the Contractor shall have no responsibility or liability.

18. The State shall segregate all data now contained in the EDBMS pertaining to initial beta testing (that was done prior to October 17, 2003) and acceptance testing of Program vehicles. Such data will not be accessed or recalled by the testing software during the performance of any Inspection.

19. In Article XXIV delete Section G. in its entirety and substitute the following in lieu thereof:

"G. Assignment/Delegation. The Contractor shall not assign the Contract nor delegate any of its responsibilities, except to the extent such delegation to a subcontractor, as made in accordance with the provisions

*Handwritten initials and date:*  
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[Signature]

of Article X of the Contract, may be necessary to enable the Contractor to perform its obligations under the Contract, without the express prior written consent of the State, acting through the State Representative. Any attempted assignment or delegation in violation of this Section shall be void."

20. The State shall begin mailing Reminder Notices to owners of Fleet vehicles approximately one week prior to the Restart Date.

21. With respect to any payment to the State or reimbursement that is required by any provision of this Amendment, the Contractor hereby authorizes the State Representative to make a deduction from the Security Fund in accordance with the provisions of Article V, Section A. of the Contract.

22. All provisions of the Contract not expressly amended or superseded by the provisions of this Amendment shall remain in full force and effect. In the case of any disagreement as to their meaning or interpretation, the provisions of this Amendment shall be construed in accordance with Applicable Legal Requirements.

23. This Amendment and the Contract taken together embody the entire sole and exclusive agreement between the State and Contractor on the matters expressly addressed herein. They supersede any prior or contemporaneous oral or written statements not contained herein. The parties shall not be bound by or be liable for any statement, representation, promise, inducement or understanding of any kind or nature not set forth herein.

24. This Amendment shall not become effective unless and until it is approved as to form by the Attorney General of the State of Connecticut, as evidenced by execution of this document on the date indicated by the Attorney General or his duly authorized subordinate.

25. On or before the date the Office of Attorney General signs this Amendment, the Contractor shall provide an executed Withdrawal of its complaint in the Connecticut Superior Court in the matter of Agbar Technologies, Inc. vs. State of Connecticut, Department of Motor Vehicles, et al, Docket No. CV04-0833698 without fees or costs, and a fully executed Release as attached hereto as Exhibit C and made a part hereof.

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IN WITNESS WHEREOF, the parties hereto have executed two duplicate originals of this Amendment on the dates stated below.

STATE OF CONNECTICUT  
DEPARTMENT OF MOTOR VEHICLES

BY *Gary J. DeFilippo*  
Gary J. DeFilippo  
Commissioner

10/8/04  
Date

AGBAR TECHNOLOGIES, INC.

BY \_\_\_\_\_ (L.S.)

\_\_\_\_\_  
Date

Its

Approved as to Form  
Attorney General

By: *Nancy E. Arnold*  
Nancy E. Arnold  
Assistant Atty General

Date: 10/8/04

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STATE OF CONNECTICUT  
DEPARTMENT OF MOTOR VEHICLES

BY: *Gary J. DeFilippo*  
Gary J. DeFilippo  
Commissioner

10/8/04  
Date

AGBAR TECHNOLOGIES, INC.

BY: *Christopher A. Stock*  
Christopher A. Stock  
Its Executive Vice President

8 OCT 2004  
Date

Approved as to Form  
Attorney General

BY: *Clay E. Shuld*  
Assistant Atty General

Date: 10/8/04

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Exhibit A

Scheduled Inspection Volume for Testing Restart Date of 11/1/04

| LetterMailedByDate | InspectionExpirationDate | Daily Volume | MailerDueDate | Total For Day | Sum    |
|--------------------|--------------------------|--------------|---------------|---------------|--------|
| 11/01/2004         | 03/22/2004               | 835          | 12/20/2004    | 0             | 835    |
| 11/01/2004         | 12/20/2004               | 2333         | 12/20/2004    | 3168          | 3,168  |
| 11/01/2004         | 03/23/2004               | 623          | 12/21/2004    | 0             | 3,791  |
| 11/01/2004         | 12/21/2004               | 2349         | 12/21/2004    | 2972          | 6,140  |
| 11/01/2004         | 03/24/2004               | 1185         | 12/22/2004    | 0             | 7,325  |
| 11/01/2004         | 12/22/2004               | 2471         | 12/22/2004    | 3656          | 9,796  |
| 11/01/2004         | 03/25/2004               | 770          | 12/23/2004    | 0             | 10,566 |
| 11/01/2004         | 12/23/2004               | 2565         | 12/23/2004    | 3335          | 13,131 |
| 11/01/2004         | 03/26/2004               | 1061         | 12/24/2004    | 0             | 14,192 |
| 11/01/2004         | 12/24/2004               | 2525         | 12/24/2004    | 3586          | 16,717 |
| 11/01/2004         | 03/27/2004               | 701          | 12/25/2004    | 0             | 17,418 |
| 11/01/2004         | 12/25/2004               | 2431         | 12/25/2004    | 3132          | 19,849 |
| 11/01/2004         | 03/28/2004               | 760          | 12/26/2004    | 0             | 20,609 |
| 11/01/2004         | 12/26/2004               | 2355         | 12/26/2004    | 3115          | 22,964 |
| 11/08/2004         | 03/29/2004               | 793          | 12/27/2004    | 0             | 23,757 |
| 11/08/2004         | 12/27/2004               | 2520         | 12/27/2004    | 3313          | 26,277 |
| 11/08/2004         | 03/30/2004               | 711          | 12/28/2004    | 0             | 26,988 |
| 11/08/2004         | 12/28/2004               | 2522         | 12/28/2004    | 3233          | 29,510 |
| 11/08/2004         | 03/31/2004               | 1135         | 12/29/2004    | 0             | 30,645 |
| 11/08/2004         | 12/29/2004               | 2441         | 12/29/2004    | 3576          | 33,086 |
| 11/08/2004         | 04/01/2004               | 883          | 12/30/2004    | 0             | 33,969 |
| 11/08/2004         | 12/30/2004               | 2405         | 12/30/2004    | 3288          | 36,374 |
| 11/08/2004         | 04/02/2004               | 1047         | 12/31/2004    | 0             | 37,421 |
| 11/08/2004         | 12/31/2004               | 2456         | 12/31/2004    | 3503          | 39,877 |
| 11/08/2004         | 04/03/2004               | 926          | 01/01/2005    | 0             | 40,803 |
| 11/08/2004         | 01/01/2005               | 2458         | 01/01/2005    | 3384          | 43,261 |
| 11/08/2004         | 04/04/2004               | 858          | 01/02/2005    | 0             | 44,119 |
| 11/08/2004         | 01/02/2005               | 2454         | 01/02/2005    | 3312          | 46,573 |
| 11/15/2004         | 04/05/2004               | 889          | 01/03/2005    | 0             | 47,462 |
| 11/15/2004         | 01/03/2005               | 2373         | 01/03/2005    | 3262          | 49,835 |
| 11/15/2004         | 04/06/2004               | 798          | 01/04/2005    | 0             | 50,633 |
| 11/15/2004         | 01/04/2005               | 2526         | 01/04/2005    | 3324          | 53,159 |
| 11/15/2004         | 04/07/2004               | 1249         | 01/05/2005    | 0             | 54,408 |
| 11/15/2004         | 01/05/2005               | 2557         | 01/05/2005    | 3806          | 56,965 |
| 11/15/2004         | 04/08/2004               | 846          | 01/06/2005    | 0             | 57,811 |
| 11/15/2004         | 01/06/2005               | 2538         | 01/06/2005    | 3384          | 60,349 |
| 11/15/2004         | 04/09/2004               | 1074         | 01/07/2005    | 0             | 61,423 |
| 11/15/2004         | 01/07/2005               | 2413         | 01/07/2005    | 3487          | 63,836 |
| 11/15/2004         | 04/10/2004               | 942          | 01/08/2005    | 0             | 64,778 |
| 11/15/2004         | 01/08/2005               | 2494         | 01/08/2005    | 3436          | 67,272 |
| 11/15/2004         | 04/11/2004               | 973          | 01/09/2005    | 0             | 68,245 |
| 11/15/2004         | 01/09/2005               | 2556         | 01/09/2005    | 3529          | 70,801 |
| 11/22/2004         | 04/12/2004               | 745          | 01/10/2005    | 0             | 71,546 |
| 11/22/2004         | 01/10/2005               | 2460         | 01/10/2005    | 3205          | 74,006 |
| 11/22/2004         | 04/13/2004               | 826          | 01/11/2005    | 0             | 74,832 |
| 11/22/2004         | 01/11/2005               | 2394         | 01/11/2005    | 3220          | 77,226 |
| 11/22/2004         | 04/14/2004               | 1139         | 01/12/2005    | 0             | 78,365 |
| 11/22/2004         | 01/12/2005               | 2457         | 01/12/2005    | 3596          | 80,822 |
| 11/22/2004         | 04/15/2004               | 943          | 01/13/2005    | 0             | 81,765 |
| 11/22/2004         | 01/13/2005               | 2498         | 01/13/2005    | 3441          | 84,263 |
| 11/22/2004         | 04/16/2004               | 1077         | 01/14/2005    | 0             | 85,340 |
| 11/22/2004         | 01/14/2005               | 2427         | 01/14/2005    | 3504          | 87,767 |
| 11/22/2004         | 04/17/2004               | 1011         | 01/15/2005    | 0             | 88,778 |
| 11/22/2004         | 01/15/2005               | 2414         | 01/15/2005    | 3425          | 91,192 |
| 11/22/2004         | 04/18/2004               | 903          | 01/16/2005    | 0             | 92,095 |

\*Note: "LetterMailedByDate" column represents the data as stored in the database; the actual mailings can be broken into smaller groups.

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Exhibit A

Scheduled Inspection Volume for Testing Restart Date of 11/1/04

| LetterMailedByDate | InspectionExpirationDate | Daily Volume | MailerDueDate | Total For Day | Sum     |
|--------------------|--------------------------|--------------|---------------|---------------|---------|
| 11/22/2004         | 01/16/2005               | 2514         | 01/16/2005    | 3417          | 94,609  |
| 11/29/2004         | 04/19/2004               | 962          | 01/17/2005    | 0             | 95,571  |
| 11/29/2004         | 01/17/2005               | 2544         | 01/17/2005    | 3506          | 98,115  |
| 11/29/2004         | 04/20/2004               | 841          | 01/18/2005    | 0             | 98,956  |
| 11/29/2004         | 01/18/2005               | 2478         | 01/18/2005    | 3319          | 101,434 |
| 11/29/2004         | 04/21/2004               | 1206         | 01/19/2005    | 0             | 102,640 |
| 11/29/2004         | 01/19/2005               | 2465         | 01/19/2005    | 3671          | 105,105 |
| 11/29/2004         | 04/22/2004               | 1131         | 01/20/2005    | 0             | 106,236 |
| 11/29/2004         | 01/20/2005               | 2445         | 01/20/2005    | 3576          | 108,681 |
| 11/29/2004         | 04/23/2004               | 1247         | 01/21/2005    | 0             | 109,928 |
| 11/29/2004         | 01/21/2005               | 2411         | 01/21/2005    | 3658          | 112,339 |
| 11/29/2004         | 04/24/2004               | 1229         | 01/22/2005    | 0             | 113,568 |
| 11/29/2004         | 01/22/2005               | 2388         | 01/22/2005    | 3617          | 115,956 |
| 11/29/2004         | 04/25/2004               | 1227         | 01/23/2005    | 0             | 117,183 |
| 11/29/2004         | 01/23/2005               | 2418         | 01/23/2005    | 3645          | 119,601 |
| 12/06/2004         | 04/26/2004               | 1285         | 01/24/2005    | 0             | 120,886 |
| 12/06/2004         | 01/24/2005               | 2388         | 01/24/2005    | 3673          | 123,274 |
| 12/06/2004         | 04/27/2004               | 1303         | 01/25/2005    | 0             | 124,577 |
| 12/06/2004         | 01/25/2005               | 2364         | 01/25/2005    | 3667          | 126,941 |
| 12/06/2004         | 04/28/2004               | 1864         | 01/26/2005    | 0             | 128,805 |
| 12/06/2004         | 01/26/2005               | 2490         | 01/26/2005    | 4354          | 131,295 |
| 12/06/2004         | 04/29/2004               | 1527         | 01/27/2005    | 0             | 132,822 |
| 12/06/2004         | 01/27/2005               | 2511         | 01/27/2005    | 4038          | 135,333 |
| 12/06/2004         | 04/30/2004               | 1718         | 01/28/2005    | 0             | 137,051 |
| 12/06/2004         | 01/28/2005               | 2422         | 01/28/2005    | 4140          | 139,473 |
| 12/06/2004         | 05/01/2004               | 1613         | 01/29/2005    | 0             | 141,086 |
| 12/06/2004         | 01/29/2005               | 2413         | 01/29/2005    | 4026          | 143,499 |
| 12/06/2004         | 05/02/2004               | 1743         | 01/30/2005    | 0             | 145,242 |
| 12/06/2004         | 01/30/2005               | 2399         | 01/30/2005    | 4142          | 147,641 |
| 12/13/2004         | 05/03/2004               | 1762         | 01/31/2005    | 0             | 149,403 |
| 12/13/2004         | 01/31/2005               | 2428         | 01/31/2005    | 4190          | 151,831 |
| 12/13/2004         | 05/04/2004               | 1551         | 02/01/2005    | 0             | 153,382 |
| 12/13/2004         | 02/01/2005               | 2414         | 02/01/2005    | 3965          | 155,796 |
| 12/13/2004         | 05/05/2004               | 1733         | 02/02/2005    | 0             | 157,529 |
| 12/13/2004         | 02/02/2005               | 2346         | 02/02/2005    | 4079          | 159,875 |
| 12/13/2004         | 05/06/2004               | 1830         | 02/03/2005    | 0             | 161,705 |
| 12/13/2004         | 02/03/2005               | 2412         | 02/03/2005    | 4242          | 164,117 |
| 12/13/2004         | 05/07/2004               | 2909         | 02/04/2005    | 0             | 167,026 |
| 12/13/2004         | 02/04/2005               | 2509         | 02/04/2005    | 5418          | 169,535 |
| 12/13/2004         | 05/08/2004               | 1826         | 02/05/2005    | 0             | 171,361 |
| 12/13/2004         | 02/05/2005               | 2510         | 02/05/2005    | 4336          | 173,871 |
| 12/13/2004         | 05/09/2004               | 1858         | 02/06/2005    | 0             | 175,729 |
| 12/13/2004         | 02/06/2005               | 2487         | 02/06/2005    | 4345          | 178,216 |
| 12/20/2004         | 05/10/2004               | 1891         | 02/07/2005    | 0             | 180,107 |
| 12/20/2004         | 02/07/2005               | 2400         | 02/07/2005    | 4291          | 182,507 |
| 12/20/2004         | 05/11/2004               | 1809         | 02/08/2005    | 0             | 184,316 |
| 12/20/2004         | 02/08/2005               | 2431         | 02/08/2005    | 4240          | 186,747 |
| 12/20/2004         | 05/12/2004               | 2812         | 02/09/2005    | 0             | 189,559 |
| 12/20/2004         | 02/09/2005               | 2458         | 02/09/2005    | 5270          | 192,017 |
| 12/20/2004         | 05/13/2004               | 1939         | 02/10/2005    | 0             | 193,956 |
| 12/20/2004         | 02/10/2005               | 2474         | 02/10/2005    | 4413          | 196,430 |
| 12/20/2004         | 05/14/2004               | 2667         | 02/11/2005    | 0             | 199,097 |
| 12/20/2004         | 02/11/2005               | 2435         | 02/11/2005    | 5102          | 201,532 |
| 12/20/2004         | 05/15/2004               | 1996         | 02/12/2005    | 0             | 203,528 |
| 12/20/2004         | 02/12/2005               | 2517         | 02/12/2005    | 4513          | 206,045 |

\*Note: "LetterMailedByDate" column represents the data as stored in the database; the actual mailings can be broken into smaller groups.

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Exhibit A

Scheduled Inspection Volume for Testing Restart Date of 11/1/04

| LetterMailedByDate | InspectionExpirationDate | Daily Volume | MailerDueDate | Total For Day | Sum     |
|--------------------|--------------------------|--------------|---------------|---------------|---------|
| 12/20/2004         | 05/16/2004               | 2007         | 02/13/2005    | 0             | 208,052 |
| 12/20/2004         | 02/13/2005               | 2468         | 02/13/2005    | 4475          | 210,520 |
| 12/27/2004         | 05/17/2004               | 2049         | 02/14/2005    | 0             | 212,569 |
| 12/27/2004         | 02/14/2005               | 2486         | 02/14/2005    | 4535          | 215,055 |
| 12/27/2004         | 05/18/2004               | 1836         | 02/15/2005    | 0             | 216,891 |
| 12/27/2004         | 02/15/2005               | 2521         | 02/15/2005    | 4357          | 219,412 |
| 12/27/2004         | 05/19/2004               | 2973         | 02/16/2005    | 0             | 222,385 |
| 12/27/2004         | 02/16/2005               | 2461         | 02/16/2005    | 5434          | 224,846 |
| 12/27/2004         | 05/20/2004               | 2153         | 02/17/2005    | 0             | 226,999 |
| 12/27/2004         | 02/17/2005               | 2405         | 02/17/2005    | 4558          | 229,404 |
| 12/27/2004         | 05/21/2004               | 3028         | 02/18/2005    | 0             | 232,432 |
| 12/27/2004         | 02/18/2005               | 2398         | 02/18/2005    | 5426          | 234,830 |
| 12/27/2004         | 05/22/2004               | 2024         | 02/19/2005    | 0             | 236,854 |
| 12/27/2004         | 02/19/2005               | 2471         | 02/19/2005    | 4495          | 239,325 |
| 12/27/2004         | 05/23/2004               | 1966         | 02/20/2005    | 0             | 241,291 |
| 12/27/2004         | 02/20/2005               | 2473         | 02/20/2005    | 4439          | 243,764 |
| 01/03/2005         | 05/24/2004               | 2008         | 02/21/2005    | 0             | 245,772 |
| 01/03/2005         | 02/21/2005               | 2419         | 02/21/2005    | 4427          | 248,191 |
| 01/03/2005         | 05/25/2004               | 2078         | 02/22/2005    | 0             | 250,269 |
| 01/03/2005         | 02/22/2005               | 2363         | 02/22/2005    | 4441          | 252,632 |
| 01/03/2005         | 05/26/2004               | 3493         | 02/23/2005    | 0             | 256,125 |
| 01/03/2005         | 02/23/2005               | 2445         | 02/23/2005    | 5938          | 258,570 |
| 01/03/2005         | 05/27/2004               | 2121         | 02/24/2005    | 0             | 260,691 |
| 01/03/2005         | 02/24/2005               | 2380         | 02/24/2005    | 4501          | 263,071 |
| 01/03/2005         | 05/28/2004               | 3361         | 02/25/2005    | 0             | 266,432 |
| 01/03/2005         | 02/25/2005               | 2425         | 02/25/2005    | 5786          | 268,857 |
| 01/03/2005         | 05/29/2004               | 2240         | 02/26/2005    | 0             | 271,097 |
| 01/03/2005         | 02/26/2005               | 2416         | 02/26/2005    | 4656          | 273,513 |
| 01/03/2005         | 05/30/2004               | 2280         | 02/27/2005    | 0             | 275,793 |
| 01/03/2005         | 02/27/2005               | 2499         | 02/27/2005    | 4779          | 278,292 |
| 01/10/2005         | 05/31/2004               | 2335         | 02/28/2005    | 0             | 280,627 |
| 01/10/2005         | 02/28/2005               | 2481         | 02/28/2005    | 4816          | 283,108 |
| 01/10/2005         | 06/01/2004               | 2339         | 03/01/2005    | 0             | 285,447 |
| 01/10/2005         | 03/01/2005               | 2381         | 03/01/2005    | 4720          | 287,828 |
| 01/10/2005         | 06/02/2004               | 3113         | 03/02/2005    | 0             | 290,941 |
| 01/10/2005         | 03/02/2005               | 2444         | 03/02/2005    | 5557          | 293,385 |
| 01/10/2005         | 06/03/2004               | 2325         | 03/03/2005    | 0             | 295,710 |
| 01/10/2005         | 03/03/2005               | 2463         | 03/03/2005    | 4788          | 298,173 |
| 01/10/2005         | 06/04/2004               | 3212         | 03/04/2005    | 0             | 301,385 |
| 01/10/2005         | 03/04/2005               | 2420         | 03/04/2005    | 5632          | 303,805 |
| 01/10/2005         | 06/05/2004               | 2374         | 03/05/2005    | 0             | 306,179 |
| 01/10/2005         | 03/05/2005               | 2404         | 03/05/2005    | 4778          | 308,583 |
| 01/10/2005         | 06/06/2004               | 2298         | 03/06/2005    | 0             | 310,881 |
| 01/10/2005         | 03/06/2005               | 2385         | 03/06/2005    | 4683          | 313,266 |
| 01/17/2005         | 06/07/2004               | 2414         | 03/07/2005    | 0             | 315,680 |
| 01/17/2005         | 03/07/2005               | 2432         | 03/07/2005    | 4846          | 318,112 |
| 01/17/2005         | 06/08/2004               | 2458         | 03/08/2005    | 0             | 320,570 |
| 01/17/2005         | 03/08/2005               | 2410         | 03/08/2005    | 4868          | 322,980 |
| 01/17/2005         | 06/09/2004               | 2642         | 03/09/2005    | 0             | 325,622 |
| 01/17/2005         | 03/09/2005               | 2427         | 03/09/2005    | 5069          | 328,049 |
| 01/17/2005         | 06/10/2004               | 2494         | 03/10/2005    | 0             | 330,543 |
| 01/17/2005         | 03/10/2005               | 2385         | 03/10/2005    | 4879          | 332,928 |
| 01/17/2005         | 06/11/2004               | 4410         | 03/11/2005    | 0             | 337,338 |
| 01/17/2005         | 03/11/2005               | 2443         | 03/11/2005    | 6853          | 339,781 |
| 01/17/2005         | 06/12/2004               | 2468         | 03/12/2005    | 0             | 342,249 |

\*Note: "LetterMailedByDate" column represents the data as stored in the database; the actual mailings can be broken into smaller groups.

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Exhibit A

Scheduled Inspection Volume for Testing Restart Date of 11/1/04

| LetterMailedByDate | InspectionExpirationDate | Daily Volume | MailerDueDate | Total For Day | Sum     |
|--------------------|--------------------------|--------------|---------------|---------------|---------|
| 01/17/2005         | 03/12/2005               | 2439         | 03/12/2005    | 4907          | 344,688 |
| 01/17/2005         | 06/13/2004               | 2411         | 03/13/2005    | 0             | 347,099 |
| 01/17/2005         | 03/13/2005               | 2442         | 03/13/2005    | 4853          | 349,541 |
| 01/24/2005         | 06/14/2004               | 2426         | 03/14/2005    | 0             | 351,967 |
| 01/24/2005         | 03/14/2005               | 2438         | 03/14/2005    | 4864          | 354,405 |
| 01/24/2005         | 06/15/2004               | 2540         | 03/15/2005    | 0             | 356,945 |
| 01/24/2005         | 03/15/2005               | 2472         | 03/15/2005    | 5012          | 359,417 |
| 01/24/2005         | 06/16/2004               | 3085         | 03/16/2005    | 0             | 362,502 |
| 01/24/2005         | 03/16/2005               | 2353         | 03/16/2005    | 5438          | 364,855 |
| 01/24/2005         | 06/17/2004               | 2600         | 03/17/2005    | 0             | 367,455 |
| 01/24/2005         | 03/17/2005               | 2323         | 03/17/2005    | 4923          | 369,778 |
| 01/24/2005         | 06/18/2004               | 3546         | 03/18/2005    | 0             | 373,324 |
| 01/24/2005         | 03/18/2005               | 2435         | 03/18/2005    | 5981          | 375,759 |
| 01/24/2005         | 06/19/2004               | 2664         | 03/19/2005    | 0             | 378,423 |
| 01/24/2005         | 03/19/2005               | 2528         | 03/19/2005    | 5192          | 380,951 |
| 01/24/2005         | 06/20/2004               | 2448         | 03/20/2005    | 0             | 383,399 |
| 01/24/2005         | 03/20/2005               | 2409         | 03/20/2005    | 4857          | 385,808 |
| 01/31/2005         | 06/21/2004               | 2530         | 03/21/2005    | 0             | 388,338 |
| 01/31/2005         | 03/21/2005               | 2398         | 03/21/2005    | 4928          | 390,736 |
| 01/31/2005         | 06/22/2004               | 2433         | 03/22/2005    | 0             | 393,169 |
| 01/31/2005         | 03/22/2005               | 2375         | 03/22/2005    | 4808          | 395,544 |
| 01/31/2005         | 06/23/2004               | 3784         | 03/23/2005    | 0             | 399,328 |
| 01/31/2005         | 03/23/2005               | 2465         | 03/23/2005    | 6249          | 401,793 |
| 01/31/2005         | 06/24/2004               | 2592         | 03/24/2005    | 0             | 404,385 |
| 01/31/2005         | 03/24/2005               | 2392         | 03/24/2005    | 4984          | 406,777 |
| 01/31/2005         | 06/25/2004               | 3350         | 03/25/2005    | 0             | 410,127 |
| 01/31/2005         | 03/25/2005               | 2465         | 03/25/2005    | 5815          | 412,592 |
| 01/31/2005         | 06/26/2004               | 2507         | 03/26/2005    | 0             | 415,099 |
| 01/31/2005         | 03/26/2005               | 2463         | 03/26/2005    | 4970          | 417,562 |
| 01/31/2005         | 06/27/2004               | 2519         | 03/27/2005    | 0             | 420,081 |
| 01/31/2005         | 03/27/2005               | 2474         | 03/27/2005    | 4993          | 422,555 |
| 02/07/2005         | 06/28/2004               | 2552         | 03/28/2005    | 0             | 425,107 |
| 02/07/2005         | 03/28/2005               | 2369         | 03/28/2005    | 4921          | 427,476 |
| 02/07/2005         | 06/29/2004               | 2466         | 03/29/2005    | 0             | 429,942 |
| 02/07/2005         | 03/29/2005               | 2385         | 03/29/2005    | 4851          | 432,327 |
| 02/07/2005         | 06/30/2004               | 3952         | 03/30/2005    | 0             | 436,279 |
| 02/07/2005         | 03/30/2005               | 2445         | 03/30/2005    | 6397          | 438,724 |
| 02/07/2005         | 07/01/2004               | 2607         | 03/31/2005    | 0             | 441,331 |
| 02/07/2005         | 03/31/2005               | 2464         | 03/31/2005    | 5071          | 443,795 |
| 02/07/2005         | 07/02/2004               | 3460         | 04/01/2005    | 0             | 447,255 |
| 02/07/2005         | 04/01/2005               | 2395         | 04/01/2005    | 5855          | 449,650 |
| 02/07/2005         | 07/03/2004               | 2497         | 04/02/2005    | 0             | 452,147 |
| 02/07/2005         | 04/02/2005               | 2380         | 04/02/2005    | 4877          | 454,527 |
| 02/07/2005         | 07/04/2004               | 2369         | 04/03/2005    | 0             | 456,896 |
| 02/07/2005         | 04/03/2005               | 2446         | 04/03/2005    | 4815          | 459,342 |
| 02/14/2005         | 07/05/2004               | 2525         | 04/04/2005    | 0             | 461,867 |
| 02/14/2005         | 04/04/2005               | 2486         | 04/04/2005    | 5011          | 464,353 |
| 02/14/2005         | 07/06/2004               | 2360         | 04/05/2005    | 0             | 466,713 |
| 02/14/2005         | 04/05/2005               | 2431         | 04/05/2005    | 4791          | 469,144 |
| 02/14/2005         | 07/07/2004               | 3117         | 04/06/2005    | 0             | 472,261 |
| 02/14/2005         | 04/06/2005               | 2449         | 04/06/2005    | 5566          | 474,710 |
| 02/14/2005         | 07/08/2004               | 2446         | 04/07/2005    | 0             | 477,156 |
| 02/14/2005         | 04/07/2005               | 2463         | 04/07/2005    | 4909          | 479,619 |
| 02/14/2005         | 07/09/2004               | 3331         | 04/08/2005    | 0             | 482,950 |
| 02/14/2005         | 04/08/2005               | 2500         | 04/08/2005    | 5831          | 485,450 |

\*Note: "LetterMailedByDate" column represents the data as stored in the database; the actual mailings can be broken into smaller groups.

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Exhibit A

Scheduled Inspection Volume for Testing Restart Date of 11/1/04

| LetterMailedByDate | InspectionExpirationDate | Daily Volume | MailerDueDate | Total For Day | Sum     |
|--------------------|--------------------------|--------------|---------------|---------------|---------|
| 02/14/2005         | 07/10/2004               | 2728         | 04/09/2005    | 0             | 488,178 |
| 02/14/2005         | 04/09/2005               | 2425         | 04/09/2005    | 5153          | 490,603 |
| 02/14/2005         | 07/11/2004               | 2651         | 04/10/2005    | 0             | 493,254 |
| 02/14/2005         | 04/10/2005               | 2440         | 04/10/2005    | 5091          | 495,694 |
| 02/21/2005         | 07/12/2004               | 2454         | 04/11/2005    | 0             | 498,148 |
| 02/21/2005         | 04/11/2005               | 2441         | 04/11/2005    | 4895          | 500,589 |
| 02/21/2005         | 07/13/2004               | 2359         | 04/12/2005    | 0             | 502,948 |
| 02/21/2005         | 04/12/2005               | 2552         | 04/12/2005    | 4911          | 505,500 |
| 02/21/2005         | 07/14/2004               | 4054         | 04/13/2005    | 0             | 509,554 |
| 02/21/2005         | 04/13/2005               | 2495         | 04/13/2005    | 6549          | 512,049 |
| 02/21/2005         | 07/15/2004               | 2594         | 04/14/2005    | 0             | 514,643 |
| 02/21/2005         | 04/14/2005               | 2444         | 04/14/2005    | 5038          | 517,087 |
| 02/21/2005         | 07/16/2004               | 3389         | 04/15/2005    | 0             | 520,476 |
| 02/21/2005         | 04/15/2005               | 2432         | 04/15/2005    | 5821          | 522,908 |
| 02/21/2005         | 07/17/2004               | 2582         | 04/16/2005    | 0             | 525,490 |
| 02/21/2005         | 04/16/2005               | 2392         | 04/16/2005    | 4974          | 527,882 |
| 02/21/2005         | 07/18/2004               | 2490         | 04/17/2005    | 0             | 530,372 |
| 02/21/2005         | 04/17/2005               | 2476         | 04/17/2005    | 4966          | 532,848 |
| 02/28/2005         | 07/19/2004               | 2395         | 04/18/2005    | 0             | 535,243 |
| 02/28/2005         | 04/18/2005               | 2545         | 04/18/2005    | 4940          | 537,788 |
| 02/28/2005         | 07/20/2004               | 2434         | 04/19/2005    | 0             | 540,222 |
| 02/28/2005         | 04/19/2005               | 2538         | 04/19/2005    | 4972          | 542,760 |
| 02/28/2005         | 07/21/2004               | 4165         | 04/20/2005    | 0             | 546,925 |
| 02/28/2005         | 04/20/2005               | 2471         | 04/20/2005    | 6636          | 549,396 |
| 02/28/2005         | 07/22/2004               | 2752         | 04/21/2005    | 0             | 552,148 |
| 02/28/2005         | 04/21/2005               | 2479         | 04/21/2005    | 5231          | 554,627 |
| 02/28/2005         | 07/23/2004               | 3575         | 04/22/2005    | 0             | 558,202 |
| 02/28/2005         | 04/22/2005               | 2428         | 04/22/2005    | 6003          | 560,630 |
| 02/28/2005         | 07/24/2004               | 2599         | 04/23/2005    | 0             | 563,229 |
| 02/28/2005         | 04/23/2005               | 2608         | 04/23/2005    | 5207          | 565,837 |
| 02/28/2005         | 07/25/2004               | 2620         | 04/24/2005    | 0             | 568,457 |
| 02/28/2005         | 04/24/2005               | 2490         | 04/24/2005    | 5110          | 570,947 |
| 03/07/2005         | 07/26/2004               | 2594         | 04/25/2005    | 0             | 573,541 |
| 03/07/2005         | 04/25/2005               | 2507         | 04/25/2005    | 5101          | 576,048 |
| 03/07/2005         | 07/27/2004               | 2433         | 04/26/2005    | 0             | 578,481 |
| 03/07/2005         | 04/26/2005               | 2489         | 04/26/2005    | 4922          | 580,970 |
| 03/07/2005         | 07/28/2004               | 4212         | 04/27/2005    | 0             | 585,182 |
| 03/07/2005         | 04/27/2005               | 2560         | 04/27/2005    | 6772          | 587,742 |
| 03/07/2005         | 07/29/2004               | 2756         | 04/28/2005    | 0             | 590,498 |
| 03/07/2005         | 04/28/2005               | 2490         | 04/28/2005    | 5246          | 592,988 |
| 03/07/2005         | 07/30/2004               | 3762         | 04/29/2005    | 0             | 596,750 |
| 03/07/2005         | 04/29/2005               | 2475         | 04/29/2005    | 6237          | 599,225 |
| 03/07/2005         | 07/31/2004               | 2702         | 04/30/2005    | 0             | 601,927 |
| 03/07/2005         | 04/30/2005               | 2587         | 04/30/2005    | 5289          | 604,514 |
| 03/07/2005         | 08/01/2004               | 2699         | 05/01/2005    | 0             | 607,213 |
| 03/07/2005         | 05/01/2005               | 2592         | 05/01/2005    | 5291          | 609,805 |
| 03/14/2005         | 08/02/2004               | 2608         | 05/02/2005    | 0             | 612,413 |
| 03/14/2005         | 05/02/2005               | 2542         | 05/02/2005    | 5150          | 614,955 |
| 03/14/2005         | 08/03/2004               | 2492         | 05/03/2005    | 0             | 617,447 |
| 03/14/2005         | 05/03/2005               | 2540         | 05/03/2005    | 5032          | 619,987 |
| 03/14/2005         | 08/04/2004               | 4072         | 05/04/2005    | 0             | 624,059 |
| 03/14/2005         | 05/04/2005               | 2517         | 05/04/2005    | 6589          | 626,576 |
| 03/14/2005         | 08/05/2004               | 2711         | 05/05/2005    | 0             | 629,287 |
| 03/14/2005         | 05/05/2005               | 2460         | 05/05/2005    | 5171          | 631,747 |
| 03/14/2005         | 08/06/2004               | 3390         | 05/06/2005    | 0             | 635,137 |

\*Note: "LetterMailedByDate" column represents the data as stored in the database; the actual mailings can be broken into smaller groups.

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Exhibit A

Scheduled Inspection Volume for Testing Restart Date of 11/1/04

| LetterMailedByDate | InspectionExpirationDate | Daily Volume | MailerDueDate | Total For Day | Sum     |
|--------------------|--------------------------|--------------|---------------|---------------|---------|
| 03/14/2005         | 05/06/2005               | 2598         | 05/06/2005    | 5988          | 637,735 |
| 03/14/2005         | 08/07/2004               | 2695         | 05/07/2005    | 0             | 640,430 |
| 03/14/2005         | 05/07/2005               | 2620         | 05/07/2005    | 5315          | 643,050 |
| 03/14/2005         | 08/08/2004               | 2622         | 05/08/2005    | 0             | 645,672 |
| 03/14/2005         | 05/08/2005               | 2576         | 05/08/2005    | 5198          | 648,248 |
| 03/21/2005         | 08/09/2004               | 2528         | 05/09/2005    | 0             | 650,776 |
| 03/21/2005         | 05/09/2005               | 2501         | 05/09/2005    | 5029          | 653,277 |
| 03/21/2005         | 08/10/2004               | 2430         | 05/10/2005    | 0             | 655,707 |
| 03/21/2005         | 05/10/2005               | 2459         | 05/10/2005    | 4889          | 658,166 |
| 03/21/2005         | 08/11/2004               | 3678         | 05/11/2005    | 0             | 661,844 |
| 03/21/2005         | 05/11/2005               | 2545         | 05/11/2005    | 6223          | 664,389 |
| 03/21/2005         | 08/12/2004               | 2666         | 05/12/2005    | 0             | 667,055 |
| 03/21/2005         | 05/12/2005               | 2540         | 05/12/2005    | 5206          | 669,595 |
| 03/21/2005         | 08/13/2004               | 3749         | 05/13/2005    | 0             | 673,344 |
| 03/21/2005         | 05/13/2005               | 2522         | 05/13/2005    | 6271          | 675,866 |
| 03/21/2005         | 08/14/2004               | 2746         | 05/14/2005    | 0             | 678,612 |
| 03/21/2005         | 05/14/2005               | 2544         | 05/14/2005    | 5290          | 681,156 |
| 03/21/2005         | 08/15/2004               | 2691         | 05/15/2005    | 0             | 683,847 |
| 03/21/2005         | 05/15/2005               | 2566         | 05/15/2005    | 5257          | 686,413 |
| 03/28/2005         | 08/16/2004               | 2472         | 05/16/2005    | 0             | 688,885 |
| 03/28/2005         | 05/16/2005               | 2538         | 05/16/2005    | 5010          | 691,423 |
| 03/28/2005         | 08/17/2004               | 2463         | 05/17/2005    | 0             | 693,886 |
| 03/28/2005         | 05/17/2005               | 2533         | 05/17/2005    | 4996          | 696,419 |
| 03/28/2005         | 08/18/2004               | 3918         | 05/18/2005    | 0             | 700,337 |
| 03/28/2005         | 05/18/2005               | 2564         | 05/18/2005    | 6482          | 702,901 |
| 03/28/2005         | 08/19/2004               | 2610         | 05/19/2005    | 0             | 705,511 |
| 03/28/2005         | 05/19/2005               | 2456         | 05/19/2005    | 5066          | 707,967 |
| 03/28/2005         | 08/20/2004               | 3070         | 05/20/2005    | 0             | 711,037 |
| 03/28/2005         | 05/20/2005               | 2519         | 05/20/2005    | 5589          | 713,556 |
| 03/28/2005         | 08/21/2004               | 2666         | 05/21/2005    | 0             | 716,222 |
| 03/28/2005         | 05/21/2005               | 2645         | 05/21/2005    | 5311          | 718,867 |
| 03/28/2005         | 08/22/2004               | 2529         | 05/22/2005    | 0             | 721,396 |
| 03/28/2005         | 05/22/2005               | 2654         | 05/22/2005    | 5183          | 724,050 |
| 04/04/2005         | 08/23/2004               | 2424         | 05/23/2005    | 0             | 726,474 |
| 04/04/2005         | 05/23/2005               | 2545         | 05/23/2005    | 4969          | 729,019 |
| 04/04/2005         | 08/24/2004               | 2444         | 05/24/2005    | 0             | 731,463 |
| 04/04/2005         | 05/24/2005               | 2087         | 05/24/2005    | 4531          | 733,550 |
| 04/04/2005         | 08/25/2004               | 3084         | 05/25/2005    | 0             | 736,634 |
| 04/04/2005         | 05/25/2005               | 2456         | 05/25/2005    | 5540          | 739,090 |
| 04/04/2005         | 08/26/2004               | 2756         | 05/26/2005    | 0             | 741,846 |
| 04/04/2005         | 05/26/2005               | 2599         | 05/26/2005    | 5355          | 744,445 |
| 04/04/2005         | 08/27/2004               | 3054         | 05/27/2005    | 0             | 747,499 |
| 04/04/2005         | 05/27/2005               | 2613         | 05/27/2005    | 5667          | 750,112 |
| 04/04/2005         | 08/28/2004               | 2638         | 05/28/2005    | 0             | 752,750 |
| 04/04/2005         | 05/28/2005               | 2611         | 05/28/2005    | 5249          | 755,361 |
| 04/04/2005         | 08/29/2004               | 2666         | 05/29/2005    | 0             | 758,027 |
| 04/04/2005         | 05/29/2005               | 2622         | 05/29/2005    | 5288          | 760,649 |
| 04/11/2005         | 08/30/2004               | 2469         | 05/30/2005    | 0             | 763,118 |
| 04/11/2005         | 05/30/2005               | 2599         | 05/30/2005    | 5068          | 765,717 |
| 04/11/2005         | 08/31/2004               | 2344         | 05/31/2005    | 0             | 768,061 |
| 04/11/2005         | 05/31/2005               | 2566         | 05/31/2005    | 4910          | 770,627 |
| 04/11/2005         | 09/01/2004               | 3038         | 06/01/2005    | 0             | 773,665 |
| 04/11/2005         | 06/01/2005               | 2555         | 06/01/2005    | 5593          | 776,220 |
| 04/11/2005         | 09/02/2004               | 2636         | 06/02/2005    | 0             | 778,856 |
| 04/11/2005         | 06/02/2005               | 2553         | 06/02/2005    | 5189          | 781,409 |

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Exhibit A

Scheduled Inspection Volume for Testing Restart Date of 11/1/04

| LetterMailedByDate | InspectionExpirationDate | Daily Volume | MailerDueDate | Total For Day | Sum     |
|--------------------|--------------------------|--------------|---------------|---------------|---------|
| 04/11/2005         | 09/03/2004               | 2787         | 06/03/2005    | 0             | 784,196 |
| 04/11/2005         | 06/03/2005               | 2625         | 06/03/2005    | 5412          | 786,821 |
| 04/11/2005         | 09/04/2004               | 2538         | 06/04/2005    | 0             | 789,359 |
| 04/11/2005         | 06/04/2005               | 2655         | 06/04/2005    | 5193          | 792,014 |
| 04/11/2005         | 09/05/2004               | 2663         | 06/05/2005    | 0             | 794,677 |
| 04/11/2005         | 06/05/2005               | 2704         | 06/05/2005    | 5367          | 797,381 |
| 04/18/2005         | 09/06/2004               | 2602         | 06/06/2005    | 0             | 799,983 |
| 04/18/2005         | 06/06/2005               | 2512         | 06/06/2005    | 5114          | 802,495 |
| 04/18/2005         | 09/07/2004               | 2502         | 06/07/2005    | 0             | 804,997 |
| 04/18/2005         | 06/07/2005               | 2541         | 06/07/2005    | 5043          | 807,538 |
| 04/18/2005         | 09/08/2004               | 2951         | 06/08/2005    | 0             | 810,489 |
| 04/18/2005         | 06/08/2005               | 2534         | 06/08/2005    | 5485          | 813,023 |
| 04/18/2005         | 09/09/2004               | 2641         | 06/09/2005    | 0             | 815,664 |
| 04/18/2005         | 06/09/2005               | 2558         | 06/09/2005    | 5199          | 818,222 |
| 04/18/2005         | 09/10/2004               | 2660         | 06/10/2005    | 0             | 820,882 |
| 04/18/2005         | 06/10/2005               | 2761         | 06/10/2005    | 5421          | 823,643 |
| 04/18/2005         | 09/11/2004               | 2587         | 06/11/2005    | 0             | 826,230 |
| 04/18/2005         | 06/11/2005               | 2613         | 06/11/2005    | 5200          | 828,843 |
| 04/18/2005         | 09/12/2004               | 2565         | 06/12/2005    | 0             | 831,408 |
| 04/18/2005         | 06/12/2005               | 2618         | 06/12/2005    | 5183          | 834,026 |
| 04/25/2005         | 09/13/2004               | 2545         | 06/13/2005    | 0             | 836,571 |
| 04/25/2005         | 06/13/2005               | 2519         | 06/13/2005    | 5064          | 839,090 |
| 04/25/2005         | 09/14/2004               | 2471         | 06/14/2005    | 0             | 841,561 |
| 04/25/2005         | 06/14/2005               | 2542         | 06/14/2005    | 5013          | 844,103 |
| 04/25/2005         | 09/15/2004               | 8271         | 06/15/2005    | 0             | 852,374 |
| 04/25/2005         | 06/15/2005               | 2604         | 06/15/2005    | 10875         | 854,978 |
| 04/25/2005         | 09/16/2004               | 2509         | 06/16/2005    | 0             | 857,487 |
| 04/25/2005         | 06/16/2005               | 2609         | 06/16/2005    | 5118          | 860,096 |
| 04/25/2005         | 09/17/2004               | 3477         | 06/17/2005    | 0             | 863,573 |
| 04/25/2005         | 06/17/2005               | 2688         | 06/17/2005    | 6165          | 866,261 |
| 04/25/2005         | 09/18/2004               | 2711         | 06/18/2005    | 0             | 868,972 |
| 04/25/2005         | 06/18/2005               | 2681         | 06/18/2005    | 5392          | 871,653 |
| 04/25/2005         | 09/19/2004               | 2652         | 06/19/2005    | 0             | 874,305 |
| 04/25/2005         | 06/19/2005               | 2680         | 06/19/2005    | 5332          | 876,985 |
| 05/02/2005         | 09/20/2004               | 2557         | 06/20/2005    | 0             | 879,542 |
| 05/02/2005         | 06/20/2005               | 2567         | 06/20/2005    | 5124          | 882,109 |
| 05/02/2005         | 09/21/2004               | 2496         | 06/21/2005    | 0             | 884,605 |
| 05/02/2005         | 06/21/2005               | 2603         | 06/21/2005    | 5099          | 887,208 |
| 05/02/2005         | 09/22/2004               | 3466         | 06/22/2005    | 0             | 890,674 |
| 05/02/2005         | 06/22/2005               | 2518         | 06/22/2005    | 5984          | 893,192 |
| 05/02/2005         | 09/23/2004               | 2592         | 06/23/2005    | 0             | 895,784 |
| 05/02/2005         | 06/23/2005               | 2523         | 06/23/2005    | 5115          | 898,307 |
| 05/02/2005         | 09/24/2004               | 4023         | 06/24/2005    | 0             | 902,330 |
| 05/02/2005         | 06/24/2005               | 2736         | 06/24/2005    | 6759          | 905,066 |
| 05/02/2005         | 09/25/2004               | 2690         | 06/25/2005    | 0             | 907,756 |
| 05/02/2005         | 06/25/2005               | 2756         | 06/25/2005    | 5446          | 910,512 |
| 05/02/2005         | 09/26/2004               | 2598         | 06/26/2005    | 0             | 913,110 |
| 05/02/2005         | 06/26/2005               | 2685         | 06/26/2005    | 5283          | 915,795 |
| 05/09/2005         | 09/27/2004               | 2473         | 06/27/2005    | 0             | 918,268 |
| 05/09/2005         | 06/27/2005               | 2573         | 06/27/2005    | 5046          | 920,841 |
| 05/09/2005         | 09/28/2004               | 2429         | 06/28/2005    | 0             | 923,270 |
| 05/09/2005         | 06/28/2005               | 2556         | 06/28/2005    | 4985          | 925,826 |
| 05/09/2005         | 09/29/2004               | 3612         | 06/29/2005    | 0             | 929,438 |
| 05/09/2005         | 06/29/2005               | 2581         | 06/29/2005    | 6193          | 932,019 |
| 05/09/2005         | 09/30/2004               | 2773         | 06/30/2005    | 0             | 934,792 |

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*Handwritten signature and date:*  
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Exhibit A

Scheduled Inspection Volume for Testing Restart Date of 11/1/04

| LetterMailedByDate | InspectionExpirationDate | Daily Volume | MailerDueDate | Total For Day | Sum       |
|--------------------|--------------------------|--------------|---------------|---------------|-----------|
| 05/09/2005         | 06/30/2005               | 2663         | 06/30/2005    | 5436          | 937,455   |
| 05/09/2005         | 10/01/2004               | 2665         | 07/01/2005    | 0             | 940,120   |
| 05/09/2005         | 07/01/2005               | 2745         | 07/01/2005    | 5410          | 942,865   |
| 05/09/2005         | 10/02/2004               | 2554         | 07/02/2005    | 0             | 945,419   |
| 05/09/2005         | 07/02/2005               | 2735         | 07/02/2005    | 5289          | 948,154   |
| 05/09/2005         | 10/03/2004               | 2648         | 07/03/2005    | 0             | 950,802   |
| 05/09/2005         | 07/03/2005               | 2574         | 07/03/2005    | 5222          | 953,376   |
| 05/16/2005         | 10/04/2004               | 2634         | 07/04/2005    | 0             | 956,010   |
| 05/16/2005         | 07/04/2005               | 2526         | 07/04/2005    | 5160          | 958,536   |
| 05/16/2005         | 10/05/2004               | 2403         | 07/05/2005    | 0             | 960,939   |
| 05/16/2005         | 07/05/2005               | 2539         | 07/05/2005    | 4942          | 963,478   |
| 05/16/2005         | 10/06/2004               | 2597         | 07/06/2005    | 0             | 966,075   |
| 05/16/2005         | 07/06/2005               | 2583         | 07/06/2005    | 5180          | 968,658   |
| 05/16/2005         | 10/07/2004               | 2672         | 07/07/2005    | 0             | 971,330   |
| 05/16/2005         | 07/07/2005               | 2551         | 07/07/2005    | 5223          | 973,881   |
| 05/16/2005         | 10/08/2004               | 2563         | 07/08/2005    | 0             | 976,444   |
| 05/16/2005         | 07/08/2005               | 2709         | 07/08/2005    | 5272          | 979,153   |
| 05/16/2005         | 10/09/2004               | 2534         | 07/09/2005    | 0             | 981,687   |
| 05/16/2005         | 07/09/2005               | 2685         | 07/09/2005    | 5219          | 984,372   |
| 05/16/2005         | 10/10/2004               | 2489         | 07/10/2005    | 0             | 986,861   |
| 05/16/2005         | 07/10/2005               | 2690         | 07/10/2005    | 5179          | 989,551   |
| 05/23/2005         | 10/11/2004               | 2476         | 07/11/2005    | 0             | 992,027   |
| 05/23/2005         | 07/11/2005               | 2574         | 07/11/2005    | 5050          | 994,601   |
| 05/23/2005         | 10/12/2004               | 2526         | 07/12/2005    | 0             | 997,127   |
| 05/23/2005         | 07/12/2005               | 2625         | 07/12/2005    | 5151          | 999,752   |
| 05/23/2005         | 10/13/2004               | 2567         | 07/13/2005    | 0             | 1,002,349 |
| 05/23/2005         | 07/13/2005               | 2605         | 07/13/2005    | 5172          | 1,004,924 |
| 05/23/2005         | 10/14/2004               | 2555         | 07/14/2005    | 0             | 1,007,479 |
| 05/23/2005         | 07/14/2005               | 2679         | 07/14/2005    | 5234          | 1,010,158 |
| 05/23/2005         | 10/15/2004               | 2522         | 07/15/2005    | 0             | 1,012,680 |
| 05/23/2005         | 07/15/2005               | 2836         | 07/15/2005    | 5358          | 1,015,516 |
| 05/23/2005         | 10/16/2004               | 2711         | 07/16/2005    | 0             | 1,018,227 |
| 05/23/2005         | 07/16/2005               | 2758         | 07/16/2005    | 5469          | 1,020,985 |
| 05/23/2005         | 10/17/2004               | 2528         | 07/17/2005    | 0             | 1,023,513 |
| 05/23/2005         | 07/17/2005               | 2674         | 07/17/2005    | 5202          | 1,026,187 |
| 05/30/2005         | 10/18/2004               | 2460         | 07/18/2005    | 0             | 1,028,647 |
| 05/30/2005         | 07/18/2005               | 2637         | 07/18/2005    | 5097          | 1,031,284 |
| 05/30/2005         | 10/19/2004               | 2473         | 07/19/2005    | 0             | 1,033,757 |
| 05/30/2005         | 07/19/2005               | 2675         | 07/19/2005    | 5148          | 1,036,432 |
| 05/30/2005         | 10/20/2004               | 2517         | 07/20/2005    | 0             | 1,038,949 |
| 05/30/2005         | 07/20/2005               | 2645         | 07/20/2005    | 5162          | 1,041,594 |
| 05/30/2005         | 10/21/2004               | 2531         | 07/21/2005    | 0             | 1,044,125 |
| 05/30/2005         | 07/21/2005               | 2694         | 07/21/2005    | 5225          | 1,046,819 |
| 05/30/2005         | 10/22/2004               | 2503         | 07/22/2005    | 0             | 1,049,322 |
| 05/30/2005         | 07/22/2005               | 2744         | 07/22/2005    | 5247          | 1,052,066 |
| 05/30/2005         | 10/23/2004               | 2690         | 07/23/2005    | 0             | 1,054,756 |
| 05/30/2005         | 07/23/2005               | 2724         | 07/23/2005    | 5414          | 1,057,480 |
| 05/30/2005         | 10/24/2004               | 2697         | 07/24/2005    | 0             | 1,060,177 |
| 05/30/2005         | 07/24/2005               | 2737         | 07/24/2005    | 5434          | 1,062,914 |
| 06/06/2005         | 10/25/2004               | 2658         | 07/25/2005    | 0             | 1,065,572 |
| 06/06/2005         | 07/25/2005               | 2633         | 07/25/2005    | 5291          | 1,068,205 |
| 06/06/2005         | 10/26/2004               | 2389         | 07/26/2005    | 0             | 1,070,594 |
| 06/06/2005         | 07/26/2005               | 2556         | 07/26/2005    | 4945          | 1,073,150 |
| 06/06/2005         | 10/27/2004               | 2430         | 07/27/2005    | 0             | 1,075,580 |
| 06/06/2005         | 07/27/2005               | 2493         | 07/27/2005    | 4923          | 1,078,073 |

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Exhibit A

Scheduled Inspection Volume for Testing Restart Date of 11/1/04

| LetterMailedByDate | InspectionExpirationDate | Daily Volume | MailerDueDate | Total For Day | Sum       |
|--------------------|--------------------------|--------------|---------------|---------------|-----------|
| 06/06/2005         | 10/28/2004               | 2609         | 07/28/2005    | 0             | 1,080,682 |
| 06/06/2005         | 07/28/2005               | 2651         | 07/28/2005    | 5260          | 1,083,333 |
| 06/06/2005         | 10/29/2004               | 2433         | 07/29/2005    | 0             | 1,085,766 |
| 06/06/2005         | 07/29/2005               | 2857         | 07/29/2005    | 5290          | 1,088,623 |
| 06/06/2005         | 10/30/2004               | 2494         | 07/30/2005    | 0             | 1,091,117 |
| 06/06/2005         | 07/30/2005               | 2984         | 07/30/2005    | 5478          | 1,094,101 |
| 06/06/2005         | 10/31/2004               | 2645         | 07/31/2005    | 0             | 1,096,746 |
| 06/06/2005         | 07/31/2005               | 2978         | 07/31/2005    | 5623          | 1,099,724 |
| 06/13/2005         | 11/01/2004               | 2480         | 08/01/2005    | 0             | 1,102,204 |
| 06/13/2005         | 08/01/2005               | 2833         | 08/01/2005    | 5313          | 1,105,037 |
| 06/13/2005         | 11/02/2004               | 2363         | 08/02/2005    | 0             | 1,107,400 |
| 06/13/2005         | 08/02/2005               | 2663         | 08/02/2005    | 5026          | 1,110,063 |
| 06/13/2005         | 11/03/2004               | 2438         | 08/03/2005    | 0             | 1,112,501 |
| 06/13/2005         | 08/03/2005               | 2694         | 08/03/2005    | 5132          | 1,115,195 |
| 06/13/2005         | 11/04/2004               | 2515         | 08/04/2005    | 0             | 1,117,710 |
| 06/13/2005         | 08/04/2005               | 2815         | 08/04/2005    | 5330          | 1,120,525 |
| 06/13/2005         | 11/05/2004               | 2620         | 08/05/2005    | 0             | 1,123,145 |
| 06/13/2005         | 08/05/2005               | 2995         | 08/05/2005    | 5615          | 1,126,140 |
| 06/13/2005         | 11/06/2004               | 2657         | 08/06/2005    | 0             | 1,128,797 |
| 06/13/2005         | 08/06/2005               | 2864         | 08/06/2005    | 5521          | 1,131,661 |
| 06/13/2005         | 11/07/2004               | 2545         | 08/07/2005    | 0             | 1,134,206 |
| 06/13/2005         | 08/07/2005               | 2769         | 08/07/2005    | 5314          | 1,136,975 |
| 06/20/2005         | 11/08/2004               | 2451         | 08/08/2005    | 0             | 1,139,426 |
| 06/20/2005         | 08/08/2005               | 2826         | 08/08/2005    | 5277          | 1,142,252 |
| 06/20/2005         | 11/09/2004               | 2557         | 08/09/2005    | 0             | 1,144,809 |
| 06/20/2005         | 08/09/2005               | 2667         | 08/09/2005    | 5224          | 1,147,476 |
| 06/20/2005         | 11/10/2004               | 2432         | 08/10/2005    | 0             | 1,149,908 |
| 06/20/2005         | 08/10/2005               | 2593         | 08/10/2005    | 5025          | 1,152,501 |
| 06/20/2005         | 11/11/2004               | 2325         | 08/11/2005    | 0             | 1,154,826 |
| 06/20/2005         | 08/11/2005               | 2790         | 08/11/2005    | 5115          | 1,157,616 |
| 06/20/2005         | 11/12/2004               | 2535         | 08/12/2005    | 0             | 1,160,151 |
| 06/20/2005         | 08/12/2005               | 2938         | 08/12/2005    | 5473          | 1,163,089 |
| 06/20/2005         | 11/13/2004               | 2525         | 08/13/2005    | 0             | 1,165,614 |
| 06/20/2005         | 08/13/2005               | 2925         | 08/13/2005    | 5450          | 1,168,539 |
| 06/20/2005         | 11/14/2004               | 2479         | 08/14/2005    | 0             | 1,171,018 |
| 06/20/2005         | 08/14/2005               | 2867         | 08/14/2005    | 5346          | 1,173,885 |
| 06/27/2005         | 11/15/2004               | 2378         | 08/15/2005    | 0             | 1,176,263 |
| 06/27/2005         | 08/15/2005               | 2798         | 08/15/2005    | 5176          | 1,179,061 |
| 06/27/2005         | 11/16/2004               | 2398         | 08/16/2005    | 0             | 1,181,459 |
| 06/27/2005         | 08/16/2005               | 2631         | 08/16/2005    | 5029          | 1,184,090 |
| 06/27/2005         | 11/17/2004               | 2544         | 08/17/2005    | 0             | 1,186,634 |
| 06/27/2005         | 08/17/2005               | 2596         | 08/17/2005    | 5140          | 1,189,230 |
| 06/27/2005         | 11/18/2004               | 2624         | 08/18/2005    | 0             | 1,191,854 |
| 06/27/2005         | 08/18/2005               | 2747         | 08/18/2005    | 5371          | 1,194,601 |
| 06/27/2005         | 11/19/2004               | 2564         | 08/19/2005    | 0             | 1,197,165 |
| 06/27/2005         | 08/19/2005               | 2863         | 08/19/2005    | 5427          | 1,200,028 |
| 06/27/2005         | 11/20/2004               | 2501         | 08/20/2005    | 0             | 1,202,529 |
| 06/27/2005         | 08/20/2005               | 2953         | 08/20/2005    | 5454          | 1,205,482 |
| 06/27/2005         | 11/21/2004               | 2490         | 08/21/2005    | 0             | 1,207,972 |
| 06/27/2005         | 08/21/2005               | 2737         | 08/21/2005    | 5227          | 1,210,709 |
| 07/04/2005         | 11/22/2004               | 2484         | 08/22/2005    | 0             | 1,213,193 |
| 07/04/2005         | 08/22/2005               | 2741         | 08/22/2005    | 5225          | 1,215,934 |
| 07/04/2005         | 11/23/2004               | 2344         | 08/23/2005    | 0             | 1,218,278 |
| 07/04/2005         | 08/23/2005               | 2733         | 08/23/2005    | 5077          | 1,221,011 |
| 07/04/2005         | 11/24/2004               | 2386         | 08/24/2005    | 0             | 1,223,397 |

\*Note: "LetterMailedByDate" column represents the data as stored in the database; the actual mailings can be broken into smaller groups.

*AB*  
*28/38*  
*next*

Exhibit A

Scheduled Inspection Volume for Testing Restart Date of 11/1/04

| LetterMailedByDate | InspectionExpirationDate | Daily Volume | MailerDueDate | Total For Day | Sum       |
|--------------------|--------------------------|--------------|---------------|---------------|-----------|
| 07/04/2005         | 08/24/2005               | 2681         | 08/24/2005    | 5067          | 1,226,078 |
| 07/04/2005         | 11/25/2004               | 2565         | 08/25/2005    | 0             | 1,228,643 |
| 07/04/2005         | 08/25/2005               | 2663         | 08/25/2005    | 5228          | 1,231,306 |
| 07/04/2005         | 11/26/2004               | 2390         | 08/26/2005    | 0             | 1,233,696 |
| 07/04/2005         | 08/26/2005               | 2731         | 08/26/2005    | 5121          | 1,236,427 |
| 07/04/2005         | 11/27/2004               | 2300         | 08/27/2005    | 0             | 1,238,727 |
| 07/04/2005         | 08/27/2005               | 2721         | 08/27/2005    | 5021          | 1,241,448 |
| 07/04/2005         | 11/28/2004               | 2419         | 08/28/2005    | 0             | 1,243,867 |
| 07/04/2005         | 08/28/2005               | 2632         | 08/28/2005    | 5051          | 1,246,499 |
| 07/11/2005         | 11/29/2004               | 2512         | 08/29/2005    | 0             | 1,249,011 |
| 07/11/2005         | 08/29/2005               | 2579         | 08/29/2005    | 5091          | 1,251,590 |
| 07/11/2005         | 11/30/2004               | 2544         | 08/30/2005    | 0             | 1,254,134 |
| 07/11/2005         | 08/30/2005               | 2466         | 08/30/2005    | 5010          | 1,256,600 |
| 07/11/2005         | 12/01/2004               | 2525         | 08/31/2005    | 0             | 1,259,125 |
| 07/11/2005         | 08/31/2005               | 2479         | 08/31/2005    | 5004          | 1,261,604 |
| 07/11/2005         | 12/02/2004               | 2410         | 09/01/2005    | 0             | 1,264,014 |
| 07/11/2005         | 09/01/2005               | 2529         | 09/01/2005    | 4939          | 1,266,543 |
| 07/11/2005         | 12/03/2004               | 2488         | 09/02/2005    | 0             | 1,269,031 |
| 07/11/2005         | 09/02/2005               | 2752         | 09/02/2005    | 5240          | 1,271,783 |
| 07/11/2005         | 12/04/2004               | 2463         | 09/03/2005    | 0             | 1,274,246 |
| 07/11/2005         | 09/03/2005               | 2675         | 09/03/2005    | 5138          | 1,276,921 |
| 07/11/2005         | 12/05/2004               | 2425         | 09/04/2005    | 0             | 1,279,346 |
| 07/11/2005         | 09/04/2005               | 2650         | 09/04/2005    | 5075          | 1,281,996 |
| 07/18/2005         | 12/06/2004               | 2483         | 09/05/2005    | 0             | 1,284,479 |
| 07/18/2005         | 09/05/2005               | 2702         | 09/05/2005    | 5185          | 1,287,181 |
| 07/18/2005         | 12/07/2004               | 2467         | 09/06/2005    | 0             | 1,289,648 |
| 07/18/2005         | 09/06/2005               | 2605         | 09/06/2005    | 5072          | 1,292,253 |
| 07/18/2005         | 12/08/2004               | 2358         | 09/07/2005    | 0             | 1,294,611 |
| 07/18/2005         | 09/07/2005               | 2542         | 09/07/2005    | 4900          | 1,297,153 |
| 07/18/2005         | 12/09/2004               | 2379         | 09/08/2005    | 0             | 1,299,532 |
| 07/18/2005         | 09/08/2005               | 2616         | 09/08/2005    | 4995          | 1,302,148 |
| 07/18/2005         | 12/10/2004               | 2502         | 09/09/2005    | 0             | 1,304,650 |
| 07/18/2005         | 09/09/2005               | 2749         | 09/09/2005    | 5251          | 1,307,399 |
| 07/18/2005         | 12/11/2004               | 2612         | 09/10/2005    | 0             | 1,310,011 |
| 07/18/2005         | 09/10/2005               | 2749         | 09/10/2005    | 5361          | 1,312,760 |
| 07/18/2005         | 12/12/2004               | 2530         | 09/11/2005    | 0             | 1,315,290 |
| 07/18/2005         | 09/11/2005               | 2726         | 09/11/2005    | 5256          | 1,318,016 |
| 07/25/2005         | 12/13/2004               | 2404         | 09/12/2005    | 0             | 1,320,420 |
| 07/25/2005         | 09/12/2005               | 2659         | 09/12/2005    | 5063          | 1,323,079 |
| 07/25/2005         | 12/14/2004               | 2354         | 09/13/2005    | 0             | 1,325,433 |
| 07/25/2005         | 09/13/2005               | 2587         | 09/13/2005    | 4941          | 1,328,020 |
| 07/25/2005         | 12/15/2004               | 2526         | 09/14/2005    | 0             | 1,330,546 |
| 07/25/2005         | 09/14/2005               | 2584         | 09/14/2005    | 5110          | 1,333,130 |
| 07/25/2005         | 12/16/2004               | 2346         | 09/15/2005    | 0             | 1,335,476 |
| 07/25/2005         | 09/15/2005               | 2204         | 09/15/2005    | 4550          | 1,337,680 |
| 07/25/2005         | 12/17/2004               | 2408         | 09/16/2005    | 0             | 1,340,088 |
| 07/25/2005         | 09/16/2005               | 2687         | 09/16/2005    | 5095          | 1,342,775 |
| 07/25/2005         | 12/18/2004               | 2512         | 09/17/2005    | 0             | 1,345,287 |
| 07/25/2005         | 09/17/2005               | 2576         | 09/17/2005    | 5088          | 1,347,863 |
| 07/25/2005         | 12/19/2004               | 2428         | 09/18/2005    | 0             | 1,350,291 |
| 07/25/2005         | 09/18/2005               | 2702         | 09/18/2005    | 5130          | 1,352,993 |
| 08/01/2005         | 09/19/2005               | 5311         | 09/19/2005    | 5311          | 1,358,304 |
| 08/01/2005         | 09/20/2005               | 5573         | 09/20/2005    | 5573          | 1,363,877 |
| 08/01/2005         | 09/21/2005               | 5053         | 09/21/2005    | 5053          | 1,368,930 |
| 08/01/2005         | 09/22/2005               | 5128         | 09/22/2005    | 5128          | 1,374,058 |

\*Note: "LetterMailedByDate" column represents the data as stored in the database; the actual mailings can be broken into smaller groups.

*Handwritten initials and date:*  
 29/38  
 EA

Exhibit A

Scheduled Inspection Volume for Testing Restart Date of 11/1/04

| LetterMailedByDate | InspectionExpirationDate | Daily Volume | MailerDueDate | Total For Day | Sum       |
|--------------------|--------------------------|--------------|---------------|---------------|-----------|
| 08/01/2005         | 09/23/2005               | 5231         | 09/23/2005    | 5231          | 1,379,289 |
| 08/01/2005         | 09/24/2005               | 5412         | 09/24/2005    | 5412          | 1,384,701 |
| 08/01/2005         | 09/25/2005               | 5307         | 09/25/2005    | 5307          | 1,390,008 |
| 08/08/2005         | 09/26/2005               | 5182         | 09/26/2005    | 5182          | 1,395,190 |
| 08/08/2005         | 09/27/2005               | 4933         | 09/27/2005    | 4933          | 1,400,123 |
| 08/08/2005         | 09/28/2005               | 4849         | 09/28/2005    | 4849          | 1,404,972 |
| 08/08/2005         | 09/29/2005               | 4618         | 09/29/2005    | 4618          | 1,409,590 |
| 08/08/2005         | 09/30/2005               | 5420         | 09/30/2005    | 5420          | 1,415,010 |
| 08/08/2005         | 10/01/2005               | 5708         | 10/01/2005    | 5708          | 1,420,718 |
| 08/08/2005         | 10/02/2005               | 4219         | 10/02/2005    | 4219          | 1,424,937 |
| 08/15/2005         | 10/03/2005               | 2349         | 10/03/2005    | 2349          | 1,427,286 |
| 08/15/2005         | 10/04/2005               | 771          | 10/04/2005    | 771           | 1,428,057 |
| 08/15/2005         | 10/05/2005               | 441          | 10/05/2005    | 441           | 1,428,498 |
| 08/15/2005         | 10/06/2005               | 216          | 10/06/2005    | 216           | 1,428,714 |
| 08/15/2005         | 10/07/2005               | 630          | 10/07/2005    | 630           | 1,429,344 |
| 08/15/2005         | 10/08/2005               | 898          | 10/08/2005    | 898           | 1,430,242 |
| 08/15/2005         | 10/09/2005               | 767          | 10/09/2005    | 767           | 1,431,009 |
| 08/22/2005         | 10/10/2005               | 793          | 10/10/2005    | 793           | 1,431,802 |
| 08/22/2005         | 10/11/2005               | 534          | 10/11/2005    | 534           | 1,432,336 |
| 08/22/2005         | 10/12/2005               | 308          | 10/12/2005    | 308           | 1,432,644 |
| 08/22/2005         | 10/13/2005               | 179          | 10/13/2005    | 179           | 1,432,823 |
| 08/22/2005         | 10/14/2005               | 437          | 10/14/2005    | 437           | 1,433,260 |
| 08/22/2005         | 10/15/2005               | 645          | 10/15/2005    | 645           | 1,433,905 |
| 08/22/2005         | 10/16/2005               | 758          | 10/16/2005    | 758           | 1,434,663 |
| 08/29/2005         | 10/17/2005               | 1126         | 10/17/2005    | 1126          | 1,435,789 |
| 08/29/2005         | 10/18/2005               | 916          | 10/18/2005    | 916           | 1,436,705 |
| 08/29/2005         | 10/19/2005               | 344          | 10/19/2005    | 344           | 1,437,049 |
| 08/29/2005         | 10/20/2005               | 520          | 10/20/2005    | 520           | 1,437,569 |
| 08/29/2005         | 10/21/2005               | 908          | 10/21/2005    | 908           | 1,438,477 |
| 08/29/2005         | 10/22/2005               | 1192         | 10/22/2005    | 1192          | 1,439,669 |
| 08/29/2005         | 10/23/2005               | 1239         | 10/23/2005    | 1239          | 1,440,908 |
| 09/05/2005         | 10/24/2005               | 1212         | 10/24/2005    | 1212          | 1,442,120 |
| 09/05/2005         | 10/25/2005               | 900          | 10/25/2005    | 900           | 1,443,020 |
| 09/05/2005         | 10/26/2005               | 334          | 10/26/2005    | 334           | 1,443,354 |
| 09/05/2005         | 10/27/2005               | 637          | 10/27/2005    | 637           | 1,443,991 |
| 09/05/2005         | 10/28/2005               | 1285         | 10/28/2005    | 1285          | 1,445,276 |
| 09/05/2005         | 10/29/2005               | 1532         | 10/29/2005    | 1532          | 1,446,808 |
| 09/05/2005         | 10/30/2005               | 1670         | 10/30/2005    | 1670          | 1,448,478 |
| 09/12/2005         | 10/31/2005               | 1571         | 10/31/2005    | 1571          | 1,450,049 |
| 09/12/2005         | 11/01/2005               | 1145         | 11/01/2005    | 1145          | 1,451,194 |
| 09/12/2005         | 11/02/2005               | 458          | 11/02/2005    | 458           | 1,451,652 |
| 09/12/2005         | 11/03/2005               | 946          | 11/03/2005    | 946           | 1,452,598 |
| 09/12/2005         | 11/04/2005               | 1431         | 11/04/2005    | 1431          | 1,454,029 |
| 09/12/2005         | 11/05/2005               | 1668         | 11/05/2005    | 1668          | 1,455,697 |
| 09/12/2005         | 11/06/2005               | 1678         | 11/06/2005    | 1678          | 1,457,375 |
| 09/19/2005         | 11/07/2005               | 1678         | 11/07/2005    | 1678          | 1,459,053 |
| 09/19/2005         | 11/08/2005               | 1394         | 11/08/2005    | 1394          | 1,460,447 |
| 09/19/2005         | 11/09/2005               | 345          | 11/09/2005    | 345           | 1,460,792 |
| 09/19/2005         | 11/10/2005               | 939          | 11/10/2005    | 939           | 1,461,731 |
| 09/19/2005         | 11/11/2005               | 860          | 11/11/2005    | 860           | 1,462,591 |
| 09/19/2005         | 11/12/2005               | 1674         | 11/12/2005    | 1674          | 1,464,265 |
| 09/19/2005         | 11/13/2005               | 2066         | 11/13/2005    | 2066          | 1,466,331 |
| 09/26/2005         | 11/14/2005               | 1996         | 11/14/2005    | 1996          | 1,468,327 |
| 09/26/2005         | 11/15/2005               | 1613         | 11/15/2005    | 1613          | 1,469,940 |
| 09/26/2005         | 11/16/2005               | 510          | 11/16/2005    | 510           | 1,470,450 |

\*Note: "LetterMailedByDate" column represents the data as stored in the database; the actual mailings can be broken into smaller groups.

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**Exhibit A**

Scheduled Inspection Volume for Testing Restart Date of 11/1/04

| LetterMailedByDate | InspectionExpirationDate | Daily Volume | MailerDueDate | Total For Day | Sum       |
|--------------------|--------------------------|--------------|---------------|---------------|-----------|
| 09/26/2005         | 11/17/2005               | 1271         | 11/17/2005    | 1271          | 1,471,721 |
| 09/26/2005         | 11/18/2005               | 1857         | 11/18/2005    | 1857          | 1,473,578 |
| 09/26/2005         | 11/19/2005               | 2038         | 11/19/2005    | 2038          | 1,475,616 |
| 09/26/2005         | 11/20/2005               | 1983         | 11/20/2005    | 1983          | 1,477,599 |
| 10/03/2005         | 11/21/2005               | 1963         | 11/21/2005    | 1963          | 1,479,562 |
| 10/03/2005         | 11/22/2005               | 1495         | 11/22/2005    | 1495          | 1,481,057 |
| 10/03/2005         | 11/23/2005               | 505          | 11/23/2005    | 505           | 1,481,562 |
| 10/03/2005         | 11/24/2005               | 1377         | 11/24/2005    | 1377          | 1,482,939 |
| 10/03/2005         | 11/25/2005               | 2016         | 11/25/2005    | 2016          | 1,484,955 |
| 10/03/2005         | 11/26/2005               | 1918         | 11/26/2005    | 1918          | 1,486,873 |
| 10/03/2005         | 11/27/2005               | 652          | 11/27/2005    | 652           | 1,487,525 |
| 10/10/2005         | 11/28/2005               | 1660         | 11/28/2005    | 1660          | 1,489,185 |
| 10/10/2005         | 11/29/2005               | 1364         | 11/29/2005    | 1364          | 1,490,549 |
| 10/10/2005         | 11/30/2005               | 419          | 11/30/2005    | 419           | 1,490,968 |
| 10/10/2005         | 12/01/2005               | 1627         | 12/01/2005    | 1627          | 1,492,595 |
| 10/10/2005         | 12/02/2005               | 2139         | 12/02/2005    | 2139          | 1,494,734 |
| 10/10/2005         | 12/03/2005               | 2505         | 12/03/2005    | 2505          | 1,497,239 |
| 10/10/2005         | 12/04/2005               | 2056         | 12/04/2005    | 2056          | 1,499,295 |
| 10/17/2005         | 12/05/2005               | 1906         | 12/05/2005    | 1906          | 1,501,201 |
| 10/17/2005         | 12/06/2005               | 1051         | 12/06/2005    | 1051          | 1,502,252 |
| 10/17/2005         | 12/07/2005               | 399          | 12/07/2005    | 399           | 1,502,651 |
| 10/17/2005         | 12/08/2005               | 1252         | 12/08/2005    | 1252          | 1,503,903 |
| 10/17/2005         | 12/09/2005               | 1896         | 12/09/2005    | 1896          | 1,505,799 |
| 10/17/2005         | 12/10/2005               | 1947         | 12/10/2005    | 1947          | 1,507,746 |
| 10/17/2005         | 12/11/2005               | 1916         | 12/11/2005    | 1916          | 1,509,662 |

\*Note: "LetterMailedByDate" column represents the data as stored in the database; the actual mailings can be broken into smaller groups.

*Handwritten signature and date:*  
 [Signature]  
 3/1/38  
 HSA

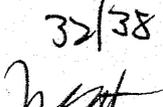
**EXHIBIT "B"**

**AUDIT LEVEL 1 ITEMS**

| <u>REPORT NUMBER</u> | <u>SMR</u> | <u>DESCRIPTION</u>                                                | <u>Version #</u> |
|----------------------|------------|-------------------------------------------------------------------|------------------|
| I 11                 | I36        | Incorrect Load Selected to be Applied                             | 4.04             |
| I 2                  | 095        | Incorrect Parasitic Drag Determination                            | 4.04             |
| I 8                  | FSR        | Incorrect Inertia set into the Controller of the Dynamometer      | 4.04             |
| I 9                  | FSR        | Dynamometer utilized default rather than actual dead weight value | 4.04             |
| I 53                 | 098        | OBD Test defaulted to ASM and did not ask about dyne-test safety  | 4.04             |
| I 65                 | 081        | OBD Test improperly defaulted to ASM on retest                    | 4.04             |
| L 3                  | 072        | Retest not conducted in same mode as original                     | 4.04             |
| L 61                 | 140        | Incorrect Gas audit results reported and/or stored                | 4.06             |
| L 78                 | FSR        | Gas Audit results – high level of audit failures                  | 4.04             |

**AUDIT LEVEL 2 ITEMS**

| <u>REPORT NUMBER</u> | <u>SMR</u> | <u>DESCRIPTION</u>                                                                              | <u>Version #</u>   |
|----------------------|------------|-------------------------------------------------------------------------------------------------|--------------------|
| I 33                 | I26        | GVWR can be changed/manipulated                                                                 | 4.04               |
| I 43                 | 078        | Inductive and cigarette lighter RPM pick ups did not work properly                              | 4.08               |
| I 44                 | 073        | OBD test system does not read or record diagnostic trouble codes properly                       | 4.04               |
| I 60                 | 048        | Iris capturing camera not working as specified                                                  | 4.08               |
| I 64                 | 080        | Potential for zero air cylinder manipulation (New valve to be introduced)                       | 4.07               |
| I 66                 | 082        | No floppy disk version of test not transferred to EDBMS                                         | 4.07               |
| I 79                 | 083        | Dyne coast down checks done improperly                                                          | 4.08               |
| I 81                 | 084        | Aborted ASM test does not work properly                                                         | Unscheduled        |
| I 92                 | 076        | Preconditioned TSI sequence is incorrect (New filters necessary prior to testing following BAR) | 5.01               |
| I 94                 | 089        | No entry limits in the Cal Valve entry screen                                                   | 4.07               |
| I 101                | 090        | Incorrect Time alignments                                                                       | 4.07               |
| I 116                |            | Snap-idle test results were questionable (No action required)                                   | Closed             |
| I 122                |            | Speed tolerances used during ASM test (Spec. Change made / No action required)                  | Closed             |
| J 20                 | 069c       | Codes used for "Dyno Non Testable Reason" (Spec. change made / No action required)              | 4.04 & 4.06        |
| J 21                 | 025        | Field "Abort Reason" is not always populated                                                    | 4.08               |
| K 2                  | 031        | Calibration audit results missing                                                               | 4.08               |
| K 9                  | 095        | Calculated parasitic drag field is always blank                                                 | 4.04               |
| L 4                  | 141-150    | BAR 97 Certification                                                                            | 4.06 & Unscheduled |
| L 29                 |            | Same license Plate shows for 3 VINs (No action necessary)                                       | Closed             |
| L 31                 |            | High Off Line testing rates                                                                     | 4.03               |

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| <u>REPORT NUMBER</u> | <u>SMR</u> | <u>DESCRIPTION</u>                                                           | <u>Version #</u> |
|----------------------|------------|------------------------------------------------------------------------------|------------------|
| L 32                 |            | High abort test rates (No action necessary / Trigger report)                 | 4.03             |
| L 40                 | 031        | Calibration records missing results                                          | 3.08             |
| L 66                 |            | AS-built CDAS specifications (No action necessary – Specs have been updated) | Closed           |
| L 67                 |            | Missing Information about CDAS software                                      | Closed           |
| L 70                 |            | CDAS software ATP                                                            | Closed           |
| L 71                 |            | Critical submissions not provided                                            | Closed           |
| L 74                 |            | CDAS ATP Plan                                                                | Closed           |
| L 81                 | 063        | Off Line tests periods                                                       | 5.01             |
| L 98                 | 101        | ASM 25/25 final cut point standards                                          | 4.05             |

AUDIT LEVEL 3 ITEMS

| <u>REPORT NUMBER</u> | <u>SMR</u> | <u>DESCRIPTION</u>                                                                            | <u>Version #</u> |
|----------------------|------------|-----------------------------------------------------------------------------------------------|------------------|
| I 3                  |            | Load cell calibration does not work in Cheshire unit                                          | 4.05             |
| I 4                  | N/A        | Video monitoring system                                                                       | 4.06             |
| I 5                  | 090        | ASM vehicle speed updates too slowly                                                          | 4.07             |
| I 15                 | FSR        | Video cameras have “active” light on top                                                      | 4.04             |
| I 20                 | FSR        | Slow connectivity at beginning of test                                                        | 4.05             |
| I 27                 | 107        | Gas audit tolerances                                                                          | Unscheduled      |
| I 36                 |            | Video help functionality not working                                                          | Unscheduled      |
| I 48                 | I31 & 081  | OBD failure reason missing                                                                    | 4.05             |
| I 49                 | N/A        | Data retrieval does not work at all                                                           | 4.05             |
| I 56                 |            | Opacity calibration values unclear                                                            | Closed           |
| I 62                 | 060        | Security switch on bench not working properly                                                 | 4.08             |
| I 68                 |            | Problems if exhaust line is “plugged up”                                                      | Unscheduled      |
| I 69                 | 053        | Training VIR needs correction                                                                 | 4.08             |
| I 70                 |            | Service Techs using the same ID/Password                                                      | Closed           |
| I 71                 |            | Temperature lockout feature                                                                   | Unscheduled      |
| I 74                 | 097        | VIN check digit check not performed properly                                                  | 4.07             |
| I 76                 | 109        | Prompt for use of cooling fan appears incorrectly                                             | Unscheduled      |
| I 77                 |            | Gas cap testing hardware is missing required filter                                           | Unscheduled      |
| I 80                 |            | Gas cap tester serial number not recorded                                                     | Unscheduled      |
| I 85                 | 087        | VIR for aborted test shows results                                                            | 4.08             |
| I 86                 |            | CDAS dynamometer issue (No action necessary; Spec. has been changed)                          | Closed           |
| I 88                 | OCX        | Communications error pertaining to MIL and readiness monitors                                 | 4.05             |
| I 89                 | 091        | ASM test with speed and dyno loading violations                                               | 4.07             |
| I 90                 |            | After abort of test, sample purge pump continues to run                                       | Unscheduled      |
| I 100                | 110        | Diesel snap test instructions                                                                 | Unscheduled      |
| I 102                |            | No listings of loadings for diesel vehicles (No action necessary’ Spec. change has been made) | Closed           |
| I 103                |            | Non-contact probe to inductive mode caused system lock-up                                     | Unscheduled      |

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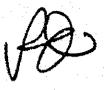
| <u>REPORT NUMBER</u> | <u>SMR</u> | <u>DESCRIPTION</u>                                             | <u>Version #</u> |
|----------------------|------------|----------------------------------------------------------------|------------------|
| I 105                | 138        | RPM limitation does not work                                   | Unscheduled      |
| I 107                |            | Switch to change station from high to low volume does not work | Unscheduled      |
| I 108                | 123        | OBD test attempted on Electric vehicle                         | 4.04             |
| I109                 |            | OBD test attempted on 2000 LPG vehicle                         | Spec Update      |
| I 110                | 076        | Idle sequence # 4                                              | 5.01             |
| I 111                | 076        | LMD instructions                                               | 5.01             |
| I 112                | 076        | LMD loading values                                             | 5.01             |
| I 113                | 076        | TSI procedures prompt                                          | 5.01             |
| I 114                | 076        | Idle sequence # 6                                              | 5.01             |
| I 115                | 076        | Idle sequence #7                                               | 5.01             |
| I 117                | 111        | Gross leak during hose leak check procedure                    | Unscheduled      |
| I 121                | 112        | GVWR recheck prompt missing                                    | Unscheduled      |
| I 123                |            | Excessive exhaust dilution procedure not working per spec.     | Unscheduled      |
| I 125                | 086/91     | ASM speed violations                                           | 4.07             |
| I 126                |            | Unsafe conditions and/or power failure abort                   | Unscheduled      |
| I 128                |            | LMD and Diesel Snap test instructions                          | Unscheduled      |
| I 131                |            | Communication log print function missing                       | Closed           |
| I 132                |            | ID and password entry allowed more than 3 times                | Unscheduled      |
| I 133                | 113        | Gas audit prompts                                              | Unscheduled      |
| I 134                |            | Lockout screen is missing lockout menu items                   | Unscheduled      |
| I 140                |            | CDAS Diagnostic Capabilities                                   | Unscheduled      |
| J 1                  | I27        | "DMV Match Indicated" field                                    | 4.04             |
| J 2                  | I27        | "Data Different From DMV" field                                | 4.04             |
| J 3                  |            | "Test Identification Number" field                             | Closed           |
| J 5                  | 121        | "License Plate Source" field                                   | Unscheduled      |
| J 6                  | 122        | "GVWR Source" field                                            | Unscheduled      |
| J 10                 |            | "PC MID" and "PIM Count" fields                                | Unscheduled      |
| J12                  |            | "TSI 2500 RPM Limit" field                                     | Spec Update      |
| J 13                 | 123        | "Polk Decode Successful" field                                 | Unscheduled      |
| J 14                 |            | "OBD II PID Code" fields                                       | Spec Update      |
| J 15                 |            | "OBD II PID Code" fields                                       | Spec Update      |
| J 16                 |            | "PCM Odometer" field                                           | Spec Update      |
| J 17                 | 045        | "DMV VIN" field                                                | 5.01             |
| J 18                 | 046        | "DMV License" field                                            | 5.01             |
| J 19                 | 047        | "DMV Plate Code" field                                         | 5.01             |
| J 22                 | 091        | "ASM Speed Violations" field is not always populated           | 4.07             |
| K 1                  |            | Calibration record number sequence and usage                   | Unscheduled      |
| K 3                  | 031        | Bench and NDUV bench serial numbers                            | 4.08             |
| K 4                  |            | Dynamometer serial number                                      | Unscheduled      |
| K 6                  |            | Base inertia value recorded incorrectly                        | Unscheduled      |
| K 7                  | 124        | Dead weight calibration number recorded incorrectly            | Unscheduled      |
| K 8                  | 125        | Measured dead weight value recorded incorrectly                | Unscheduled      |
| K 16                 | 095        | Missing parasitic determination data for coast down tests      | 4.04             |
| L 1                  | FSR        | Test Connectivity time                                         | 4.05             |
| L 2                  |            | Video monitoring system and images                             | Unscheduled      |
| L 13                 |            | Poor quality of video images                                   | Unscheduled      |

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| <u>REPORT NUMBER</u> | <u>SMR</u> | <u>DESCRIPTION</u>                                                                   | <u>Version #</u> |
|----------------------|------------|--------------------------------------------------------------------------------------|------------------|
| L 14                 |            | Video images could not be retrieved                                                  | Unscheduled      |
| L 18                 |            | Individual test records do not contain yes/no offline test indication                | 4.03             |
| L 34                 |            | Instructions for entering alpha characters or automatically converting to upper case | Unscheduled      |
| L 44                 | 031        | Calibration Record reports missing dynamometer serial numbers                        | 4.08             |
| L 45                 |            | Results in Detailed Calibration Record reports missing                               | Unscheduled      |
| L 57                 |            | Inconsistent information in Vehicle Repairs Details reports                          | Closed           |
| L 60                 | 031        | Bench serial number on CDAS Gas Audit Detail report incorrect                        | 4.08             |
| L 68                 |            | Failure rates variances                                                              | Closed           |
| L 69                 |            | CDAS Maintenance by Station                                                          | Unscheduled      |
| L 72                 | 070        | Repair Effectiveness Monitoring                                                      | 4.04             |
| L 75                 | OPS        | Customer Problem Resolution Plan – Monthly reports are deficient                     | Unscheduled      |
| L 80                 |            | OBD Test Data Problems                                                               | Unscheduled      |
| L 95                 |            | Repair Data Entry                                                                    | Unscheduled      |

**AUDIT LEVEL 4 ITEMS**

| <u>REPORT NUMBER</u> | <u>SMR</u> | <u>DESCRIPTION</u>                                                   | <u>Version #</u> |
|----------------------|------------|----------------------------------------------------------------------|------------------|
| L 89                 | 092        | Engine Displacement Entries                                          | 4.07             |
| I 10                 |            | Dynamometer failed dead weight calibration                           | Unscheduled      |
| I 12                 |            | OBD cable length                                                     | Closed           |
| I 17                 |            | System does not back purge after each ASM test                       | Unscheduled      |
| I 19                 |            | Software does not remove second probe during single exhaust test     | Unscheduled      |
| I 21                 |            | Bar code reader read bar code incorrectly                            | Unscheduled      |
| I 29                 | 114        | Prompt to lower lift and stabilize vehicle is missing                | Unscheduled      |
| I 34                 | 118        | Zero air cylinders                                                   | Unscheduled      |
| I 38                 | 119        | VIR message regarding inspector's signature                          | Unscheduled      |
| I 39                 | 031        | Status screen does not indicate pass/fail status of last calibration | 4.08             |
| I 42                 |            | Labels "Cal 1" and "Cal 2" are missing from back of analyzer         | Closed           |
| I 50                 |            | "Q" appears before the VIN                                           | Unscheduled      |
| I 54                 | 035        | Operator not informed of printer malfunction                         | Unscheduled      |
| I 57                 |            | Prompt to install filter before calibration measurement is missing   | Unscheduled      |
| I 59                 | 037        | "Shutdown" button on main screen does not work                       | Unscheduled      |
| I 61                 | I41        | OBD test performed while bench warm-up done                          | 4.04             |
| I 67                 | 128        | Inspection menu item identification                                  | Unscheduled      |
| I 72                 |            | Weather Station data                                                 | Unscheduled      |
| I 73                 |            | Test results display screen is missing                               | Unscheduled      |

  
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| <u>REPORT NUMBER</u> | <u>SMR</u> | <u>DESCRIPTION</u>                                                                | <u>Version #</u>          |
|----------------------|------------|-----------------------------------------------------------------------------------|---------------------------|
| I 75                 |            | Prompt for second hose is missing-single to dual exhaust                          | Unscheduled               |
| I 78                 |            | ASM test time is not displayed                                                    | Unscheduled               |
| I 91                 |            | Model year cannot be corrected                                                    | Unscheduled               |
| I 106                | 139        | Missing text message when reprinting a VIR                                        | Unscheduled               |
| I 118                |            | Opacity filter not as described in CDAS specifications                            | Unscheduled               |
| I 119                |            | Floppy disks not storing offline test data                                        | Unscheduled               |
| I 120                |            | Print screen conflicts with CDAS specification                                    | Unscheduled               |
| I 124                |            | ASM dyno loading error did not properly abort                                     | Unscheduled               |
| I 129                | 131        | Warnings missing during oxygen sensor malfunction                                 | Unscheduled               |
| I 130                | 132        | Correct operator instructions not given following bench calibration failures      | Unscheduled               |
| I 135                |            | . XML format used rather than ASCII format with floppy drive                      | Unscheduled               |
| I 138                |            | Incorrect data on VIR regarding gas cap test results                              | Spec update & Unscheduled |
| I 142                |            | Multiple fields in VIR Content Definition document not used                       | Unscheduled               |
| J 4                  |            | "Old Sticker Date" field                                                          | Unscheduled               |
| J 7                  | 133        | "Fuel Cap Replaced During Test Cap 1" field                                       | Unscheduled               |
| J 8                  |            | "OBD II Test Flag" field                                                          | Unscheduled               |
| J 9                  |            | "OBD II Model Year Retest" field                                                  | Unscheduled               |
| J 11                 |            | "OBD II Advisory Pass" field                                                      | Unscheduled               |
| K 10                 | 031        | Gas Cap tester serial number                                                      | 4.08                      |
| K 11                 | 031        | Opacity meter serial number is missing                                            | 4.08                      |
| K 12                 |            | CDAS and EDBMS record date and time stamp is the only recorded date               | Unscheduled               |
| K 15                 |            | Calibration record missing fields                                                 | Unscheduled               |
| L 6                  |            | Other documentation is missing and inconsistent in some cases                     | EDBMS                     |
| L 15                 |            | ASM test results for SBS data could not be retrieved                              | Unscheduled               |
| L 17                 |            | DCF values in SBS files aren't rounded properly                                   | Unscheduled               |
| L 24                 |            | Incorrect Abort record                                                            | Unscheduled               |
| L 43                 | 031        | Gas cap tester cal records contained incorrect bench serial numbers(Dupe of K-10) | 4.08                      |
| L 46                 | 031        | Results missing from dynamometer calcs fields (Dupe of K-11)                      | 4.08                      |
| L 47                 |            | CDAS lockout should occur after a certain number of consecutive failed calcs      | Unscheduled               |
| L 58                 | 070        | Vehicle Repair Details reports show inconsistent data                             | Unscheduled               |
| L 65                 |            | No tracking system for EDBMS response times                                       | EDBMS                     |

  
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**EXHIBIT C**

**SPECIAL RELEASE**

TO ALL WHOM THESE PRESENTS SHALL COME OR MAY CONCERN,

Greeting: Know Ye, AGBAR TECHNOLOGIES, INC. ("Agbar") for and in consideration of payment in the sum of One Dollar (\$1.00) and other valuable consideration paid to Agbar by THE STATE OF CONNECTICUT (the "State"), the receipt whereof is hereby acknowledged, has remised, released and forever discharged and by these Presents does for its subsidiaries, affiliates, agents, employees, executors and administrators, heirs, successors and assigns, remise, release and forever discharge the State, its subsidiaries, affiliates, agents, employees, executors and administrators, heirs, successors and assigns, of and from any and all claims, in law or in equity, which against the State, Agbar ever had from the beginning of time, to October 8, 2004, for any reason whatsoever, including without limitation, any and all claims set forth in the matter currently pending in the Judicial District of Hartford at Hartford, Connecticut, captioned as Agbar Technologies, Inc. v. State of Connecticut Department of Motor Vehicles and Gary J. DeFilippo, Commissioner of State of Connecticut Department of Motor Vehicles, Docket Number CV 04 0833698 S, except such claims as may be asserted by Agbar's Station Subcontractors as defined in the Contract as amended between the State and Agbar, arising from or related to the suspension of the testing of the Department of Motor Vehicle's Vehicle Inspection Program from April 22, 2004, through October 8, 2004 for which the State reserves all of its rights and defenses, including but not limited to, the defense of sovereign immunity.

It is further agreed that this Special Release expresses a full and complete resolution of a liability claimed and denied, regardless of the adequacy of the aforesaid payment made, and that said payment and the acceptance of this Special Release shall not operate as an admission of liability on the part of anyone.

In all references herein to any parties, persons, entities or corporations the use of any particular gender or the plural or singular number is intended to include the appropriate gender or number as the text of the within instrument may require.

IN WITNESS WHEREOF, AGBAR TECHNOLOGIES, INC., by Mr. STOCK, its duly authorized (title) EXECUTIVE VP, makes solemn oath as to the truth of the contents of the foregoing instrument and sets its and his hand and seal this 8 day of OCTOBER, 2004.

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Lislessa Mitchell  
WITNESS

AGBAR TECHNOLOGIES, INC.,

Ronda C. McAlary  
WITNESS

By: [Signature]  
Mr. STUCK, (title) EXECUTIVE V.P.  
Duly Authorized

STATE OF COLORADO

:

ss: Denver, Colorado

COUNTY OF Denver

:

Personally appeared Mr. STUCK, signer and sealer of the foregoing instrument, personally known to me, who swore and made solemn oath as to the truth of the contents of the foregoing instrument and acknowledged that he, as (title) Exec V.P. of AGBAR TECHNOLOGIES, INC., is duly authorized to execute said instrument and further acknowledged the same to be his free act and deed and the free act and deed of AGBAR TECHNOLOGIES, INC., before me this 08 day of OCT, 2004.

Ronda C McAlary  
Notary Public/Commissioner Superior Court  
My Commission expires: 11/13/2004



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## **Appendix 2**

### State of Connecticut

Connecticut Statutory Authority for I/M Program and  
Connecticut I/M Regulations (DEP/DMV)

**CHAPTER 246a**  
**MOTOR VEHICLE EMISSIONS**

**Sec. 14-164c. (Formerly Sec. 14-100c). Motor vehicle emissions systems. Emissions standards and inspections. Inspection facilities. Fees. Penalty.** (a) No person shall fail to maintain in good working order or remove, dismantle or otherwise cause to be inoperative any equipment or feature constituting an operational element of the air pollution control system or mechanism of a motor vehicle required by regulations of the Commissioner of Environmental Protection to be maintained or on the vehicle. Any such failure to maintain in good working order or removal, dismantling or causing of inoperability shall subject the owner thereof to revocation of registration for such vehicle by the Commissioner of Motor Vehicles unless all parts and equipment constituting elements of air pollution control have been made operable and in good working order within thirty days of notice by said commissioner of such violation. Any such failure shall be considered a failure to comply with the periodic inspection requirements established under subsection (c) of this section. As used in this section, motor vehicle shall have the same meaning as is provided in section 14-1.

(b) The Commissioner of Environmental Protection shall consult with the Commissioner of Motor Vehicles and furnish the commissioner with technical information, including testing techniques, standards and instructions for emission control features and equipment. The Commissioner of Environmental Protection shall furnish the Commissioner of Motor Vehicles with emission standards for all motor vehicles subject to the inspection and maintenance requirements. Such standards shall be consistent with provisions of federal law, if any, relating to control of emissions from the vehicles concerned or any regulations adopted by the Commissioner of Environmental Protection which implement the low-emission vehicle and clean fuels regulations adopted by the state of California, as amended. Such standards shall be periodically reviewed by the Commissioner of Environmental Protection and revised, if necessary, to achieve the objectives of the vehicle emission inspection program.

(c) The commissioner shall adopt regulations, in accordance with chapter 54, to implement the provisions of this section. Such regulations shall include provision for a periodic inspection of air pollution control equipment and compliance with or waiver of exhaust emission standards or compliance with or waiver of on-board diagnostic standards or other standards defined by the Commissioner of Environmental Protection and approved by the Administrator of the United States Environmental Protection Agency, compliance with or waiver of, air pollution control system integrity standards defined by the Commissioner of Environmental Protection and compliance with or waiver of purge system standards defined by the Commissioner of Environmental Protection. Such regulations may provide for an inspection procedure using an on-board diagnostic information system for all 1996 model year and newer motor vehicles. Such regulations shall apply to all motor vehicles registered or which will be registered in this state except: (1) Vehicles having a gross weight of more than ten thousand pounds; (2) vehicles powered by electricity; (3) bicycles with motors attached; (4) motorcycles; (5) vehicles operating with a temporary registration; (6) vehicles manufactured twenty-five

or more years ago; (7) new vehicles at the time of initial registration; (8) vehicles registered but not designed primarily for highway use; (9) farm vehicles, as defined in subsection (q) of section 14-49; (10) antique, rare or special interest motor vehicles, as defined in section 14-1; (11) diesel-powered type II school buses; or (12) a vehicle operated by a licensed dealer or repairer either to or from a location of the purchase or sale of such vehicle or for the purpose of obtaining an official emissions or safety inspection. On and after July 1, 2002, such regulations shall exempt from the periodic inspection requirement any vehicle four or less model years of age, beginning with model year 2003 and the previous three model years, provided that such exemption shall lapse upon a finding by the Administrator of the United States Environmental Protection Agency or by the Secretary of the United States Department of Transportation that such exemption causes the state to violate applicable federal environmental or transportation planning requirements. Notwithstanding any provisions of this subsection, the commissioner may require an initial emissions inspection and compliance or waiver prior to registration of a new motor vehicle. If the Commissioner of Environmental Protection finds that it is necessary to inspect motor vehicles which are exempt under subdivision (1) or (4) of this subsection, or motor vehicles that are four or less model years of age in order to achieve compliance with federal law concerning emission reduction requirements, the Commissioner of Motor Vehicles may adopt regulations, in accordance with the provisions of chapter 54, to require the inspection of motorcycles, designated motor vehicles having a gross weight of more than ten thousand pounds or motor vehicles four or less model years of age.

(d) No motor vehicle subject to the inspection requirements of this section shall be operated upon the highways of this state unless such vehicle has been presented for inspection in accordance with a schedule for inspection and compliance as established by the commissioner. The commissioner shall grant waivers from compliance with standards for vehicles which fail any required inspection and require an unreasonable cost of repair to bring the vehicle into compliance. The commissioner may determine compliance of a vehicle that has failed an emissions retest by means of a complete physical and functional diagnosis and inspection of the vehicle, in accordance with the provisions of 40 CFR Part 51.360, showing that no additional emissions-related repairs are needed. An extension of time, not to exceed the period of inspection frequency, may be granted to obtain needed repairs on a vehicle in the case of economic hardship of the owner. Only one such extension may be granted for any vehicle. The commissioner may design a sticker to be affixed to the windshield of each vehicle which shall bear the date of expiration of the assigned inspection period on both sides. The commissioner may also design a sticker to be affixed to the windshield of each vehicle that is exempt from the requirements of this chapter, which sticker shall bear the date, if any, on which such vehicle is no longer exempt and is required to be presented for inspection. As used in this section, "unreasonable cost of repair" means cost of repair in excess of the amounts required to be expended by Title 40, Part 51.360 of the Code of Federal Regulations, as amended.

(e) In order to provide for emissions inspection facilities, the commissioner may enter into a negotiated inspection agreement or agreements, notwithstanding chapters 50, 58, 59 and 60, with an independent contractor or contractors, to provide for the leasing, construction, equipping, maintenance or operation of a system of official emissions

inspection stations in such numbers and locations as may be required to provide vehicle owners reasonably convenient access to inspection facilities. The commissioner may employ such system and the services of such contractor or contractors to conduct safety inspections as provided by section 14-16a, subsection (g) of section 14-12 and section 14-103a. Such contractor or contractors, with the approval of the commissioner, may operate inspection stations at suitable locations owned or operated by other persons, firms or corporations, including retail business establishments with adequate facilities to accommodate and to perform inspections on motor vehicles. The commissioner is prohibited from entering into an inspection agreement with any independent contractor who: (1) Is engaged in the business of maintaining or repairing vehicles in this state, except that the independent contractor shall not be precluded from maintaining or repairing any vehicle owned or operated by the independent contractor; or (2) does not have the capability, resources or technical and management skill to adequately conduct, equip, operate and maintain a sufficient number of official emissions inspection stations. All persons employed by the independent contractor in the performance of an inspection agreement are deemed to be employees of the independent contractor and not of this state. The inspection agreement or agreements authorized by this section shall be subject to other provisions as follows: (A) Minimum requirements for staff, equipment, management and hours and place of operation of official emissions inspection stations including such additional testing facilities as may be established and operated in accordance with subsection (g) of this section; (B) reports and documentation concerning the operation of official emissions inspection stations and additional testing facilities as the commissioner may require; (C) surveillance privileges for the commissioner to ensure compliance with standards, procedures, rules, regulations and laws; and (D) any other provision deemed necessary by the commissioner for the administration of the inspection agreement. Nothing in the inspection agreement shall require the state to purchase any asset or assume any liability if such agreement is not renewed.

(f) (1) The commissioner may authorize and appoint any motor vehicle dealer or repairer that is licensed in accordance with the provisions of subpart (D) of part III of chapter 246 and that has the qualifications established by the commissioner to conduct emissions inspections in a designated area of its licensed premises and to report the results thereof to the Department of Motor Vehicles, provided such licensee signs a statement that such licensee understands the provisions of this section and regulations adopted under authority of this section, understands the necessity to comply with administrative and technical directives and advisories that the commissioner issues and understands that any failure by such licensee to comply with this section, the regulations or the directives or advisories constitutes grounds for the commissioner to suspend or revoke the authority for such licensee to conduct inspections.

(2) Each such licensee shall conduct an emissions inspection of any registered motor vehicle requiring such an inspection at any time during its normal and posted hours of operation or, at the discretion of the commissioner, at a predetermined or appointed time, when such motor vehicle is presented for inspection. No such licensee shall charge any fee for the inspection except the fee authorized by subsection (k) of this section. The results of each emissions inspection performed in accordance with this subsection shall be evidenced by a written vehicle inspection report, containing such information and

certification by the inspecting licensee as the commissioner shall prescribe. The licensee shall furnish a copy of such inspection report to the operator of the motor vehicle at the time of completion of the inspection.

(3) No such licensee may be appointed by the commissioner nor may any such licensee conduct any inspection unless the licensee has in its employ one or more certified emissions inspectors and repair technicians. Such inspectors and technicians shall conduct all inspections and related emissions repair work and shall meet the training and certification requirements in 40 CFR Part 51.367 and of the regulations adopted by the commissioner in accordance with this subsection.

(4) The commissioner may suspend or revoke the authority to conduct emissions inspections by any such licensee that is authorized to conduct emissions inspections if the licensee fails to comply with the provisions of this section, regulations adopted under authority of this section, or administrative or technical directives or advisories that the commissioner issues.

(5) The commissioner shall adopt regulations, in accordance with chapter 54, to establish the qualifications for such licensees to be authorized and appointed to conduct emissions inspections, and to establish standards and procedures for such inspections, reporting requirements by such licensees and training and certification requirements for inspectors and repair technicians.

(g) The independent contractor or contractors retained by the state in accordance with the provisions of subsection (e) of this section may conduct emissions inspections at one or more facilities owned or operated by a motor vehicle dealer or dealers, licensed in accordance with section 14-52. No such inspection facility located on the premises of a licensed dealer shall be operated without the prior approval of the commissioner. The operation of each such facility shall be subject to such procedures and requirements, to be followed by the contractor and the licensee, as may be prescribed by the terms and conditions of the contract entered into in accordance with the provisions of subsection (e) of this section, and in regulations as may be adopted by the commissioner in accordance with chapter 54. The state shall not be a party to, or assume or incur any liability of any kind under, any agreement entered into between the independent contractor and any dealer in furtherance of the provisions of this subsection. The contract or contracts entered into by the state in accordance with the provisions of subsection (e) of this section shall provide for indemnification of the state with respect to the operation of any such inspection facility located at a motor vehicle dealership, in the same manner and to the same extent as the operation of an official emissions inspection station.

(h) In order to provide for management and oversight of emissions inspection facilities established in accordance with subsection (e) of this section and to establish and maintain necessary electronic data capture and reporting systems for such facilities and for licensed dealers and repairers who may be authorized to perform inspections in accordance with the provisions of subsection (f) of this section, the commissioner may enter into a negotiated personal service agreement or agreements, in accordance with the provisions of chapter 55a, with any qualified person, firm or corporation. The

responsibilities of any such contractor retained by the commissioner shall include, but need not be limited to, the following: (1) Review and analysis of data from all official emissions inspections performed, and provision to the commissioner of recommendations to improve the quality and integrity of such data, (2) provision of program information and standards to inspection facilities and locations, (3) provision to the commissioner of regular reports, assessments and recommendations to maintain or improve the effectiveness, efficiency, quality and integrity of such inspection operations, and (4) identification of measures to enhance public convenience, and compliance with the inspection requirements. No such contractor retained in accordance with the provisions of this subsection may be licensed as, or have any financial interest in any firm engaged in the business of selling or repairing motor vehicles, or may be a provider of emissions inspection equipment or facilities to the state.

(i) The commissioner may license an owner or operator of a fleet of motor vehicles which are subject to emissions inspection pursuant to subsection (c) of this section or section 14-164i, to establish a fleet emissions inspection station, provided that the fleet owner or operator conforms with regulations for fleet emissions inspection stations adopted by the commissioner which shall specify the classes or other characteristics of vehicles eligible for inspection at such stations.

(j) The commissioner may establish a program for the on-road testing of motor vehicles subject to this chapter. The program shall test not less than one-half of one per cent of the subject fleet state-wide or twenty thousand vehicles, whichever is less, per inspection cycle under conditions of highway operation in order to provide information concerning the emission performance of such in-use vehicles. Testing may be performed by means of remote sensing devices, or roadside pullovers followed by tailpipe emissions testing using a suitable, portable device and recording system. Owners of vehicles that have previously been through scheduled periodic inspection and passed, and are found by on-road testing to be high emitters, in accordance with the standards established under subsection (b) of this section and the regulations adopted under subsection (c) of this section, may be notified that their vehicles are required to pass an out-of-cycle follow-up inspection at an inspection station. Notification may be made by mailing in the case of remote sensing on-road testing or through immediate notification if roadside pullovers are used. The commissioner may use the services of the independent contractor or contractors to implement the on-road testing program. If a method of roadside pullovers is used in the program, such method shall be employed with due regard to traffic safety considerations and performed with the assistance of inspectors of the Department of Motor Vehicles or members of state or municipal police forces.

(k) (1) The commissioner, with approval of the Secretary of the Office of Policy and Management, shall establish, and from time to time modify, the inspection fees, not to exceed ten dollars per annual inspection or twenty dollars for each biennial inspection or reinspection required pursuant to this chapter for inspections performed at official emissions inspection stations. Such fees shall be paid in a manner prescribed by the commissioner. If the costs to the state of the emissions inspection program, including administrative costs and payments to any independent contractor, exceed the income from such fees, such excess costs shall be borne by the state. Any person whose vehicle

has been inspected at an official emissions inspection station shall, if such vehicle is found not to comply with any required standards, have the vehicle repaired and have the right within thirty consecutive calendar days to return such vehicle to the same official emissions inspection station for one reinspection without charge, provided, where the thirtieth day falls on a Sunday, legal holiday or a day on which the commissioner has established that special circumstances or conditions exist that have caused emissions inspection to be impracticable, such person may return such vehicle for reinspection on the next day. The commissioner shall assess a late fee of twenty dollars for the emissions inspection of a motor vehicle performed at an official emissions inspection station later than thirty days after the expiration date of the assigned inspection period provided the commissioner may waive such late fee when it is proven to the commissioner's satisfaction that the failure to have the vehicle inspected within thirty days of the assigned inspection period was due to exigent circumstances. If ownership of the motor vehicle has been transferred subsequent to the expiration date of the assigned inspection period and the new owner has such motor vehicle inspected within thirty days of the registration of such motor vehicle, the commissioner shall waive the late fee. If the thirtieth day falls on a Sunday, legal holiday or a day on which the commissioner has established that special circumstances or conditions exist that have caused emissions inspection to be impracticable, such vehicle may be inspected on the next day and no late fee shall be assessed.

(2) If the commissioner authorizes a licensed dealer or repairer to conduct emissions inspections of 1996 model year and newer vehicles required by this chapter, the commissioner may authorize such licensee to charge a fee, not to exceed twenty dollars for each biennial inspection or reinspection.

(3) Upon the registration of each new motor vehicle subject to the inspection requirements of this chapter, or of each motor vehicle that is four or less model years of age that has not been registered previously in this state, the commissioner may issue a sticker indicating the exempt status of such motor vehicle and the date on which the motor vehicle is scheduled to be presented for inspection. Any such sticker that may be issued shall be displayed on the motor vehicle in accordance with subsection (d) of this section. On and after July 1, 2002, the commissioner shall charge a fee of forty dollars in addition to any other fees required for such registration. All receipts from the payment of such fee shall be deposited in the Special Transportation Fund.

(l) The commissioner may acquire in the name of the state by purchase, lease, gift, devise or otherwise any special equipment, tools, materials or facilities needed to adequately administer, investigate or enforce the provisions of this chapter.

(m) A person shall not in any manner represent any place to be an official emissions inspection station unless such station has been established and is operated in accordance with the provisions of this section.

(n) No person, firm or corporation shall operate or allow to be operated any motor vehicle that has not been inspected and found to be in compliance with the provisions of subsections (c), (d) and (i) of this section and the regulations adopted by the

commissioner. Operation in violation of said subsections or the regulations adopted by the commissioner shall be an infraction for each violation, except that the fine for a first violation shall be thirty-five dollars. The commissioner may deny the issuance of registration to the owner of a motor vehicle, or the renewal of registration to any such owner, or suspend or revoke any registration that has been issued, if such motor vehicle is not in compliance with the inspection requirements of this chapter, or such owner has failed to pay any fee required by the provisions of this chapter.

**CHAPTER 246a**  
**MOTOR VEHICLE EMISSIONS**

**Public Act No. 07-167: Sec. 35. Subsection (c) of section 14-164c of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2007*):**

(c) The commissioner shall adopt regulations, in accordance with chapter 54, to implement the provisions of this section. Such regulations shall include provision for a periodic inspection of air pollution control equipment and compliance with or waiver of exhaust emission standards or compliance with or waiver of on-board diagnostic standards or other standards defined by the Commissioner of Environmental Protection and approved by the Administrator of the United States Environmental Protection Agency, compliance with or waiver of, air pollution control system integrity standards defined by the Commissioner of Environmental Protection and compliance with or waiver of purge system standards defined by the Commissioner of Environmental Protection. Such regulations may provide for an inspection procedure using an on-board diagnostic information system for all 1996 model year and newer motor vehicles. Such regulations shall apply to all motor vehicles registered or which will be registered in this state except: (1) Vehicles having a gross weight of more than ten thousand pounds; (2) vehicles powered by electricity; (3) bicycles with motors attached; (4) motorcycles; (5) vehicles operating with a temporary registration; (6) vehicles manufactured twenty-five or more years ago; (7) new vehicles at the time of initial registration; (8) vehicles registered but not designed primarily for highway use; (9) farm vehicles, as defined in subsection (q) of section 14-49; (10) dieselpowered type II school buses; [or] (11) a vehicle operated by a licensed dealer or repairer either to or from a location of the purchase or sale of such vehicle or for the purpose of obtaining an official emissions or safety inspection; or (12) vehicles that have met the inspection requirements of section 14-103a and are registered by the commissioner as composite vehicles. On and after July 1, 2002, such regulations shall exempt from the periodic inspection requirement any vehicle four or less model years of age, beginning with model year 2003 and the previous three model years, provided that such exemption shall lapse upon a finding by the Administrator of the United States Environmental Protection Agency or by the Secretary of the United States Department of Transportation that such exemption causes the state to violate applicable federal environmental or transportation planning requirements. Notwithstanding any provisions of this subsection, the commissioner may require an initial emissions inspection and compliance or waiver prior to registration of a new motor vehicle. If the Commissioner of Environmental Protection finds that it is necessary to inspect motor vehicles which are exempt under subdivision (1) or (4) of this subsection, or motor vehicles that are four or less model years of age in order to achieve compliance with federal law concerning emission reduction requirements, the Commissioner of Motor Vehicles may adopt regulations, in accordance with the provisions of chapter 54, to require the inspection of motorcycles, designated motor vehicles having a gross weight of more than ten thousand pounds or motor vehicles four or less model years of age.

**CHAPTER 246\***  
**MOTOR VEHICLES**

**Sec. 14-49b. Registration renewal fee.** (a) For each new registration or renewal of registration of any motor vehicle with the Commissioner of Motor Vehicles pursuant to this chapter, the person registering such vehicle shall pay to the commissioner a fee of ten dollars for registration for a biennial period and five dollars for registration for an annual period, except that any individual who is sixty-five years of age or older on or after January 1, 1994, may, at the discretion of such individual, pay the fee for either a one-year or two-year period. The provisions of this section shall not apply with respect to any motor vehicle which is not self-propelled, which is electrically powered, or which is exempted from payment of a registration fee. This fee may be identified as the "federal Clean Air Act fee" on any registration form provided by the commissioner. Payments collected pursuant to the provisions of this section shall be deposited as follows: (1) Fifty-seven and one-half per cent of such payments collected shall be deposited into the Special Transportation Fund established pursuant to section 13b-68, and (2) forty-two and one-half per cent of such payments collected shall be deposited in a treasurer's account and credited to a separate, nonlapsing federal Clean Air Act account which shall be established by the Comptroller within the General Fund. The federal Clean Air Act account may be used to pay any costs to state agencies of implementing the requirements of the federal Clean Air Act Amendments of 1990 that are not otherwise met by the fees collected pursuant to section 22a-174 and any funds transferred to the account pursuant to section 22a-27m may additionally be used by the Commissioner of Environmental Protection to carry out the provisions of chapter 446c. All moneys deposited in this account are deemed to be appropriated for this purpose. The fee required by this section is in addition to any other fees prescribed by any other provision of this title for the registration of a motor vehicle.

(b) The Commissioner of Environmental Protection, in consultation with the Commissioner of Motor Vehicles, shall annually, within ninety days prior to the beginning of the next ensuing fiscal year, submit to the Secretary of the Office of Policy and Management an annual operating budget for the federal Clean Air Act account, providing for the operation of programs to implement the federal Clean Air Act Amendments of 1990, to the extent that the payment of such costs has not otherwise been adequately provided for. Such annual operating budget shall include an estimate of revenues from the fees and charges fixed by law, and from any and all other sources, to meet the estimated expenditures of the federal Clean Air Act account for such fiscal year. Within thirty days prior to the first day of such fiscal year the Secretary of the Office of Policy and Management shall approve said annual operating budget, with such changes, amendments, additions and deletions as shall be agreed upon prior to that date by the Commissioner of Environmental Protection and the Secretary of the Office of Policy and Management.

## NOTE

**This document contains the Connecticut regulations for the abatement of air pollution with the recently adopted revisions to the regulations that became effective August 25, 2004. This document was prepared by the State of Connecticut Department of Environmental Protection and is provided for the convenience of the reader. This is not the official version of the regulations. The official regulations are published by the State of Connecticut, Judicial Branch, Commission on Official Legal Publications in the Connecticut Law Journal. Official legal publications may be obtained from the Commission on Official Legal Publications, 111 Phoenix Ave Enfield, CT 06082 (telephone: (860) 741-3027, or [www.jud.state.ct.us/colp/ColpDefault.htm](http://www.jud.state.ct.us/colp/ColpDefault.htm)). In the event there is an inconsistency between this document and the regulations as published in the Connecticut Law Journal, the Connecticut Law Journal will serve as the official version.**

Section 22a-174-27 of the Regulations of Connecticut State Agencies is amended to read as follows:

**Sec. 22a-174-27. Emission standards and on-board diagnostic II test requirements for periodic motor vehicle inspection and maintenance.**

**(a) Applicability.**

This section shall apply to any owner or operator of a 1979 and later model year motor vehicle that is not an antique, rare or special interest motor vehicle as defined in section 14-1 of the Connecticut General Statutes. This section shall not apply to motor vehicles that are exempt from the periodic air pollution control system inspection and maintenance requirements pursuant to subsection (c) of section 14-164c of the Connecticut General Statutes.

**(b) Definitions.** As used in this section:

- (1) "ASM 2525" or "Acceleration Simulation Mode Test" means an emissions test to analyze exhaust emissions of CO, NO, and HC performed at a steady state of twenty-five (25) miles per hour (mph) and utilizing a dynamometer load set to simulate twenty-five (25%) of the power required to accelerate the particular vehicle being tested at 3.3 mph per second until a speed of twenty-five (25) mph is attained;
- (2) "CO" means carbon monoxide;
- (3) "Composite Motor Vehicle" means a vehicle that is designated "COMP" or "COMPO" in the "make" field of an applicable Connecticut motor vehicle registration certificate;
- (4) "Gross Vehicle Weight Rating" or "GVWR" means the value specified by the manufacturer as the maximum loaded weight of a single or a combination (articulated) vehicle, or its registered gross weight, whichever is greater. The GVWR of a combination (articulated) vehicle commonly referred to as the "Gross Combination Weight Rating" or GCWR is the GVWR of the power unit plus the GVWR of the towed unit or units;
- (5) "HC" means hydrocarbon;
- (6) "Heavy-duty gasoline powered vehicle" means any motor vehicle fueled by gasoline that is rated at greater than eight thousand five hundred (8500) pounds GVWR and less than or equal to ten thousand (10,000) pounds GVWR;
- (7) "Light-duty truck" or "LDT" means a motor vehicle rated at eight thousand five hundred (8500) pounds GVWR or less and is designed:

- (A) To transport property or ten (10) or more persons, not including the operator; or
  - (B) With features enabling off-street or off-highway operation and use;
- (8) "Light-duty vehicle" or "LDV" means a motor vehicle that is designed:
- (A) To carry not more than ten (10) persons, including the operator; and
  - (B) To transport persons and their property with at least fifty percent (50%) of the total area enclosed by the outermost body contour lines, excluding the area enclosing the engine;
- (9) "Loaded opacity test procedure" means an analysis of exhaust opacity measured by an opacity meter and utilizing a dynamometer load;
- (10) "Loaded vehicle weight" or "LVW" means vehicle curb weight plus three hundred (300) pounds;
- (11) "Model year" means a motor vehicle manufacturer's annual production period that includes January 1 of such calendar year or, if the manufacturer has no annual production period, the production period that includes January 1 of such year;
- (12) "Modified snap-acceleration smoke opacity test procedure" means an analysis of exhaust opacity in accordance with a variant of the "snap-acceleration smoke opacity test" defined in section 14-164i-1 of the Regulations of Connecticut State Agencies;
- (13) "NO" means nitric oxide;
- (14) "On-board diagnostic II system" or "OBD II system" means a computerized self-diagnostic system in a LDV or LDT that registers faults indicating malfunctions and deteriorations of the LDV's OR LDT's exhaust and evaporative emission control components;
- (15) "Pre-conditioned two speed idle test procedure" means an analysis of exhaust emissions concentrations of CO, in percent by volume (VOL. %), and HC, in parts per million (ppm); and
- (16) "Vehicle curb weight" is defined as in 40 CFR 86.082-2.
- (c) **Emission standards.**

- (l) Pre-conditioned two speed idle test standards shall be as follows:
  - (A) Maximum allowable emissions for any light-duty truck or light-duty vehicle subject to a pre-conditioned two speed idle test procedure administered by the commissioner of motor vehicles or his designee shall be as identified per vehicle model year in Table 27-1; and

Table 27-1. Pre-conditioned two speed idle test standards for light-duty trucks and light-duty vehicles.

| Vehicle Model Year | CO (Vol. %) | HC (ppm) |
|--------------------|-------------|----------|
| 1979               | 3.00        | 600      |
| 1980               | 3.00        | 600      |
| 1981 and later     | 1.20        | 220      |

- (B) Maximum allowable emissions for any heavy-duty gasoline powered vehicle subject to a pre-conditioned two speed idle test procedure administered by the commissioner of motor vehicles or his designee shall be as identified per vehicle model year in Table 27-2.

Table 27-2. Pre-conditioned two speed idle test standards for heavy-duty gasoline powered vehicles.

| Vehicle Model Year | CO (VOL. %) | HC (ppm) |
|--------------------|-------------|----------|
| 1980 and earlier   | 3.0         | 600      |
| 1981 through 1987  | 1.6         | 450      |
| 1988 and later     | 1.6         | 300      |

- (2) ASM 2525 exhaust emission standards. Maximum allowable emissions for any vehicle subject to an ASM 2525 exhaust emission test administered by the Commissioner of Motor Vehicles or a designee of the Commissioner of Motor Vehicles shall be as published by the United States Environmental Protection Agency in subdivisions (a)(2) and (a)(3) of section 85.1 of the "Acceleration Simulation Mode Test Procedures, Emission Standards, Quality Control Requirements, and Equipment Specifications," Final Technical Guidance, EPA420-B-03-008 (October 2003).

(3) Loaded opacity test standards. Maximum allowable visible emissions for diesel powered LDVs and LDTs of model years 1979 and later subject to a loaded opacity test procedure administered by the commissioner of motor vehicles or his designee, shall be twenty percent (20%) particulate opacity.

(4) Modified snap-acceleration smoke opacity test standards. Maximum allowable visible emissions for any diesel powered vehicle subject to a modified snap-acceleration smoke opacity test procedure administered by the commissioner of motor vehicles or his designee shall be as specified in section 14-164i-2 of the Regulations of Connecticut State Agencies.

**(d) Undetermined GVWR.** Where the gross vehicle weight rating cannot be determined, the emission standard for LDVs shall apply.

**(e) Composite motor vehicles.** For 2005 and earlier model year composite motor vehicles, the maximum allowable emissions shall be 4.0 VOL. % CO and 800 ppm HC. For 2006 and later model year composite motor vehicles, the maximum allowable emissions shall be 1.2 VOL. % CO and 220 ppm HC.

**(f) Alteration or replacement of vehicle engine.**

(1) Any vehicle with an engine other than the one originally installed by the manufacturer or an identical replacement of such engine shall be subject to the test procedures and standards for the chassis type and model year of the vehicle.

(2) Any vehicle that is re-engineered from an internal combustion gasoline engine to another combustion or fuel type, shall be subject to the test procedures and standards for a gasoline powered vehicle.

**(g) On-board diagnostic II system test procedures.**

The test sequence for any inspection of OBD II systems on model year 1996 and newer LDV's and LDT's administered by the commissioner of motor vehicles or his designee shall meet the requirements of 40 CFR 51 and 40 CFR 85 and shall include all procedures set forth in 40 CFR 85.2222.

**Statement of Purpose:** This amendment updates the motor vehicle emissions testing program standards implemented by the Commissioner of Motor Vehicles to conform to current requirements of the U.S. Environmental Protection Agency (EPA). Specifically, the amendment: (1) defines new on-board diagnostic test requirements; (2) deletes unnecessary on-road testing standards; (3) adds new emissions standards for vehicles subject to a pre-conditioned two speed idle exhaust emissions test procedure; (4) requires ASM 2525 exhaust emission standards

consistent with federal guidance but for which the federal government has not adopted analogous standards; and (5) adds new emissions standards for diesel vehicles subject to a modified snap-acceleration smoke opacity test. The amendment will be submitted to EPA for approval as a revision to the State Implementation Plan.

## **Periodic Motor Vehicle Emissions Inspection and Maintenance**

The following regulation became effective on May 28, 2004.

**Secs. 14-164c-1--14-164c-12.** Repealed, January 1, 1995.

**Section 1. Secs. 14-164c-1a to Sec. 14-164c-18a, inclusive, of the Regulations of Connecticut State Agencies are amended to read as follows:**

### **Sec. 14-164c-1a. Definitions**

The following definitions shall apply to sections 14-164c-1a to 14-164c-18a of the Regulations of Connecticut State Agencies:

(1) "Acceleration Simulation Mode (ASM) 25/25 Test" means the test procedure for the exhaust emissions of gasoline-powered vehicles found in the EPA technical guidance document, "Acceleration Simulation Mode Test Procedures, Emissions Standards, Quality Control Requirements, and Equipment Specifications," EPA-420-P-03-001 (2003)," as may be amended from time to time, except for the following provisions: (A) the test procedure is limited to the ASM 25/25 mode; (B) dynamometer identification plates are not required; (C) the dynamometer power absorber unit is not required to operate in the reverse direction; (D) inertia simulation is not required; and (E) other exceptions shall be noted by the department as applicable and warranted.

(2) "Certificate of origin" means the original written instrument or document required to be executed and delivered by the manufacturer to an agent, dealer, or person purchasing directly from the manufacturer, certifying the origin of the vehicle, as provided in subsection (l) of section 14-165 of the Connecticut General Statutes.

(3) "CFR" means the Code of Federal Regulations, as the same may be amended from time to time.

(4) "Commissioner" means the Commissioner of Motor Vehicles.

(5) "Commissioner's certificate" means a written instrument issued by the commissioner extending the time for compliance with a periodic emissions inspection.

(6) "Compliance" means meeting requirements under this state's enhanced vehicle emissions inspection program.

(7) "Contract" means an agreement entered into between the commissioner and a contractor to establish and operate a system of official emissions inspection stations, as authorized by subsection (e) of section 14-164c of the Connecticut General Statutes.

(8) "Contractor" means an independent contractor, which operates a system of official emissions inspection stations.

(9) "Dealer" includes any person licensed pursuant to chapter 246 of the Connecticut General Statutes and who is actively engaged in buying, selling, or exchanging motor vehicles

in this state and who, incidental to such business, repairs motor vehicles, or causes them to be repaired by persons in his employ. A dealer may be hired by the contractor or authorized

by the commissioner to conduct emissions inspections in accordance with section 14-164c of the Connecticut General Statutes and the regulations promulgated thereunder.

(10) "Department" means the Department of Motor Vehicles or its duly authorized agents or representatives.

(11) "DEP" means the Department of Environmental Protection or its duly authorized agents or representatives.

(12) "Diagnostics" means the identification of the problem area or areas, which cause a vehicle to fail to meet emissions or other inspection standards.

(13) "EDBMS" means the Connecticut Department of Motor Vehicle's Emissions Database Management System that has been established for this state's enhanced vehicle emissions inspection program.

(14) "Emissions" means products of combustion and volatile organic compounds including carbon monoxide, oxides of nitrogen and hydrocarbons emitted into the atmosphere from any motor vehicle and its engine.

(15) "Emissions inspection" means any procedure authorized and approved by the commissioner that is used for determining compliance with federal and state motor vehicle emissions standards.

(16) "Emissions inspector" means an individual trained and certified to perform emissions inspections in accordance with the requirements of 40 CFR section 51.367 and section 14-164c-18a of the Regulations of Connecticut State Agencies, as amended.

(17) "Emissions standards" means the current maximum allowable emissions for vehicles defined by the Commissioner of Environmental Protection in section 22a-174-27 of the Regulations of Connecticut State Agencies, as amended. Emissions standards shall include standards for exhaust emissions, air pollution control system integrity standards (pressure test) and fuel evaporative control system standards for vehicles subject to this state's enhanced vehicle emissions inspection program.

(18) "Enhanced vehicle emissions inspection program" means the program administered by the commissioner and the department pursuant to chapter 246a of the Connecticut General Statutes and sections 14-164c-1a to 14-164c-18a, inclusive, of the Regulations of Connecticut State Agencies, in order to meet the requirements of 40 CFR Part 51, Subpart S.

(19) "EPA" means the United States Environmental Protection Agency or its duly authorized agents or representatives.

(20) "Fail mark" means a mark indicated on a vehicle inspection report which signifies the vehicle does not meet emissions standards.

(21) "Fail sticker" means a sticker that may be issued for a motor vehicle on which an emissions inspection has been performed if the vehicle does not meet emissions standards.

(22) "Failure and repair report" means that part of the vehicle inspection report describing the nature of the failure of the vehicle to meet emissions standards and the repairs made to correct the reason for failure.

(23) "Gas cap leak test" means the vehicle's gas cap will be tested for leakage as defined in the EPA technical guidance documents, "I/M240" and "Evaporative Technical Guidance", EPA 420-R-00-007, as amended, in order to meet the requirements of 40 CFR section 85.2222(d).

(24) "Gross vehicle weight rating" or "GVWR" means that value specified by the manufacturer as the maximum loaded weight of a single or combination vehicle, or its

registered gross weight, whichever is greater, as further defined in section 14-1 of the Connecticut General Statutes.

(25) "Idle test" means an exhaust emissions test sampling and analysis performed while the vehicle engine is operating at or approximately at the vehicle manufacturer's recommended normal curb idle speed. The idle test may involve conditioning the vehicle on a dynamometer at a vehicle drive-wheel speed of approximately thirty (30) miles per hour.

(26) "Initial inspection" means the first emissions inspection of a vehicle during each biennial period in which the vehicle is required to be inspected.

(27) "Inspection" means the mandatory periodic vehicle emissions inspection. The term includes "Initial Inspection" and "Reinspection."

(28) "Model-year" means the year designated by the manufacturer of the motor vehicle and appearing on the registration certificate.

(29) "Motor vehicle" means motor vehicle as defined in section 14-1 of the Connecticut General Statutes.

(30) "New vehicles at the time of initial registration" means all motor vehicles coming within the definition of "New Motor Vehicle" as provided in section 14-1 of the Connecticut General Statutes, which are of the previous, current or succeeding model-year, relative to the current calendar year, for a period not to exceed five (5) years from the month of issuance of the first permanent registration for such motor vehicles.

(31) "New vehicle sticker" means that sticker that may be issued upon initial registration of a motor vehicle of the previous, current or succeeding model-year in relation to the calendar year of such initial registration to vehicles that have not previously undergone emissions inspection in this state.

(32) "Official emission inspection station" means an emission inspection facility, other than a self-test emissions inspection station, that is (a) operated by a licensed dealer or repairer hired by the contractor and which meets qualifications and standards for the performance of emissions inspections established under the contract, or (b) operated by a licensed dealer or repairer appointed directly by the commissioner in accordance with the provisions and requirements of subsection (f) of section 14-164c of the Connecticut General Statutes.

(33) "On-board diagnostic II (OBDII) inspection" means an inspection of the on-board diagnostic system of applicable 1996 and newer motor vehicles pursuant to EPA 420-R-01015, as amended, in order to meet the requirements of 40 CFR Parts 51 and 85.

(34) "On-road testing" means an emissions inspection as provided in subsection (j) of section 14-164c of the Connecticut General Statutes, and as defined in 40 CFR section 51.37.

(35) "Opacity test" means the testing procedure for diesel-powered vehicles with a GVWR of 10,000 pounds or less that measures the amount of light transmitted through an exhaust plume.

(36) "Pass mark" means a mark indicated on the vehicle inspection report that signifies that the vehicle meets emissions standards.

(37) "Pass sticker" means the sticker that may be issued for a motor vehicle, for which an emissions inspection has been performed, if the vehicle meets emissions standards.

(38) "Permanent replacement windshield sticker" means that sticker that may be affixed to a motor vehicle which has a replacement windshield for the purpose of replacing a previous validly issued sticker.

(39) "Pre-conditioned two speed idle test" means the exhaust emissions test described in 40 CFR section 85.2220.

(40) "Recycler" means a motor vehicle recycle business or a motor vehicle recycler licensed pursuant to chapter 246 of the Connecticut General Statutes to which dismantler plates may be issued.

(41) "Reinspection" means a paid or unpaid inspection conducted within thirty (30) days after a vehicle has failed its initial inspection.

(42) "Repairer" means a qualified person licensed to repair motor vehicles in accordance with the provisions of chapter 246 of the Connecticut General Statutes including any person licensed as a limited repairer. A repairer may be authorized by the commissioner to conduct emissions inspections in accordance with section 14-164c of the Connecticut General Statutes and the regulations promulgated thereunder.

(43) "Self-test emissions inspection station" means a facility to conduct emissions inspections operated by the owner or operator of a fleet of twenty-five (25) or more motor vehicles with respect to such owned or operated motor vehicles only, as licensed by the commissioner in accordance with subsection (i) of section 14-164c of the Connecticut General Statutes.

(44) "Self-test sticker" means that sticker that may be issued for a self-test motor vehicle, identified in section 14-164c-12a of the Regulations of Connecticut State Agencies, which meets emissions standards.

(45) "State" means the State of Connecticut.

(46) "Steady-state loaded test" means the testing procedure for the exhaust emissions of a vehicle where a constant load is placed on the vehicle at a fixed vehicle speed.

(47) "Sticker" means a label that may be applied to the inside of the windshield or as otherwise provided by the commissioner showing the status of the vehicle with respect to its compliance with periodic emissions inspection requirements.

(48) "Temporary compliance sticker" means that sticker that may be affixed to a motor vehicle displaying valid dealers' or repairers' plates, dismantler plates or transporter plates.

(49) "Temporary new vehicle sticker" means that sticker which may be affixed by a new car dealer to a new motor vehicle upon registration of the vehicle for a purchaser by the dealer.

(50) "Temporary replacement windshield sticker" means that sticker that may be affixed by a glass dealer or a repair shop to a replacement motor vehicle windshield.

(51) "Transporter" means a person who has been issued a transporter's registration and number plate pursuant to chapter 246 of the Connecticut General Statutes.

(52) "Vehicle" means the term as defined in section 14-1 of the Connecticut General Statutes.

(53) "Vehicle description information" means the information describing the vehicle such as identification number, make, registration class and registration number, year of vehicle, emissions compliance date and name of registrant or lessee, or both.

(54) "Vehicle identification number" or "VIN" means a series of Arabic numbers and Roman letters that is assigned to each new motor vehicle that is manufactured within or imported into the United States, as is more fully defined in section 14-1 of the Connecticut General Statutes.

(55) "Vehicle inspection report" means a document issued by the contractor or a licensed dealer or repairer authorized by the commissioner to conduct emissions inspections, which, when validated by a pass or fail mark constitutes proof of inspection. Waiver, failure and repair report, diagnostics, vehicle test results, vehicle description information, and

certification of inspection are all parts constituting the vehicle inspection report, in accordance with 40 CFR section 51.358(a)(3).

(56) "Waiver sticker" means that sticker that may be issued for a motor vehicle which has qualified for a waiver pursuant to subsection (d) of section 14-164c of the Connecticut General Statutes.

## **Sec. 14-164c-2a. The state inspection requirements**

(a) The owner of any motor vehicle registered in this state, which is not within the exempted classes of motor vehicles set forth in subsection (c) of section 14-164c of the Connecticut General Statutes, shall present such motor vehicle for periodic emissions inspection at such times as provided in an inspection schedule established by the commissioner. The purpose of such inspection shall be to determine whether such vehicle is in compliance with the emissions standards as determined by the Commissioner of Environmental Protection. The fee for such inspection shall be as established by the commissioner in accordance with the provisions of subsection (k) of section 14-164c of the Connecticut General Statutes.

(1) Unless otherwise directed by the commissioner, the period of inspection frequency for all non-exempt motor vehicles shall be two years. The commissioner may, for the more effective administration of the enhanced inspection program, adjust or alter the period of inspection frequency as stated herein, or may extend the time scheduled for the inspection of any motor vehicle. The commissioner shall, in the case of any such changes that are directed, provide appropriate notification to the owners of all motor vehicles affected thereby.

(2) A commissioner's certificate may be issued for good cause shown when a motor vehicle cannot be presented for inspection at the time scheduled for periodic inspection. A request for a commissioner's certificate shall be made in writing by the owner, except that a lessee or other person rightfully entitled to possession or custody of a vehicle may make the request, and proof of such right to possession or custody, may be required. No commissioner's certificate shall be issued to extend the time for the inspection for more than one month from the previously scheduled time, provided a vehicle continuously outside of this state for an extended period of time as determined by the commissioner may be issued a commissioner's certificate extending the time for the inspection to no more than thirty (30) days after the return of such vehicle to this state.

(3) If a person presents a motor vehicle for inspection more than thirty (30) days after the time for periodic inspection established by the commissioner, a late fee of twenty dollars (\$20.00) shall be assessed as provided in subsection (k) of section 14-164c of the Connecticut General Statutes.

(b) Used motor vehicles not otherwise exempt from inspection which are not in compliance shall be presented for initial inspection as provided in subsection (a) of this section prior to the issuance of permanent registrations for such used motor vehicles.

### **Sec. 14-164c-3a. Miscellaneous inspection procedures**

(a) New vehicles at the time of initial registration may be issued a new vehicle sticker which shall have an expiration date not to exceed five (5) years from the month of issuance of the first permanent registration for such motor vehicle. Such expiration date shall serve as the time for the periodic emissions inspection for such vehicle on or before the date of expiration of the new vehicle sticker.

(b) Any new or used car dealer or repairer or motor vehicle recycler licensed in this state may be issued a temporary compliance sticker which shall be used only for the purpose of transporting the motor vehicle displaying such sticker to a repair facility or to an official emissions inspection station. Any holder of a transporter's registration issued pursuant to section 14-35 of the Connecticut General Statutes may be issued a temporary compliance sticker for the purpose of transporting a motor vehicle as provided in said section 14-35. A temporary compliance sticker shall have a validity period not to exceed thirty (30) days and both the effective date and the date of expiration shall be noted on such sticker by the dealer, recycler, repairer or transporter to whom such sticker was issued. The temporary compliance sticker shall be affixed to the vehicle as provided in subsection (b) of section 14-164c-7a. Each dealer, recycler, repairer or transporter shall submit a listing of motor vehicles for which temporary compliance stickers have been issued at times as required by the commissioner.

Such listing shall be on a form furnished by the commissioner. A temporary compliance sticker may be used only by the dealer, recycler, repairer or transporter to whom it was issued and may not be sold or otherwise transferred to another dealer, recycler, repairer, transporter or person.

(c) Any new car dealer may be issued a demonstrator sticker, which shall be affixed by the new car dealer as provided in subsection (b) of section 14-164c-7a of the Regulations of Connecticut State Agencies only to a new motor vehicle bearing a new car dealer plate and only for the purpose of demonstrating the vehicle. The effective date shall be entered by the dealer on the demonstrator sticker when the sticker is initially affixed to the vehicle, and the sticker shall be valid for six (6) months from its effective date, or until the vehicle is registered, whichever is the lesser time

(d) Each non-exempt, used motor vehicle sold or transferred to a customer by a licensed new or used car dealer shall be in compliance with the periodic motor vehicle emissions inspection and maintenance requirements at the time of sale or transfer, as evidenced by the vehicle inspection report.

(e) For stickers which are applied to the vehicle windshield in accordance with subsection (b) of section 14-164c-7a of the Regulations of Connecticut State Agencies, any glass dealer or repair shop may be issued a temporary replacement windshield sticker which

shall be affixed by the dealer or shop to a replacement motor vehicle windshield. The effective date shall be entered by the dealer or shop on the temporary replacement windshield sticker, and the sticker shall be valid for ten (10) days from its effective date. The procedure for obtaining a permanent replacement windshield sticker shall be as follows:

- (1) The glass dealer or repair shop shall remove the original sticker from the replaced windshield, attach the original sticker on a form provided by the commissioner, fill out and sign the form and give the completed form and the original sticker to the motor vehicle owner or operator; and
- (2) A permanent replacement windshield sticker of the same type and for the same time fixed by the original sticker may be issued and affixed to the replacement windshield as provided in subsection (b) of section 14-164c-7a of the Regulations of Connecticut State Agencies by the Department of Motor Vehicles upon presentation by the vehicle owner or operator of the completed form with the original sticker attached, the vehicle registration certificate, the most current vehicle inspection report and the subject vehicle.

(f) Any motor vehicle displaying a valid sticker as provided in subsections (a), (b), (c), or (d) of this section shall be deemed to be in compliance with the provisions of subsection (d) of section 14-164c of the Connecticut General Statutes, and may be operated on the highways of this state. Operation of any motor vehicle not in compliance with the requirements of this section shall be an infraction as defined in subsection (n) of section 14-164c of the Connecticut General Statutes.

(g) Notwithstanding the provisions of this section, any motor vehicle subject to emissions inspection is also subject to on-road testing, as provided in subsection (j) of section 14-164c of the Connecticut General Statutes.

(Effective January 1, 1995)

#### **Sec. 14-164c-4a. Deactivation of air pollution control system or mechanism**

(a) Any motor vehicle presented for inspection which is required, pursuant to the regulations of the Commissioner of Environmental Protection as authorized by sections 14-164c and 22a-174 of the Connecticut General Statutes, to be equipped with an "air pollution control system or mechanism," as defined by subsection (a) of section 22a-174-200 of the Regulations of Connecticut State Agencies, shall be deemed to have failed to meet emissions standards if such control system or mechanism is found to have been removed, to have been dismantled or is otherwise inoperable. Such control system or mechanism may be inspected prior to emissions inspection, during emissions inspection, after a vehicle has failed a required emissions inspection, or in connection with on-road testing.

(b) Any motor vehicle not meeting emissions standards pursuant to subsection (a) of this section, whether during periodic emissions inspection or on-road testing, shall be required to pass a reinspection within thirty (30) days of such failure or the owner thereof shall be subject to denial of registration for such vehicle as provided in subsection (n) of section 14-164c of the Connecticut General Statutes.

#### **Sec. 14-164c-5a. Vehicles not admitted for inspection**

(a) Vehicles having any of the following unacceptable conditions shall not be admitted to an official emissions inspection station for emissions inspection:

- (1) An exhaust system with obvious leakage or any other condition which could, in the opinion of the inspector, affect the validity of the emissions test;
- (2) Vehicles with excessive oil leaks, fuel leaks, or coolant leaks;
- (3) Drive axle tires that are under-inflated, worn or damaged to such a degree that it would be unsafe to operate the vehicle on the testing equipment;
- (4) Loud internal engine noises or other evidence which would indicate imminent major mechanical failure;
- (5) Vehicles without gas caps;
- (6) Vehicles with missing or unverifiable vehicle identification numbers;
- (7) Animals in the vehicle; or
- (8) Uncooperative vehicle operator.

(b) A record of vehicles not admitted for emissions inspection in accordance with subsection (a) of this section shall be maintained. Operators of vehicles not admitted for any of the conditions of subsection (a) of this section shall not be assessed an inspection fee. Rejection of a vehicle under any or all of the conditions of subsection (a) of this section shall not be construed as a release from the requirement to obtain an inspection in accordance with the inspection schedule established by the commissioner.

(c) The commissioner may refuse to inspect, or may determine that any such

vehicle is not in compliance with emissions standards, if a vehicle presented for inspection has not fully complied with a manufacturer's recall related to or affecting emissions in accordance with 40CFR section 51.370. Such vehicles shall be identified by reference to a list of the vehicle identification numbers of vehicles subject to emissions related recalls available to the commissioner.

### **Sec. 14-164c-6a. The mandatory vehicle emissions inspection**

(a) An ASM 25/25 test or an OBDII test, when applicable, shall be performed on all gasoline and gaseous fuel powered vehicles. A gas cap leak test shall be performed on all non-exempt vehicles. An inspection shall be performed on vehicles for the presence of a catalytic converter and gas cap when required by the manufacturer, and a pre-conditioned two-speed idle test procedure may be performed for vehicles unable to be tested by an ASM 25/25 test. For non-exempt diesel-powered light duty vehicles, a steady-state loaded mode opacity test, or an OBDII test, when applicable, shall be performed. For diesel-powered vehicles with a GVWR of greater than 8,500 pounds, a snap acceleration smoke test may be performed.

(b) All vehicles shall be inspected in accordance with inspection techniques and standards provided by the Commissioner of Environmental Protection and procedures adopted by the Department of Motor Vehicles pursuant to federal and state law.

(c) If a person alters any component of a motor vehicle, or adds or alters any substance that is usable in connection with a motor vehicle, or alters any document, with the intent of misrepresenting the emissions of a motor vehicle subject to emissions inspection, the motor vehicle shall be deemed not in compliance with emissions standards, and shall be subject to suspension or revocation of registration in accordance with the provisions of subsection (a) of section 14-111 of the Connecticut General Statutes. Such person may also be subject to criminal penalties in accordance with Title 53a of the Connecticut General Statutes.

(d) During the performance of an emissions inspection, the operator and any other occupants of a motor vehicle being inspected may be required to exit such motor vehicle and enter a designated waiting area. An emissions inspector shall enter and operate the vehicle throughout the test. The vehicle owner or operator shall be permitted to observe the emissions inspection of the motor vehicle. This observation may include video monitoring from a designated waiting area. The requirements of this section are intended to protect the safety of operators and passengers, and to ensure that the necessary inspection data is obtained.

### **Sec. 14-164c-6b. Vehicle Inspection Report**

(a) The vehicle inspection report shall contain all data elements prescribed herein, and by 40 CFR section 51.358(a)(3), including but not limited to the following:

- (1) The test serial number;
- (2) The date of the test;
- (3) The vehicle identification number;
- (4) The year and make of the vehicle;

- (5) Vehicle class code and registration number;
- (6) Identity of the emissions inspector conducting the inspection, along with the registration number of the inspection facility, and dealer and repairer license number, if applicable;
- (7) Emissions test results and standards for the vehicle;
- (8) Pass or fail mark;
- (9) The reason(s) for the failure, if applicable;
- (10) Instructions, when applicable, that the vehicle is to be returned to an official emissions inspection station for reinspection, and that, in order to receive a free reinspection, the vehicle must return to the station that conducted the original inspection within 30 days;
- (11) When applicable, space to indicate repair by operators or owners (if so permitted and accomplished);
- (12) When applicable, space to indicate repair by a garage or repair facility (name, address and license number);
- (13) When applicable, space to indicate the cost of new parts and labor for emissions related repairs;
- (14) When applicable, space to indicate the emissions related repair(s) performed; and
- (15) The identity of the certified repair technician, and if applicable, the dealer or repairer license number.

(b) A copy of the vehicle inspection report shall be given to the vehicle operator upon completion of the test.

**Sec. 14-164c-7a. Procedure for vehicles which meet emissions standards at the time of inspection.**

(a) Vehicles meeting emissions standards shall be issued a vehicle inspection report, and whether an initial inspection or a reinspection, shall have a pass mark indicated on all copies of the vehicle inspection report at the termination of the inspection, and a pass sticker may be issued for each such vehicle. In addition, the emission test record shall promptly be transmitted to the EDBMS.

(b) Each sticker, if applicable, shall be affixed either to the inside lower left-hand corner, driver side of the windshield of the vehicle, or as otherwise determined by the commissioner.

(c) The pass marks and stickers, if applicable, shall be of a design and nature as determined by the commissioner.

(d) The contractor, its authorized agent, or a licensed dealer or repairer authorized and appointed by the commissioner to conduct emissions inspections shall be responsible for promptly transmitting the emission test record to EDBMS, indicating a pass mark on all

copies of the vehicle inspection report and, if applicable, for affixing a pass sticker to such vehicle.

(e) Only certified emissions inspectors shall be permitted to utilize pass marking devices and such devices shall not be used for any purpose other than marking certificates of inspection of vehicles that meet the requirements of this state's enhanced vehicle emissions inspection program. Such pass marking devices and stickers, if applicable, shall be safeguarded by the contractor, its authorized agent, or a licensed dealer or repairer authorized by the commissioner to conduct emissions inspections.

#### **Sec. 14-164c-8a. Procedures for vehicles which do not meet emissions standards**

(a) Operators of vehicles subject to emissions inspections that do not meet the emissions standards as defined by the Commissioner of Environmental Protection when presented for inspection shall be issued a vehicle inspection report with a fail mark, and a fail sticker may be affixed as provided in subsection (b) of section 14-164c-7a of the Regulations of Connecticut State Agencies. A fail sticker shall be valid for a period not to exceed thirty (30) days. If a vehicle does not thereafter meet emissions standards, or is not issued a waiver, the commissioner may suspend the registration of such vehicle in accordance with the provisions of chapter 54 of the Connecticut General Statutes.

(b) A vehicle registered in this state which is not presented for emissions inspection in accordance with the schedule established by the commissioner, and for which a commissioner's certificate has not been issued, shall not have its registration renewed and, the commissioner may take administrative action in accordance with the provisions of section 14-164c and chapter 54 of the Connecticut General Statutes.

#### **Sec. 14-164c-9a. Reinspection of vehicles which do not meet emissions standards**

(a) Except as provided in subsection (a) of section 14-164c-8a of the Regulations of Connecticut State Agencies, a reinspection shall be required of every vehicle which has been inspected and which does not meet emissions standards. A vehicle shall be eligible for one free reinspection within thirty (30) days as provided in subsection (k) of section 14-164c of the Connecticut General Statutes. A person presenting a vehicle for reinspection shall be required to provide proof that the vehicle has been repaired before it will be reinspected.

(b) A vehicle meeting the emissions standards at the time of reinspection shall have a pass mark indicated on all copies of the vehicle inspection report and such pass mark shall be reported in a timely manner to the EDBMS at the termination of the reinspection. In addition, a pass sticker may be affixed to the vehicle.

(b) An operator of a vehicle not meeting emissions standards at reinspection shall receive a vehicle inspection report with a fail mark, and such fail mark shall be reported in a timely manner to the EDMS. A fail sticker may be affixed to the vehicle.”

(d) Except as provided in subsection (a) of section 14-164c-8a of the Regulations of Connecticut State Agencies, any vehicle not meeting emissions standards at reinspection and not issued a waiver in accordance with the provisions of section 14-164c-11a of the Regulations of Connecticut State Agencies shall again be presented for inspection and an inspection fee shall be paid as established by the commissioner. A late fee may also be required in accordance with the law.

### **Sec. 14-164c-10a. Requirements for inspection equipment and hours of operation**

(a) Each official emissions inspection station shall be equipped with emissions analyzers and other necessary testing equipment and instrumentation, along with an appropriate means of recording and transmitting emissions inspection data and vehicle information approved by the commissioner. All testing equipment and instrumentation shall be maintained in accordance with the provisions of CFR sections 51.363 (c) and 51.358.

(b) Equipment used by each official emissions inspection station in its inspections shall be subject to both scheduled and unscheduled checks for accuracy and condition by the Department of Motor Vehicles.

(c) The equipment used for testing emissions shall meet all standards or equipment requirements promulgated or established by the Commissioner of Environmental Protection.

(d) The Department of Environmental Protection and its designated employees shall have all vehicle inspection records made available to them, and shall have the authority to sample and inspect vehicles, testing equipment and procedures, as agreed between the Commissioner of Motor Vehicles and the Commissioner of Environmental Protection.

(e) A standard minimum schedule for hours of operation of each official emissions inspection station established by the contractor shall be Mondays through Fridays from 8 a.m. to 5 p.m. and Saturdays from 8 a.m. to 1 p.m. Such hours of operation may be extended subject to the commissioner's approval.

### **Sec. 14-164c-11a. Waivers**

(a) A waiver shall be issued only after a vehicle has failed a reinspection performed after all qualifying repairs have been completed, and evidence satisfactory to the commissioner is presented that an unreasonable cost of repair, as defined in subsection (b) of this section, is required to bring the vehicle into compliance as provided in subsection (d) of section 14-164c of the Connecticut General Statutes. A waiver also may be issued in a demonstrated case of economic hardship as authorized by 40 CFR section 51.360.

(b) For all vehicles that are subject to this state's enhanced vehicle emissions inspection program, an unreasonable cost of repair, in accordance with subsection (d) of section 14-164c of the Connecticut General Statutes, shall be an actual expenditure for emissions related repairs of a minimum of six hundred and sixty dollars (\$660.00). The amount stated

shall be adjusted in January of each year by the percentage, if any, by which the consumer price index for the preceding calendar year differs from the consumer price index of 1989, as determined

by the Emissions Planning and Strategies Division of the EPA. The amount required to be expended for emissions related repairs during the current calendar year in order to qualify for a waiver shall be posted in plain view at each emissions inspection facility.

(c) All expenditures made pursuant to subsection (b) of this section for vehicles that are subject to this state's enhanced vehicle emissions inspection program shall be for actual vehicle repairs made after available emissions related warranty coverage or written denial of such warranty coverage by the vehicle manufacturer. All such repairs for vehicles that are subject to this state's emissions program shall be made by a repairer licensed by the commissioner pursuant to chapter 246 of the Connecticut General Statutes. Such repairer shall be registered and shall have one or more certified repair technicians in its employ recognized by the commissioner as qualified to perform emissions repairs, in accordance with sections 14-164c-14a and 14-164c-15a of the Regulations of Connecticut State Agencies. A list of such repairers employing such certified technicians shall be made available without charge at all branches of the department and all emissions inspection facilities. Repairs performed by the vehicle owner or operator, or a person not certified by the commissioner, shall not be included as expenditures. Repairs required because of tampering with the air pollution of Connecticut State Agencies, a reinspection shall be required of every vehicle which has been inspected and which does not meet emissions standards. A vehicle shall be control system or any emissions related mechanism shall not be included as expenditures and waivers shall not be issued to vehicles for tampering related repairs. Repair estimates shall not be considered for purposes of obtaining a waiver.

(d) Notwithstanding the provisions of subsections (a), (b) and (c) of this section, the commissioner may determine compliance of a vehicle that has failed an emissions inspection by means of a complete, documented physical and functional diagnosis and inspection of the vehicle, in accordance with the diagnostic failure provisions of 40 CFR section 51.360, showing that no additional emissions-related repairs are necessary.

(e) Any owner of a motor vehicle requesting a waiver under this section shall make a formal application on such form as the commissioner shall prescribe.

(f) Vehicles meeting the waiver requirements of this section may be issued a waiver sticker. Any motor vehicle that has been granted a waiver shall be deemed in compliance with emissions standards and may be operated on the highways of this state. No waiver shall be granted except by the Department of Motor Vehicles.

(g) No waiver sticker shall be issued for any vehicle, which fails an inspection by reason of non-compliance with section 14-164c-4a of the Regulations of Connecticut State Agencies.

#### **Sec. 14-164c-11b. Guidelines for waiver due to economic hardship**

(a) As used in this section, "waiver" means an extension of the period of time, not to exceed the period of inspection frequency for a motor vehicle in accordance with the schedule

established by the commissioner, for attaining compliance with the applicable emissions standards for a motor vehicle.

(b) An extension of time, not to exceed the period of inspection frequency, may be granted to obtain needed repairs on a vehicle in the case of economic hardship of the owner when waiver requirements have not been met. Only one such extension may be granted for any vehicle. The

commissioner shall provide a procedure for an applicant to request an extension of time, and the commissioner shall make a notation on the records of the department that such extension has been granted. Economic hardship shall be determined in individual cases in accordance with guidelines in regulations adopted by the commissioner, and shall include consideration of the applicant's employment status and ability to pay, including but not limited to receipt of public assistance, food-stamps, aid for dependent children, utilities assistance, Medicaid, Connpace, or similar programs of assistance from government agencies.

(c) As used in this section, the following guidelines shall apply to all applications for a waiver of emissions compliance for economic hardship:

(1) Employment status: The applicant shall submit an affidavit on a form prescribed by the commissioner that he or she is not gainfully employed, or if employed, the applicant's annual income is at or below the poverty level as established by state and federal guidelines.

(2) Assistance status: The applicant shall submit satisfactory evidence as to all governmental and utility assistance programs of which the applicant is a beneficiary, and as to the level of benefits received in each such program.

(3) Other requirements: The applicant shall attest to the fact that he or she has no other assets that can be used for the needed repairs of the failed vehicle.

(d) Each application for a waiver for economic hardship, together with all supporting documentation, shall be fairly reviewed and considered. All such information submitted to the commissioner shall be maintained on a confidential basis and shall be used by the commissioner solely for the purposes of this section, except to the extent that disclosure of the information, in whole or in part, may be required by law. A decision of the commissioner to deny any such application shall not be subject to further review or proceedings, absent a showing of changed conditions or extraordinary circumstances.

(e) Each applicant granted a waiver shall notify the commissioner in a timely manner of any change in his or her financial condition which would make such person ineligible for a waiver due to economic hardship. The commissioner may revoke any waiver that has been granted if he becomes aware of any facts to indicate that the person granted the waiver no longer has a sufficient hardship.

#### **Sec. 14-164c-12a. Self-test emissions inspection station**

(a) The commissioner may license the owners of twenty-five (25) or more vehicles registered in the owner's business name, to include the State of Connecticut and municipalities, to perform inspections as provided in subsections (b) through (g) of this section.

(b) To qualify for a license as a self-test emissions inspection station an applicant shall satisfy the following:

(1) Have twenty-five (25) or more vehicles, which are required to be inspected pursuant to subsection (c) of section 14-164c of the Connecticut General Statutes. No vehicles other than those owned or leased by the self-test emissions inspection station licensee shall be inspected by such licensee;

(2) Not be engaged in the business of repairing vehicles for profit;

(3) Have sufficient equipment accredited by the commissioner of motor vehicles, an approved location, and a facility suitable for conducting emissions inspections;

(4) Have an appropriate means of recording and transmitting emissions inspection data and vehicle information, as prescribed by the commissioner; and

(5) Properly complete an application for a self-test emissions inspection station license on a form furnished by the commissioner.

(c) In the event the applicant desires to establish a self-test emissions inspection station at more than one location, a separate application shall be submitted for each location. Where the applicant applies for more than one license or for an additional licensed location, the commissioner may reject an application on the basis that the applicant's fleet is of such a size and so located that the issuance of a self-test emissions inspection license at this location is not warranted.

(d) The fees for self-test emissions inspections shall be in accordance with the provisions of subsection (k) of section 14-164c of the Connecticut General Statutes.

(e) The commissioner shall establish policies and procedures for the purpose of maintaining self-test inspection records and shall prescribe the necessary forms to provide proof of compliance and fees collected. In addition, the self-testing emissions inspection station shall transmit evidence of compliance with the emissions inspection program to the EDBMS in a timely manner, as prescribed by the commissioner.

(f) Each motor vehicle required to be inspected pursuant to subsection (c) of section 14-164c of the Connecticut General Statutes will be assigned an inspection period as determined by the commissioner. Each such vehicle shall be presented for inspection during the assigned inspection period, and may be issued a sticker by the self-test emissions inspection station only if such vehicle is in compliance with emissions standards. No such vehicle shall be deemed in compliance with subsection (d) of section 14-164c of the Connecticut General Statutes, or operated on the highways of this state unless such vehicle is in compliance with the emissions inspection program. The operation of any vehicle not in compliance with the

requirements of this section is deemed to be an infraction for each violation, as authorized by subsection (n) of section 14-164c of the Connecticut General Statutes.

(g) The licensing of any self-test emissions inspection station shall be within the discretion of the commissioner, and if a license is not granted to any applicant therefor, the vehicles registered in the name of such applicant or business shall be required to be inspected at official emissions inspection stations in the manner of other vehicles for which emissions inspection is required.

### **Sec. 14-164c-13a. Proof of repair of motor vehicles failing emissions inspection**

No motor vehicle which has failed an emissions inspection shall be inspected or reinspected without proof that the vehicle has been repaired. Such proof shall include presentation of the vehicle inspection report indicating thereon any repairs made to the vehicle by the operator or owner thereof,

and indicating any repairs made to the vehicle by a repair facility licensed in accordance with chapter 246 of the Connecticut General Statutes. If repairs have been made to a vehicle by a licensed repair facility, the inspection report shall show the name, address and license number of the repairer, the cost of new parts and labor for emissions related repairs, and a description of the emissions related repairs performed. In addition, each such licensed repair facility shall provide the vehicle owner or operator with a copy of the repair invoice identified in section 14-65h of the Connecticut General Statutes, and such invoice shall be presented at the time of inspection or reinspection. Except as provided in subsection (a) of section 14-164c-9a of the Regulations of Connecticut State Agencies, an inspection fee shall be required prior to any inspection of a vehicle which has previously failed an emissions inspection.

#### **Sec. 14-164c-14a. Requirements for registered emissions repair facilities**

(a) Any Connecticut new car dealer, used car dealer or repairer, licensed in accordance with the provisions of chapter 246 of the Connecticut General Statutes, may make application to the commissioner for registration as a registered emissions repair facility. The commissioner shall specify the requirements for such registration, which shall include proof of the ability of the applicant to perform emissions diagnosis and repair. A separate application shall be made in connection with each separate location in which emissions repairs shall be conducted

(b) The applicant shall certify that it has in its employ, and shall continuously maintain in its employ, a certified emissions repair technician as provided in section 14-164c-15a of the Regulations of Connecticut State Agencies.

(c) The applicant shall agree to notify the commissioner in writing by the next business day of any change in the employment status, or certification status, of any certified emissions repair technician in its employ.

(d) All work performed by such registered emissions repair facility shall be documented in an invoice, as set forth in section 14-65h of the Connecticut General Statutes. One copy of the invoice shall be given to the customer and one copy shall be retained by such registered emissions repair facility for such time as prescribed by the commissioner. The commissioner and the contractor shall maintain a list of local emissions repair facilities registered in accordance with this section and in good standing, which list shall be updated on a regular basis and distributed without cost to each operator of a motor vehicle which fails an emissions inspection.

#### **Sec. 14-164c-15a. Requirements for certified emissions repair technicians**

(a) Any person may apply to the commissioner for registration as a certified emissions repair technician upon compliance with the following requirements:

- (1) The person shall complete successfully a training course prescribed by the commissioner as provided in subsection (b) of this section; and
- (2) The person shall thereafter take and pass a state certification test at a time and place determined by the commissioner; and

(3) The person shall submit proof acceptable to the commissioner that he is employed by a registered emissions repair facility as provided in section 14-164c-14a of the Regulations of Connecticut State Agencies.

(b) The training course shall comprise a course or courses given at both state technical and vocational schools, at community colleges, and at private training schools certified by the commissioner. Alternatively, a certified emissions repair technician may be trained by a manufacturer where such training is approved by the commissioner. Such approved manufacturer training affords the individual with emissions repair experience and knowledge with the opportunity to test out of preliminary courses, in order to continue to an advanced level course. ASE or manufacturer's certification may be substituted for preliminary course requirements, as determined by the commissioner.

(c) A certified emissions repair technician may be required by the commissioner to take and pass a re-certification test as follows:

(1) Three (3) years after initial certification; or

(2) When such technician has an unsatisfactory emissions repair success record, as provided in section 14-164c-16a of the Regulations of Connecticut State Agencies, as determined by the commissioner.

#### **Sec. 14-164c-16a. Registered emissions repair facility and certified emissions repair technician success record**

(a) The commissioner and the contractor shall maintain a record of the repair success rate of each registered emissions repair facility and of each certified emissions repair technician based on the performance of previously failed vehicles upon subsequent emissions inspection or reinspection. The commissioner shall assign a unique identification number to each such registered emissions repair facility and to each certified emissions repair technician, which numbers shall be inserted on the vehicle inspection report upon repair of a vehicle by a registered emissions repair facility and certified emissions repair technician. Upon subsequent inspection or reinspection of a vehicle, the commissioner and the contractor shall collect the unique numbers and the results of the inspection or reinspection, and shall maintain a record of the vehicles which pass and the vehicles which fail the inspection or reinspection. Such record shall be used to produce a list which provides the success and failure record for each certified emissions repair facility and each certified emissions repair technician performing the repairs of vehicles.

(b) Each operator of a motor vehicle which fails an emissions test shall be given, without charge, a list of registered emissions repair facilities for vehicles in the local area, which shall include a record of each emissions repair performed by such facility and the success rate of each such repair. At least twenty (20) vehicles must have been repaired by the facility before computing the success rate. The success rate of each facility shall be calculated by using data captured for the last twenty (20) inspections performed.

#### **Sec. 14-164c-17a. Denial or revocation of registration**

For good cause shown, the commissioner may refuse to issue, or, if issued,

cancel, revoke, suspend or withdraw the registration of any registered emissions repair facility subject to an opportunity for a prior hearing conducted in accordance with the provisions of chapter 54 of the Connecticut General Statutes.

**(New) Section 14-164c-18a. Requirements for certified emissions inspectors**

All persons conducting emissions inspections shall be certified in accordance with the requirements of 40 CFR section 51.367. Under no circumstances shall the contractor or any official emissions inspection station cause or permit an emissions inspection or any part thereof to be performed by a person who is not currently certified. The contractor will conduct an inspector training and certification program as described in the contract, including the elements of periodic retraining and re-certification of inspectors.

## OWNERSHIP AND USE OF DATA

A. Direct Reporting. It is the intention of the parties hereto that Contractor shall participate with the Department and EDBMS vendor in creating a VIP data collection system which enables Contractor and the Department to obtain all Inspection and VIP information from each Station instantaneously. It is acknowledged by the parties hereto that the EDBMS shall be the authoritative, dispositive data base source of the emissions data and that the EDBMS shall receive unaltered Inspection results directly from each of the Stations.

B. Compliance. Contractor shall instruct each person and subcontractor having any involvement with the collection, storage, or development of data or data security information on appropriate procedures to ensure that Contractor fulfills its obligations under this Contract.

C. Access to EDBMS. Contractor shall be authorized to inquire into data located on the EDBMS only to the extent allowed by the EDBMS application. Contractor will not have

direct access to view data located on the EDBMS. Contractor is allowed to simultaneously with or subsequent to the EDBMS update, receive a copy of such data sent to and stored by the EDBMS. Contractor shall create and maintain the Mini-VID and shall retain the Mini-VID as a backup source for the Department in the event the Department requires access to such data, to the extent set forth in the Response. The Mini-VID shall store and maintain data and communications among Contractor, the Stations, the Station Network and the Department as set forth in the Response. If the EDBMS is not operational by the Program Commencement Date, Contractor shall retain the data on the Mini-VID and supply the Inspection records to the Department until the EDBMS is operational. Contractor and subcontractors shall not sell, disseminate or otherwise transfer any data or information to third parties without the prior written approval of the Department except that Contractor may make such data or information available to its contractors who are fulfilling Contractor's performance obligations under the Contract.

D. Data Ownership. All Inspection data collected, maintained or developed in the performance of the Contract shall be the property of the State, including, but not limited to, Contractor specific data not explicitly required by the Department. This also includes, but is not limited to, Station supporting information such as customer appointments, which Contractor may store, report upon, and/or perform an analysis upon during the life of the Contract. The State grants to Contractor a perpetual, royalty-free license to use the Inspection data, in aggregate form only, for the limited purpose of evaluating and improving the management and operation of the System and similar vehicle inspection systems managed by Contractor. Contractor agrees to provide the Department with a copy of all Inspection data stored on its Mini-VID in a mutually agreed format every six (6) months beginning six (6) months following the Program Commencement Date. All Inspection data in the Mini-VID shall be transferred to the State at the expiration or earlier termination of the Contract in the format(s) agreed to by the parties.

## ARTICLE VIII.

### OWNERSHIP AND USE OF SOFTWARE

A. Additional Definitions. For purposes of this Contract, including this Article VIII, the following terms shall be defined as follows:

1. The term "*Software*" means all object code for all Contractor's Proprietary Software, Subcontractor's Software, New System Software, Modifications, and Updates, used in any way in the System or otherwise required for the State or a successor entity to operate and maintain the VIP upon the Contract's expiration or termination, but excluding Third-Party Software and the EDBMS.

2. The term "*Documentation*" means the foundation documents that describe the design details; functional characteristics; technical specifications; and operating requirements of the Workstations, Mini-VID, and Testing Interface Application including, without limitation, all hardware, Software and communications components thereof.

3. The term "*Workstation Software*" means all Software required for the operation of a Workstation.

4. The term "*Testing Interface Application Software*" means all Software required for the operation of the interface that allows communications between the Workstations and the EDBMS in both object code and Source Code.

5. The term "*Third-Party Software*" means object code developed by any third-party other than Contractor or Contractor's subcontractor(s), which is incorporated into or used in the Mini-VID, a Workstation, or the Testing Interface Application including any Updates installed pursuant to Section VIII.E.2.

6. The term "*Contractor's Proprietary Software*" means Software that was developed by Contractor itself, or that was developed by a subcontractor of Contractor as a "work for hire" and is currently owned by Contractor.

7. The term "*Subcontractor's Software*" means Software that was developed by, and remains the intellectual property of, a subcontractor of Contractor and is licensed, on an exclusive or non-exclusive basis, to Contractor for use in the System.

8. The term "*Modifications*" means Source Code and object code that is developed by Contractor or by its subcontractor(s) to modify or integrate existing Contractor's Proprietary Software, Subcontractor's Software and/or Third-Party Software to meet the performance requirements of the System, the Workstation Specifications, and Testing Interface Application Specifications. A Modification for purposes of this Contract must be a discreet and identifiable section of code which is not so imbedded in Contractor's Proprietary Software, Subcontractor's Software or Third Party Software as to be inseparable or indistinguishable therefrom.

9. The term "*New System Software*" means object code that does not exist as of the Effective Date, and which is/was developed by Contractor or by its subcontractor(s) to meet the performance requirements of the System, the Workstation Specifications, and Testing Interface Application Specifications.

10. The term "*Update(s)*" has that meaning set forth in Section VIII.E.

B. Software Schedules.

Schedules which identify all Software by function (i.e., Workstation Software, Testing Interface Application Software, and Software for the Mini-VID) and by type (i.e., Contractor's Proprietary Software, Subcontractor's Software, Third-Party Software, Modifications, or New System Software) are attached to this Contract as Schedule 6. Contractor shall update Schedule 6 to reflect all additions or modifications implemented during the term of this Contract, including any extensions thereof, within thirty (30) Days following installation of any new or modified Software or Third-Party Software.

C. Ownership of the Testing Interface Application Software and Modifications. The Source Code and object code of the Testing Interface Application Software and Modifications whether developed by Contractor or by its subcontractor(s), shall be deemed to be a "work for hire" and all rights, title and interest therein shall vest in the State and all such code shall be and remain the property of the State. The State's ownership rights include the right to copy, use,

disclose, publish, create derivative works from or duplicate such code in any manner and for any State purposes without compensation to or approval by Contractor or Contractor's subcontractor(s); provided, however, that the State agrees that it will not license or in any way transfer (directly or indirectly) the Testing Interface Application Software or the Modifications to any competitor of Contractor, unless such competitor replaces or succeeds Contractor as the manager of the VIP. All such State-owned Software shall clearly and conspicuously disclose that such code is "Property Of The State Of Connecticut".

D. Software Licenses.

1. During the term of this Contract, including any extensions thereof, Contractor hereby grants to the State a limited, non-exclusive and royalty-free sub-license to use the Workstation Software and license to use the Mini-VID Software solely in connection with the State's rights and obligations under this Contract. Contractor shall obtain written confirmation, reasonably acceptable to the State, of Contractor's right to sub-license the Workstation Software from its subcontractor(s). Except as otherwise provided under this Contract, this sub-license and license shall automatically terminate upon the termination or expiration of this Contract.

a. The State shall not reverse engineer, decompile, or disassemble any of the Workstation Software, Mini-VID Software or Third-Party Software, or use, transmit, or otherwise transfer any such Software to any third party.

b. All copies of any of the Contractor's Proprietary Software and Subcontractor's Software shall bear Contractor's and/or its suppliers' copyright notice(s) and such other proprietary legends as may appear on such Software upon its receipt by the State. The State shall not remove any such notices or legends.

c. The State shall treat all Contractor's Proprietary Software and Subcontractor's Software as confidential and shall not use, copy, disclose, or permit any State personnel to use, copy, or disclose, such Software for any purpose that is not specifically authorized under this Contract. Any third party desiring to use such Software may do so only with specific prior consent of Contractor or its subcontractor (as applicable) and a mutual written agreement between such third party and Contractor and/or subcontractor.

d. All rights in the Contractor's Proprietary Software and Subcontractor's Software not expressly granted herein are reserved to Contractor and its subcontractor(s), which shall retain ownership of all such Software.

2. If this Contract is terminated by the State pursuant to Article XII, or upon expiration of this Contract, at the election of the State, the license and sublicense granted by Contractor pursuant to Section VIII.D.1 shall continue in force and effect pursuant to Article XII or Article XIII of this Contract, as applicable, unless terminated by Contractor based upon the State's violation of any of the restrictions set forth in Section VIII.D.1.a above.

3. The State hereby grants to Contractor a perpetual, non-exclusive and royalty-free license to use the Testing Interface Application Software and the Modifications, including the limited right to sub-license such Testing Interface Application Software and/or the

Modifications solely in connection with Contractor's operation or management of a motor vehicle emissions Inspection testing program for a governmental entity. All copies of the Testing Interface Application Software and Modifications shall bear the State's copyright notice(s) and such other proprietary legends as may otherwise be required by the State. Contractor shall not remove any such notices or legends. Contractor shall treat the Testing Interface Application Software and the Modifications as confidential and shall not use, copy, disclose or permit any of Contractor's personnel to use, copy or disclose such Software for any purpose that is not specifically authorized under this Contract. Any violation by Contractor of the requirements or limitations set forth in this Section VIII.D.3 shall, at the election of the State, result in the termination of Contractor's license to use and to sub-license the Testing Interface Application Software and the Modifications.

E. Upgrades, Enhancements and New Releases.

1. During the term of this Contract, including any extension thereof, Contractor and, if applicable, Contractor's subcontractor, shall install, run and maintain all upgrades, enhancements, and new releases (each, an "Update") of Contractor's Proprietary Software and the Subcontractor's Software.

2. During the term of this Contract, including any extensions thereof, Contractor shall install, run and maintain all Updates of Third-Party Software if such Update is required to maintain the performance and functionality of the System, or any component thereof.

3. During the term of this Contract, including any extensions thereof, Contractor shall develop, test, install, run and maintain any Modification to the Workstation Software, Testing Interface Application Software or other System Software (if any) that is required to comply with new or revised security requirements adopted by the Department, the Connecticut Department of Information Technology or the EDBMS vendor. Any such required changes shall be subject to the engineering allowance of 1,000 hours proposed by Contractor and after all such hours have been expended, shall be subject to the Change Order process in Article XI.

F. Escrow.

Upon the Program Commencement Date, Contractor will place a copy of the source code for the Workstation Software, the Testing Interface Application Software and all other System Software (if any) excluding the Mini-VID Software and any Third-Party Software (the "Escrowed Source Code") and all Documentation related thereto (including a list of Third-Party Software used to develop, test, install, configure, run, maintain or service any and all components of the System) (collectively the "Escrow Deposit Materials"), in escrow pursuant to an Escrow Agreement substantially in the form of the agreement attached hereto as Schedule 7 with an escrow agent reasonably acceptable to the State. Contractor agrees that it shall update the Escrow Deposit Materials to reflect all changes made to such Software within thirty (30) Days following the implementation of any change. All fees associated with establishment and maintenance of the Escrow Account shall be borne by Contractor. In the event that the State terminates this Contract pursuant to Article XII and purchases the VIP Assets pursuant to Sections XII.F through H, Contractor shall, within ten (10) Days of demand by the

State, provide directly to the State, without charge, one (1) copy of the most current version of the Escrow Deposit Materials. In the event that Contractor does not provide such Escrow Deposit Materials to the State within ten (10) Days of the State's demand, the State may obtain the Escrow Deposit Materials from the escrow agent pursuant to the terms and conditions of the Escrow Agreement. Subject to the provisions of Section XII.D of this Contract, the State shall have a non-exclusive, non-transferable license to use the Source Code (including any and all Updates) and the Documentation in accordance with the Contract and the Escrow Agreement. The State acknowledges and agrees that the license granted to the Escrowed Source Code hereunder transfers neither title nor proprietary rights to the State with respect to the Escrowed Source Code or the Documentation. The State shall use the Escrowed Source Code and Documentation only for the maintenance, support, enhancement, improvement and/or updating of the System as permitted under this Contract. The State may contract with another party (or parties) to maintain, support, enhance, improve and/or update the System provided that the State requires such party (or parties) to sign a non-disclosure agreement which acknowledges the limitations on the State's right to use the Escrowed Source Code and Documentation and that the Escrowed Source Code and Documentation remain the sole and exclusive property of Contractor or, if applicable, Contractor's subcontractor(s). Nothing in this Subsection F shall limit or be deemed a waiver of any other remedies available to Contractor under law, equity or contract with respect to any confidentiality breach or other breach by the State under the terms of this Contract.

## ARTICLE IX.

### MAINTENANCE OF HARDWARE AND SOFTWARE

A. Maintenance. Contractor shall provide maintenance and support of all Workstation hardware and software, and the Testing Interface Application, required to perform emissions related functions under the Program and to interface with, transfer data to and receive data from the EDBMS pursuant to Articles VII, VIII, IX and XXIII. Contractor shall ensure that all Workstation hardware and software are configured in a standard manner across all Stations. Contractor shall provide to the Department a document outlining this standard configuration as part of the Workstation Specifications. Whenever the configuration is planned to change, Contractor shall submit at least thirty (30) Days in advance, the planned change to the Department for its review and acceptance. Any configuration change shall be made throughout the entire Station Network unless approved otherwise by the Department. The Workstation hardware and software shall be maintained in operable condition and shall be supported by the manufacturer/vendor of the component (or authorized support provider which may be Contractor) at all times. Contractor shall maintain all Software and Third Party Software as set forth in Articles VII and VIII.

B. Obsolescence. If any hardware component is no longer supported by the manufacturer or vendor or other appropriate support provider (including Contractor), such hardware shall be regarded as not current and Contractor shall replace such hardware with hardware that is so supported. If any needed and agreed to Update requires a hardware upgrade to perform at the same level as prior to the Update, Contractor shall upgrade the hardware at the State's expense, unless such Update(s) were changed in Contractor's discretion in which case Contractor shall bear the expense of any hardware upgrade.

## SCHEDULE 4

### PUBLIC EDUCATION AND INFORMATION PLAN OUTLINE

A. In extension and not in limitation of the obligations and representations contained in the Response, Contractor shall design and implement a public education program for the purpose of providing information to individuals, organizations and businesses which interface with the VIP. Contractor's budget for such program is \$2,343,403. As part of Contractor's Public Education and Information program, Contractor shall be responsible for one (1) general mailing to all Connecticut resident addresses containing pertinent facts with respect to the establishment and operation of the VIP, to be made approximately thirty (30) Days prior to the Program Commencement Date. On or before sixty (60) Days following the Notice to Proceed, Contractor shall submit a detailed outline of the proposed public education program for approval by the State Representative. Information to be used in the public education program shall describe:

- ◆ Projected benefits of the VIP.
- ◆ Nature of the tests, location and hours of operation of the Stations.
- ◆ Procedures for completing Inspection requirements.
- ◆ Summary of vehicle pass/fail criteria.
- ◆ Methods to assist in selecting a convenient Station.
- ◆ Effective techniques which can be employed in tuning, adjusting and otherwise repairing a vehicle to increase the probability of causing such vehicle to operate in compliance with applicable State and Federal standards.
- ◆ Listings of certified emissions repair technicians to be given to vehicle owners who fail their emissions inspection.
- ◆ Individuals, organization and businesses within Connecticut to which the VIP information shall be directed include representatives of the news media, automobile repair businesses, dealers, community groups (civic, service, fraternal, professional), educational institutions, governmental employee and industrial employee groups.

B. Contractor shall use its best judgment in selecting the methods and media for dissemination of information and educational materials. Contractor shall consider the use of radio, television, newspaper and other publications, billboards, signs, direct mail and physical distribution of material. Contractor shall use, at Contractor's discretion, tours, demonstrations and conferences.

In implementing the public education program, the State and Contractor shall inform each other of any forthcoming participation in activities or events involving any of the individuals, organizations or businesses that interface with the VIP.

C. The following items arising out of Contractor's expenditure of the public education and information funds identified in this Plan shall have the prior approval of the State Representative:

- ◆ Press releases (except those which relate to approved days and hours of operation and changes thereto and releases which contain previously approved material in substantially the same form and context as previously released).
- ◆ Advertising copy intended for use by Contractor in advertising media such as radio, television, newspapers or other publication and billboards. Contractor shall, in the case of print media advertising, submit for approval the final layout of the proposed ad. In the case of electronic media advertising, Contractor shall first submit proposed advertising copy with a brief description (if appropriate) of the finally produced ad (voices, actors, background and length). Following approval of the copy and production concept, Contractor shall, following production, submit the finally produced ad for approval prior to airing.
- ◆ Content of pamphlets intended for distribution by Contractor and the State as part of the public education activities for the VIP in Connecticut in implementing the public education and information program. Contractor shall use resources and educational methods such as a toll free line(s), internet site, published material, graphic aids, public opinion surveys, direct mailings and commercial advertising.

D. Contractor shall submit for approval by the State Representative an annual detailed outline of the proposed public education program for the new year. The first letter outline detailing the proposed public education program shall be submitted for approval in January 2003. The report shall describe:

- ◆ Public education and information objectives.
- ◆ Planned use of resources and educational methods.
- ◆ Suggested levels and degrees of State participation in various elements of the public education and information program.
- ◆ Anticipated major milestones and events.

## SCHEDULE 5

### CUSTOMER PROBLEM RESOLUTION PLAN

#### I. Contractor Customer Resolution Team.

Senior Manager Responsible for the Customer Resolution Plan: The implementation of the Customer Problem Resolution Plan shall be directed and managed by a senior manager to be designated by Contractor. The Senior Manager shall be assisted by Contractor's VIP Manager, Assistant VIP Manager, Industry Outreach Manager, Ombudsman, Quality Assurance Manager and Public Relations Manager.

#### II. General Requirements.

Contractor will have primary responsibility for individual customer problem resolution. Contractor shall conduct customer problem resolution activities in order to ensure that citizens' specific questions, complaints, and general concerns about the Inspection are resolved. Contractor shall provide the resources and personnel necessary to respond promptly and accurately to and to resolve specific questions raised or problems encountered by individual customers related to the Inspection process. To address and track customer complaints, Contractor shall:

1. Provide a state-of-the-art motorist information call center, a system for electronically tracking and storing customer complaints via e-mail and on the hotline database. Contractor personnel receive and review all customer concerns quickly and conveniently;
2. Order and use toll-free "800" phone numbers for use as the Customer "hot line" and as the Station Support "hot line;"
3. Use a complaint tracking application and inter-company e-mail to expedite complaint handling by Contractor team members and personnel, and providing daily action reports to DMV, including assignment of a full-time staff member to coordinate all complaints;
4. Clearly define lines of responsibilities and actions at all levels within Contractor, ensuring complaints are handled properly and expeditiously;
5. Develop and distribute customer comment cards to Stations for both motorist and Station personnel;
6. Develop a customer service/complaint handling training component for Station owners and Inspectors outlining communications techniques and problem solving skills; and
7. Create a customer satisfaction index pinpointing problem areas or services within the VIP and providing a mechanism to address them.

### III. Customer Hotline.

Contractor will provide and maintain a toll-free motorist hotline number that will be staffed with personnel who have the resources to respond promptly and accurately to and resolve questions or problems raised by customers of the VIP. All telephone inquiries will be answered within three (3) minutes or sooner. Hotline operators will have the training and sensitivity to handle any situation that may arise and to quickly determine the best course of action to resolve the problem. The hotline shall provide "one-call service" for motorist inquires to minimize multiple referrals.

Every caller to the hotline will be treated with respect, fairness, and objectivity. Motorists will receive a quick, personalized response to each request for information or assistance. When customers call the hotline, Contractor will insure that:

- ◆ Motorists receive prompt, courteous treatment;
- ◆ Callers receive informed explanations of the VIP and its goals, requirements, and foundation in law;
- ◆ Motorists have their complaints handled quickly and empathetically; and
- ◆ Operators have access to timely VIP information.

To accomplish this, Contractor shall:

- ◆ Train and motivate its customer service representatives in its headquarters office;
- ◆ Ensure that key individuals in its management team and staff focus on customer service as a priority of the VIP;
- ◆ Minimize problems that would result in low customer satisfaction levels;
- ◆ Utilize web technology to provide on-screen help pages for its operators so they can serve all callers promptly and effectively; and
- ◆ Develop and utilize a knowledge base based on Contractor's experience in rolling out similar vehicle inspection programs.

Hotline and management staff will be trained in all aspects of the VIP to ensure that a caller's questions and complaints receive appropriate attention. Additionally, hotline staff will have access to network systems and the VIP website pages to access inspection and VIP information instantaneously so they may refer to electronic and printed information about the VIP. They will be able to initiate complaint tickets and provide problem resolution during the call. If appropriate, hotline staff may be able to review test records from the Mini-VID or direct callers to review or download public communications brochures, forms, and notices that are available on the Program website or refer them to additional information published by Contractor, DEP, or DMV that may be of assistance.

Contractor will develop and provide training materials and training classes for its operators and for DEP and DMV staff. Training will encompass VIP operations, rules and regulations, inspection procedures, and public communications information. Training will enable hotline operators and VIP staff to respond accurately to questions and complaints. Training will take place in Contractor's Connecticut headquarters and coincide with other staff and VIP training that will be provided.

Calls requiring immediate attention will be quickly referred to Contractor's management staff for resolution. Contractor's public information, VIP management, and technical staff will be located in the same office with the hotline staff and will be used as resources in resolving issues, especially those that require immediate attention.

To assist in evaluating the effectiveness of the VIP and public communications activities, Contractor will track calls, complaints, and questions. Contractor will use the VIP website e-mail functions to communicate between hotline staff and Contractor's management staff and to forward inquiries to DEP and DMV as necessary. Contractor will track and create logs for complaints and problems and will use a state-of-the-art computer application for this task.

Hours of operation for the hotline will be Monday through Saturday, 8:00 a.m. to 6:00 p.m., EST/EDT, excluding holidays. The hotline shall have and maintain the capacity to answer a call volume of 1200 calls per Day for the first thirty (30) Days from the Program Commencement Date; 1000 calls per Day for the period thirty-one (31) to sixty (60) Days from the Program Commencement Date; and 800 calls per Day for the period after sixty (60) Days from the Program Commencement Date.

#### **IV. Station Support Hotline.**

Contractor shall provide a convenient means for Stations to bring questions, problems and suggestions to the attention of Contractor and have them resolved in a timely manner. Such questions, problems and suggestions may cover all aspects of becoming a Station, Station Agreements, equipment servicing and licensing. Contractor shall track all issues raised by the Stations and its response to those issues and make the information available to Stations and to DMV. Contractor shall develop and use a Station Support Hotline for this purpose. Inquiries to this hotline shall be responded to within three (3) minutes or sooner.

Contractor shall provide the Station Hotline Personnel with general VIP information and the Station enrollment package; train the Station Support Hotline Personnel by providing one week of classroom instruction and one week of supervised on the job training; begin taking calls from inspection stations for all administration support, i.e., how do I become a Station, Station Agreements and VIP requirements; and full ramp-up of the Station Administration Hotline will occur no less than sixty (60) Days before the first Station goes on line.

Not less than sixty (60) Days before the first Station commences official Inspections, Contractor shall complete implementation of a technical component of the Station Support Hotline by:

1. Providing the station technical hotline personnel with general VIP information and the Workstation Specifications;
2. Training the station technical support hotline personnel by providing one week of classroom instruction and one week of supervised on the job training; and
3. Begin taking calls from Stations for all technical support, i.e., "I'm getting security login errors when my Workstation tries to connect to the System, I'm having problems with my Workstation," etc.

Contractor shall repeat the recruiting and training process for the Station Support Hotline throughout the implementation period and the life of the Contract when transition between the VIP implementation phases or VIP changes are reasonably likely to increase call volumes. During anomalous spike periods, Contractor shall exercise reasonable efforts to handle call volumes beyond the limits defined in this Plan.

#### **V. Program Website.**

Contractor shall provide and maintain a VIP website that contains not only relevant VIP information but allows motorists to:

- ◆ View and select all or individual Station addresses;
- ◆ Obtain local maps and directions to the Station of their choice;
- ◆ Access general VIP information;
- ◆ Print public communications materials; and
- ◆ Submit questions for VIP personnel.

The communications system is designed to provide customers with numerous methods to not only access information about the Connecticut VIP but also to interact with appropriate personnel and receive responses to their questions and concerns.

The website will be promoted in public education materials and over the hotline. The website will be easy and fast, even with the 28.8k modem connection that most motorists have in their homes. Contractor will work with its creative partners and with DEP and DMV to develop a website that provides quick access to other VIP information, answers to frequently asked questions and printable, public communications materials like brochures and FAQs.

Since the decentralized network will have at least 300 Stations for motorists to choose from, the locations of the Stations will not initially be familiar to the motorists in Connecticut. Contractor shall prepare and modify the Program website to the full extent necessary to apprise motorists of inspection locations.

## **VI. Station Locator.**

In accordance with its Response, as incorporated in the Contract, Contractor shall create a business relationship for the website with MapQuest that will provide for a direct link to MapQuest information so motorists can obtain local maps of Station locations. The website will contain names, addresses, and telephone numbers for all Stations that can be sorted by zip code. Motorists will be able to easily access this list, enter the zip code where they live or work and obtain a list of the ten Stations closest to them. By clicking on a specific Station, the link to MapQuest will automatically return a printable, local map along with specific directions to the Station they have selected. See the Public Information Section of the Response (Section IV.F.3) for a sample website, as it will appear for motorists accessing the Program website Station locator.

## **VII. Customer Comment Cards.**

Contractor shall develop and take all steps necessary for the distribution and use of a consumer comment card (pre-addressed to DMV headquarters) for Inspectors to provide to motorists to register complaints, compliments, and suggestions regarding the VIP and service. Contractor will distribute the cards to the Stations as part of the material distribution tasks.

If a motorist Station mails a complaint or a compliment, Contractor shall process the card at its headquarters office. The information will be entered into the Mini-VID, reviewed by Contractor management, forwarded to the appropriate person or DMV office daily for review and action, and tracked for reporting.

## **VIII. Reporting.**

Contractor shall provide monthly reports to the Department on the status of the Hotlines, website and customer comment cards including:

- ◆ Number of calls, complaint tickets, and complaints passed to DMV;
- ◆ Complaint tickets closed, open, and unresolved from DMV;
- ◆ Property damage and personal injury claims;
- ◆ All other significant Station issues;
- ◆ Categories of complaints and solutions; and
- ◆ Average time to answer abandoned calls.

Contractor shall use knowledge gained from problem resolution activities to update the website and other public information materials.

## **IX. On-going Satisfaction Studies.**

On going efforts to measure customer satisfaction will consist of collecting and assessing customer comment cards that are distributed to vehicle owners at the emissions inspection stations and during special events. Contractor shall periodically sample consumer attitudes towards VIP convenience, station appearance and operations, service quality, employee performance, Hotline usage, public communications campaign, and overall satisfaction with the inspection process. Contractor shall compile and report results to DMV on a monthly basis during the first two years of the VIP and on a quarterly basis thereafter. Where appropriate, Contractor shall use the results in VIP communications to motivate Stations, demonstrate VIP success, and for other purposes.

Additionally, Contractor will track and report on the nature and number of inquiries received at the hotline and track the problem resolution process as the VIP proceeds. Though not scientifically statistically sound, these research tools provide an easy to understand method to identify hot buttons and common problems that can be easily corrected before they show up in the wider VIP population.

## **X. Handling Customer Complaints.**

Contractor shall develop a customer complaint handling VIP and provide instruction in customer complaint handling to Inspectors and Contractor staff.

## **XI. Receiving Complaints at the Stations.**

The first and likely only point of contact most motorists will have with the VIP will be the vehicle inspector. Complaints that are made in person to the Inspector or Station owner will be resolved, if possible, by the Inspector.

## **XII. Receiving Complaints at the Customer Hotline.**

When necessary or appropriate, customers will be referred to the motorist hotline. Consumer and motorist complaints may be received through the toll-free hotline at Contractor's headquarters. Automated recordings shall be used to direct callers to specific sources of information or will provide a means for the caller to access a hotline operator. Operators will use automated tools like the website to access timely information. The website will enable constant information sharing between parties.

Hotline staff will have access to call data, historical data, and telephone system data to produce reports and to assist the hotline staff to continually improve its level of service by identifying call statistics and areas for improvement.

Hotline operators will have the authority and responsibility to handle and resolve most complaints. Contractor's staff, within the scope of this Contract and VIP regulations, will attempt to resolve a problem or complaint quickly and to the mutual benefit of the customer and

the VIP. Regardless of complaint resolution, the hotline operator will report and track the complaint so it can be logged into the electronic tracking system.

### **XIII. Dealing with Abusive and/or Obstructive Motorists.**

Contractor hotline personnel shall be trained to deal with abusive or obstructive motorists. Contractor's training shall specifically address volatile situations and provide Contractor personnel with the skills necessary to avoid confrontations if possible and to deal with them when they occur.

### **XIV. Responding to Consumer and Customer Complaints That Cannot Be Resolved by Hotline Operators.**

In some cases, hotline operators will need to refer callers to Contractor management or to the Department for resolution for their problems. In the case of referral to Contractor management, the same mechanisms used to track hotline calls and problems will be utilized by Contractor management to keep track of requests for assistance that go outside of the hotline staff. In some cases, hotline operators will refer callers to the Department staff for problem resolution. Contractor hotline operators will track only the pass-off of information to the Department and return reports provided by state personnel regarding resolution.

### **XV. Management Responsibilities.**

1. Contractor's Director of Marketing shall have corporate responsibility for the customer service effort. He will:
  - ◆ Hire and train the Connecticut Public Relations Manager;
  - ◆ Structure hotline and website operations in conjunction with the Public Communications Manager; and
  - ◆ Insure smooth implementation and operation of the Customer Service Plan.
  
2. The Connecticut Public Relations Manager will have the authority and responsibility to implement and manage the Customer Service Plan and insure it is flexible to meet changing needs of the VIP. The primary responsibilities of the Public Relations Manager will be to:
  - ◆ Manage development and operation of the hotline and website;
  - ◆ Interface with website developers and telephone system suppliers to insure timely implementation of the hotline and website;
  - ◆ Hire and train hotline operators for the VIP;
  - ◆ Oversee day-to-day operations of the hotline and website;

- ◆ Insure timely changes are made to the hotline and website; and
  - ◆ Provide timely reports to the State.
3. Hotline operators will be responsible to:
- ◆ Receive training and understand the rules and regulations of the VIP such that they can answer calls and answer hotline callers' questions;
  - ◆ Be courteous and helpful to all callers;
  - ◆ Provide timely information updates and manage their phone system;
  - ◆ Provide weekly reports on call activities; and
  - ◆ Maintain information in the hotline database.

#### **XVI. Implementation Schedule.**

1. Contractor shall hire the Public Relations Manager within sixty (60) Days after the Notice to Proceed.
2. The Public Relations Manager will develop, in conjunction with the Director of Technology and VIP Manager, specifications for the telephone hotline system within ninety (90) Days after Notice to Proceed.
3. The Public Relations Manager will begin work with the website development team within 120 Days after Notice to Proceed.
4. The Public Relations Manager will develop and obtain State approval for hotline recording scripts within 180 Days after Notice to Proceed.
5. The website will be activated within 180 Days after Notice to Proceed.
6. The Public Relations Manager will hire and train the hotline staff between 180 Days and 210 Days after Notice to Proceed.
7. The hotline and website will begin operations 195 Days after Notice to Proceed.

#### **XVII. Telephone System.**

Contractor shall install a robust and flexible internal telephone communication system to facilitate management communications. Through its administrative offices Contractor shall provide industry and Department personnel access to VIP information to expedite requests and facilitate problem resolution. This system shall provide the infrastructure for both internal and

external communications including motorist and industry hotline operations. It shall include 24 telephone lines in Contractor's Connecticut headquarters, 4 of which will be used for hotline operations.

#### **XVIII. Electronic Mail and Website.**

Contractor shall install a PC based network communications system that will provide management with e-mail addresses and access to Contractor's network capabilities. Department staff shall have direct-to-staff communications capability via an interface with the EDBMS. Stations will be able to link to Contractor's staff via Contractor's e-mail system. The e-mail system shall be available 24-hours a Day.

Contractor shall also provide the motoring public with access to appropriate headquarters administrative staff via e-mail through the website. Contractor managers and staff shall not be identified by name on the website e-mail system; rather, they shall be assigned aliases that will automatically be inserted when public e-mails are sent or received. For example, the VIP PR Manager might be identified as "AgbarManager@VIPwebsite.com" but the alias will automatically route the mail to the manager's PC at the station under his or her Contractor name. E-mail addresses for public consumption will be publicized in informational brochures that will be available at the inspection stations as well as on the VIP website. Contractor shall also work with the Department to include an e-mail address and website location(s) to be included in registration renewal notifications that are sent to motorists.

#### **XIX. Network Communications System.**

Contractor will implement a network communications system based on the data network described in Section V Data Management of the Technical Specifications. The network communications system will not only collect and store backup data from the inspection network; it will provide a means for Contractor management, Department personnel, and Station owners to obtain pertinent data to facilitate VIP communications. This system will provide data for:

- ◆ Hotline operators who need to access Inspection data to answer questions from motorists;
- ◆ Contractor management who need Inspection data to manage the network operations;
- ◆ Department personnel who need Inspection data to facilitate field auditing and regulatory functions; and
- ◆ EDBMS personnel in the event they require backup systems or information for the EDBMS.

A unique feature of this system is Contractor's "Flash-Com" messaging capability that allows Contractor to communicate directly with Inspectors and Station owners regarding the VIP.

## **XX. Hotline Development and Operator Training.**

Telephone lines and systems shall be installed and hotline numbers will be ordered by Contractor. Contractor shall work with its communications provider to develop a hotline number that can be converted to a memorable acronym such as 1-800-NEW-TEST or similar acronym.

VIP hotline service shall be established entirely in Connecticut and shall be designed and operated by Connecticut employees who understand the context in which the VIP will be operated. DEP and DMV personnel will have direct and daily access to hotline personnel to resolve questions and problems that may arise.

Publicity materials regarding the hotline shall be developed by Contractor. Hotline telephone numbers shall be defined and the numbers integrated into the advertising and collateral materials. Scripts for hotline operators and frequently asked questions (FAQ's) will be developed. Software shall be created by Contractor to handle mapping, station locator, and Problem Resolution ticketing. Hotline operators shall be hired and trained by Contractor. DEP and DMV staff will be invited to participate in the training. Contractor shall initiate hotline operations pursuant to the Implementation Schedule, in time to provide motorists with answers to questions that will be generated as a result of publicity surrounding the changes to the VIP.

## Connecticut Emissions Program

Toll-Free Emissions Test Hotline

1-888-828-8399  
(CT Only)  
Mon-Sat: 8 a.m. - 6 p.m.

- ③ General Info
- ✓ Testing Centers
- ② FAQs
- 📄 Press/Publications
- ✳ Customer Bill Of Rights



Vehicle emissions testing is the state's most effective way to improve air quality.

## Connecticut Emissions Program

--Quick Links--



# QUICK LINK: What if I Fail the Test?

[First-time failure](#) | [Repair Options](#) | [Failing a Re-Test](#) | [Waivers](#) | [Reasons For Failure](#)

## Repair Options

### Warranty Repairs

Depending upon the age and mileage of your vehicle, it is possible that failed emissions test components are covered under the original manufacturer's warranty. Check your owner's manual to see how your vehicle may be covered beyond the regular warranty. Federally-required emissions-control warranties may cover emission-related failures that result from a manufacturer's defect in workmanship of that cause your vehicle to exceed federal emissions standards.

For some vehicles, the coverage may be as much as eight years or 80,000 miles. If your vehicle's emissions control system was the subject of a recall, you must have the recall work performed prior to presenting your vehicle for emission testing or you may be denied a test.

Last Updated: August 22, 2006

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## **Appendix 3**

State of Connecticut  
MOBILE6.2 Input Sources and Files

2007 APPENDIX 03a

\* Performance Standard Low enhanced (Metropolitan CT Area)  
\* Filename M6PSLOWE.inp

\*\*\*\*\* Header Section \*\*\*\*\*  
MOBILE6 INPUT FILE

POLLUTANTS : HC CO NOX  
DATABASE OUTPUT :  
WITH FIELDNAMES :  
AGGREGATED OUTPUT :  
EMISSIONS TABLE : M6PSLOWE.tb1 REPLACE  
REPORT FILE : M6PSLOWE.txt REPLACE

RUN DATA  
\*\*\*\*\* Run Section \*\*\*\*\*  
> \*\*\* I/M performance standard Low Enhanced \*\*\*

EXPRESS HC AS VOC :  
EXPAND EXHAUST :

> I/M program inputs  
> Performance Standard Low Enhanced  
I/M PROGRAM : 1 1983 2020 1 T/O IDLE  
I/M MODEL YEARS : 1 1968 2020  
I/M VEHICLES : 1 22222 11111111 1  
I/M STRINGENCY : 1 20.0  
I/M COMPLIANCE : 1 96.0  
I/M WAIVER RATES : 1 3.0 3.0  
NO I/M TTC CREDITS : 1

ANTI-TAMP PROG :  
83 68 20 22222 11111111 1 11 096. 11112111

\* NLEV New England  
94+ LDG IMP : NLEVNE.d

\* Meteorological inputs  
MIN/MAX TEMP : 66.5 91.6

\* Fuel inputs  
FUEL RVP : 8.7  
FUEL PROGRAM : 2 N

\*\*\*\*\* Scenario Section \*\*\*\*\*

SCENARIO RECORD : PSLWE  
CALENDAR YEAR : 2005  
EVALUATION MONTH : 7  
RELATIVE HUMIDITY : 84.0 74.5 65.2 58.8 53.6 48.0 45.5 42.8 41.4 44.3 45.8 49.9  
56.9 66.0 69.7 71.5 76.1 79.1 85.7 86.7 89.8 90.5 90.7 92.1

\*\*\*\*\* End of This Run \*\*\*\*\*  
END OF RUN

2007 APPENDIX 03b

\* Performance Standard Low enhanced (Greater CT Area)  
\* Filename M6PSLOWE.inp

\*\*\*\*\* Header Section \*\*\*\*\*  
MOBILE6 INPUT FILE

POLLUTANTS : HC CO NOX  
DATABASE OUTPUT :  
WITH FIELDNAMES :  
AGGREGATED OUTPUT :  
EMISSIONS TABLE : M6PSLOWE.tb1 REPLACE  
REPORT FILE : M6PSLOWE.txt REPLACE

RUN DATA  
\*\*\*\*\* Run Section \*\*\*\*\*

> \*\*\* I/M performance standard Low Enhanced \*\*\*

EXPRESS HC AS VOC :  
EXPAND EXHAUST :

> I/M program inputs  
> Performance Standard Low Enhanced  
I/M PROGRAM : 1 1983 2020 1 T/O IDLE  
I/M MODEL YEARS : 1 1968 2020  
I/M VEHICLES : 1 22222 11111111 1  
I/M STRINGENCY : 1 20.0  
I/M COMPLIANCE : 1 96.0  
I/M WAIVER RATES : 1 3.0 3.0  
NO I/M TTC CREDITS : 1

ANTI-TAMP PROG :  
83 68 20 22222 111111111 1 11 096. 11112111

\* NLEV New England  
94+ LDG IMP : NLEVNE.d

\* Meteorological inputs  
MIN/MAX TEMP : 67.7 95.5

\* Fuel inputs  
FUEL RVP : 8.7  
FUEL PROGRAM : 2 N

\*\*\*\*\* Scenario Section \*\*\*\*\*

SCENARIO RECORD : PSLWE  
CALENDAR YEAR : 2005  
EVALUATION MONTH : 7  
RELATIVE HUMIDITY : 86.2 76.2 69.5 61.2 53.8 49.0 44.5 41.2 40.4 38.8 40.8 43.7  
47.3 56.5 63.5 67.6 72.8 75.3 75.6 81.8 85.3 87.4 89.1 90.6

\*\*\*\*\* End of This Run \*\*\*\*\*  
END OF RUN

2007 APPENDIX 03c

\* Connecticut I/M Program (Metropolitan CT Area)  
\* Filename M6PSLOWE.inp  
\*

\*\*\*\*\* Header Section \*\*\*\*\*  
MOBILE6 INPUT FILE

POLLUTANTS : HC CO NOX  
DATABASE OUTPUT :  
WITH FIELDNAMES :  
AGGREGATED OUTPUT :  
EMISSIONS TABLE : M6PSLOWE.tbl REPLACE  
REPORT FILE : M6PSLOWE.txt REPLACE

RUN DATA  
\*\*\*\*\* Run Section \*\*\*\*\*  
> \*\*\* CT I/M Program \*\*\*

EXPRESS HC AS VOC :  
EXPAND EXHAUST :

> 2002 CT I/M PROGRAMS Revised 12/13/04  
> File has been updated w/2002 stringency/compliance/waiver rates.  
> 12/13/04 draft of I/M File. Current Name CTIM02.d

> Annual I/M test for the pre-81 CARS  
> Idle test started 1983 was upgraded to an ASM 2525 test in 1998.  
I/M PROGRAM : 1 1998 2050 1 T/O ASM 2525 PHASE-IN  
I/M MODEL YEARS : 1 1978 1980  
I/M VEHICLES : 1 22222 11111111 1  
I/M EXEMPTION AGE : 1 25  
I/M STRINGENCY : 1 22.0  
I/M COMPLIANCE : 1 94.9  
I/M WAIVER RATES : 1 5.55 3.83

> Biennial I/M for the post-80 CARS  
> Idle test started 1983 was upgraded to an ASM 2525 test in 1998.  
I/M PROGRAM : 2 1998 2050 2 T/O ASM 2525 PHASE-IN  
I/M MODEL YEARS : 2 1981 2050  
I/M VEHICLES : 2 22222 11111111 1  
I/M EXEMPTION AGE : 2 25  
I/M STRINGENCY : 2 22.0  
I/M COMPLIANCE : 2 94.9  
I/M WAIVER RATES : 2 5.55 3.83

> Annual Evap test for the pre-81 cars  
I/M PROGRAM : 3 1983 2050 1 T/O GC  
I/M MODEL YEARS : 3 1978 1980  
I/M VEHICLES : 3 22222 21111111 1  
I/M EXEMPTION AGE : 3 25  
I/M COMPLIANCE : 3 94.9  
I/M WAIVER RATES : 3 0.00 0.00

> Biennial Evap test for the post-81 cars  
I/M PROGRAM : 4 1983 2050 2 T/O GC  
I/M MODEL YEARS : 4 1981 2050  
I/M VEHICLES : 4 22222 21111111 1  
I/M EXEMPTION AGE : 4 25  
I/M COMPLIANCE : 4 94.9  
I/M WAIVER RATES : 4 0.00 0.00

> Annual I/M test for the pre-81 Trucks (GVWR 8,501-10,000lb)  
I/M PROGRAM : 5 1983 2050 1 T/O IDLE  
I/M MODEL YEARS : 5 1978 1980

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I/M VEHICLES : 5 11111 21111111 1  
I/M EXEMPTION AGE : 5 25  
I/M STRINGENCY : 5 22.0  
I/M COMPLIANCE : 5 94.9  
I/M WAIVER RATES : 5 5.55 3.83

> Biennial I/M test for the post-80 Trucks (GVWR 8,501-10,000lb)

I/M PROGRAM : 6 1983 2050 2 T/O IDLE  
I/M MODEL YEARS : 6 1981 2050  
I/M VEHICLES : 6 11111 21111111 1  
I/M EXEMPTION AGE : 6 25  
I/M STRINGENCY : 6 22.0  
I/M COMPLIANCE : 6 94.9  
I/M WAIVER RATES : 6 5.55 3.83

ANTI-TAMP PROG :  
83 71 50 22222 21111111 1 12 096. 12111112

\* NLEV New England  
94+ LDG IMP : NLEVNE.d

\* Meteorological inputs  
MIN/MAX TEMP : 66.5 91.6

\* Fuel inputs  
FUEL RVP : 8.7  
FUEL PROGRAM : 2 N

\*\*\*\*\* Scenario Section \*\*\*\*\*

SCENARIO RECORD : PSLWE  
CALENDAR YEAR : 2005  
EVALUATION MONTH : 7  
RELATIVE HUMIDITY : 84.0 74.5 65.2 58.8 53.6 48.0 45.5 42.8 41.4 44.3 45.8 49.9  
56.9 66.0 69.7 71.5 76.1 79.1 85.7 86.7 89.8 90.5 90.7 92.1

\*\*\*\*\* End of This Run \*\*\*\*\*  
END OF RUN

\* Connecticut I/M Program (Metropolitan CT Area)  
 \* Filename M6PSLOWE.inp

\*\*\*\*\* Header Section \*\*\*\*\*  
 MOBILE6 INPUT FILE

POLLUTANTS : HC CO NOX  
 DATABASE OUTPUT :  
 WITH FIELDNAMES :  
 AGGREGATED OUTPUT :  
 EMISSIONS TABLE : M6PSLOWE.tb1 REPLACE  
 REPORT FILE : M6PSLOWE.txt REPLACE

RUN DATA  
 \*\*\*\*\* Run Section \*\*\*\*\*  
 > \*\*\* CT I/M Program \*\*\*

EXPRESS HC AS VOC :  
 EXPAND EXHAUST :

>CT I/M PROGRAMS for all years 2005 and later (modified Jun 05 PMB/AG to reflect DMV info that 8,501-10,000 lb get TSI & GC (no OBD)  
 >Biennial OBDII I/M "tailpipe" test for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR. Program start year reflects OBD test that replaced the ASM test (in operation since 1998) which in turn replaced the Idle test (in operation since 1983) per agreement with EPA.

I/M PROGRAM : 1 1983 2050 2 TRC OBD I/M  
 I/M MODEL YEARS : 1 1996 2050  
 I/M GRACE PERIOD : 1 4  
 I/M EXEMPTION AGE : 1 25  
 I/M VEHICLES : 1 22222 11111111 1  
 I/M STRINGENCY : 1 22.0  
 I/M COMPLIANCE : 1 96.0  
 I/M WAIVER RATES : 1 1.0 1.0

>Biennial OBDII evaporative "test" for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR

I/M PROGRAM : 2 1983 2050 2 TRC EVAP OBD  
 I/M MODEL YEARS : 2 1996 2050  
 I/M GRACE PERIOD : 2 4  
 I/M EXEMPTION AGE : 2 25  
 I/M VEHICLES : 2 22222 11111111 1  
 I/M COMPLIANCE : 2 96.0  
 I/M WAIVER RATES : 2 1.0 1.0

>Biennial 2500/IDLE I/M tailpipe test for all HDGT 8,501 - 10,000 lbs GVWR (per above comment)

I/M PROGRAM : 3 1983 2050 2 TRC 2500/IDLE  
 I/M MODEL YEARS : 3 1981 2050  
 I/M GRACE PERIOD : 3 4  
 I/M EXEMPTION AGE : 3 25  
 I/M VEHICLES : 3 11111 21111111 1  
 I/M STRINGENCY : 3 22.0  
 I/M COMPLIANCE : 3 96.0  
 I/M WAIVER RATES : 3 1.0 1.0

>Biennial GC evaporative "test" for all HDGT 8,501 - 10,000 lbs (per above comment)

I/M PROGRAM : 4 1983 2050 2 TRC GC  
 I/M MODEL YEARS : 4 1981 2050  
 I/M GRACE PERIOD : 4 4  
 I/M EXEMPTION AGE : 4 25  
 I/M VEHICLES : 4 11111 21111111 1  
 I/M COMPLIANCE : 4 96.0

I/M WAIVER RATES : 4 1.0 1.0

>Biennial ASM I/M tailpipe test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

I/M PROGRAM : 5 1983 2050 2 TRC ASM 2525 FINAL
I/M MODEL YEARS : 5 1981 1995
I/M GRACE PERIOD : 5 4
I/M EXEMPTION AGE : 5 25
I/M VEHICLES : 5 22222 11111111 1
I/M STRINGENCY : 5 22.0
I/M COMPLIANCE : 5 96.0
I/M WAIVER RATES : 5 1.0 1.0

>Biennial Gas Cap evaporative test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

I/M PROGRAM : 6 1983 2050 2 TRC GC
I/M MODEL YEARS : 6 1981 1995
I/M GRACE PERIOD : 6 4
I/M EXEMPTION AGE : 6 25
I/M VEHICLES : 6 22222 11111111 1
I/M COMPLIANCE : 6 96.0
I/M WAIVER RATES : 6 1.0 1.0

ANTI-TAMP PROG :
83 71 50 22222 21111111 1 12 096. 12111112

\* NLEV New England
94+ LDG IMP : NLEVNE.d

\* Meteorological inputs
MIN/MAX TEMP : 66.5 91.6

\* Fuel inputs
FUEL RVP : 8.7
FUEL PROGRAM : 2 N

\*\*\*\*\* Scenario Section \*\*\*\*\*

SCENARIO RECORD : PSLWE
CALENDAR YEAR : 2005
EVALUATION MONTH : 7
RELATIVE HUMIDITY : 84.0 74.5 65.2 58.8 53.6 48.0 45.5 42.8 41.4 44.3 45.8 49.9
56.9 66.0 69.7 71.5 76.1 79.1 85.7 86.7 89.8 90.5 90.7 92.1

\*\*\*\*\* End of This Run \*\*\*\*\*

END OF RUN

2007 APPENDIX 03e

\* Connecticut I/M Program (Greater CT Area)  
\* Filename M6PSLOWE.inp

\*\*\*\*\* Header Section \*\*\*\*\*  
MOBILE6 INPUT FILE

POLLUTANTS : HC CO NOX  
DATABASE OUTPUT :  
WITH FIELDNAMES :  
AGGREGATED OUTPUT :  
EMISSIONS TABLE : M6PSLOWE.tb1 REPLACE  
REPORT FILE : M6PSLOWE.txt REPLACE

RUN DATA  
\*\*\*\*\* Run Section \*\*\*\*\*

> \*\*\* CT I/M Program \*\*\*

EXPRESS HC AS VOC :  
EXPAND EXHAUST :

> 2002 CT I/M PROGRAMS Revised 12/13/04  
> File has been updated w/2002 stringency/compliance/waiver rates.  
> 12/13/04 draft of I/M File. Current Name CTIM02.d

> Annual I/M test for the pre-81 CARS  
> Idle test started 1983 was upgraded to an ASM 2525 test in 1998.  
I/M PROGRAM : 1 1998 2050 1 T/O ASM 2525 PHASE-IN  
I/M MODEL YEARS : 1 1978 1980  
I/M VEHICLES : 1 22222 11111111 1  
I/M EXEMPTION AGE : 1 25  
I/M STRINGENCY : 1 22.0  
I/M COMPLIANCE : 1 94.9  
I/M WAIVER RATES : 1 5.55 3.83

> Biennial I/M for the post-80 CARS  
> Idle test started 1983 was upgraded to an ASM 2525 test in 1998.  
I/M PROGRAM : 2 1998 2050 2 T/O ASM 2525 PHASE-IN  
I/M MODEL YEARS : 2 1981 2050  
I/M VEHICLES : 2 22222 11111111 1  
I/M EXEMPTION AGE : 2 25  
I/M STRINGENCY : 2 22.0  
I/M COMPLIANCE : 2 94.9  
I/M WAIVER RATES : 2 5.55 3.83

> Annual Evap test for the pre-81 cars  
I/M PROGRAM : 3 1983 2050 1 T/O GC  
I/M MODEL YEARS : 3 1978 1980  
I/M VEHICLES : 3 22222 21111111 1  
I/M EXEMPTION AGE : 3 25  
I/M COMPLIANCE : 3 94.9  
I/M WAIVER RATES : 3 0.00 0.00

> Biennial Evap test for the post-81 cars  
I/M PROGRAM : 4 1983 2050 2 T/O GC  
I/M MODEL YEARS : 4 1981 2050  
I/M VEHICLES : 4 22222 21111111 1  
I/M EXEMPTION AGE : 4 25  
I/M COMPLIANCE : 4 94.9  
I/M WAIVER RATES : 4 0.00 0.00

> Annual I/M test for the pre-81 Trucks (GVWR 8,501-10,000lb)  
I/M PROGRAM : 5 1983 2050 1 T/O IDLE  
I/M MODEL YEARS : 5 1978 1980

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I/M VEHICLES : 5 11111 21111111 1  
I/M EXEMPTION AGE : 5 25  
I/M STRINGENCY : 5 22.0  
I/M COMPLIANCE : 5 94.9  
I/M WAIVER RATES : 5 5.55 3.83

> Biennial I/M test for the post-80 Trucks (GVWR 8,501-10,000lb)

I/M PROGRAM : 6 1983 2050 2 T/O IDLE  
I/M MODEL YEARS : 6 1981 2050  
I/M VEHICLES : 6 11111 21111111 1  
I/M EXEMPTION AGE : 6 25  
I/M STRINGENCY : 6 22.0  
I/M COMPLIANCE : 6 94.9  
I/M WAIVER RATES : 6 5.55 3.83

ANTI-TAMP PROG :  
83 71 50 22222 21111111 1 12 096. 12111112

\* NLEV New England  
94+ LDG IMP : NLEVNE.d

\* Meteorological inputs  
MIN/MAX TEMP : 67.7 95.5

\* Fuel inputs  
FUEL RVP : 8.7  
FUEL PROGRAM : 2 N

\*\*\*\*\* Scenario Section \*\*\*\*\*

SCENARIO RECORD : PSLWE  
CALENDAR YEAR : 2005  
EVALUATION MONTH : 7  
RELATIVE HUMIDITY : 86.2 76.2 69.5 61.2 53.8 49.0 44.5 41.2 40.4 38.8 40.8 43.7  
47.3 56.5 63.5 67.6 72.8 75.3 75.6 81.8 85.3 87.4 89.1 90.6

\*\*\*\*\* End of This Run \*\*\*\*\*  
END OF RUN

2007 APPENDIX 03f

\* Connecticut I/M Program (Greater CT Area)  
 \* Filename M6PSLOWE.inp

\*\*\*\*\* Header Section \*\*\*\*\*  
 MOBILE6 INPUT FILE

POLLUTANTS : HC CO NOX  
 DATABASE OUTPUT :  
 WITH FIELDNAMES :  
 AGGREGATED OUTPUT :  
 EMISSIONS TABLE : M6PSLOWE.tb1 REPLACE  
 REPORT FILE : M6PSLOWE.txt REPLACE

RUN DATA  
 \*\*\*\*\* Run Section \*\*\*\*\*  
 > \*\*\* CT I/M Program \*\*\*

EXPRESS HC AS VOC :  
 EXPAND EXHAUST :

>CT I/M PROGRAMS for all years 2005 and later (modified Jun 05 PMB/AG to reflect DMV info that 8,501-10,000 lb get TSI & GC (no OBD)  
 >Biennial OBDII I/M "tailpipe" test for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR. Program start year reflects OBD test that replaced the ASM test (in operation since 1998) which in turn replaced the Idle test (in operation since 1983) per agreement with EPA.

I/M PROGRAM : 1 1983 2050 2 TRC OBD I/M  
 I/M MODEL YEARS : 1 1996 2050  
 I/M GRACE PERIOD : 1 4  
 I/M EXEMPTION AGE : 1 25  
 I/M VEHICLES : 1 22222 11111111 1  
 I/M STRINGENCY : 1 22.0  
 I/M COMPLIANCE : 1 96.0  
 I/M WAIVER RATES : 1 1.0 1.0

>Biennial OBDII evaporative "test" for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR

I/M PROGRAM : 2 1983 2050 2 TRC EVAP OBD  
 I/M MODEL YEARS : 2 1996 2050  
 I/M GRACE PERIOD : 2 4  
 I/M EXEMPTION AGE : 2 25  
 I/M VEHICLES : 2 22222 11111111 1  
 I/M COMPLIANCE : 2 96.0  
 I/M WAIVER RATES : 2 1.0 1.0

>Biennial 2500/IDLE I/M tailpipe test for all HDGT 8,501 - 10,000 lbs GVWR (per above comment)

I/M PROGRAM : 3 1983 2050 2 TRC 2500/IDLE  
 I/M MODEL YEARS : 3 1981 2050  
 I/M GRACE PERIOD : 3 4  
 I/M EXEMPTION AGE : 3 25  
 I/M VEHICLES : 3 11111 21111111 1  
 I/M STRINGENCY : 3 22.0  
 I/M COMPLIANCE : 3 96.0  
 I/M WAIVER RATES : 3 1.0 1.0

>Biennial GC evaporative "test" for all HDGT 8,501 - 10,000 lbs (per above comment)

I/M PROGRAM : 4 1983 2050 2 TRC GC  
 I/M MODEL YEARS : 4 1981 2050  
 I/M GRACE PERIOD : 4 4  
 I/M EXEMPTION AGE : 4 25  
 I/M VEHICLES : 4 11111 21111111 1  
 I/M COMPLIANCE : 4 96.0

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I/M WAIVER RATES : 4 1.0 1.0

>Biennial ASM I/M tailpipe test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

I/M PROGRAM : 5 1983 2050 2 TRC ASM 2525 FINAL
I/M MODEL YEARS : 5 1981 1995
I/M GRACE PERIOD : 5 4
I/M EXEMPTION AGE : 5 25
I/M VEHICLES : 5 22222 11111111 1
I/M STRINGENCY : 5 22.0
I/M COMPLIANCE : 5 96.0
I/M WAIVER RATES : 5 1.0 1.0

>Biennial Gas Cap evaporative test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

I/M PROGRAM : 6 1983 2050 2 TRC GC
I/M MODEL YEARS : 6 1981 1995
I/M GRACE PERIOD : 6 4
I/M EXEMPTION AGE : 6 25
I/M VEHICLES : 6 22222 11111111 1
I/M COMPLIANCE : 6 96.0
I/M WAIVER RATES : 6 1.0 1.0

ANTI-TAMP PROG :
83 71 50 22222 211111111 1 12 096. 12111112

\* NLEV New England
94+ LDG IMP : NLEVNE.d

\* Meteorological inputs
MIN/MAX TEMP : 67.7 95.5

\* Fuel inputs
FUEL RVP : 8.7
FUEL PROGRAM : 2 N

\*\*\*\*\* Scenario Section \*\*\*\*\*

SCENARIO RECORD : PSLWE
CALENDAR YEAR : 2005
EVALUATION MONTH : 7
RELATIVE HUMIDITY : 86.2 76.2 69.5 61.2 53.8 49.0 44.5 41.2 40.4 38.8 40.8 43.7
47.3 56.5 63.5 67.6 72.8 75.3 75.6 81.8 85.3 87.4 89.1 90.6

\*\*\*\*\* End of This Run \*\*\*\*\*

END OF RUN

## **Appendix 4**

State of Connecticut  
MOBILE6.2 Output Files

2007 APPENDIX 04a

\*\*\*\*\*  
 \* MOBILE6.2.03 (24-Sep-2003) \*  
 \* Input file: D:\GARCIA\AM62RUNDIR\CTINPUT.IN (file 1, run 1). \*  
 \*\*\*\*\*

\*\*\* I/M performance standard Low Enhanced \*\*\*  
 \* I/M program inputs  
 \* Performance Standard Low Enhanced

\* Reading 94+ LEV IMPLEMENTATION SCHEDULE from the following external  
 \* data file: NLEVNE.D

M616 Comment:  
 User has supplied post-1999 sulfur levels.

\* #####  
 \* PSLWE

\* File 1, Run 1, Scenario 1.  
 \* #####

\*\*\* I/M credits for Tech1&2 vehicles were read from the following external  
 data file: TECH12.D

M 48 Warning:  
 there are no sales for vehicle class HDGV8b

LEV phase-in data read from file NLEVNE.D

Calendar Year: 2005  
 Month: July  
 Altitude: Low  
 Minimum Temperature: 66.5 (F)  
 Maximum Temperature: 91.6 (F)  
 Minimum Rel. Hum.: 41.4 (%)  
 Maximum Rel. Hum.: 92.1 (%)  
 Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: Yes  
 Evap I/M Program: No  
 ATP Program: Yes  
 Reformulated Gas: Yes

| vehicle Type:<br>GWR: | LDGV   | LDGT12<br><6000 | LDGT34<br>>6000 | LDGT<br>(All) | HDGV   | LDDV   | LDDT   | HDDV   | MC     | All Veh |
|-----------------------|--------|-----------------|-----------------|---------------|--------|--------|--------|--------|--------|---------|
| VMT Distribution:     | 0.4158 | 0.3387          | 0.1165          |               | 0.0360 | 0.0006 | 0.0019 | 0.0849 | 0.0057 | 1.0000  |

Composite Emission Factors (g/mi):

|                 |       |       |       |       |       |       |       |        |       |        |
|-----------------|-------|-------|-------|-------|-------|-------|-------|--------|-------|--------|
| Composite VOC : | 0.968 | 1.041 | 1.726 | 1.217 | 1.611 | 0.562 | 0.801 | 0.540  | 2.09  | 1.074  |
| Composite CO :  | 10.24 | 11.85 | 16.06 | 12.92 | 14.44 | 1.568 | 1.371 | 3.046  | 14.00 | 11.004 |
| Composite NOX : | 0.901 | 1.056 | 1.359 | 1.134 | 4.271 | 1.246 | 1.371 | 11.448 | 1.11  | 2.025  |

Exhaust emissions (g/mi):

|                    |       |       |       |       |       |       |       |        |        |        |
|--------------------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| VOC Start:         | 0.186 | 0.244 | 0.425 | 0.290 |       | 0.247 | 0.336 |        | 0.397  |        |
| VOC Running:       | 0.203 | 0.266 | 0.465 | 0.317 |       | 0.315 | 0.465 |        | 1.228  |        |
| VOC Total Exhaust: | 0.389 | 0.510 | 0.890 | 0.607 | 0.624 | 0.562 | 0.801 | 0.540  | 1.62   | 0.518  |
| CO Start:          | 2.45  | 3.89  | 5.60  | 4.33  |       | 0.762 | 0.672 |        | 2.953  |        |
| CO Running:        | 7.79  | 7.96  | 10.47 | 8.60  |       | 0.806 | 0.699 |        | 11.052 |        |
| CO Total Exhaust:  | 10.24 | 11.85 | 16.06 | 12.92 | 14.44 | 1.568 | 1.371 | 3.046  | 14.00  | 11.004 |
| NOx Start:         | 0.143 | 0.180 | 0.225 | 0.192 |       | 0.070 | 0.069 |        | 0.347  |        |
| NOx Running:       | 0.757 | 0.876 | 1.133 | 0.942 |       | 1.177 | 1.302 |        | 0.761  |        |
| NOx Total Exhaust: | 0.901 | 1.056 | 1.359 | 1.134 | 4.271 | 1.246 | 1.371 | 11.448 | 1.11   | 2.025  |

2007 APPENDIX 04b

\*\*\*\*\*  
 \* MOBILE6.2.03 (24-Sep-2003) \*  
 \* Input file: D:\GARCIA\AM62RUNDIR\CTINPUT.IN (file 1, run 1). \*  
 \*\*\*\*\*

\*\*\* I/M performance standard Low Enhanced \*\*\*  
 \* I/M program inputs  
 \* Performance Standard Low Enhanced

\* Reading 94+ LEV IMPLEMENTATION SCHEDULE from the following external  
 \* data file: NLEVNE.D  
 M616 Comment:

User has supplied post-1999 sulfur levels.

\* #####  
 \* PSLWE

\* File 1, Run 1, Scenario 1.

\* #####

\*\*\* I/M credits for Tech1&2 vehicles were read from the following external  
 data file: TECH12.D  
 M 48 warning:

there are no sales for vehicle class HDGV8b

LEV phase-in data read from file NLEVNE.D

Calendar Year: 2005  
 Month: July  
 Altitude: Low  
 Minimum Temperature: 67.7 (F)  
 Maximum Temperature: 95.5 (F)  
 Minimum Rel. Hum.: 38.8 (%)  
 Maximum Rel. Hum.: 90.6 (%)  
 Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: Yes  
 Evap I/M Program: No  
 ATP Program: Yes  
 Reformulated Gas: Yes

| Vehicle Type:                      | LDGV   | LDGT12<br><6000 | LDGT34<br>>6000 | LDGT<br>(All) | HDGV   | LDDV   | LDDT   | HDDV   | MC     | All Veh |
|------------------------------------|--------|-----------------|-----------------|---------------|--------|--------|--------|--------|--------|---------|
| VMT Distribution:                  | 0.4158 | 0.3387          | 0.1165          |               | 0.0360 | 0.0006 | 0.0019 | 0.0849 | 0.0057 | 1.0000  |
| -----                              |        |                 |                 |               |        |        |        |        |        |         |
| Composite Emission Factors (g/mi): |        |                 |                 |               |        |        |        |        |        |         |
| Composite VOC :                    | 1.000  | 1.072           | 1.774           | 1.252         | 1.682  | 0.562  | 0.801  | 0.540  | 2.14   | 1.106   |
| Composite CO :                     | 10.39  | 11.89           | 16.09           | 12.97         | 14.85  | 1.568  | 1.371  | 3.046  | 14.93  | 11.106  |
| Composite NOX :                    | 0.904  | 1.051           | 1.351           | 1.128         | 4.268  | 1.246  | 1.371  | 11.448 | 1.07   | 2.024   |
| -----                              |        |                 |                 |               |        |        |        |        |        |         |
| Exhaust emissions (g/mi):          |        |                 |                 |               |        |        |        |        |        |         |
| VOC Start:                         | 0.185  | 0.242           | 0.421           | 0.288         |        | 0.247  | 0.336  |        | 0.399  |         |
| VOC Running:                       | 0.206  | 0.269           | 0.468           | 0.320         |        | 0.315  | 0.465  |        | 1.239  |         |
| VOC Total Exhaust:                 | 0.391  | 0.510           | 0.889           | 0.607         | 0.632  | 0.562  | 0.801  | 0.540  | 1.64   | 0.519   |
| CO Start:                          | 2.35   | 3.78            | 5.50            | 4.22          |        | 0.762  | 0.672  |        | 3.081  |         |
| CO Running:                        | 8.04   | 8.11            | 10.59           | 8.74          |        | 0.806  | 0.699  |        | 11.851 |         |
| CO Total Exhaust:                  | 10.39  | 11.89           | 16.09           | 12.97         | 14.85  | 1.568  | 1.371  | 3.046  | 14.93  | 11.106  |
| NOx Start:                         | 0.141  | 0.177           | 0.221           | 0.189         |        | 0.070  | 0.069  |        | 0.335  |         |
| NOx Running:                       | 0.763  | 0.874           | 1.130           | 0.939         |        | 1.177  | 1.302  |        | 0.731  |         |
| NOx Total Exhaust:                 | 0.904  | 1.051           | 1.351           | 1.128         | 4.268  | 1.246  | 1.371  | 11.448 | 1.07   | 2.024   |

2007 APPENDIX 04c

\*\*\*\*\*  
 \* MOBILE6.2.03 (24-Sep-2003) \*  
 \* Input file: D:\GARCIA\AM62RUNDIR\CTINPUT.IN (file 1, run 1). \*  
 \*\*\*\*\*

\*\*\* CT I/M Program \*\*\*  
 \* 2002 CT I/M PROGRAMS Revised 12/13/04  
 \* File has been updated w/2002 stringency/compliance/waiver rates.  
 \* 12/13/04 draft of I/M File. Current Name CTIM02.d  
 \* Annual I/M test for the pre-81 CARS  
 \* Idle test started 1983 was upgraded to an ASM 2525 test in 1998.

\* Reading ASM I/M Test Credits from ASMDATA.D  
 \* Biennial I/M for the post-80 CARS  
 \* Idle test started 1983 was upgraded to an ASM 2525 test in 1998.

\* Reading ASM I/M Test Credits from ASMDATA.D  
 \* Annual Evap test for the pre-81 cars  
 \* Biennial Evap test for the post-81 cars  
 \* Annual I/M test for the pre-81 Trucks (GVWR 8,501-10,000lb)  
 \* Biennial I/M test for the post-80 Trucks (GVWR 8,501-10,000lb)

\* Reading 94+ LEV IMPLEMENTATION SCHEDULE from the following external  
 \* data file: NLEVNE.D  
 M616 Comment:

User has supplied post-1999 sulfur levels.

\* #####  
 \* PSLWE

\* File 1, Run 1, Scenario 1.

\* #####

\*\*\* I/M credits for Tech1&2 vehicles were read from the following external  
 data file: TECH12.D

M 48 warning:

there are no sales for vehicle class HDGV8b

LEV phase-in data read from file NLEVNE.D

Calendar Year: 2005  
 Month: July  
 Altitude: Low  
 Minimum Temperature: 66.5 (F)  
 Maximum Temperature: 91.6 (F)  
 Minimum Rel. Hum.: 41.4 (%)  
 Maximum Rel. Hum.: 92.1 (%)  
 Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: Yes  
 Evap I/M Program: Yes  
 ATP Program: Yes  
 Reformulated Gas: Yes

| vehicle Type:                      | LDGV   | LDGT12<br><6000 | LDGT34<br>>6000 | LDGT<br>(All) | HDGV   | LDDV   | LDDT   | HDDV   | MC     | All Veh |
|------------------------------------|--------|-----------------|-----------------|---------------|--------|--------|--------|--------|--------|---------|
| VMT Distribution:                  | 0.4158 | 0.3387          | 0.1165          |               | 0.0360 | 0.0006 | 0.0019 | 0.0849 | 0.0057 | 1.0000  |
| Composite Emission Factors (g/mi): |        |                 |                 |               |        |        |        |        |        |         |
| Composite VOC :                    | 0.951  | 0.998           | 1.633           | 1.160         | 1.571  | 0.562  | 0.801  | 0.540  | 2.09   | 1.040   |
| Composite CO :                     | 9.90   | 11.32           | 14.85           | 12.22         | 13.59  | 1.568  | 1.371  | 3.046  | 14.00  | 10.513  |
| Composite NOX :                    | 0.844  | 0.983           | 1.286           | 1.060         | 4.245  | 1.246  | 1.371  | 11.448 | 1.11   | 1.967   |
| Exhaust emissions (g/mi):          |        |                 |                 |               |        |        |        |        |        |         |
| VOC Start:                         | 0.186  | 0.242           | 0.415           | 0.286         |        | 0.247  | 0.336  |        | 0.397  |         |
| VOC Running:                       | 0.196  | 0.233           | 0.395           | 0.274         |        | 0.315  | 0.465  |        | 1.228  |         |
| VOC Total Exhaust:                 | 0.382  | 0.475           | 0.810           | 0.560         | 0.592  | 0.562  | 0.801  | 0.540  | 1.62   | 0.492   |
| CO Start:                          | 2.41   | 3.79            | 5.49            | 4.23          |        | 0.762  | 0.672  |        | 2.953  |         |
| CO Running:                        | 7.49   | 7.52            | 9.36            | 7.99          |        | 0.806  | 0.699  |        | 11.052 |         |
| CO Total Exhaust:                  | 9.90   | 11.32           | 14.85           | 12.22         | 13.59  | 1.568  | 1.371  | 3.046  | 14.00  | 10.513  |
| NOx Start:                         | 0.143  | 0.180           | 0.225           | 0.192         |        | 0.070  | 0.069  |        | 0.347  |         |
| NOx Running:                       | 0.701  | 0.802           | 1.060           | 0.868         |        | 1.177  | 1.302  |        | 0.761  |         |
| NOx Total Exhaust:                 | 0.844  | 0.983           | 1.286           | 1.060         | 4.245  | 1.246  | 1.371  | 11.448 | 1.11   | 1.967   |



2007 APPENDIX 04e

\*\*\*\*\*  
 \* MOBILE6.2.03 (24-Sep-2003) \*  
 \* Input file: D:\GARCIA\AM62RUNDIR\CTINPUT.IN (file 1, run 1). \*  
 \*\*\*\*\*

\* \*\* CT I/M Program \*\*  
 \* 2002 CT I/M PROGRAMS Revised 12/13/04  
 \* File has been updated w/2002 stringency/compliance/waiver rates.  
 \* 12/13/04 draft of I/M File. Current Name CTIM02.d  
 \* Annual I/M test for the pre-81 CARS  
 \* Idle test started 1983 was upgraded to an ASM 2525 test in 1998.

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 \* Biennial I/M for the post-80 CARS  
 \* Idle test started 1983 was upgraded to an ASM 2525 test in 1998.

\* Reading ASM I/M Test Credits from ASMDATA.D  
 \* Annual Evap test for the pre-81 cars  
 \* Biennial Evap test for the post-81 cars  
 \* Annual I/M test for the pre-81 Trucks (GVWR 8,501-10,000lb)  
 \* Biennial I/M test for the post-80 Trucks (GVWR 8,501-10,000lb)

\* Reading 94+ LEV IMPLEMENTATION SCHEDULE from the following external  
 \* data file: NLEVNE.D  
 \* M616 Comment:

User has supplied post-1999 sulfur levels.

\* #####  
 \* PSLWE

\* File 1, Run 1, Scenario 1.

\* #####

\*\*\* I/M credits for Tech1&2 vehicles were read from the following external  
 data file: TECH12.D

M 48 warning:

there are no sales for vehicle class HDGV8b

LEV phase-in data read from file NLEVNE.D

Calendar Year: 2005  
 Month: July  
 Altitude: Low  
 Minimum Temperature: 67.7 (F)  
 Maximum Temperature: 95.5 (F)  
 Minimum Rel. Hum.: 38.8 (%)  
 Maximum Rel. Hum.: 90.6 (%)  
 Fuel Sulfur Content: 90. ppm

Exhaust I/M Program: Yes  
 Evap I/M Program: Yes  
 ATP Program: Yes  
 Reformulated Gas: Yes

| Vehicle Type:                      | LDGV   | LDGT12<br><6000 | LDGT34<br>>6000 | LDGT<br>(All) | HDGV   | LDDV   | LDDT   | HDDV   | MC     | All Veh |
|------------------------------------|--------|-----------------|-----------------|---------------|--------|--------|--------|--------|--------|---------|
| VMT Distribution:                  | 0.4158 | 0.3387          | 0.1165          |               | 0.0360 | 0.0006 | 0.0019 | 0.0849 | 0.0057 | 1.0000  |
| Composite Emission Factors (g/mi): |        |                 |                 |               |        |        |        |        |        |         |
| Composite VOC :                    | 0.980  | 1.026           | 1.678           | 1.193         | 1.640  | 0.562  | 0.801  | 0.540  | 2.14   | 1.069   |
| Composite CO :                     | 10.05  | 11.37           | 14.89           | 12.27         | 13.99  | 1.568  | 1.371  | 3.046  | 14.93  | 10.614  |
| Composite NOX :                    | 0.847  | 0.978           | 1.279           | 1.055         | 4.242  | 1.246  | 1.371  | 11.448 | 1.07   | 1.966   |
| Exhaust emissions (g/mi):          |        |                 |                 |               |        |        |        |        |        |         |
| VOC Start:                         | 0.185  | 0.240           | 0.411           | 0.284         |        | 0.247  | 0.336  |        | 0.399  |         |
| VOC Running:                       | 0.198  | 0.235           | 0.398           | 0.277         |        | 0.315  | 0.465  |        | 1.239  |         |
| VOC Total Exhaust:                 | 0.383  | 0.475           | 0.809           | 0.560         | 0.600  | 0.562  | 0.801  | 0.540  | 1.64   | 0.493   |
| CO Start:                          | 2.31   | 3.69            | 5.39            | 4.13          |        | 0.762  | 0.672  |        | 3.081  |         |
| CO Running:                        | 7.74   | 7.68            | 9.49            | 8.14          |        | 0.806  | 0.699  |        | 11.851 |         |
| CO Total Exhaust:                  | 10.05  | 11.37           | 14.89           | 12.27         | 13.99  | 1.568  | 1.371  | 3.046  | 14.93  | 10.614  |
| NOX Start:                         | 0.141  | 0.177           | 0.221           | 0.189         |        | 0.070  | 0.069  |        | 0.335  |         |
| NOX Running:                       | 0.706  | 0.800           | 1.057           | 0.866         |        | 1.177  | 1.302  |        | 0.731  |         |
| NOX Total Exhaust:                 | 0.847  | 0.978           | 1.279           | 1.055         | 4.242  | 1.246  | 1.371  | 11.448 | 1.07   | 1.966   |



## **Appendix 5**

State of Connecticut  
Connecticut I/M Program Budget

**Appendix 5**  
State of Connecticut  
Connecticut I/M Program Budget

Fiscal Year 2006 – 2007 \$7,757,658.38<sup>A</sup>

51.354 (a) *Administrative Resources* – A portion of the Clean Air Act fee is set aside to fund the DMV's oversight functions.

51.354 (b) *Personnel* – The Connecticut program has 51 positions dedicated to its oversight duties.

51.354 (c) - *Equipment* – Connecticut has a constant supply of covert vehicles, the EDBMS and in-house CDAS units for program evaluation, data processing, analysis and reporting

51.354 (d) (1) Detailed budget plan describing source of funds for personnel, program administration, program enforcement, data analysis/reporting, equipment purchase and other requirements.

51.354 (d) (2) Description of personnel resources as in 51.354 (b) Following are the number of personnel dedicated to oversight functions by category: Overt Auditing – 22, Covert Auditing – 4, Data Analysis – 7, Administration – 13 and Enforcement – 5.

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<sup>A</sup> Information provided by Department of Motor Vehicles on July 26, 2007 is for overall program costs.

## **Appendix 6**

State of Connecticut  
Personnel Distribution/Major Equipment Procurement

## **Appendix 6**

State of Connecticut

Personnel Distribution/Major Equipment Procurement

Personnel and equipment resources (as described in CFR 51.354)

*DMV's Technical Management Center houses 32 Field Agents and 13 Contract Compliance Officers that perform administrative (overt performance), video and trigger auditing and covert audits of stations and inspectors. Covert vehicles are dispatched from this site as well as software testing and waiver and challenge testing. Findings from these activities are sent to Applus for their required enforcement on stations and inspectors. Also, there are 6 clericals who interact with the public on compliance issues etc.*

Testing equipment and software (as described in CFR 51.358)

*The Cheshire Emissions Technical Management Center is where software acceptance testing is performed. Presently, the Connecticut Decentralized Analyzer System (CDAS Unit) performs the 6 types of tests that are required: ASM25/25, TSI, OBD, Loaded Mode Diesel, Modified Snap Diesel and Gas Cap.*

Procedures concerning document security

*The computer generated Vehicle Inspection Report (VIR) as well as its contents are in accordance with 40CFR, 51.358(a)(3)*

Quality control and quality assurance activities (as described in CFR 51.359 and 51.363)

*At the Cheshire Technical Management Center 5 QA auditors perform calibration audits of the network station's CDAS Units. Performance, QA, covert, record and trigger auditing are all employed to discover and prevent fraud as well as correct non-program procedures.*

Description of administrative and judicial procedures and responsibilities

*The Cheshire Technical Management Center performs challenge tests. Cost and Diagnostic Waivers (researched at both Cheshire and Waterbury) are also handled from this site. Hardship waivers are researched at Waterbury and directed to Cheshire for issuance. Time Extensions are researched and issued at Waterbury. Notification and compliance enforcement are performed at Waterbury and Wethersfield and/or all Branches respectively.*

Information on Recall Compliance Plan/Recall Notice Outreach Plan

*It is outlined in the Emissions RFP in section 3.4. It is required by contract but not implemented yet.*

## **Appendix 7**

State of Connecticut  
Inspection Test Station Names and Locations  
Upon Full Program Implementation

| Station # | Station Name                   | Address               | City           | Zip   | Phone Number   | A.T.P. Completed | Total               |
|-----------|--------------------------------|-----------------------|----------------|-------|----------------|------------------|---------------------|
| 0001      | Valley Motors Inc              | 91 Park Lane Rd       | New Milford,   | 06776 | (860) 354-4429 | 10/8/2003        |                     |
| 0017      | Morande Linc-Merc-Mazda        | 171 Tolland Turnpike  | Manchester,    | 06040 | (860) 643-5135 | 10/1/2003        | 271 Active Stations |
| 0019      | Artioli Dodge                  | 525 Enfield St.       | Enfield,       | 06082 | (860) 745-2469 | 12/15/2003       | 1/26/2005           |
| 0020      | Cargill Chevrolet Co. Inc.     | 23 Livery Street      | Putnam,        | 06260 | (860) 928-6591 | 10/8/2003        |                     |
| 0023      | Robert's Chrysler-Dodge        | 89 South Broad Street | Meriden,       | 064   | (203) 238-0036 | 10/3/2003        | 270                 |
| 0034      | Bob Valenti Chevrolet - Olds   | 72 Jerry Brown Rd     | Mystic,        | 06355 | (860) 536-4931 | 10/3/2003        | Stations Testing    |
| 0036      | Hoffman Auto Group             | 600 Connecticut Bld   | East Hartford, | 061   | (860) 290-6164 | 10/3/2003        | 1/26/2005           |
| 0060      | Dan Perkins Chevrolet          | 734 Bridgeport Avenue | Milford,       | 06460 | (203) 878-4621 | 10/7/2003        |                     |
| 0065      | Stevens Ford Linc-Merc Inc     | 717 Bridgeport Avenue | Milford,       | 06460 | (203) 876-6464 | 10/7/2003        |                     |
| 0107      | King Olds-Cadillac-GMC         | 139 Pomfret Street    | Putnam,        |       | (860) 928-6572 | 10/9/2003        |                     |
| 0112      | Brustolon Buick-Pont-GMC       | P.O. Box 68 Route 1   | Mystic,        | 06355 | (860) 536-2626 | 10/6/2003        |                     |
| 0116      | Simon Ford Inc                 | 401 North Main Street | Norwich,       | 06360 | (860) 889-2608 | 9/29/2003        |                     |
| 0128      | Southworths Dodge              | 21 Bridge st          | Kent,          | 06757 | (860) 927-4142 | 11/6/2003        |                     |
| 0129      | Southworth's Chrysler          | 5 Danbury Rd          | New Milford,   | 06776 | (860) 354-3131 | 11/1/2003        |                     |
| 0132      | Middletown Toyota Inc          | 634 Newfield Street   | Middletown     | 06457 | (860) 347-7294 | 9/25/2003        |                     |
| 0136      | The Parson's Buick Company     | 151 East Street       | Plainville,    | 06062 | (860) 747-1693 | 10/7/2003        |                     |
| 0166      | Crowley Buick Olds             | 223 Broad St          | Bristol        | 06010 | 860 589 4444   |                  |                     |
| 0168      | Merriam Motors Inc.            | 895 North Colony Road | Wallingford,   | 06492 | (203) 265-2001 | 10/1/2003        |                     |
| 0169      | Key Lincoln-Mercury-Hyundai    | 425 North Avenue      | Bridgeport,    | 066   | (203) 335-7539 | 10/8/2003        |                     |
| 0193      | M J Sullivan Automotive Corner | 452 Broad Street      | New London,    | 06320 | (860) 442-4371 | 10/6/2003        |                     |
| 0228      | Markley Motors, Inc.           | 512 Providence Road   | Danielson,     | 06239 | (860) 774-1849 | 9/25/2003        |                     |
| 0229      | Hartford Toyota Superstore     | 158 Weston Street     | Hartford,      | 06120 | (860) 278-5411 | 9/29/2003        |                     |
| 0230      | Robert E. Parson's, Inc.       | 750 Farmington Avenue | Farmington,    | 06032 | (860) 677-4501 | 10/7/2003        |                     |

|      |                                               |                             |               |       |                |           |  |
|------|-----------------------------------------------|-----------------------------|---------------|-------|----------------|-----------|--|
| 0247 | Card Chevrolet Company, Inc.                  | 106 West Broad Sreet        | Pawcatuck,    | 06379 | (860) 599-5741 | 10/8/2003 |  |
| 0268 | Curran Volkswagen, Inc.                       | 2785 Main Street            | Stratford,    | 066   | (203) 377-6800 | 10/6/2003 |  |
| 0274 | Shelton Mitsubishi                            | 405 Bridgeport Ave.         | Shelton,      | 06484 | (203) 925-8600 | 10/9/2003 |  |
| 0315 | Schaller Tire Distributer<br>Bloomfield, Inc. | 80 Granby Street            | Bloomfield,   | 06002 | (860) 243-9526 | 10/9/2003 |  |
| 0326 | Midas Auto Service Experts                    | 41 Tunxis Avenue            | Bloomfield,   | 06002 | (860) 243-9430 | 10/7/2003 |  |
| 0328 | Automotive Plus                               | 534 Broad Street            | Bristol,      | 06010 | (860) 585-5668 | 10/6/2003 |  |
| 0386 | Hamelin & Sons, Inc.                          | 64 West Street              | Bristol,      | 06010 | (860) 583-3292 | 10/8/2003 |  |
| 0412 | Arnold's Garage                               | 2 North Elm Street          | North Canaan, | 06018 | (860) 824-5802 | 10/8/2003 |  |
| 0434 | Midas Of Canton                               | 66 Albany Turnpike          | Canton,       | 06019 | (860) 693-1721 | 9/30/2003 |  |
| 0469 | Lees Auto Center, Inc.                        | 171 West Road               | Ellington,    | 06029 | (860) 875-1444 | 10/8/2003 |  |
| 0493 | Midas Auto Service Experts                    | 1361 Farmington Avenue      | Farmington,   | 06032 | (860) 676-0140 | 10/7/2003 |  |
| 0516 | Hallmark Tire Co, Inc.                        | 252 Welles Street           | Glastonbury,  | 06033 | (860) 633-5201 | 10/7/2003 |  |
| 0520 | Farmington Motor Sports, Inc.                 | 163 Brickyard Road          | Farmington,   | 06032 | (860) 677-9074 | 10/8/2003 |  |
| 0549 | Morande Ford                                  | 250 Webster Square          | Berlin,       | 06037 | (860) 828-3546 | 1/16/2004 |  |
| 0557 | Kensington Auto Service, LTD.                 | 1052 Farmington Avenue      | Kensington,   | 06037 | (860) 829-7377 | 10/9/2003 |  |
| 0581 | J & M Corvettes, Inc.                         | 299 Broad Street            | Manchester,   | 06040 | (860) 645-6389 | 10/1/2003 |  |
| 0616 | Firestone Tire & Service Center               | 1145 Tolland Turnpike       | Manchester,   | 06040 | (860) 646-1761 | 9/25/2003 |  |
| 0618 | Computer Tune & Lube                          | 357 Broad Street            | Manchester,   | 06040 | (860) 647-1999 | 10/3/2003 |  |
| 0621 | Ex-Per Tech Auto Repairs                      | 161 West Middle<br>Turnpike | Manchester,   | 06040 | (860) 646-5969 | 10/7/2003 |  |
| 0648 | Bolton Motors, Inc.                           | 4 Hillcrest Road            | Bolton,       | 06043 | (860) 643-9521 | 10/6/2003 |  |
| 0678 | New Britain Auto Sales                        | 246 Beaver Street           | New Britain,  | 060   | (860) 224-3320 | 10/8/2003 |  |
| 0697 | Firestone Tire & Service Center               | 55 Chestnut Street          | New Britain,  | 060   | (860) 229-0348 | 10/9/2003 |  |
| 0711 | Schaller Olds, Inc.                           | 1141 Stanley St             | New Britain,  | 060   | (860) 826-2043 | 9/25/2003 |  |
| 0718 | Ceglarz Motor Repair and Sales,<br>LLC.       | 581 West Main Street        | New Britain,  | 060   | (860) 224-3532 | 10/3/2003 |  |

|      |                                     |                          |                |       |                |            |  |
|------|-------------------------------------|--------------------------|----------------|-------|----------------|------------|--|
| 0725 | Story Bros, Inc.                    | 84 Burrit Street         | New Britain,   | 060   | (860) 225-0159 | 10/2/2003  |  |
| 0730 | Midas Auto Service                  | 770 West Main Street     | New Britain,   | 060   | (860) 224-9137 | 9/25/2003  |  |
| 0776 | Anthony's Service Station, Inc.     | 136 East Main Street     | Plainville,    | 06062 | (860) 747-5791 | 10/7/2003  |  |
| 0779 | Central Conn Tire and Service, Inc. | 465 East Street          | Plainville,    | 06062 | (860) 793-0214 | 10/2/2003  |  |
| 0790 | Farm Car Care Center, Inc.          | 11 Windermere Avenue     | Rockville,     | 06066 | (860) 875-3370 | 10/3/2003  |  |
| 0809 | Moore's Automotive                  | 1246 Hartford Turnpike   | Vernon,        | 06066 | (860) 872-2024 | 10/3/2003  |  |
| 0825 | Meineke Car Care                    | 370 Hartford Turnpike    | Vernon,        | 06066 | (860) 871-0868 | 10/8/2003  |  |
| 0951 | Saturn of Enfield                   | 1 Palomba Drive          | Enfield,       | 06082 | (860) 745-4477 | 9/30/2003  |  |
| 0963 | Firestone Tire & Service Center     | 33 Palomba Drive         | Enfield,       | 06082 | (860) 741-6550 | 10/8/2003  |  |
| 0969 | Meineke Car Care Center             | 66 Enfield St            | Enfield,       | 06082 |                | 11/17/2004 |  |
| 0971 | Computer Tune & Lube                | 85 Fresh Water Boulevard | Enfield,       | 06082 | (860) 745-6161 | 10/6/2003  |  |
| 0972 | Mad Hatter Auto Repair              | 10 Cranbrook Boulevard   | Enfield,       | 06082 | (860) 741-7862 | 10/9/2003  |  |
| 0976 | Midas Auto Service Experts          | 5 Palomba Drive          | Enfield,       | 06082 | (860) 745-0305 | 10/9/2003  |  |
| 0986 | Suburban Tire & Auto Service        | 65 Freshwater Boulevard  | Enfield,       | 06082 | (860) 741-2204 | 10/6/2003  |  |
| 0994 | Tolland Citgo.                      | 128 Merrow Road          | Tolland,       | 06084 | (860) 871-7963 | 10/3/2003  |  |
| 1040 | Major Auto                          | 248 South Main St        | East windsor,  | 06088 | (860) 292-1196 | 12/9/2003  |  |
| 1051 | L and J Service                     | 57 Tunxis Street         | Windsor,       | 06095 | (860) 298-8800 | 10/6/2003  |  |
| 1056 | Scata's Auto & Truck Repairs, Inc.  | 535 Spring Street        | Windsor Locks, | 06096 | (860) 623-0449 | 9/25/2003  |  |
| 1066 | Bobby G's Old Fashioned Service     | 61 S Main Street         | Windsor Locks, | 06096 | (860) 623-9988 | 10/6/2003  |  |
| 1095 | Prospect Foreign Car Center, Inc.   | 595 Prospect Avenue      | West Hartford, | 061   | (860) 236-6136 | 9/25/2003  |  |
| 1161 | Adams St. Texaco                    | 318 adams St             | Manchester,    | 06040 | (860) 646-3058 | 10/3/2003  |  |
| 1193 | Herb's Auto Electric, Inc.          | 16 Tolland Street        | East Hartford, | 061   | (860) 289-5421 | 10/3/2003  |  |
| 1214 | Rick's Auto Repair, LLC             | 1745 Berlin Turnpike     | Wethersfield,  | 06109 | (860) 563-8188 | 9/25/2003  |  |
| 1216 | Wethersfield Automotive, LLC.       | 404 Silas Deane Highway  | Wethersfield,  | 06109 | (860) 563-2651 | 10/7/2003  |  |

|      |                                       |                       |                 |       |                |           |  |
|------|---------------------------------------|-----------------------|-----------------|-------|----------------|-----------|--|
| 1253 | Midas Auto Service Experts            | 918 New Britain Ave   | West Hartford,  | 061   | (860) 953-0171 | 10/7/2003 |  |
| 1264 | Mike's Auto Service                   | 54 Pane Road          | Newington,      | 06111 | (860) 667-1426 | 10/8/2003 |  |
| 1267 | Mirabelli Automotive, LLC.            | 1812 Berlin Turnpike  | Wethersfield,   | 06109 | (860) 563-5577 | 10/8/2003 |  |
| 1270 | R & M Auto Services LLC               | 172 Kelsey Street     | Newington,      | 06111 | (860) 667-1605 | 10/8/2003 |  |
| 1274 | West Hill Automotive                  | 120 Willard Avenue    | Newington,      | 06111 | (860) 523-7941 | 10/2/2003 |  |
| 1284 | Modern Tire & Auto Service            | 3455 Berlin Turnpike  | Newington,      | 06111 | (860) 666-2404 | 10/2/2003 |  |
| 1297 | Aguas Buenas Auto SLS & Services      | 1919 Broad Street     | Hartford,       | 06114 | (860) 956-1847 | 10/7/2003 |  |
| 1299 | B & S Automotive, Inc.                | 127 Meadow Street     | Hartford,       | 06114 | (860) 296-9290 | 10/6/2003 |  |
| 1303 | South Green Automotive                | 880 Wethersfield Ave. | Hartford,       | 061   | (860) 296-2616 | 12/3/2003 |  |
| 1363 | Midas Auto Service Experts            | 53 Maple Avenue       | Hartford,       | 061   | (860) 246-5127 | 9/29/2003 |  |
| 1368 | Lyons Service Corp                    | 2526 Albany Ave       | West Hartford,  | 06117 | 860 233 5541   | 10/1/2003 |  |
| 1371 | Cox's Service Station                 | 200 Main Street       | East Hartford,  | 061   | (860) 568-2980 | 10/3/2003 |  |
| 1377 | A & P Auto Service                    | 365 Main Street       | East Hartford,  | 061   | (860) 568-0202 | 10/7/2003 |  |
| 1401 | Nutmeg Auto Service Inc               | 3490 Main Street      | Hartford,       | 061   | (860) 522-8724 | 10/3/2003 |  |
| 1423 | Midas Auto Service Experts            | 65 Weston Street      | Hartford,       | 061   | (860) 246-4828 | 10/7/2003 |  |
| 1470 | Columbia Car Care Center              | 52 Route 66           | Columbia        |       | 860 228 3612   | 1/5/2005  |  |
| 1511 | T and B Motor Sales and Service, Inc. | 460 Storrs Road       | Mansfield,      | 062   | (860) 423-1187 | 10/6/2003 |  |
| 1519 | Raymond's Auto Repair                 | 892 Windham Road      | North Franklin, | 06254 | (860) 642-6792 | 10/6/2003 |  |
| 1594 | Town Hill Auto                        | 857 Bank Street       | New London,     | 06320 | (860) 444-1973 | 10/7/2003 |  |
| 1613 | Midas Auto Service Experts            | 665 Broad Street      | New London,     | 06320 | (860) 447-1711 | 10/8/2003 |  |
| 1615 | Firestones Expert Tire                | 45 Truman Street      | New London,     | 06320 | (860) 443-4361 | 9/26/2003 |  |
| 1646 | Bob's Auto, Inc.                      | 277 Candlewood Road   | Groton,         | 06340 | (860) 446-1320 | 10/6/2003 |  |
| 1660 | Midas Auto Service Experts            | 170 Route 12          | Groton,         | 06340 | (860) 445-8129 | 10/2/2003 |  |
| 1662 | Meineke Car Care Center               | 266 Bridge Street     | Groton,         | 06340 | (860) 445-6743 | 10/9/2003 |  |

|      |                                                  |                        |                 |       |                |            |  |
|------|--------------------------------------------------|------------------------|-----------------|-------|----------------|------------|--|
| 1704 | Precision Motors, Inc.                           | 2400 Route 184         | Mystic,         | 06355 | (860) 536-9235 | 10/3/2003  |  |
| 1725 | Nick's Service Center                            | 220 Foxon Road         | North Branford, | 06471 | (203) 484-7945 | 10/2/2003  |  |
| 1767 | Firestone Tire & Service Center                  | 251 West Main Street   | Norwich,        | 06360 | (860) 889-9897 | 10/1/2003  |  |
| 1794 | Reynold's Garage & Marine, Inc.                  | Hamburg Cove           | Lyme,           | 06371 | (860) 434-0028 | 10/6/2003  |  |
| 1805 | Plainfield Shell                                 | 600 Norwich Road       | Plainfield,     | 06374 | (860) 564-2965 | 9/26/2003  |  |
| 1835 | Montville Auto                                   | 341 Route 32           | Uncasville      | 06382 | (860) 848-4015 | 8/5/2004   |  |
| 1852 | Marvin's Midway Auto                             | 155 Boston Post Road   | Waterford,      | 06385 | (860) 439-1313 | 10/9/2003  |  |
| 1889 | Gabe's Service Station                           | 100 North Main Street  | Beacon Falls,   | 06403 | (203) 729-3383 | 9/30/2003  |  |
| 1896 | A & M Service Station                            | 117 North Main Street  | Branford,       | 06405 | (203) 488-0800 | 10/4/2003  |  |
| 1944 | Branford Auto Center                             | 323 East Main Street   | Branford,       | 06405 | (203) 481-6572 | 10/1/2003  |  |
| 1969 | Cheshire Shell Service                           | 831 South Main Street  | Cheshire,       | 06410 | (203) 272-7033 | 10/6/2003  |  |
| 1970 | Cheshire Tire & Auto Service, Inc.               | 514 West Main Street   | Cheshire,       | 06410 | (203) 272-3296 | 10/4/2003  |  |
| 2026 | Desmonds Auto Sales                              | 373 Lebanon Avenue     | Colchester,     | 06415 | (860) 537-1140 | 10/1/2003  |  |
| 2060 | Cromwell Automotive                              | 283 Main Street        | Cromwell,       | 06416 | (860) 613-2355 | 9/25/2003  |  |
| 2120 | Greenfield Hill Service                          | 1865 Bronson Road      | Fairfield,      | 064   | (203) 259-5334 | 10/4/2003  |  |
| 2133 | Firestone Tire & Service Center                  | 750 Kings Highway      | Fairfield,      | 064   | (203) 367-3674 | 10/4/2003  |  |
| 2134 | Brooklawn Service Center                         | 714 Brooklawn Avenue   | Fairfield,      | 064   | (203) 366-5230 | 10/4/2003  |  |
| 2141 | Fairfield Tire & Auto Center, LLC.               | 1370 Kings Hwy Cut-off | Fairfield,      | 064   | (203) 255-5931 | 10/22/2003 |  |
| 2149 | Meineke                                          | 94 Kings Highway East  | Fairfield,      | 064   | (203) 366-4444 | 10/9/2003  |  |
| 2153 | Sport Hill Service Station, Inc.                 | 2629 Easton Turnpike   | Fairfield,      | 064   | (203) 372-0077 | 9/30/2003  |  |
| 2175 | Audi of Fairfield                                | 26 Commerce Drive      | Fairfield,      | 064   | (203) 335-3919 | 9/29/2003  |  |
| 2178 | Nick's Precision Automotive Service Center, Inc. | 531 Tunxis Hill Road   | Fairfield,      | 064   | (203) 366-4775 | 10/9/2003  |  |
| 2181 | Auto Associates, Inc.                            | 1984 Boston Post Road  | Guilford,       | 06437 | (203) 453-6244 | 10/7/2003  |  |
| 2233 | Cos' Central Auto                                | 1652 N. Broad St.      | Meriden         | 06450 | 203 634 7878   | 1/25/2005  |  |

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| 2267 | Harte Chevrolet, Inc.                   | 341 South Broad Street | Meriden,      | 064   | (203) 237-5561 | 9/25/2003  |  |
| 2305 | Fast Track Auto Sales, Inc.             | 75 Cook Avenue         | Meriden,      | 064   | (203) 235-5300 | 9/25/2003  |  |
| 2318 | Fine Tunes                              | 392 Washington Street  | Middletown,   | 06457 | (860) 344-1883 | 10/8/2003  |  |
| 2340 | European Motorcars                      | 1158aNewfield Street   | Middletown,   | 06457 | (860) 632-2355 | 9/30/2003  |  |
| 2351 | Town and Country Auto Sales, Inc.       | 750 Newfield Street    | Middletown,   | 06457 | (860) 347-4471 | 10/8/2003  |  |
| 2358 | Computer Tune & Lube, Inc.              | 871 Washington Street  | Middletown,   | 06457 | (860) 346-1999 | 10/2/2003  |  |
| 2365 | Midas Auto Service of Middletown        | 380 Washington Street  | Middletown,   | 06457 | (860) 347-9100 | 10/2/2003  |  |
| 2373 | Personal Auto Care Service Center, Inc. | 60 Dekoven Drive       | Middletown,   | 06457 | (860) 347-9845 | 10/2/2003  |  |
| 2379 | Alarcon Tire Co, Inc.                   | 70 Bridgeport Avenue   | Devon,        | 06460 | (203) 878-5731 | 9/29/2003  |  |
| 2380 | New Image Auto                          | 969 Killingworth Rd    | Higganum      | 06441 | 860 345 4185   | 1/7/2005   |  |
| 2419 | Robert's Service Center, Inc.           | 216 Buckingham Avenue  | Milford,      | 06460 | (203) 878-4746 | 9/30/2003  |  |
| 2427 | Westshore Motors, Inc.                  | 105 Boston Post Road   | Milford,      | 06460 | (203) 878-5223 | 9/26/2003  |  |
| 2493 | Amaral Motors, Inc.                     | 40 South Main Street   | Newtown,      | 06470 | (203) 426-4427 | 10/17/2003 |  |
| 2526 | Horseless Carriage Co.                  | 81 Old Broadway        | North Haven,  | 06473 | (203) 239-4637 | 9/26/2003  |  |
| 2554 | Bouchard Automotive, Inc.               | 25 Stiles Lane         | North Haven,  | 06473 | (203) 288-3141 | 9/26/2003  |  |
| 2560 | Tech One Automotive, LLC.               | 341 Washington Avenue  | North Haven,  | 06473 | (203) 239-2005 | 10/8/2003  |  |
| 2573 | Oceanside Auto, LLC.                    | 810 Middlesex Turnpike | Old Saybrook, | 06475 | (860) 388-9833 | 10/6/2003  |  |
| 2593 | Bens Service Center                     | 115 Boston Post Road   | Orange,       | 06477 | (203) 795-9324 | 10/7/2003  |  |
| 2594 | Kia of Milford                          | 908 Bridgeport Avenue  | Milford,      | 06460 | (203) 878-9989 | 10/2/2003  |  |
| 2603 | Meineke                                 | 404 Boston Post Road   | Orange,       | 06477 | (203) 795-0207 | 10/6/2003  |  |
| 2631 | Portland Automotive, Inc.               | 61 Marlborough Street  | Portland,     | 06480 | (860) 342-0640 | 9/25/2003  |  |
| 2651 | East Coast Four-Wheel Drive, Inc.       | 223 West Street        | Seymour,      | 06483 | (203) 888-4056 | 10/4/2003  |  |
| 2652 | Falbos Tire and Auto Center, Inc.       | 163 West Street        | Seymour,      | 06483 | (203) 888-4329 | 10/8/2003  |  |
| 2672 | AJ'S Center Service, Inc.               | 851 River Road         | Shelton,      | 06484 | (203) 944-9900 | 10/3/2003  |  |

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| 2714 | Automaster Service Center, LLC.                | 1217 Queen Street            | Southington, | 06489 | (860) 793-0505 | 10/9/2003  |  |
| 2722 | Computer Tune and Lube                         | 1125 Queen Street            | Southington, | 06489 | (860) 793-1999 | 10/7/2003  |  |
| 2740 | Mad Hatter Muffler                             | 176 Queen Street             | Southington, | 06489 | (860) 628-8888 | 10/7/2003  |  |
| 2744 | Tire Depot Plus, Inc.                          | 60 Interstate Park Drive     | Southington, | 06489 | (860) 628-9600 | 10/7/2003  |  |
| 2770 | Darrells Auto Sales and Service, Inc.          | 250 South Colony Road        | Wallingford, | 06492 | (203) 294-1355 | 10/1/2003  |  |
| 2822 | Frenchys Auto Repair, Inc.                     | 508 Main Street              | Wallingford, | 06492 | (203) 265-0889 | 10/7/2003  |  |
| 2830 | Nelson's Automotive Service Center, LLC.       | 862 East Center Street       | Wallingford, | 06492 | (203) 265-3997 | 10/8/2003  |  |
| 2855 | Just Restorations                              | 365 Benton Street            | Stratford,   | 066   | (203) 381-0363 | 10/6/2003  |  |
| 2880 | Broadbridge Auto Service, Inc.                 | 2607 Broadbridge Avenue      | Stratford,   | 066   | (203) 377-8474 | 10/1/2003  |  |
| 2884 | Don Schiffer's Auto Service, Inc.              | 7050 Main Street             | Stratford,   | 066   | (203) 381-9234 | 10/7/2003  |  |
| 2903 | Cars, Inc.                                     | 816 Boston Post Road         | Westbrook,   | 06498 | (860) 399-4160 | 10/3/2003  |  |
| 2915 | Midas Auto Service of Westbrook                | 55 Boston Post Road          | Westbrook,   | 06498 | (860) 669-9937 | 10/6/2003  |  |
| 2919 | Meineke Discount Mufflers                      | 1175 Whalley Avenue          | New Haven,   | 065   | (203) 397-2353 | 10/20/2003 |  |
| 2955 | Whalley Ave. Exxon                             | 284 Whalley Avenue           | New Haven,   | 065   | (203) 865-6174 | 10/7/2003  |  |
| 2964 | Canzanella Brothers                            | 144 Main Street              | East Haven,  | 06512 | (203) 469-0593 | 10/6/2003  |  |
| 3004 | Annex Auto Repair                              | 166 Main Street              | New Haven,   | 065   | (203) 469-0812 | 10/17/2003 |  |
| 3086 | Barco Motors, Inc.                             | 107 Fowler Street            | New Haven,   | 065   | (203) 389-4404 | 10/6/2003  |  |
| 3102 | Auto Specialist, Inc.                          | 401 Elm Street               | West Haven,  | 06516 | (203) 934-1127 | 10/1/2003  |  |
| 3106 | Campbell Motor Sales, Inc.                     | 175 Campbell Avenue          | West Haven,  | 06516 | (203) 932-2253 | 10/3/2003  |  |
| 3107 | Chuck's Garage                                 | 52 Hood Terrace              | West Haven,  | 06516 | (203) 932-4336 | 10/3/2003  |  |
| 3176 | Circle A Automotive Service, Inc.              | 2625 State Street            | Hamden,      | 065   | (203) 288-9884 | 10/4/2003  |  |
| 3190 | Partyka Chevrolet, Inc.                        | 200 Skiff Street             | Hamden,      | 065   | (203) 288-7761 | 9/30/2003  |  |
| 3192 | Dougan Automotive, LLC. State Street Emissions | 2260 State Street            | Hamden,      | 065   | (203) 248-4808 | 10/6/2003  |  |
| 3225 | Tire Doctor                                    | 470 Ella T. Grasso Boulevard | New Haven,   | 065   | (203) 787-1281 | 10/6/2003  |  |

|      |                                     |                        |             |       |                |           |  |
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| 3253 | Crest Lincoln Mercury, Inc.         | 185 Amity Road         | Woodbridge, | 06525 | (203) 389-7110 | 10/6/2003 |  |
| 3263 | Firestone Tire & Service Center     | 300 John Street        | Bridgeport, | 066   | (203) 333-6188 | 9/30/2003 |  |
| 3292 | Joey's Capitol-Wood Service Center  | 1598 Capitol Avenue    | Bridgeport, | 066   | (203) 384-6190 | 10/3/2003 |  |
| 3353 | Paul's Service Center, Inc.         | 819 Lindley Street     | Bridgeport, | 066   | (203) 367-2736 | 9/26/2003 |  |
| 3384 | Super Citgo Service Center, LLC     | 915 Reservoir Avenue   | Bridgeport, | 066   | (203) 365-2610 | 9/29/2003 |  |
| 3406 | Genesis Motorworks                  | 946 Noble Avenue       | Bridgeport, | 066   | (203) 333-1525 | 10/8/2003 |  |
| 3432 | E & S Auto                          | 425 Boston Ave         | Bridgeport, | 066   | (203) 332-4555 | 12/1/2003 |  |
| 3437 | Monroe Muffler                      | 451 Main St            | Monroe      | 06468 | 203 261 6335   | 10/7/2003 |  |
| 3449 | Boston Ave Auto (Getty)             | 375 Boston Ave         | Bridgeport, | 06610 | (203) 367-6006 | 10/8/2003 |  |
| 3458 | Knecht's Garage, Inc.               | 101 Monroe Turnpike    | Trumbull,   | 06611 | (203) 268-6284 | 10/7/2003 |  |
| 3483 | Breezy Point Auto Repairs, Inc.     | 609 Main Street        | Stratford,  | 066   | (203) 377-2092 | 10/6/2003 |  |
| 3498 | Model Garage, Inc.                  | 110 Thomaston Avenue   | Waterbury,  | 067   | (203) 574-1882 | 10/6/2003 |  |
| 3548 | Montambault's, Inc.                 | 1676 Thomaston Avenue  | Waterbury,  | 067   | (203) 756-7026 | 9/25/2003 |  |
| 3592 | Superior Transmissions, Inc.        | 1201 Wolcott Road      | Waterbury,  | 067   | (203) 574-2308 | 9/8/2003  |  |
| 3662 | United Auto Sales and Service, Inc. | 219 Congress Avenue    | Waterbury,  | 067   | (203) 756-8851 | 10/6/2003 |  |
| 3724 | Superior Transmissions, Inc         | 11 West Road           | Bethlehem,  | 06751 | (203) 266-5440 | 10/7/2003 |  |
| 3732 | Litchfield Hills Motorsports, LLC   | 159 Torrington Road    | Goshen,     | 06756 | (860) 491-5467 | 10/8/2003 |  |
| 3739 | Bennett Motor Works                 | 108 Torrington Road    | Litchfield, | 06759 | (860) 567-9290 | 10/7/2003 |  |
| 3746 | Sunshine Car Repair.                | 247 West Street        | Litchfield, | 06759 | (860) 567-9490 | 10/7/2003 |  |
| 3767 | Mezzio Auto Body                    | 792 New Haven Rd       | Naugatuck,  | 06770 | (203) 729-5988 | 1/30/2004 |  |
| 3932 | Wilson Dodge Nissan                 | 1530 East Main Street  | Torrington, | 06790 | (86) 482-5555  | 10/7/2003 |  |
| 3937 | Northwest Hills Chrysler Jeep, LLC  | 2033 East Main Street  | Torrington, | 06790 | (860) 482-0700 | 10/7/2003 |  |
| 3943 | Bahr Auto Repair                    | 1065 South Main Street | Torrington, | 06790 | (860) 489-6077 | 10/8/2003 |  |
| 3988 | Valenti Motors, Inc.                | 600 Straits Turnpike   | Watertown,  | 06795 | (860) 274-8846 | 10/7/2003 |  |

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|------|----------------------------------------|-----------------------|----------------|-------|----------------|------------|--|
| 3997 | Murray Bros Garage, Inc.               | 19 Bacon Pond Road    | Woodbury,      | 06798 | (203) 263-4779 | 10/8/2003  |  |
| 4001 | Bethel Automotive Service & Repair LLC | 214 Greenwood Avenue  | Bethel,        | 06801 | (203) 744-3420 | 10/7/2003  |  |
| 4004 | Belardinelli Tire Comp                 | 7 Beech Street        | Bethel,        | 06801 | (203) 748-0889 | 10/7/2003  |  |
| 4016 | Firestone Tire & Service Center        | 164 Federal Road      | Brookfield,    | 06804 | (203) 775-1295 | 10/4/2003  |  |
| 4023 | Lang's Auto, LLC                       | 527 Federal Road      | Brookfield,    | 06804 | (203) 775-3886 | 10/4/2003  |  |
| 4034 | A 1 Service Center, Inc.               | 33 Rose Street        | Danbury,       | 068   | (203) 792-6954 | 10/7/2003  |  |
| 4040 | Cardinale Auto Repair, Inc.            | 16 Chestnut Street    | Danbury,       | 068   | (203) 790-4872 | 10/8/2003  |  |
| 4076 | Colonial Mazda                         | 100C Federal Road     | Danbury,       | 068   | (203) 748-8700 | 10/8/2003  |  |
| 4080 | Danbury Chevy Olds Cadillac            | 102 Federal Rd.       | Danbury,       | 068   | (203) 730-5757 | 12/12/2003 |  |
| 4105 | E.M. Auto Repair                       | 46 Maple Avenue       | Danbury,       | 06810 | (203) 790-5734 | 10/9/2003  |  |
| 4107 | Federal Towing and Car Center          | 272 White Street      | Danbury,       | 068   | (203) 794-9475 | 10/6/2003  |  |
| 4125 | Auto Tech                              | 18 South Street       | Danbury,       | 068   | (203) 748-9165 | 10/3/2003  |  |
| 4144 | Advanced Auto Repair, Inc.             | 23 Chestnut Street    | Danbury,       | 068   | (203) 743-7877 | 10/8/2003  |  |
| 4152 | Motor Works                            | 233 White Street      | Danbury,       | 068   | (203) 744-1030 | 10/7/2003  |  |
| 4161 | Hayestown Automotive                   | 2 East Hayestown Road | Danbury,       | 068   | (203) 730-9857 | 10/6/2003  |  |
| 4167 | Superior Service, Inc.                 | 813 Federal Rd        | Brookfield     | 068   | 203 775 5933   | 10/6/2003  |  |
| 4170 | New Fairfield Automotive, Inc.         | 104 Route 39 North    | New Fairfield, | 06812 | (203) 746-2422 | 10/3/2003  |  |
| 4180 | Noroton Getty                          | 179 Noroton Ave       | Darien,        | 06820 | (203) 655-1971 | 9/29/2003  |  |
| 4191 | Darien Auto Center                     | 1350 Post Road        | Darien,        | 06820 | (203) 655-8203 | 9/29/2003  |  |
| 4223 | Greenwich Shell                        | 83 East Putnam Avenue | Greenwich,     | 068   | (203) 661-8871 | 10/7/2003  |  |
| 4241 | New Canaan Texaco                      | 272 Elm Street        | New Canaan,    | 06840 | (203) 966-5671 | 10/6/2003  |  |
| 4257 | New Canaan Ave. Service                | 87 New Canaan Avenue  | Norwalk,       | 068   | (203) 846-2676 | 10/8/2003  |  |
| 4262 | The Brigg's Tire Co.                   | 72 Connecticut Avenue | Norwalk,       | 068   | (203) 838-3716 | 10/4/2003  |  |
| 4298 | Hank Mays Goodyear                     | 470 Westport Avenue   | Norwalk,       | 068   | (203) 846-3277 | 10/4/2003  |  |

|      |                                        |                            |                |       |                |            |  |
|------|----------------------------------------|----------------------------|----------------|-------|----------------|------------|--|
| 4304 | Margala Sunoco                         | 527 Main Ave               | Norwalk,       | 068   | (203) 846-0806 | 12/3/2003  |  |
| 4363 | Soundview North Service Center, Inc.   | 35 Arcadia Road            | Old Greenwich, | 06870 | (203) 637-2033 | 10/2/2003  |  |
| 4375 | Copps Hill Shell, Inc.                 | 130 Danbury Road           | Ridgefield,    | 06877 | (203) 438-2433 | 10/8/2003  |  |
| 4377 | Limestone Service Station, Inc.        | 399 Danbury Road           | Ridgefield,    | 06877 | (203) 438-8028 | 10/8/2003  |  |
| 4392 | Bridge Mobil                           | 558 Riverside Avenue       | Westport,      | 06880 | (203) 227-5322 | 10/1/2003  |  |
| 4397 | Green's Farms Shell Service            | 1530 Boston Post Road East | Westport,      | 06880 | (203) 259-7467 | 9/29/2003  |  |
| 4405 | Weston Service Center                  | 190 Weston Rd              | Weston         | 06883 | 203 227 7437   | 11/16/2004 |  |
| 4472 | Saturn of Stamford, Inc.               | 85 Magee Ave               | Stamford,      | 069   | (203) 977-7110 | 10/1/2003  |  |
| 4480 | Stamford Firestone                     | 892 E. Main Street         | Stamford,      | 069   | (203) 327-2930 | 10/4/2003  |  |
| 4525 | High Ridge Shell Inc                   | 899 High Ridge Rd          | Stamford,      | 069   | (203) 329-9947 | 11/20/2003 |  |
| 4541 | Sotires Auto Diagnostic Center         | 62 Camp Ave                | Stamford,      | 069   | (203) 968-0313 | 12/11/2003 |  |
| 4582 | A-OK Auto Center, LLC                  | 236 Forest Road            | West Haven,    | 06516 | (203) 931-1134 | 10/7/2003  |  |
| 4591 | AutoWorks of Devon                     | 409 Bridgeport Avenue      | Milford,       | 06460 | (203) 877-1478 | 10/6/2003  |  |
| 4592 | Avery Brothers, Inc.                   | 120 Dudley Avenue          | Wallingford,   | 06492 | (203) 949-0770 | 10/7/2003  |  |
| 4612 | Platt Automotive                       | 356 Ashford Center Rd      | Ashford        | 06278 | 860 429 4101   | 12/10/2004 |  |
| 4615 | Firestone                              | 1262 S.Broad St            | Wallingford    | 06492 | 203.237.8999   | 12/1/2004  |  |
| 4619 | Bill Selig Ford                        | 801 Bloomfield Avenue      | Windsor,       | 06095 | (860) 688-3651 | 9/25/2003  |  |
| 4628 | Firestone Tire & Service Center        | 1063 Boston Post Rd        | Milford        | 06460 | 203 878 6859   | 11/12/2004 |  |
| 4632 | Burt Humphrey & Sons, Inc.             | 350 Main Street            | Danbury,       | 068   | (203) 743-6150 | 10/9/2003  |  |
| 4657 | Essex Service Center                   | 153 Westbrook Road         | Essex,         | 06426 | (860) 767-2185 | 10/3/2003  |  |
| 4658 | Fairfield Auto & Truck Center          | 1139 Boston Post Road      | Fairfield,     | 064   | (203) 255-9043 | 10/4/2003  |  |
| 4696 | Long Ridge Service                     | 1095 Long Ridge Road       | Stamford,      | 069   | (203) 322-3900 | 10/6/2003  |  |
| 4701 | Martin & Parson's Auto Sales & Service | 455 Main Street            | Monroe,        | 06468 | (203) 268-4022 | 10/7/2003  |  |
| 4710 | Middlesex Auto Center                  | 29 Meriden Road            | Middlefield,   | 06455 | (860) 346-1064 | 10/7/2003  |  |

|      |                                                |                           |                |       |                |            |  |
|------|------------------------------------------------|---------------------------|----------------|-------|----------------|------------|--|
| 4713 | Milex Auto Repair                              | 1289 Stratford Avenue     | Stratford,     | 066   | (203) 378-2679 | 10/6/2003  |  |
| 4722 | Mobile Lube Express                            | 1429 East Putnam Avenue   | Old Greenwich, | 06870 | (203) 698-9531 | 10/1/2003  |  |
| 4739 | Precision Motor Coach, LLC.                    | 1281 John Fitch Boulevard | South Windsor, | 06074 | (860) 282-1118 | 10/7/2003  |  |
| 4745 | R.K. Rogers LTD, Inc.                          | 281 Woodmont Road         | Milford,       | 06460 | (203) 874-6703 | 9/30/2003  |  |
| 4750 | Sam Wibberley Tire & Auto Service              | 18 Putnam Turnpike        | Dayville,      | 06241 | (860) 774-1174 | 9/29/2003  |  |
| 4761 | Special-T Auto Repair                          | 15 Field Road             | Somers,        | 06071 | (860) 763-4859 | 10/7/2003  |  |
| 4764 | Suburban Subaru                                | 24 Hartford Turnpike      | Vernon,        | 06066 | (860) 649-6550 | 9/30/2003  |  |
| 4765 | Meineke Discount Muffler                       | 92 Main Street            | Norwalk,       | 068   | (203) 846-4221 | 10/4/2003  |  |
| 4769 | The Quiet Zone, Your complete car care center. | 738 Bantam Road           | Bantam,        | 06750 | (860) 567-3380 | 10/9/2003  |  |
| 4772 | Tim's Auto Center                              | 28 Jones Hill Road        | West Haven,    | 06516 | (203) 933-2610 | 10/6/2003  |  |
| 4775 | Northwest Auto Sales, Inc.                     | 244 Colebrook River Road  | Colebrook,     | 06021 | (860) 738-0547 | 10/6/2003  |  |
| 4777 | Townline Auto Sales                            | 574 Wauregan Road         | Danielson,     | 06239 | (860) 774-6639 | 9/29/2003  |  |
| 4788 | West High Service Station                      | 355 West Main St.         | Stamford,      | 069   | (203) 324-0288 | 12/9/2003  |  |
| 4810 | Valvoline Express Care                         | 254 Old Gate Lane         | Milford,       | 06460 | (203) 878-7688 | 9/29/2003  |  |
| 4814 | Dan Perkin's Cadillac                          | 2095 Barnum Avenue        | Stratford,     | 066   | (203) 375-5201 | 10/7/2003  |  |
| 4815 | Tire Country Automotive Center                 | 468 Orange Avenue         | West Haven,    | 06516 | (203) 934-3451 | 10/2/2003  |  |
| 4816 | Valenti Pontiac                                | 520 Watertown av.         | Waterbury,     | 067   | (203) 754-6135 | 11/20/2003 |  |
| 4817 | High Tech Auto                                 | 266 Boston Post Road      | Orange,        | 06477 | (203) 799-0888 | 10/8/2003  |  |
| 4820 | John & Son's Automotive                        | 125 New Britain Avenue    | Hartford,      | 061   | (860) 247-6527 | 10/3/2003  |  |
| 4826 | Suburban Mitsubishi                            | 6 Hartford Turnpike       | Vernon,        | 06066 | (860) 646-8800 | 10/1/2003  |  |
| 4827 | Balkos Service Station                         | 156 South Main Street     | Seymour,       | 06483 | (203) 888-8836 | 10/8/2003  |  |
| 4828 | Waterbury Tire & Auto Service                  | 144 Thomaston Avenue      | Waterbury,     | 067   | (203) 754-0113 | 10/6/2003  |  |
| 4837 | Car Tune                                       | 1049 Dixwell Avenue       | Hamden,        | 065   | (203) 776-7774 | 11/6/2003  |  |
| 4839 | Hank Mays Goodyear                             | 168 Magee Avenue          | Stamford,      | 069   | (203) 348-3000 | 10/1/2003  |  |

|      |                           |                 |             |       |                |           |  |  |
|------|---------------------------|-----------------|-------------|-------|----------------|-----------|--|--|
| 4841 | Family Auto of Manchester | 371 Main Street | Manchester, | 06040 | (860) 432-1272 | 10/3/2003 |  |  |
|------|---------------------------|-----------------|-------------|-------|----------------|-----------|--|--|

## **Appendix 8**

State of Connecticut  
DMV Vehicle Registration Matrix

Number of Vehicles  
By Class Code

|                              |           |
|------------------------------|-----------|
| Passenger                    | 2,189,653 |
| Combination                  | 73,863    |
| Commercial                   | 378,931   |
| Livery                       | 1,282     |
| Taxi                         | 837       |
| Camp Trailer                 | 155,119   |
| Veteran                      | 269       |
| Handicapped                  | 6,939     |
| Prisoner of War              | 376       |
| Congressional Medal of Honor | 4         |
| Van Pool                     | 522       |
| Parade                       | 4         |
| Hearse                       | 184       |
| Sphinx                       | 22        |
| CT Legislative               | 203       |
| US Senate/Congress           | 3         |
| Camper                       | 8,055     |
| Volunteer Fire               | 576       |
| Ambulance                    | 742       |
| Wrecker                      | 1,983     |
| Transporter                  | 1,430     |
| Dealer                       | 26,110    |

Statistics from June 2005.

These numbers do not reflect the 'Four Year – Model Year' Exemption or those vehicles that are 25 years old or older that are not classified as 'Early American'.

## **Appendix 9**

State of Connecticut  
Motor Vehicles Exempt from I/M Requirements

**Exempt Motor Vehicles**

| <b>Vehicle Type</b>      | <b># Vehicles</b> |
|--------------------------|-------------------|
| Farm                     | 6,307             |
| Commercial Trailer       | 30,736            |
| Motorcycle               | 76,078            |
| Special Mobile Equipment | 439               |
| Experimental Test        | 32                |
| Early American           | 32,275            |
| Golf Cart                | 44                |
| Construction             | 334               |
| Snowmobile               | 1,501             |
| All Terrain              | 2,538             |
| Composite Vehicles       | 359               |

## **Appendix 10**

### State of Connecticut DMV Inspection Requirements (Matrix Table)

3. VIP Tests. The VIP requirements as herein described are summarized in the following table:

| <b>Test Type</b>                                     |                             |                                 |                     |                                     |                                  |
|------------------------------------------------------|-----------------------------|---------------------------------|---------------------|-------------------------------------|----------------------------------|
| <b>Model Year</b>                                    | <b>ASM 25/25</b>            | <b>OBDII</b>                    | <b>Gas Cap Leak</b> | <b>Pre-Conditioned 2 Speed Idle</b> | <b>Presence of CAT Converter</b> |
| 1999+                                                | (a) (c)                     | < 8,501 lbs. <sup>(a)</sup>     | ALL <sup>(d)</sup>  | > 8,500 lbs.                        | < 8,501 lbs.                     |
| 1996-1998                                            | (a) (b) (c)                 | < 8,501 lbs. <sup>(a) (b)</sup> | ALL <sup>(d)</sup>  | > 8,500 lbs.                        | < 8,501 lbs.                     |
| 1995 and Older                                       | < 8,501 lbs. <sup>(c)</sup> |                                 | ALL <sup>(e)</sup>  | > 8,500 lbs.                        | < 8,501 lbs.                     |
| 25 Model Years and Older and 4 Model Years and Newer | <b>Exempt</b>               |                                 |                     |                                     |                                  |

- a. ASM backup test for vehicles for which data communication link cannot be made during the first test cycle after the Program resumes.
- b. ASM test for vehicles identified by USEPA Guidance as problematic for OBDII test.
- c. Full-time 4-wheel drive and traction control vehicles that cannot be deactivated will receive a Pre-conditioned 2 Speed Idle Test. Other 1995 and older vehicles that cannot be tested on the dynamometer shall receive a Pre-conditioned 2 Speed Idle Test when approved by the State Representative.
- d. Except OBDII, Diesel, and Gaseous Fuel vehicles.
- e. Except Diesel, and Gaseous Fuel vehicles.

Note: Test frequency shall be biennial for all vehicles required to be tested.

Note: Handicapped drivers of pre-1996 model year vehicles may request and shall receive a Pre-conditioned 2 Speed Idle Test.

Note: Diesel vehicles older than 1997 and less than 8501 lbs. GVWR shall receive a loaded mode opacity test unless they cannot be tested on the dynamometer.

Note: Diesel vehicles of all model years greater than 8500 lbs. shall receive a snap idle test.

## **Appendix 11**

State of Connecticut  
2006 Connecticut I/M Evaluation Report

**EVALUATION OF TEST DATA  
COLLECTED IN 2004 AND 2005 FROM  
CONNECTICUT'S  
INSPECTION/MAINTENANCE PROGRAM**

**FINAL REPORT**

**Prepared for:**

**Connecticut Department of Environmental Protection**

**Prepared by:**

**dKC – de la Torre Klausmeier Consulting**

**October 2006**

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## Executive Summary

As required by the Clean Air Act Amendments of 1990, the Connecticut Department of Environmental Protection (DEP) in partnership with the Connecticut Department of Motor Vehicles (DMV) conducts periodic evaluations of its enhanced inspection/maintenance program. The 1<sup>st</sup> evaluation was completed in 2001; it analyzed data collected during the 1999 to 2000 time period. The 2<sup>nd</sup> evaluation was completed in 2003 and utilized data collected during the 2001 to 2002 time period. Both evaluations include comprehensive analysis of failure rates and compliance trends based on emissions test results from all vehicles. The large volume of data on exhaust emissions test results enabled DEP to independently estimate the impact of the program on exhaust emissions.

In 2003, Connecticut implemented a new I/M program. Unlike the previous centralized program where vehicles were tested in approximately 20 centrally located stations, in the new program vehicles are tested in a decentralized network of 300 inspection stations. In addition, in the new program, 1996 and newer vehicles receive OBDII tests which involve checks of the onboard diagnostic (OBD) system to determine if the vehicle complies with emission standards. Previously, 1996 and newer models as well as pre-1996 models received tailpipe emissions tests.

Using data collected from November 11, 2004 to November 10, 2005, DEP evaluated the new I/M program. In addition to providing analyses included in the previous two evaluations, this analysis focuses on items that were changed when the new program was implemented, particularly the following:

- The switch from tailpipe testing to OBDII testing for 1996 and newer vehicles; and
- The use of 300 private test facilities instead of 20 centralized test facilities.

Evaluating OBDII test results presents special challenges since tailpipe emission results are not available for each vehicle. The methodology for

this evaluation has instead, utilized data on different inspection components to determine if the appropriate number of vehicles are being failed and repaired. This approach is consistent with the purpose of OBDII system, since it assures that Connecticut is identifying and requiring the repair of vehicles that exceed design emission standards by more than 50%. As a further check on the integrity of the OBDII inspection, the analysis correlates emission readings from remote sensing devices with OBDII inspection results. This helps to determine if many high emitting vehicles are passing their OBDII inspection.

Evaluating the switch to decentralized inspections requires a comprehensive assessment of how well stations comply with mandated inspection procedures. Generally, there are greater opportunities for fraud in decentralized facilities, because there are more stations that need policing. Using data and procedures provided by the DMV, DEP assessed enforcement of the new program.

Following are the key findings of this study:

- ❖ Connecticut is failing the expected fraction of vehicles because they have evidence of being high emitters. Overall, 103,000 vehicles failed the their initial inspection. This equates to 9% of the vehicles tested. Failure rates for the OBDII test in Connecticut are equal or higher than failure rates recorded on OBDII tests conducted in centralized I/M programs.
- ❖ Connecticut's I/M test identifies vehicles that were observed to have high emissions during independent on-road (remote sensing) tests. The fraction failing tailpipe and OBDII tests has much higher average emissions than the fraction that passes. OBDII tests identify vehicles with high emissions levels even though they do not directly measure emissions.
- ❖ In the 2004 to 2005 period, 99% of the vehicles tested complied with I/M program requirements. Connecticut's program requires vehicles to pass I/M before they can be registered. This method of compliance enforcement was implemented with the new program;

previously, compliance with the I/M test was enforced through the use of window stickers.

- ❖ DMV performs extensive quality assurance checks on Connecticut's Decentralized Analyzer Systems (CDAS). DMV also performs extensive anti-fraud checks, and routinely terminates stations that perform questionable tests. The program appears to have little fraud.

DEP and DMV will continue to evaluate Connecticut's I/M program as it evolves. Currently, 65% of the vehicles receive OBDII inspections. This percentage increases each year as old vehicles without OBDII systems are dropped from the program and new vehicles with OBDII systems are added. By 2010, when the contract for the current I/M contractor ends, about 95% of the vehicles in the program will receive OBDII tests. DEP and DMV will be collecting data for future evaluations that will allow estimates to be made on the cost-effectiveness of alternative I/M options. Particular emphasis will be given to innovative inspection strategies, such as self-service inspection kiosks, that will further improve customer convenience and likely lower inspection costs.

## **1.0 Introduction**

In 1983, the State of Connecticut implemented an inspection/maintenance (I/M) program. In an I/M program, vehicles are periodically inspected, and those with evidence that they exceed design emission standards must be repaired. I/M programs were mandated under the Clean Air Act in areas such as Connecticut that were designated as serious or severe non-attainment for ozone. Connecticut's I/M program identifies vehicles that have been tampered or have received improper maintenance. These vehicles must be repaired until they comply with emission standards. The Connecticut Department of Motor Vehicles (DMV) manages the I/M program; the Connecticut Department of Environmental Protection (DEP) ensures that the program achieves the air quality benefits as outlined in Connecticut's State Implementation Plan (SIP).

The original program implemented in 1983 subjected vehicles to two inspections – an idle test where exhaust concentrations of hydrocarbons (HC) and carbon monoxide (CO) were measured while the vehicle was idling and a visual inspection for the presence of emission control devices, such as the catalytic converter. In 1998, Connecticut substantially enhanced its existing I/M program to meet new SIP requirements. The emission test was changed from an unloaded idle emission test to a loaded-mode test (ASM2525). With this change, Connecticut began evaluating emissions of oxides of nitrogen<sup>1</sup> (NO<sub>x</sub>) along with HC and CO. A loaded-mode test uses a chassis dynamometer to simulate on-road driving. If the vehicle could not be safely tested on a dynamometer, it received a pre-conditioned two-speed idle (PCTSI) test. In addition, the inspection included a gas cap pressure test to check to see if the gas cap holds pressure. Leaking gas caps are a major source of evaporative HC emissions. The inspection continued to include a visual emission control component check.

In 2003, DMV again made substantial revisions to the program. In response to an RFP for a new emissions test system, the inspection network was changed from a centralized system with about 30 inspection

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<sup>1</sup> Nitric oxide (NO) is measured as a surrogate for oxides of nitrogen (NO<sub>x</sub>)

stations to a decentralized system with about 300 stations. In addition, 1996 and newer models started receiving OBDII inspections<sup>2</sup>, instead of ASM2525 tests. All 1996 and later model year light-duty vehicles sold in the U.S. contain the second generation of on-board diagnostic equipment (OBDII). OBDII systems monitor all components that make up the engine management and emission control systems. They can detect malfunctions or deterioration of these components, often well before the motorist becomes aware of any problem. Inspecting vehicles by reading the OBDII system codes can identify vehicles with serious emission control malfunctions more accurately and cost-effectively than traditional tailpipe tests, and help technicians diagnose and repair them. In the new program, diesel powered vehicles less than 10,000 lbs GVW receive tests for excessive exhaust smoke, if they cannot receive OBD tests.

dKC analyzed data collected from the new I/M program. The analysis concentrates on data collected since November 11, 2004. This was the date the program was restarted after some initial start-up problems were corrected. The primary goal of this analysis is to generate EPA required reports. Another goal is to evaluate issues that are relevant to the new program, particularly OBDII tests and enforcement of the decentralized inspection network.

---

2 1997 and newer light-duty diesels (<8500 lbs GVW) also get OBD inspections.

## **2.0 Observed Failure Rates for Gasoline Powered Vehicles**

Failure rates for gasoline powered vehicles were calculated using test results from I/M test stations. Below is a brief description of the criteria used to determine if a vehicle passes or fails inspection.

### ***Pass Fail Criteria***

**ASM2525 or Pre-Conditioned Two-Speed Idle (PCTSI) Inspection (pre-1996 vehicles):** Vehicles fail if they exceed Connecticut's cutpoints (emissions standards). For the ASM2525 test, HC, CO and NOx emissions are evaluated. For the PCTSI test, HC and CO emissions are evaluated. A vehicle fails if it exceeds cutpoints. Connecticut uses cutpoints recommended by EPA.

**Gas Cap Test:** Vehicles fail if their gas cap cannot hold pressure. Beginning in November 2004, only pre-1996 light-duty vehicles receive gas cap tests. The OBDII system adequately tests the gas cap on most 1996 and newer vehicles.

**OBDII Inspection:** 1996 and newer light-duty vehicles get an OBDII inspection. The emissions test system is plugged into the OBDII connector and information on the status of the vehicle's OBD system is downloaded. Vehicles fail the OBDII inspection if they have the following problems:

- Malfunction Indicator Lamp (MIL)<sup>3</sup> is commanded-on
- MIL not working (Termed Key-On Engine-Off, KOEO, failure<sup>4</sup>)
- OBD diagnostic link connector damaged

During this time period, vehicles that exceeded EPA's limits on the numbers of monitors that can be not ready were defaulted to the appropriate tailpipe test (ASM2525 or PCTSI). Vehicles that failed to communicate with Connecticut's test equipment also received tailpipe tests.

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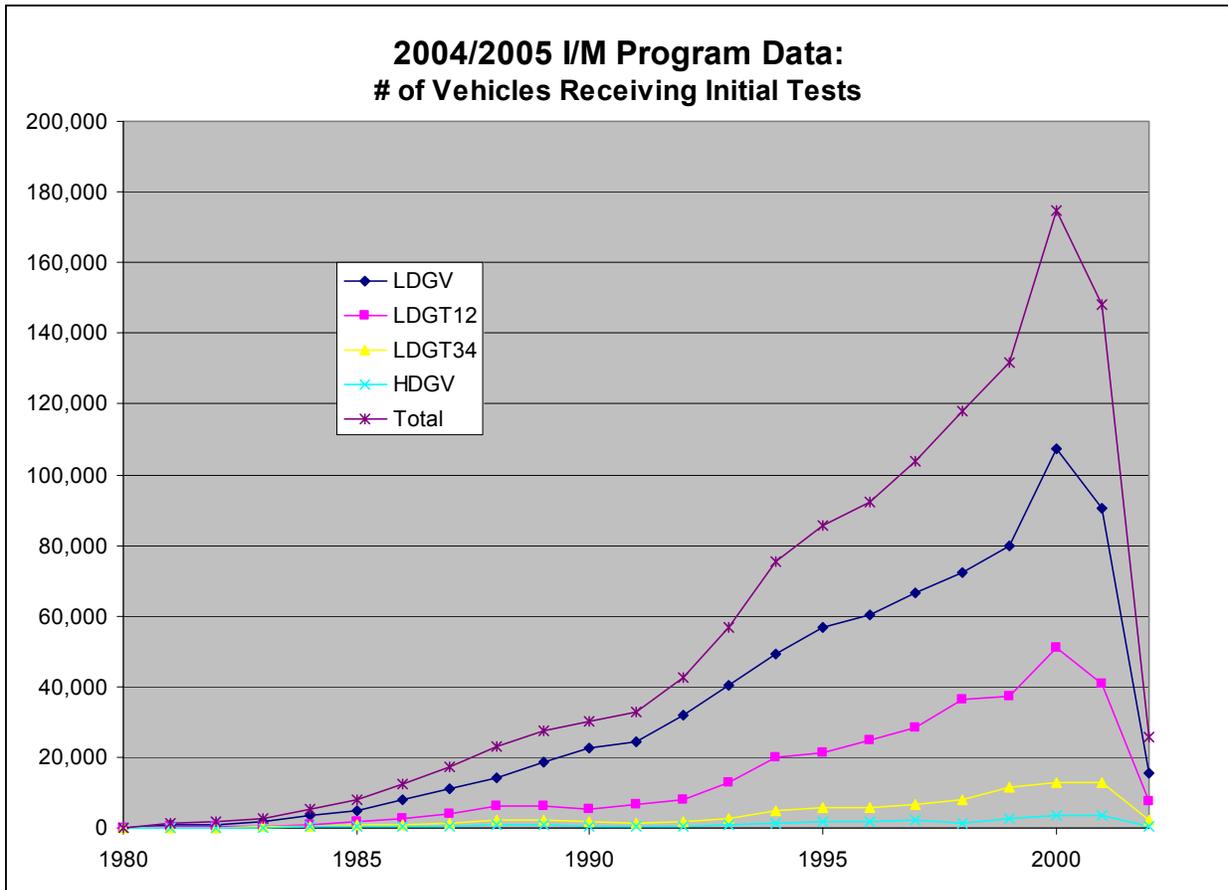
<sup>3</sup> MIL is a term used for the light on the instrument panel, which notifies the vehicle operator of an emission related problem. The MIL is required to display the phrase "check engine" or "service engine soon" or the ISO engine symbol. The MIL is required to illuminate when a problem has been identified that could cause emissions to exceed a specific multiple of the standards the vehicle was certified to meet.

<sup>4</sup> The Key-On Engine-Off (KOEO) determines if the MIL bulb is working. The bulb should illuminate when the vehicle is turned on but not started.

## ***Summary of Fail Rates***

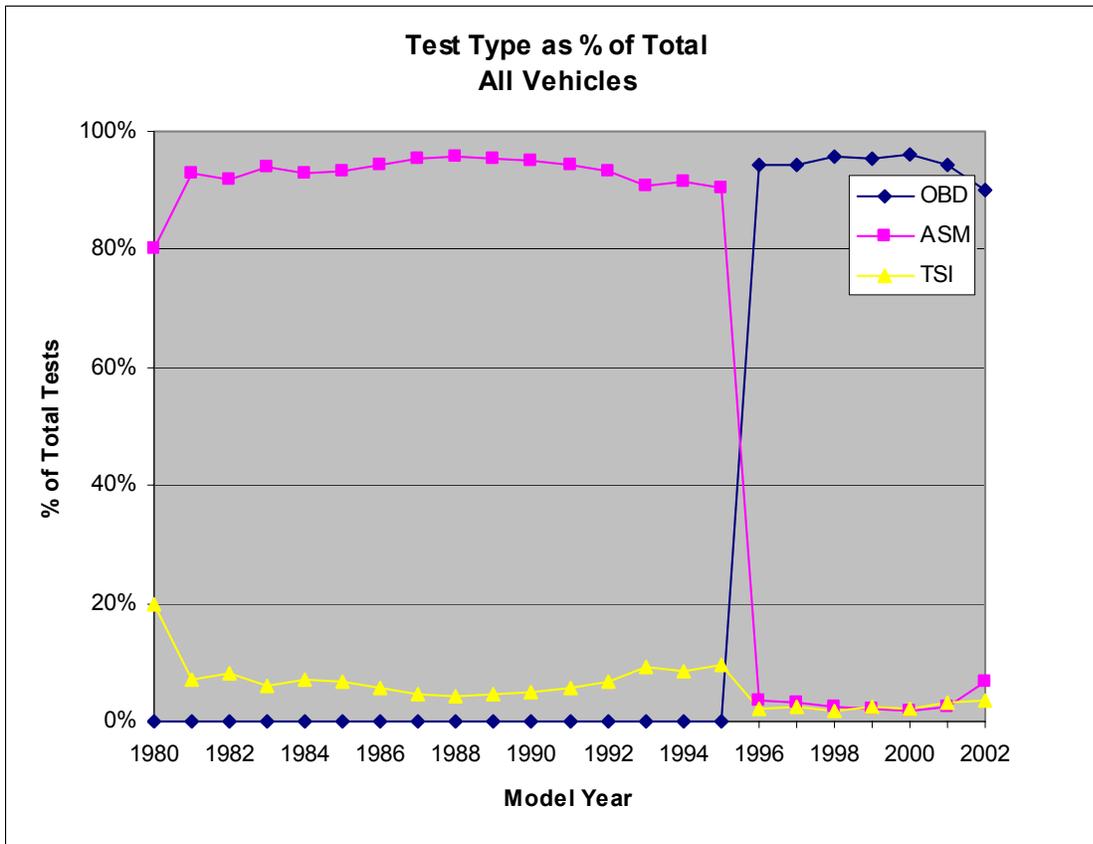
Following is a summary of test results for the November 11, 2004 to November 10, 2005 period. During this period 1,191,716 gasoline powered vehicles received initial tests.

- Overall, 102,905 vehicles (8.6%) failed the initial inspection.
  - 16.5% of the vehicles failed their first retest.
  - Vehicles can fail for more than one reason.
- 27,721 (6.7%) vehicles failed the ASM2525 test.
  - 35.8% of the vehicles failed the first ASM2525 retest.
- 3,512 (7.0%) vehicles failed the PCTSI test.
  - 34.2% of the vehicles failed the first PCTSI retest.
- 20,587 (1.7%) vehicles failed the gas cap test.
  - 3.8% of the vehicles failed the first gas cap retest.
- 52,324 (6.9%) vehicles failed the OBD test.
  - 6.0% of the vehicles failed the test because the MIL was commanded-on.
  - 0.5% of the vehicles failed the test because the MIL bulb was not working.
  - 10.5% of the vehicles failed the first OBD retest.
- As of 12/31/04 fleets are allowed to self inspect, if they purchase required test equipment. Since 12/31/04, 32 Fleet Operators completed 2,002 initial inspections (OBD & PCTSI). OBDII fail rates were 3.66%; PCTSI fail rates were 4.22%.

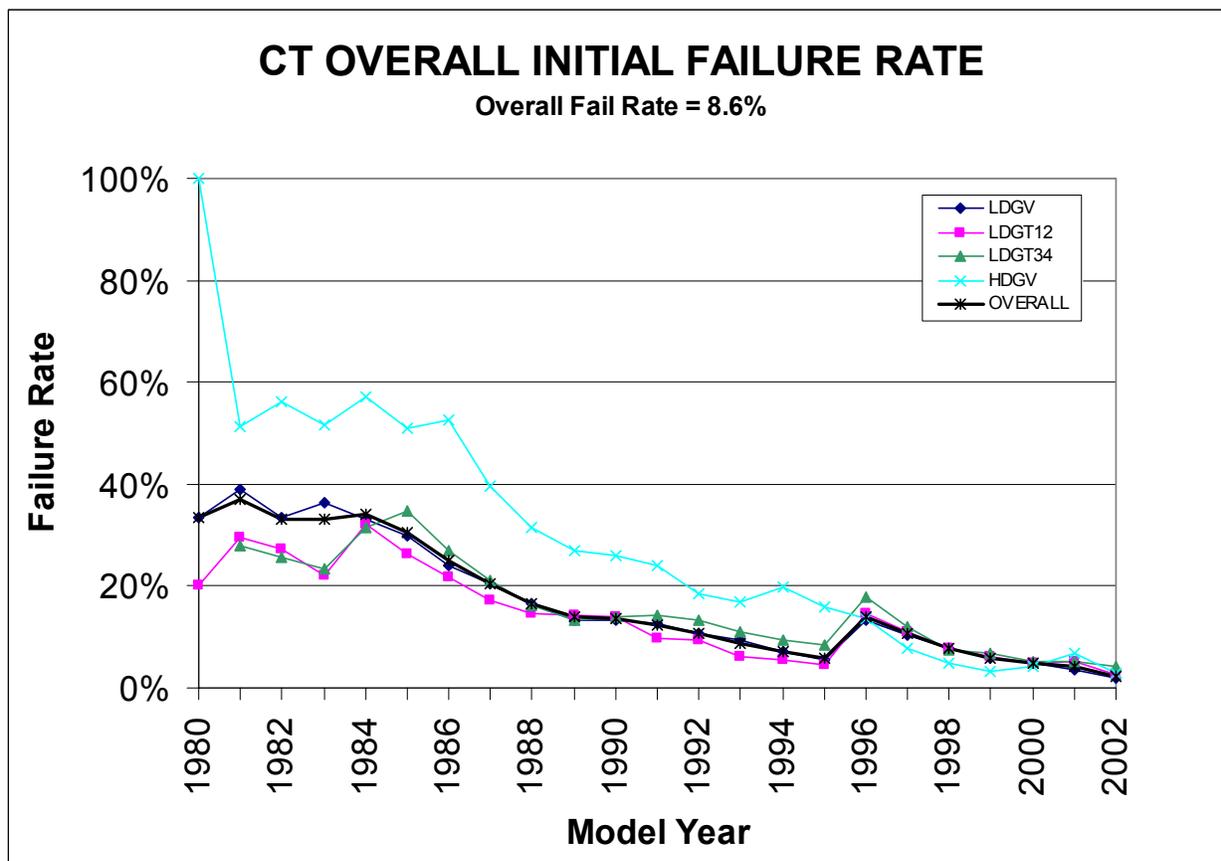


**This chart shows the total number of inspections by model year and vehicle type. The 1<sup>st</sup> four model years are exempted from testing, so the number drops sharply after 2001.**

**LDGV = Light-duty gasoline powered vehicles (Passenger Cars)  
 LDGT(12&34) = Light-duty gasoline powered trucks  
 HDGV = Heavy-duty gasoline powered vehicles**

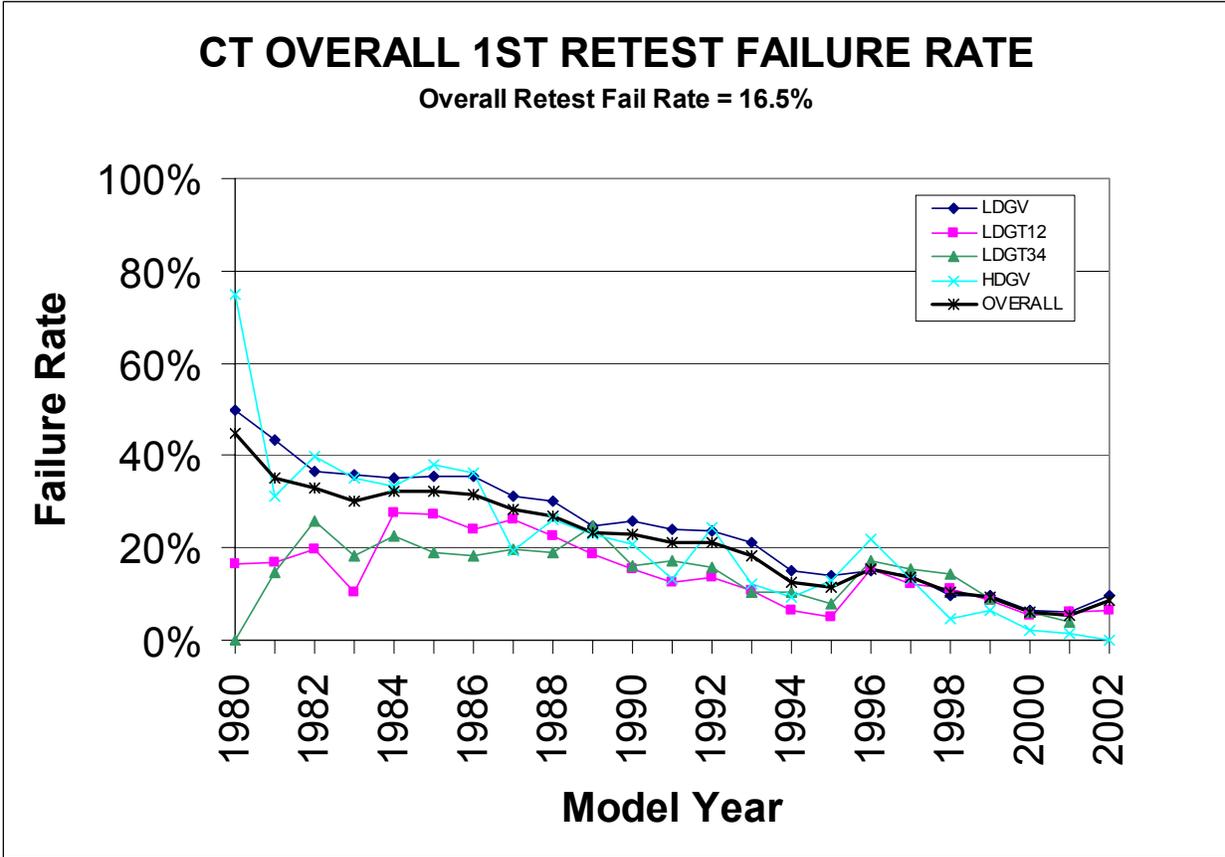


**This chart shows the total number of inspections by model year and final inspection type. Most 1996+ vehicles received OBDII tests. Because of provisions to perform back-up tailpipe tests on vehicles that were not ready or failed to communicate with test system, some 1996+ vehicles received tailpipe tests. Also, a small fraction (2%) of the vehicles were heavy-duty models without OBD systems.**



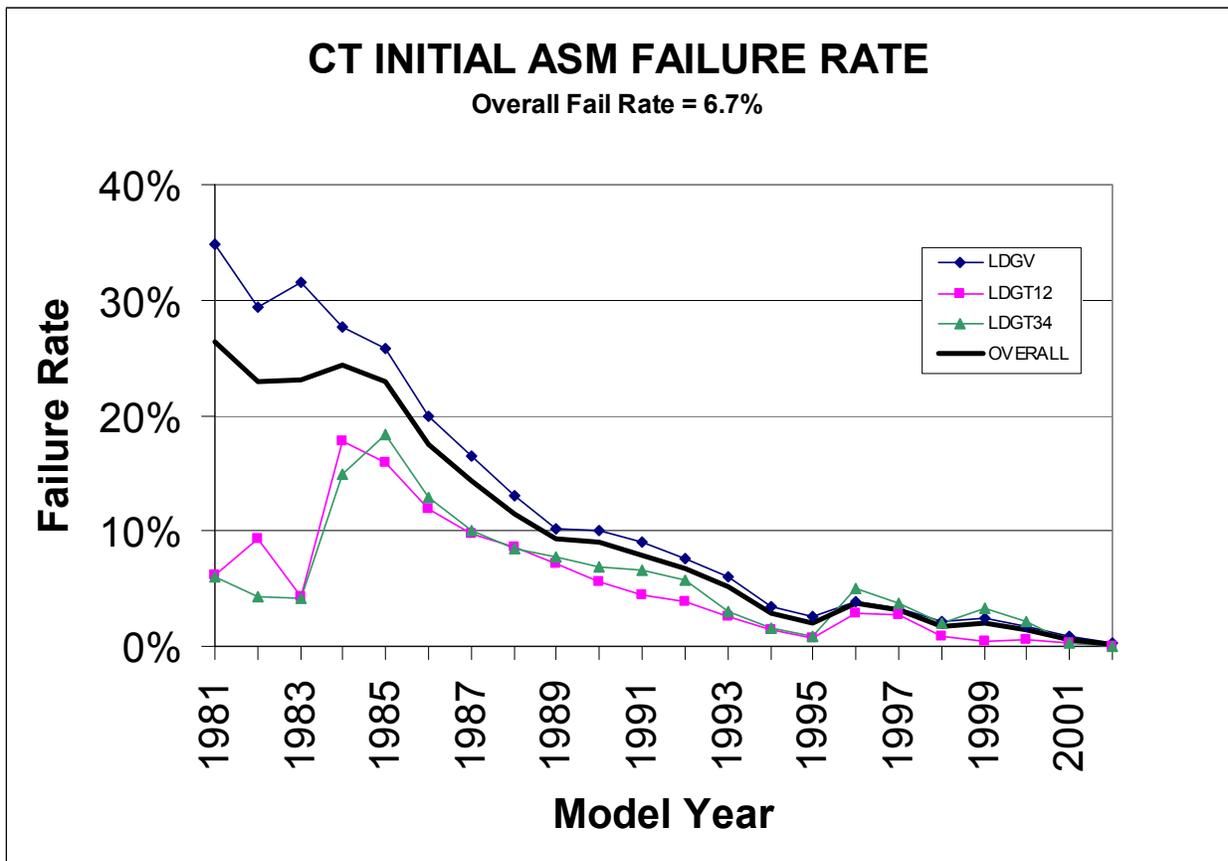
This chart shows the overall percent of vehicles that fail the tailpipe test, gas cap test, visual emission control component inspection, or the OBD test. Some vehicles fail more than one inspection component. As expected, the failure rate is lowest for new vehicles. The failure rate for light-duty cars and trucks spikes up for 1996 model year vehicles, due to implementation of the OBDII test. Compliance with the OBDII test is considered to be more difficult than compliance with the ASM2525 or PCTSI test.

LDGV = Light-duty gasoline powered vehicles (Passenger Cars)  
 LDGT(12&34) = Light-duty gasoline powered trucks  
 HDGV = Heavy-duty gasoline powered vehicles



This chart shows the percent of vehicles by model year that fail their first retest. The fail rate is highest for the older vehicles. Overall, 16.5% of the vehicles pass the first retest. As with the initial test failure rate, the retest failure rate spikes up for the 1996 model year.

LDGV = Light-duty gasoline powered vehicles (Passenger Cars)  
 LDGT(12&34) = Light-duty gasoline powered trucks  
 HDGV = Heavy-duty gasoline powered vehicles

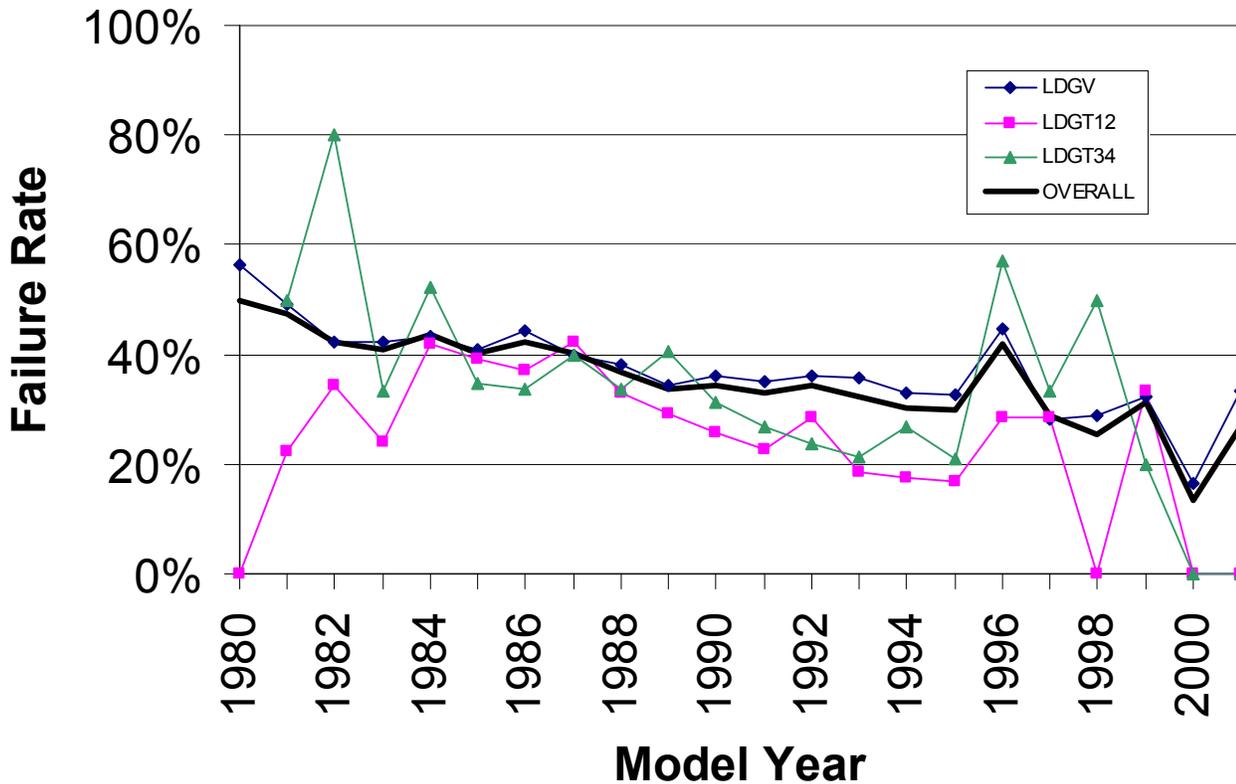


This chart shows failure rates by model year for the ASM2525 test. The average ASM2525 test failure rate for all vehicles was 6.7%. Typically, you expect a higher failure rate for older model year vehicles. The increase in 1996 corresponds with a major tightening of ASM2525 standards. Note: 1996 and newer vehicles received ASM2525 (or PCTSI) tests only if they were not ready or could not communicate with Connecticut's OBDII test system.

LDGV = Light-duty gasoline powered vehicles (Passenger Cars)  
 LDGT(12&34) = Light-duty gasoline powered trucks  
 HDGV = Heavy-duty gasoline powered vehicles

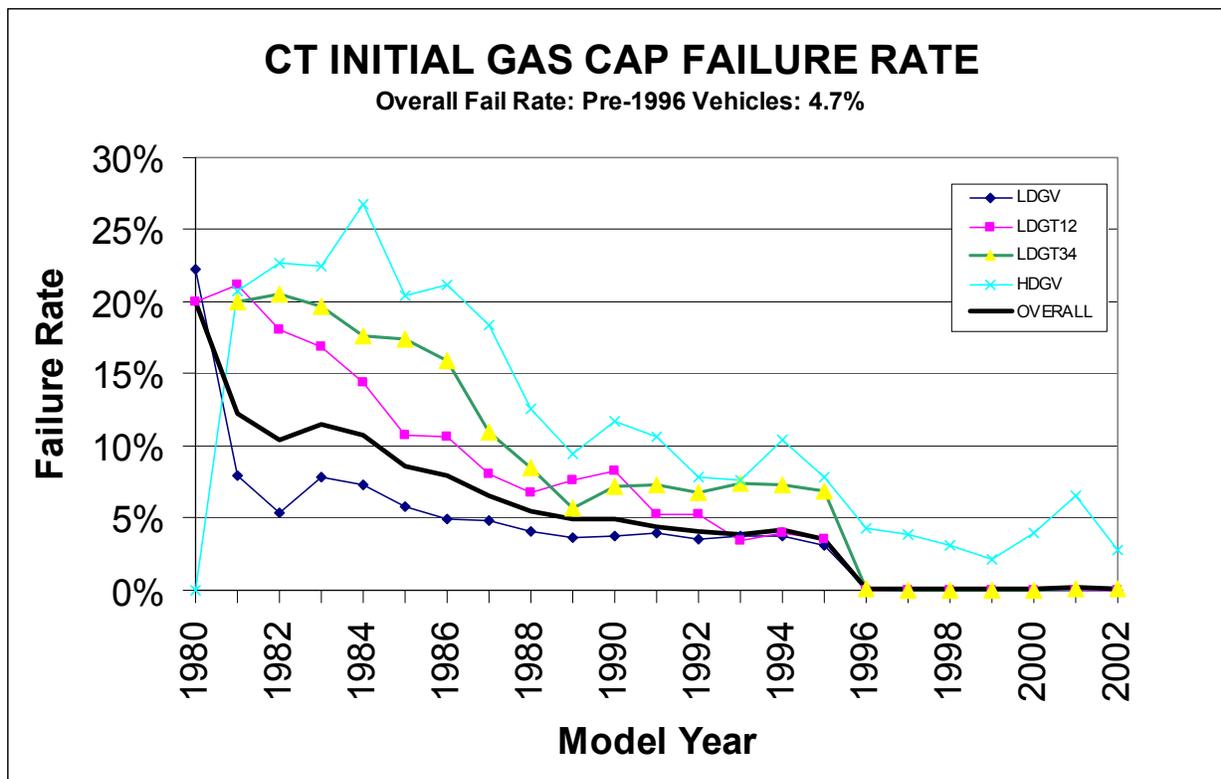
## CT 1ST RETEST ASM FAILURE RATE

Overall Fail Rate = 35.8%



This chart shows the percent of vehicles by model year that fail their first ASM2525 retest. The retest fail rate is highest for the older vehicles. Overall, 35.8% of the vehicles fail the first ASM2525 retest. It appears that many vehicles are receiving inadequate diagnosis of the problem(s) causing high emissions.

LDGV = Light-duty gasoline powered vehicles (Passenger Cars)  
LDGT(12&34) = Light-duty gasoline powered trucks

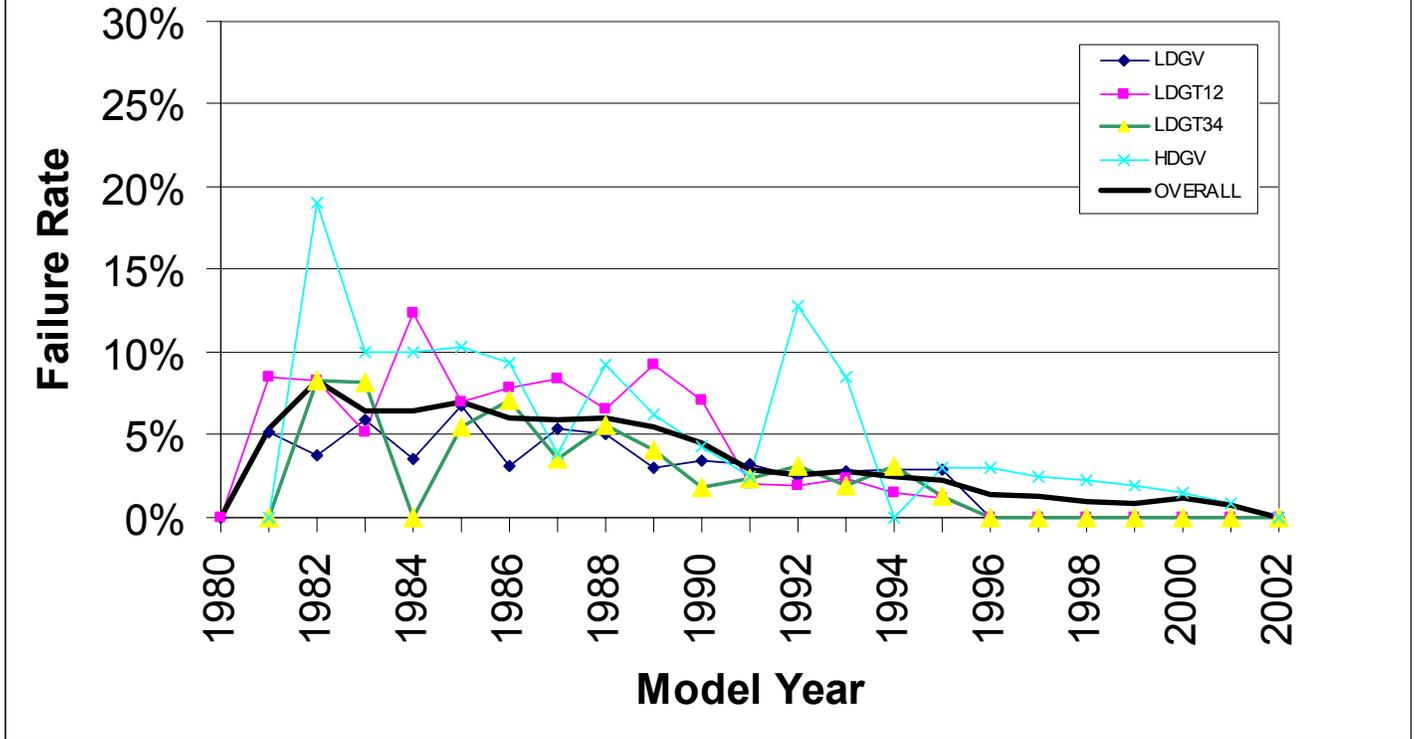


This chart shows the gas cap pressure test failure rate by model year. As with the ASM2525 test, the failure rate is higher for older vehicles. Note: 1996 and newer light-duty vehicles no longer receive gas cap tests.

LDGV = Light-duty gasoline powered vehicles (Passenger Cars)  
 LDGT(12&34) = Light-duty gasoline powered trucks  
 HDGV = Heavy-duty gasoline powered vehicles

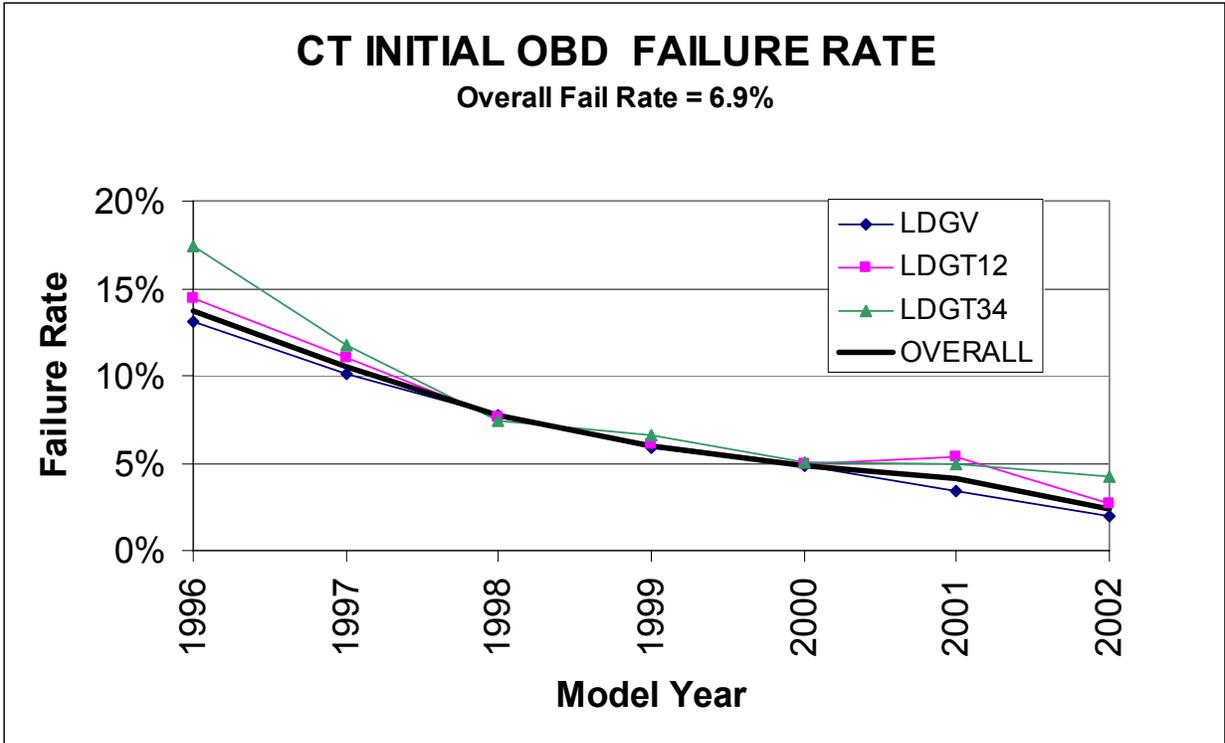
# CT 1ST RETEST GAS CAP FAILURE RATE

Overall Average = 3.7%



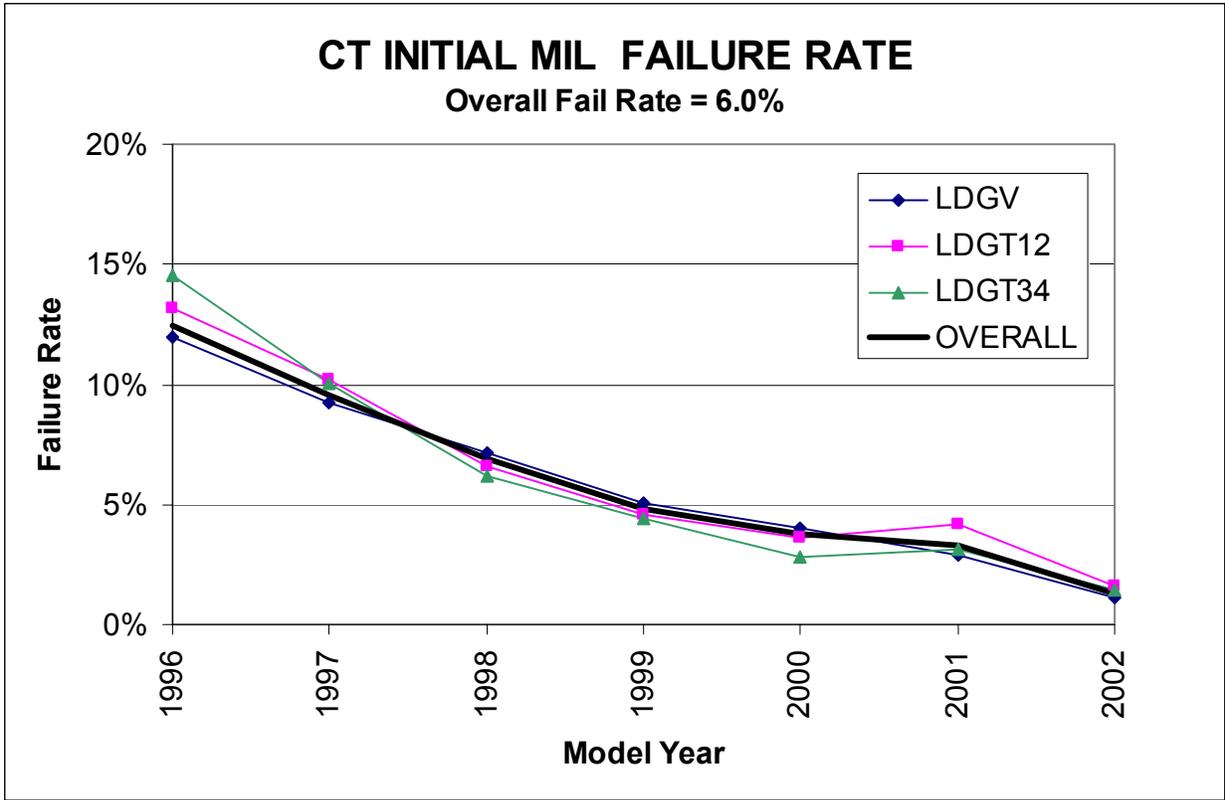
This chart shows the gas cap retest fail rate by model year. Overall, 4% of the vehicles fail the first gas cap retest.

LDGV = Light-duty gasoline powered vehicles (Passenger Cars)  
LDGT(12&34) = Light-duty gasoline powered trucks



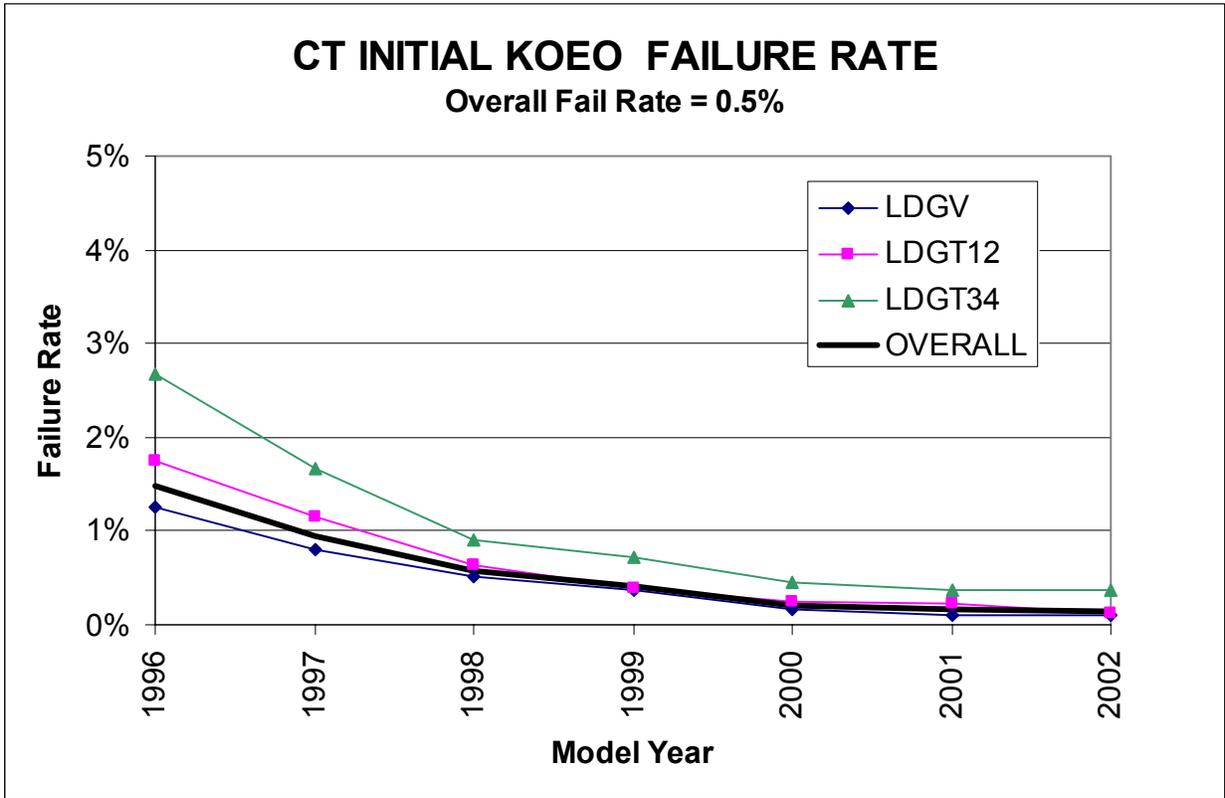
**This chart shows failure rates by model year for the OBD test. The average OBD test failure rate for all vehicles was 6.9%. Typically, you expect a higher failure rate for older model year vehicles. 14% of the 1996 model year vehicles fail the test vs. 2% of the 2002 models.**

**LDGV = Light-duty gasoline powered vehicles (Passenger Cars)  
 LDGT(12&34) = Light-duty gasoline powered trucks**



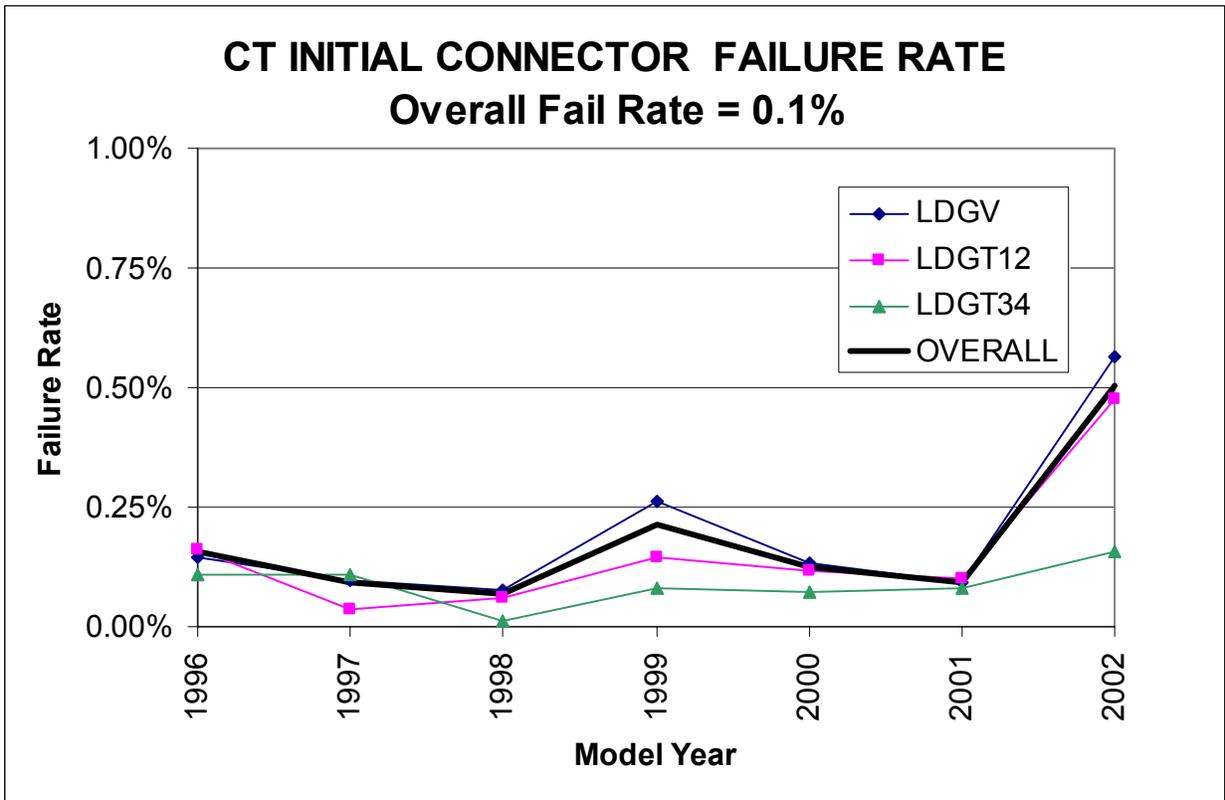
This chart shows the % of vehicles that fail the MIL-Command check that's part of the OBD test. Most OBDII failures are for the MIL command check. The average MIL failure rate for all vehicles was 6.1%. Again, you expect a higher failure rate for older model year vehicles.

LDGV = Light-duty gasoline powered vehicles (Passenger Cars)  
 LDGT(12&34) = Light-duty gasoline powered trucks



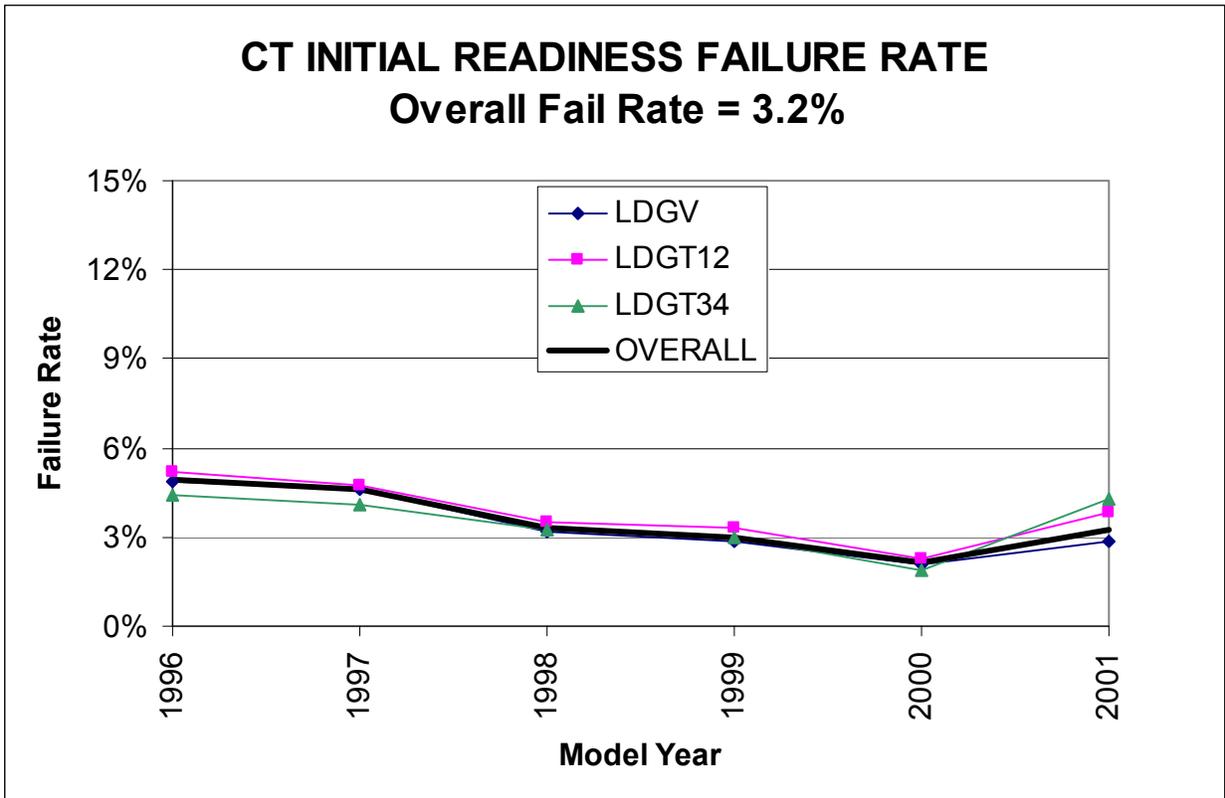
This chart shows failure rates by model year for the Key-On Engine Off (KOEO) test, which is part of the OBD test. The average KOEO failure rate for all vehicles was 0.5%. The Key-On Engine-Off (KOEO) determines if the MIL bulb is working. The bulb should illuminate when the vehicle is turned on but not started.

LDGV = Light-duty gasoline powered vehicles (Passenger Cars)  
 LDGT(12&34) = Light-duty gasoline powered trucks

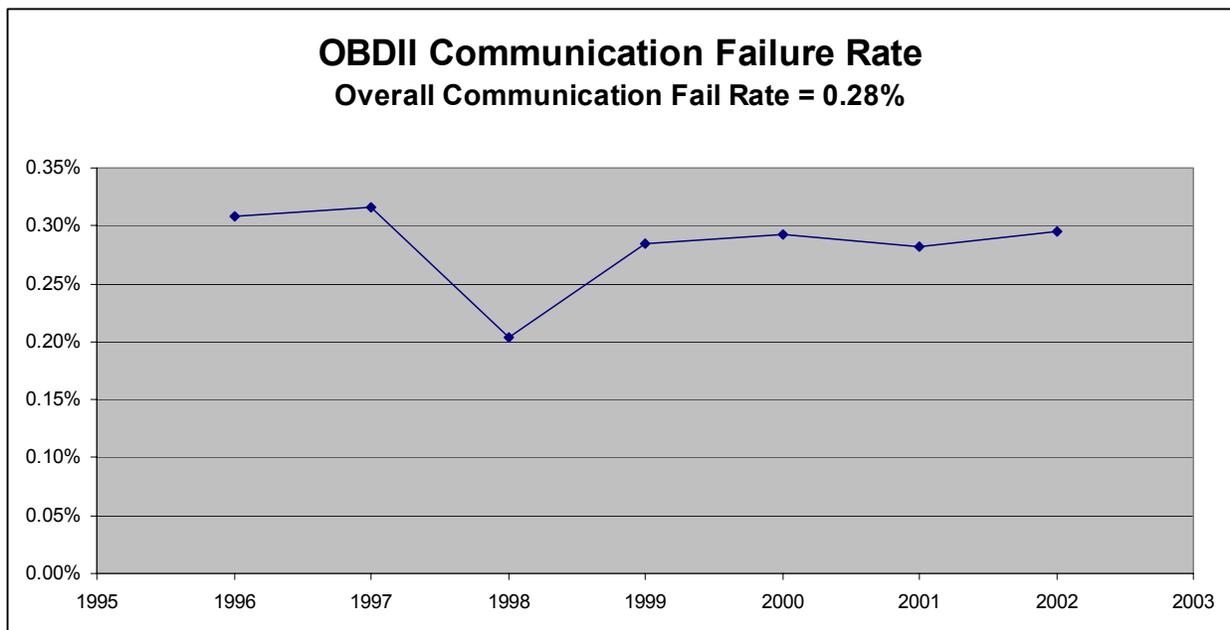


**This chart shows the % of vehicles that fail because the OBDII connector (termed DLC) is missing or damaged. Overall, 0.1% of the vehicles fail for this reason.**

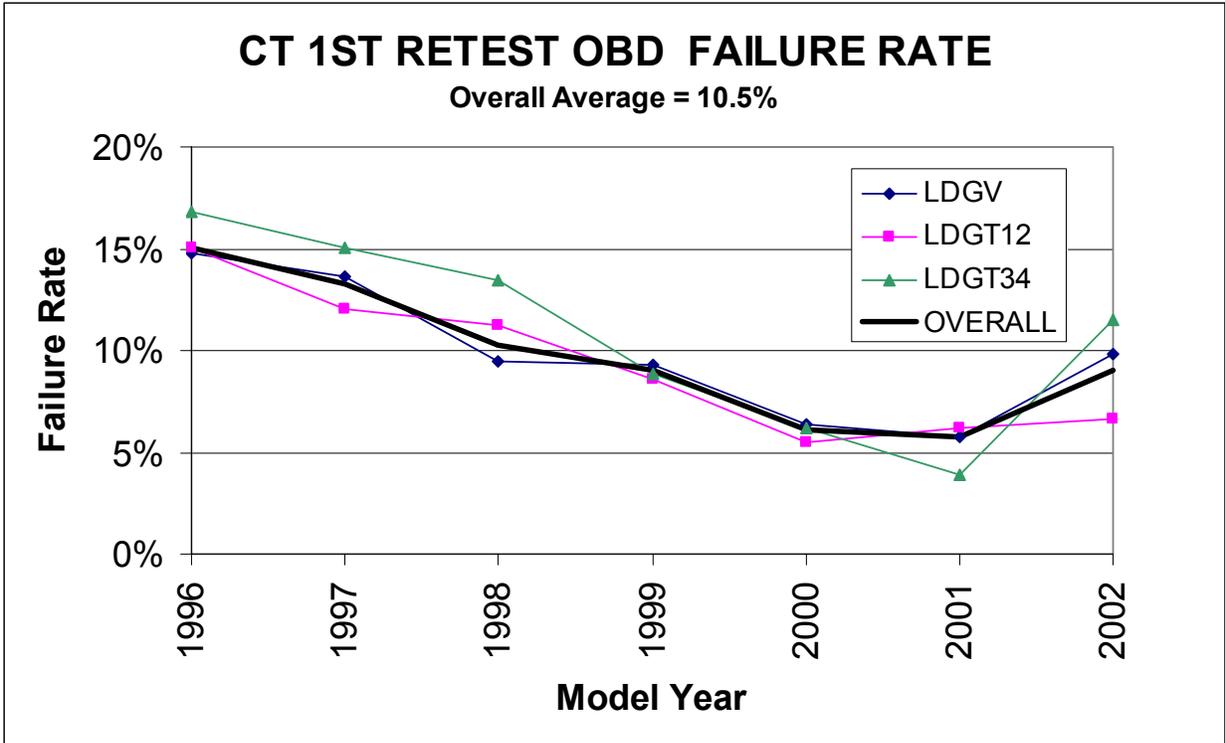
**LDGV = Light-duty gasoline powered vehicles (Passenger Cars)  
 LDGT(12&34) = Light-duty gasoline powered trucks**



**This chart shows the % of vehicles that exceed EPA’s readiness criteria. OBDII systems have up to 11 diagnostic monitors. Diagnostic monitors are periodic tests run on specific systems and components to ensure that they are performing within their prescribed range. OBDII systems must indicate whether or not the onboard diagnostic system has monitored each component. Components that have been diagnosed are termed “ready”, meaning they were tested by the OBDII system. During the time period these data were collected, vehicles that were not ready receive tailpipe emissions tests, if they pass all other OBDII inspection criteria. Overall, 3.2% of the vehicles fail EPA’s readiness criteria.**



**This chart shows the % of vehicles that fail to communicate with the OBDII test equipment. Overall, 0.3% of the vehicles fail for this reason. Currently, vehicles that fail to communicate with the test equipment receive tailpipe emissions tests, if they pass all other OBDII inspection criteria.**



**This chart shows failure rates by model year for the first OBD retest. The average failure rate for all vehicles in the first OBD retest was 10.5%. Note that Connecticut requires OBD failures to meet readiness requirements when retested. The fall-back tailpipe test for vehicles that are not ready is not an option for retests. If a vehicle does not meet readiness requirements when retested, the inspection is aborted. Vehicles that are not ready on retest are not included in the above fail percentage.**

**LDGV = Light-duty gasoline powered vehicles (Passenger Cars)  
 LDGT(12&34) = Light-duty gasoline powered trucks**

### **3.0 Observed Failure Rates for Diesel Powered Vehicles**

Diesel powered vehicles less than 10,000 lbs GVW also are tested in Connecticut. If the vehicle is equipped with an OBDII system, an OBDII test is performed. Otherwise the vehicle receives a test for excessive exhaust smoke opacity.

Failure rates for diesel powered vehicles were calculated using test results from I/M test stations. Below is a brief description of the criteria used to determine if a vehicle passes or fails inspection.

#### ***Pass Fail Criteria***

**Loaded Mode Diesel (LMD) Test:** Test using a dynamometer to simulate driving at 30 mph. Exhaust smoke opacity is measured.

**Modified Snap Acceleration (MSA) Test:** With this test, the throttle is snapped and exhaust smoke opacity is measured. Test is done in “neutral”. The average of 3 snaps is calculated and compared to the standard.

**OBDII Inspection:** 1997 and newer light-duty diesels get an OBDII inspection. The emissions test system is plugged into the OBDII connector and information on the status of the vehicle’s OBD system is downloaded. Vehicles fail the OBDII inspection if they have the following problems:

- Malfunction Indicator Lamp (MIL) is commanded-on
- MIL not working (Termed Key-On Engine-Off, KOEO, failure)
- OBD diagnostic link connector damaged

## ***Summary of Fail Rates***

Following is a summary of test results for the November 11, 2004 to November 10, 2005 period. During this period, 10,669 diesel powered vehicles received opacity tests and an additional 1,832 vehicles received OBD tests.

- 133 (6.0%) vehicles failed the Modified Snap Acceleration (MSA) test.
  - 33% of the vehicles failed the first MSA retest.
- 236 (2.8%) vehicles failed the Loaded Mode Diesel (LMD) test.
  - 29% of the vehicles failed the first MSI retest.
- 223 (12.2%) vehicles failed the OBD test.
  - 9.0% of the vehicles failed the first OBD retest.

## **4.0 Enforcement of Connecticut's I/M Program**

### ***Non-Compliance Penalties***

In the new I/M program, DMV makes I/M compliance a prerequisite for vehicle registration. Overall, 99% of the vehicles tested from 1/1/05 to 12/31/05 complied with I/M program requirements and are registered. In 2005, DMV denied registration for 10,744 vehicles, because they did not comply with I/M test standards. As of 12/31/05, DMV sent 7,206 late fee notices.

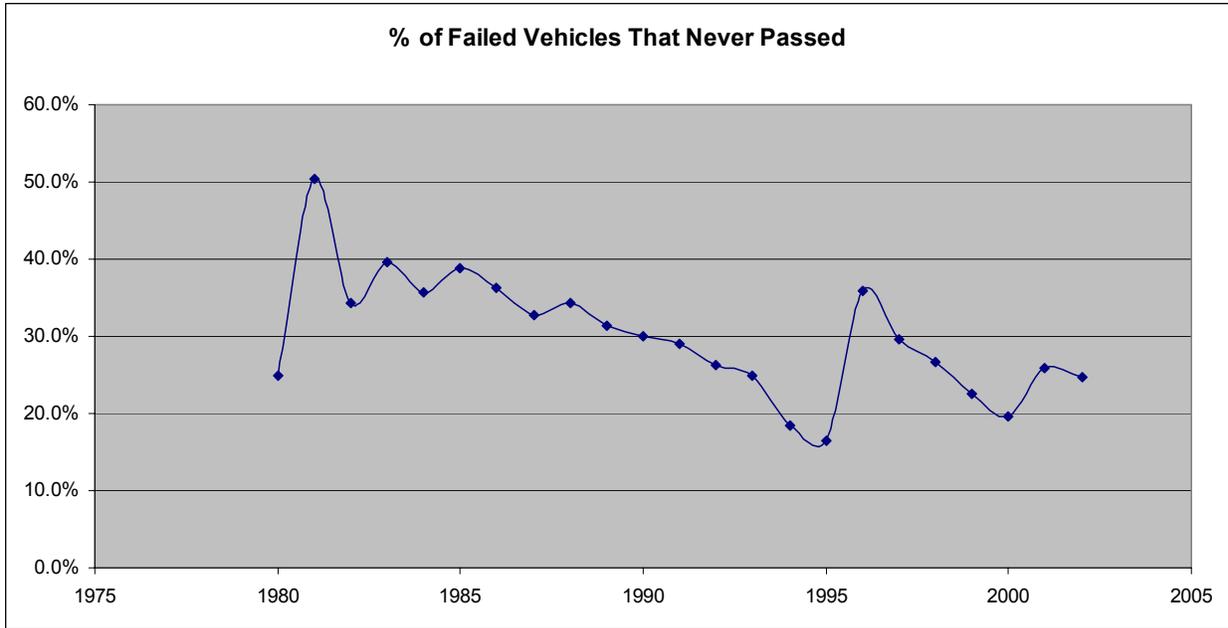
### ***Fate of Failed Vehicles***

What happens to vehicles failing their inspection? A central question is whether these vehicles ultimately pass the test. The fate of vehicles failing the I/M test in the 2004 to 2005 period was evaluated. Failures for the 3 month period beginning 11/11/04 were tracked through 11/10/05.

Overall, 28.5% of the failures had not yet received a passing result (or waiver). This is similar to the old program. Ultimately, these vehicles must comply or they cannot be registered in Connecticut.

**Vehicles Tested from 11/11/04 to 11/10/05  
with No Known Outcome**

| Model Year   | Initial Fail  | Final Retest Pass | Final Retest Fail | No Retest Pass or Fail | % No Final Pass |
|--------------|---------------|-------------------|-------------------|------------------------|-----------------|
| 1980         | 4             | 3                 | 0                 | 1                      | 25.0%           |
| 1981         | 107           | 53                | 22                | 32                     | 50.5%           |
| 1982         | 125           | 82                | 19                | 24                     | 34.4%           |
| 1983         | 212           | 128               | 33                | 51                     | 39.6%           |
| 1984         | 427           | 275               | 58                | 94                     | 35.6%           |
| 1985         | 561           | 343               | 86                | 132                    | 38.9%           |
| 1986         | 721           | 460               | 100               | 161                    | 36.2%           |
| 1987         | 911           | 612               | 127               | 172                    | 32.8%           |
| 1988         | 923           | 606               | 110               | 207                    | 34.3%           |
| 1989         | 1,041         | 714               | 124               | 203                    | 31.4%           |
| 1990         | 1,050         | 734               | 110               | 206                    | 30.1%           |
| 1991         | 947           | 672               | 104               | 171                    | 29.0%           |
| 1992         | 1,099         | 810               | 109               | 180                    | 26.3%           |
| 1993         | 1,239         | 930               | 101               | 208                    | 24.9%           |
| 1994         | 1,291         | 1,054             | 90                | 147                    | 18.4%           |
| 1995         | 1,313         | 1,098             | 77                | 138                    | 16.4%           |
| 1996         | 2,834         | 1,816             | 220               | 798                    | 35.9%           |
| 1997         | 2,919         | 2,053             | 138               | 728                    | 29.7%           |
| 1998         | 1,980         | 1,452             | 77                | 451                    | 26.7%           |
| 1999         | 1,973         | 1,528             | 78                | 367                    | 22.6%           |
| 2000         | 870           | 700               | 31                | 139                    | 19.5%           |
| 2001         | 251           | 186               | 17                | 48                     | 25.9%           |
| 2002         | 69            | 52                | 2                 | 15                     | 24.6%           |
| <b>TOTAL</b> | <b>22,867</b> | <b>16,361</b>     | <b>1,833</b>      | <b>4,673</b>           | <b>28.5%</b>    |



**This chart shows the percentage of vehicles that fail the emission test that never ultimately pass. The increase from 1995 to 1996 indicates that compliance with the OBD test is more difficult than the tailpipe test used for pre-1996 vehicles.**

## ***Enforcement of Proper Test Procedures***

- DMV has developed a comprehensive set of Triggers. Triggers are reports to identify stations performing fraudulent or inaccurate inspections.
- Triggers focus on finding the following types of fraud:
  - Clean Scanning: Performing an OBDII test on a fault-free vehicle instead of the vehicle that should be tested.
  - Clean Piping: Performing a tailpipe test on a passing vehicle instead of the vehicle that should be tested.
- These reports are being generated frequently to identify stations performing improper inspections.
- Following is a summary of the trigger reports that were generated during the 2004/2005 period. Overall, inspection fraud is not a problem in Connecticut's I/M program, as indicated by the low percentage of questionable tests in Connecticut.

## Triggers for Clean Scanning/Clean Piping

DMV runs several trigger reports to identify clean scanning and clean piping:

- **Mismatch between entered VIN and OBDII VIN** – Inspectors may be attempting to pass vehicles with OBDII faults by scanning problem free vehicles instead of vehicles that should be inspected.
  - If the vehicle has an electronic VIN available through the vehicle's OBDII system, clean scanning cases can be identified by comparing entered VIN with VIN provided by vehicle's OBDII system.
  - There have been 117 incidences of OBD VIN mismatches out of 40,000 tests with OBD VINs (0.29%).
- **Questionable Retests** – Mismatches between initial tests and retests could indicate that the inspector clean-scanned vehicles on retests. DMV checks the following parameters:
  - Supported readiness monitors – different vehicles have different monitors
  - OBD computer identifiers
  - To date, out of about 52,000 OBD failures, 63 tests (0.12%) have been flagged by this trigger.

- **Short Time Between Initial OBD Test Fail And Retest Pass** – Stations that often show short time periods between initial test failures and retest passes could be performing fraudulent inspections. (Short = ½ hour)
  - It is difficult to repair OBD failures and get failing vehicles to pass in a short time period:
    - MIL-On Fails – It takes time for the MIL to go off or readiness monitors to reset if codes are cleared
    - Readiness Fails – It takes time for readiness monitors to set to ready, especially the evaporative monitor.
  - To date, out of about 52,000 OBD failures, only 28 tests (0.05%) have been flagged by this trigger.
  
- **Large Emission Reductions In A Short Time Period (1981-1995 Vehicles)** – Stations reporting large emission reductions in a short time period are more likely to be clean piping the retests. (Short = ½ hour)
  - To date, out of about 28,000 ASM2525 failures, 76 tests (0.27%) have been flagged by this trigger.

## Triggers Summaries

- DMV tabulates triggers by station.
- Stations with more than one minor trigger or any major trigger, e.g. large emission reductions in a short time period, are immediately investigated.
- About  $\frac{3}{4}$  of the trigger incidences were in stations that had >1 trigger.
- Overall, less than 0.5% of the inspections were flagged by trigger reports, which indicates that inspection fraud is not a problem in Connecticut.

### Example Report – Stations with the Most Trigger Hits

| Station | <1hr<br>OBD<br>pass | <1hr>50<br>% | Looser<br>ASM2525<br>Cutpoints | OBD<br>Parameter<br>Mismatch | OBD VIN<br>Mismatch | Total |
|---------|---------------------|--------------|--------------------------------|------------------------------|---------------------|-------|
| A       |                     | 1            |                                | 12                           |                     | 13    |
| B       |                     | 1            |                                | 9                            |                     | 10    |
| C       |                     | 3            | 1                              | 1                            | 3                   | 8     |
| D       | 1                   | 1            | 1                              | 4                            |                     | 7     |
| E       | 1                   |              | 1                              |                              | 3                   | 5     |
| F       |                     | 2            |                                | 1                            | 2                   | 5     |
| G       |                     | 2            | 1                              |                              | 2                   | 5     |
| H       |                     |              | 1                              | 1                            | 3                   | 5     |
| I       |                     |              |                                | 1                            | 3                   | 4     |
| J       | 1                   | 2            | 1                              |                              |                     | 4     |
| K       |                     | 1            | 1                              |                              | 2                   | 4     |
| L       |                     |              | 1                              | 1                            | 2                   | 4     |
| M       |                     |              | 4                              |                              |                     | 4     |
| N       |                     |              | 1                              |                              | 3                   | 4     |

## **5.0 Analysis of Data from Remote Sensing Devices (RSD)**

EPA requires that 0.5% of the tested vehicle population receive independent on-road emissions tests. Connecticut meets this requirement by using Remote Sensing Devices (RSD). DMV requires its contractor, Applus, to perform on-road tests with RSD.

Remote Sensing Devices (RSD) measure emissions by passing a light source across a highway to a source detector. The source detector measures absolute concentrations of hydrocarbons (HC), carbon monoxide (CO), nitric oxide<sup>5</sup> (NO), and carbon dioxide (CO<sub>2</sub>) in the diluted exhaust. From these measurements, exhaust concentrations of HC, CO, and NO in the undiluted exhaust are calculated.

RSD offers the opportunity to obtain vehicle emissions measurements in a relatively non-intrusive manner. Connecticut's I/M contractor, Applus, is required to conduct on-road emission tests using remote sensing devices (RSD), in order to meet EPA's on-road test requirements.

In July 2005, Applus contracted ESP<sup>6</sup> to conduct approximately 21,000 tests using RSD. After removing invalid records and matching results with the vehicle I/M database, 5,379 records remained (~0.5% of the vehicles tested in the I/M program annually). The RSD program meets EPA's on-road test requirements.

Applus was able to match RSD results with I/M results from 2001. Applus generated two datasets:

- RSD results before I/M: 1,553 valid observations
- RSD results after I/M: 3,826 valid observations

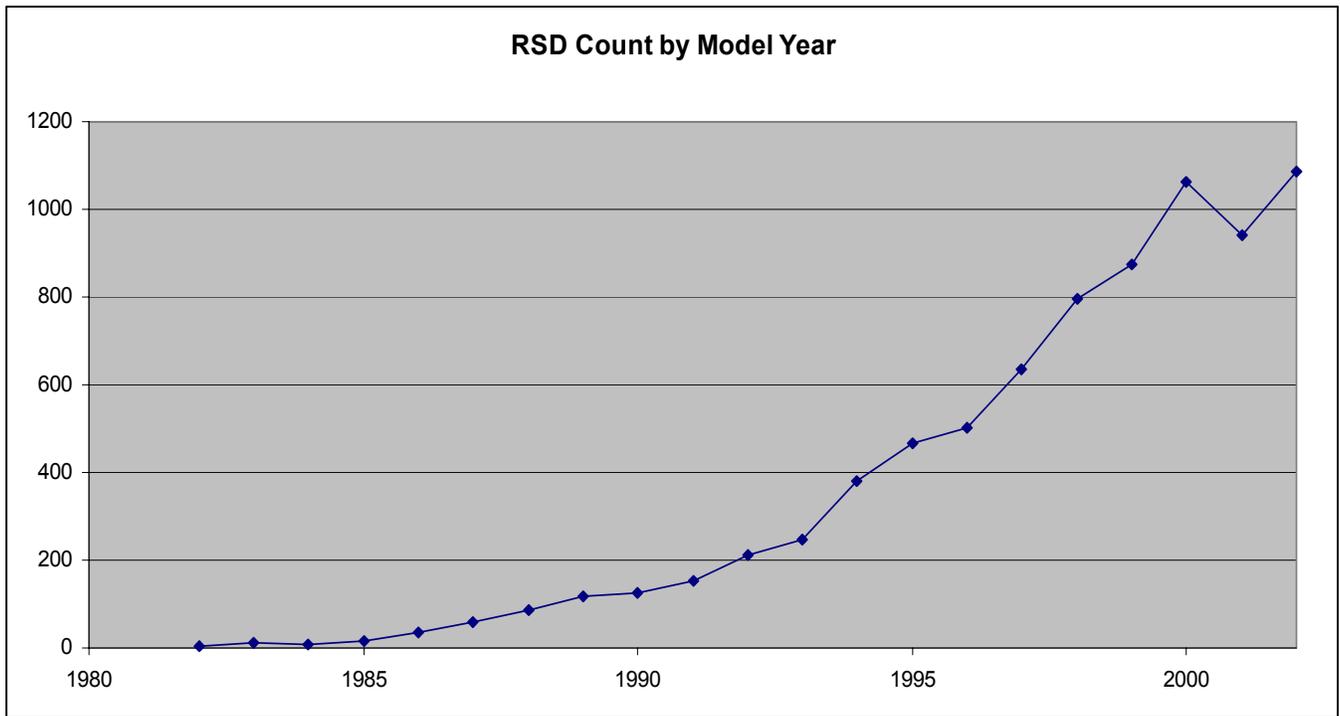
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5 NO is used as a surrogate for oxides of nitrogen (NO<sub>x</sub>).

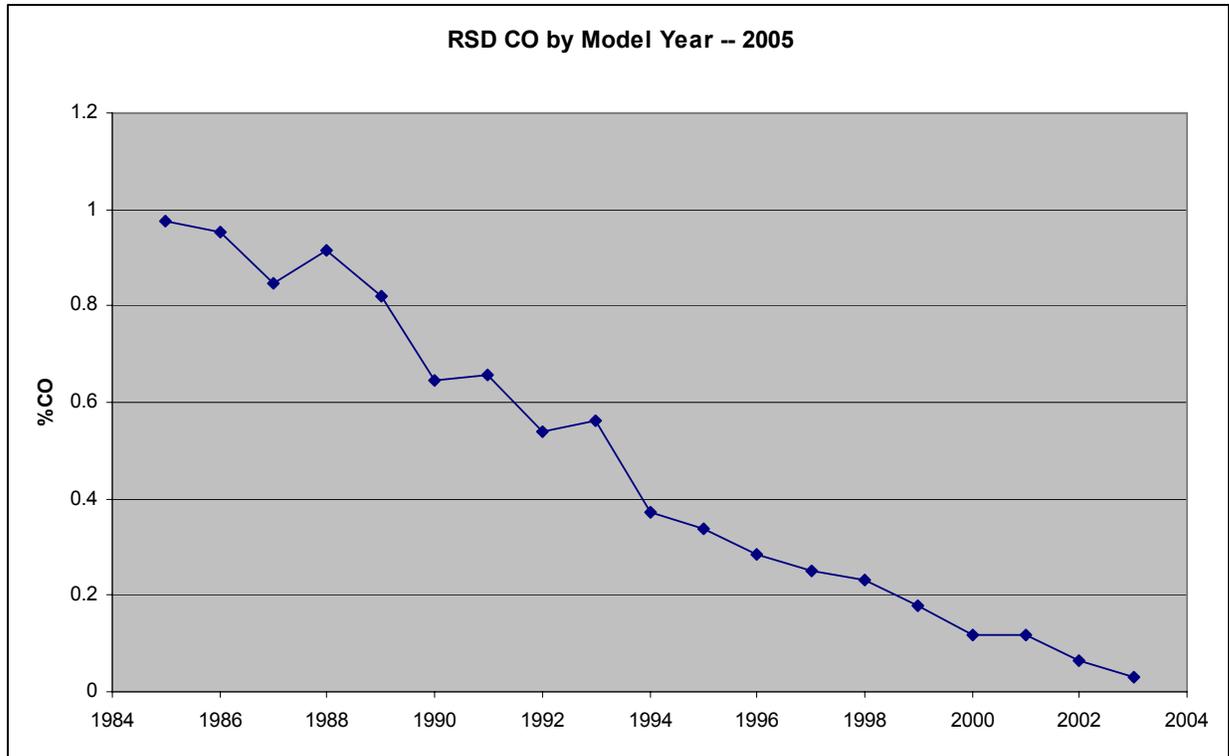
6 ESP is the only provider of Remote Sensing services.

## ***Observed Remote Sensing Device (RSD) Emission Levels***

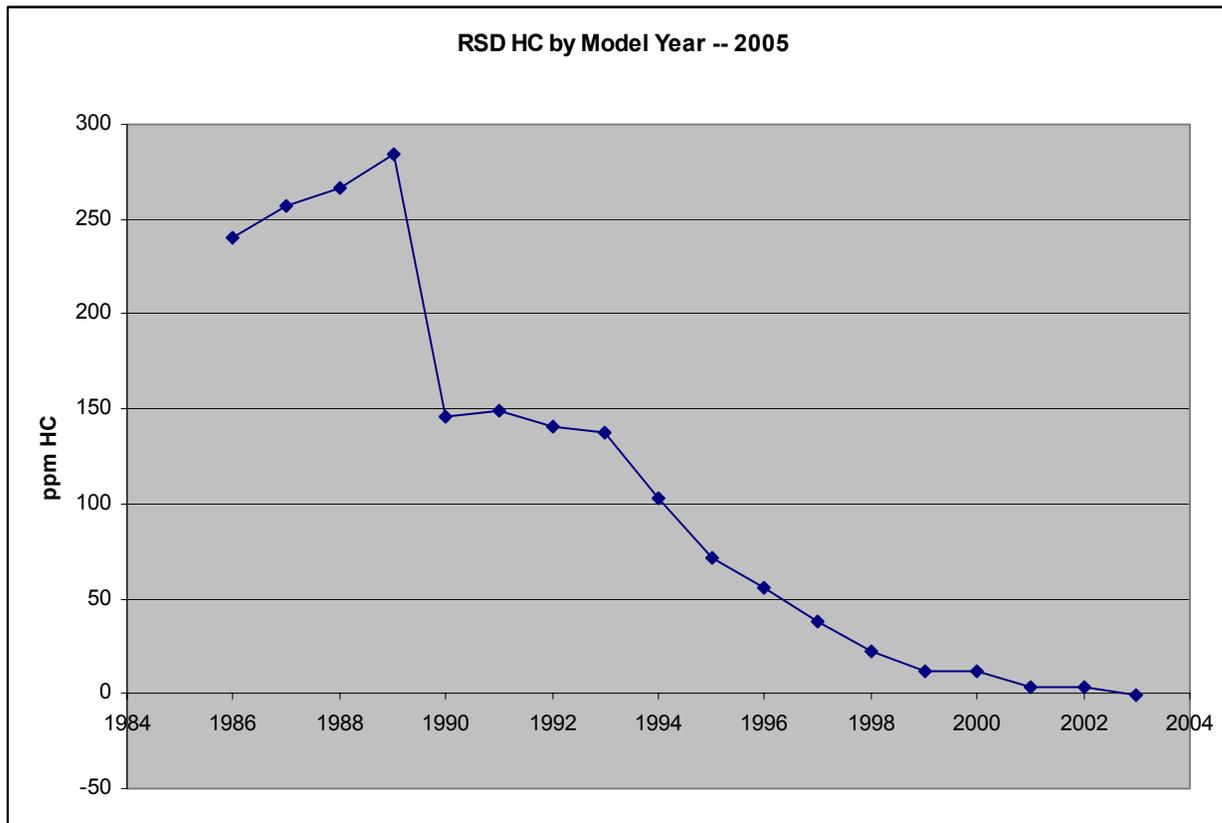
- As expected, average RSD emissions and the percentages of high emitters are lowest for the newest vehicles.
- 0.29% of the vehicles scanned exceeded the 6% RSD CO limit. This criteria is used in some programs to identify high emitting vehicles. In 2002, when the last survey was done, 0.33% of the vehicles tested exceeded the 6% RSD CO limit.
- Emission trends can be observed before and after the emissions inspection. Of particular interest are RSD emissions for vehicles that were scanned via RSD prior to failing I/M tests or after failing.
- Average RSD emission levels for vehicles that failed I/M tests were greater than average RSD emission levels for vehicles that had passed.



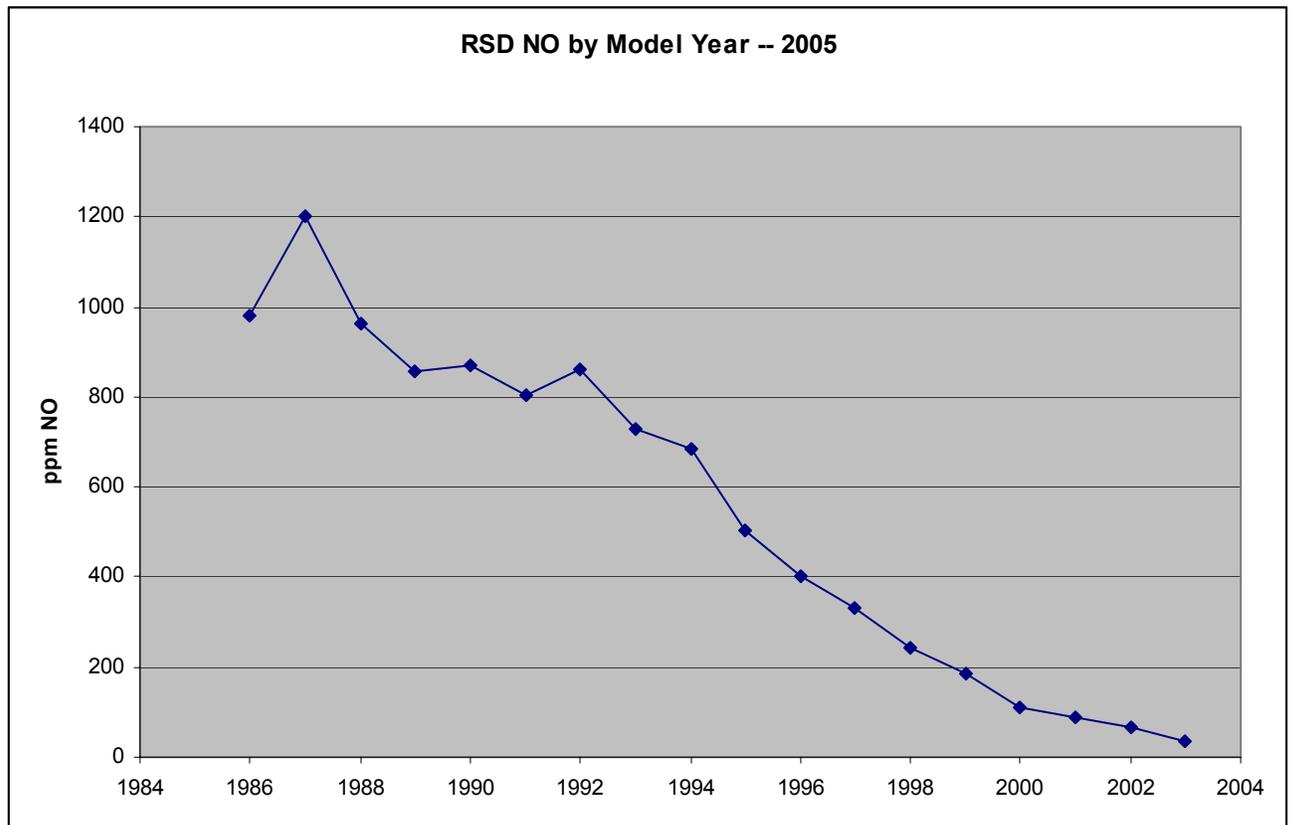
**This chart shows the number of vehicles scanned by RSD by model year. Only the model years covered by the I/M program (1980 to 2002) are shown.**



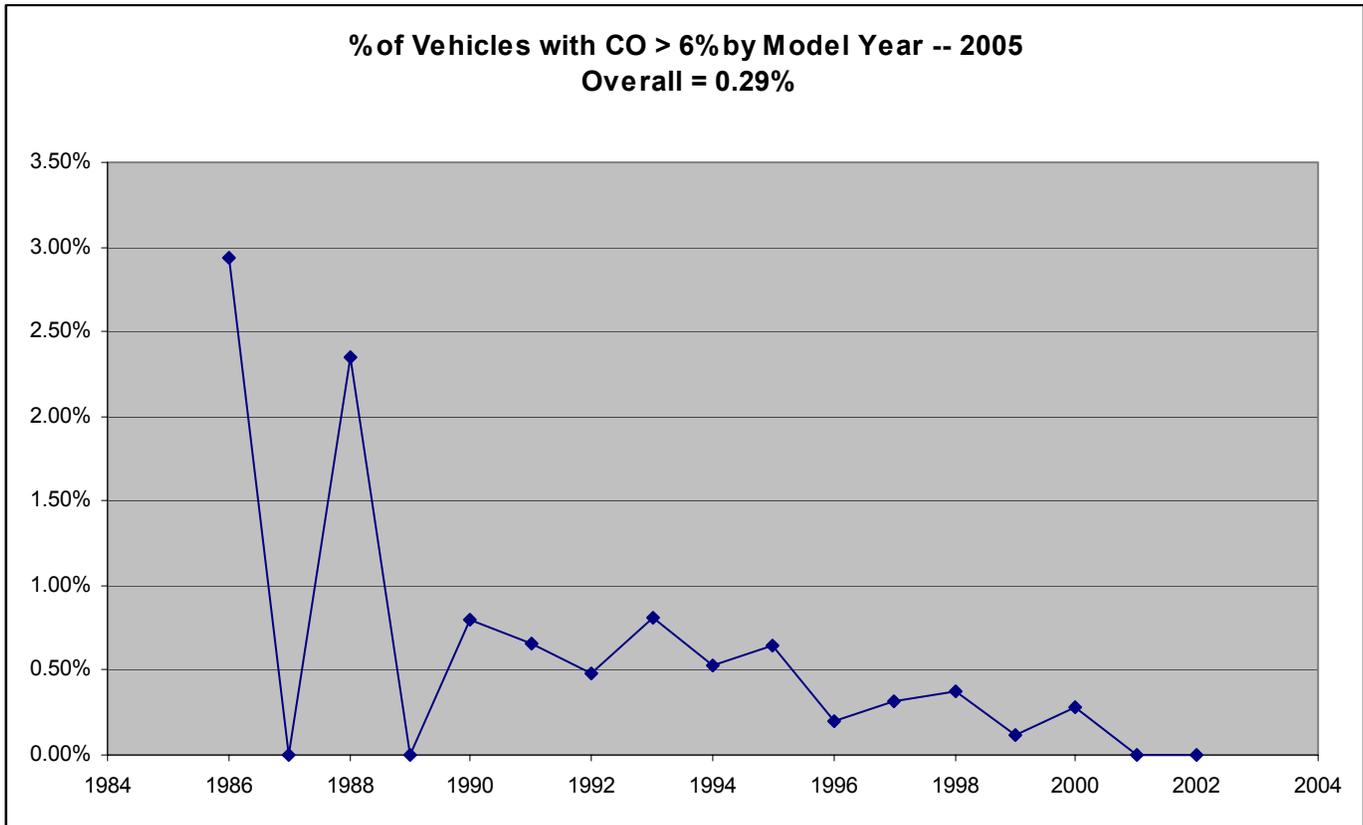
**This figure shows average carbon monoxide (CO) RSD readings by model year. Generally, older vehicles have higher emission levels.**



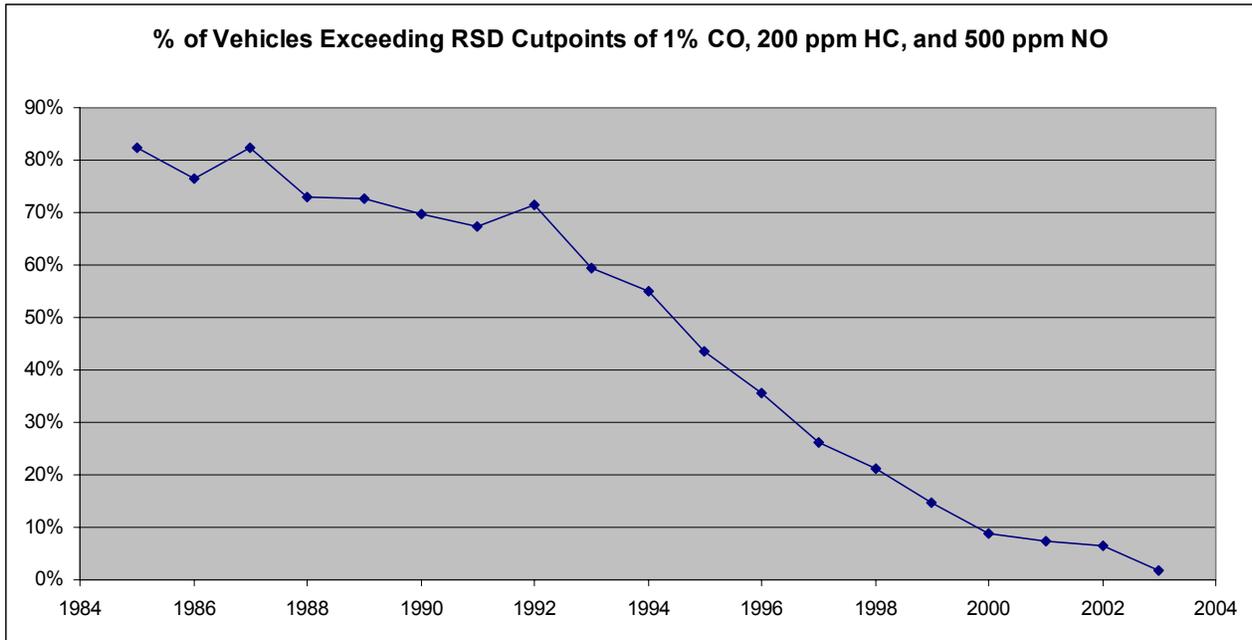
**This figure shows average hydrocarbon (HC) RSD readings by model year. Generally, older vehicles have higher emission levels. The low sample sizes for the older vehicles causes considerable variation in average readings.**



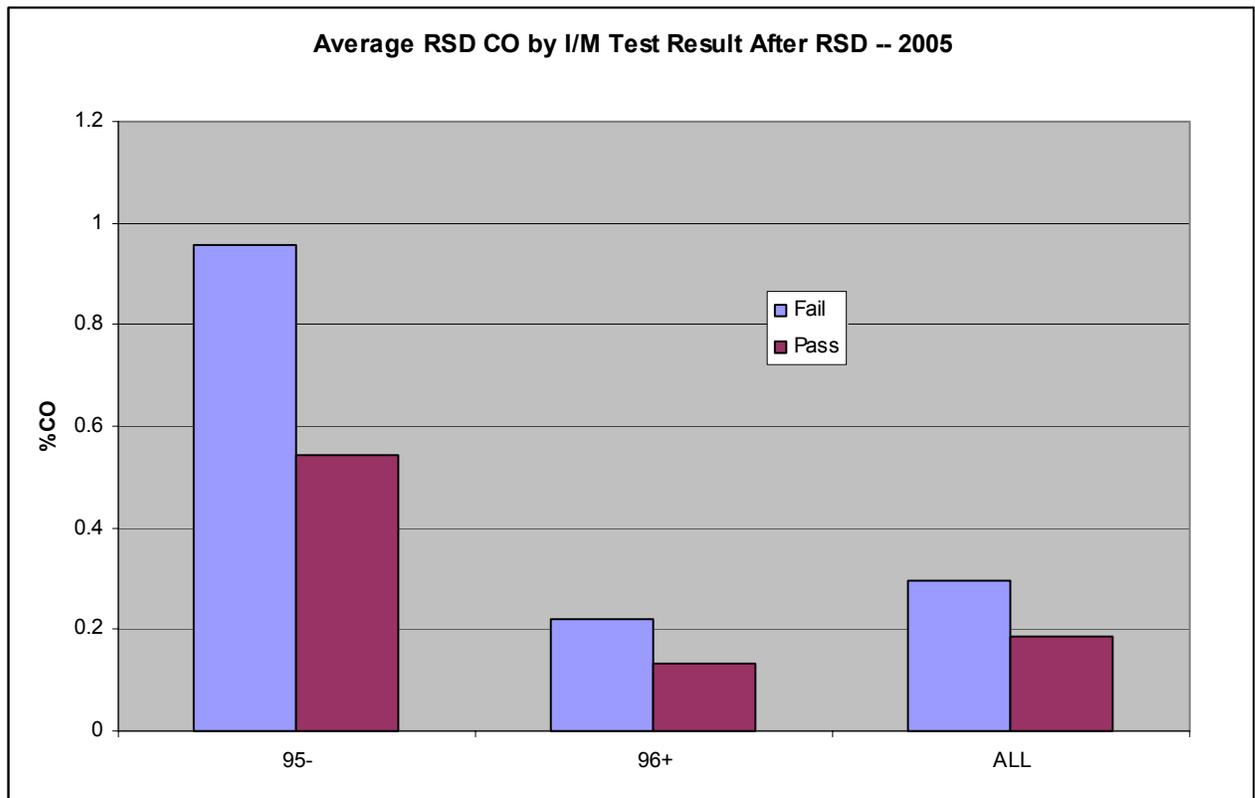
**This figure shows average RSD readings for nitric oxide (NO) by model year. Generally, older vehicles have higher emission levels.**



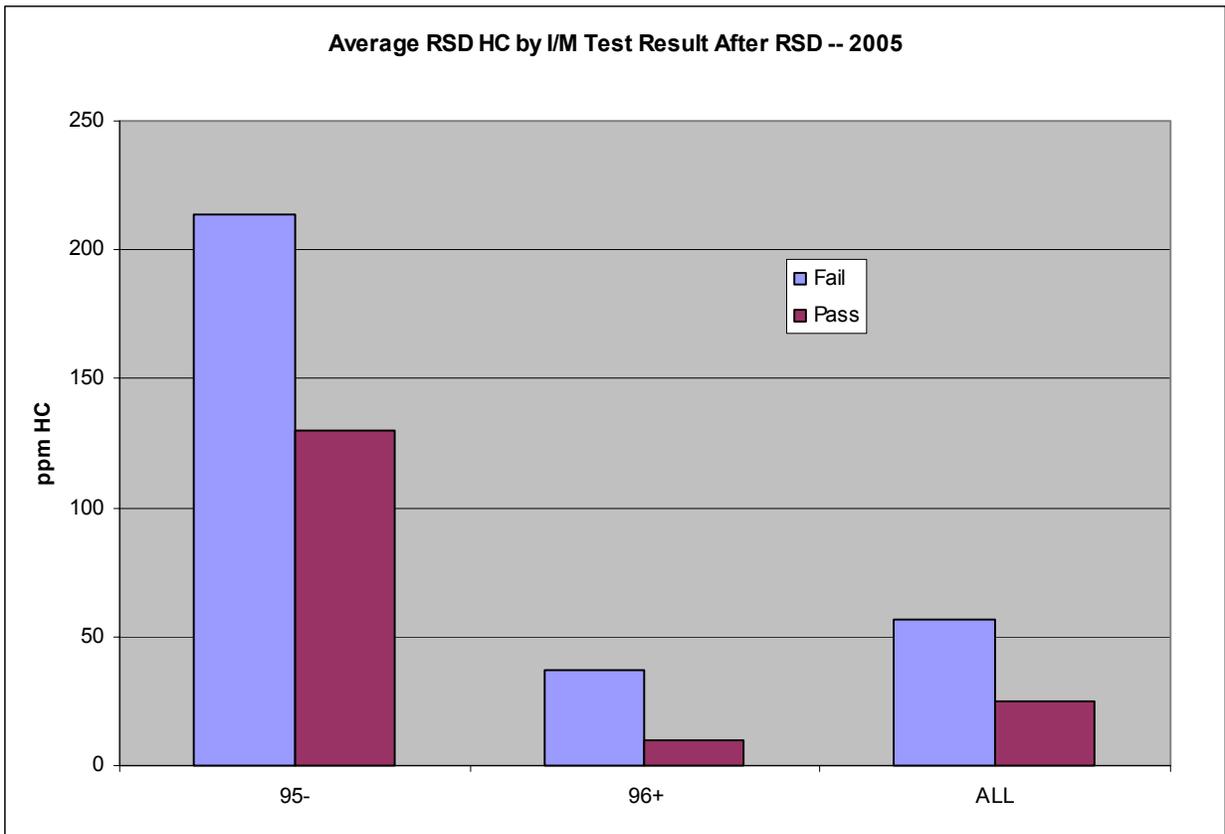
**This figure shows the percent of vehicles exceeding 6% CO by model year. 6% CO is typically used as a gross emitter criteria for on-road emissions tests. The greatest percentages of failed vehicles are between the 1986 and 1990 model years. The low sample sizes for the older vehicles causes considerable variation in the percentages.**



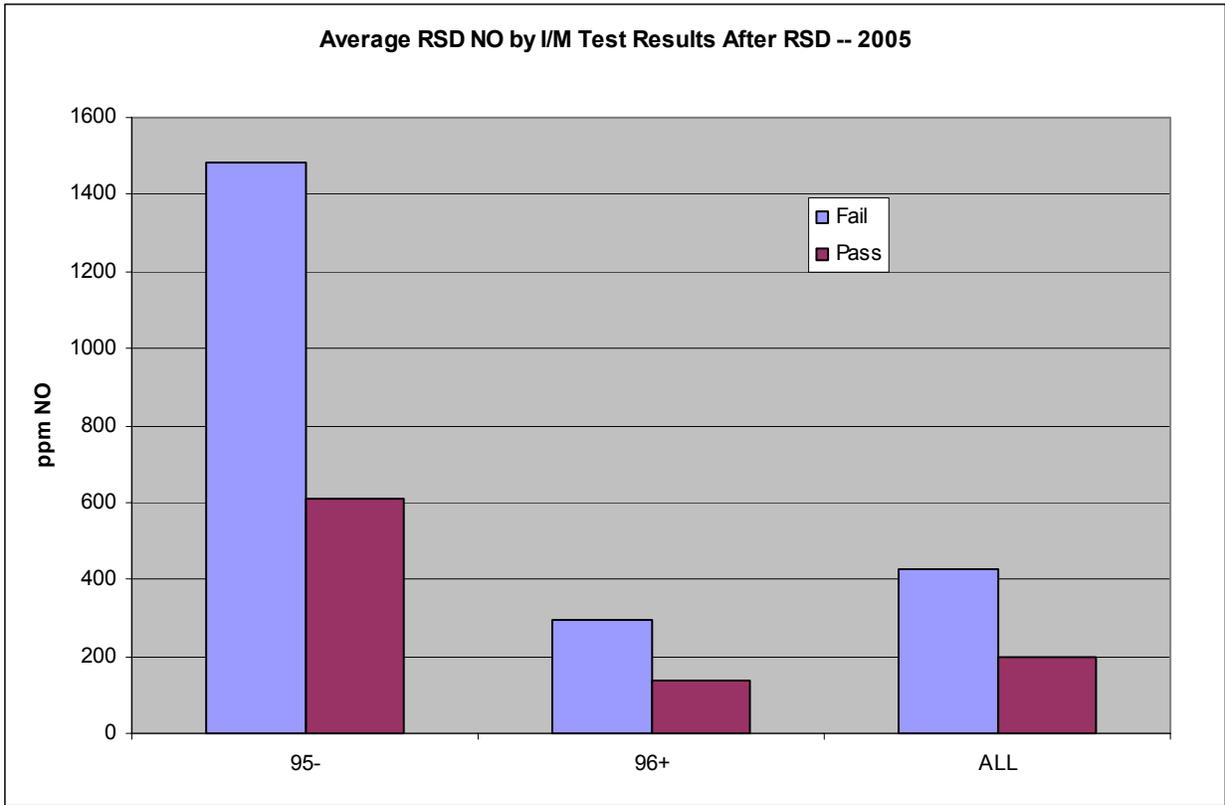
**This figure shows the percent of vehicles by model year that exceed cutpoints of 1% CO, 200 ppm HC, and 500 ppm NO. These cutpoints are similar to ASM2525 cutpoints for late model light-duty vehicles. As expected, older models have much higher percentages of failed vehicles.**



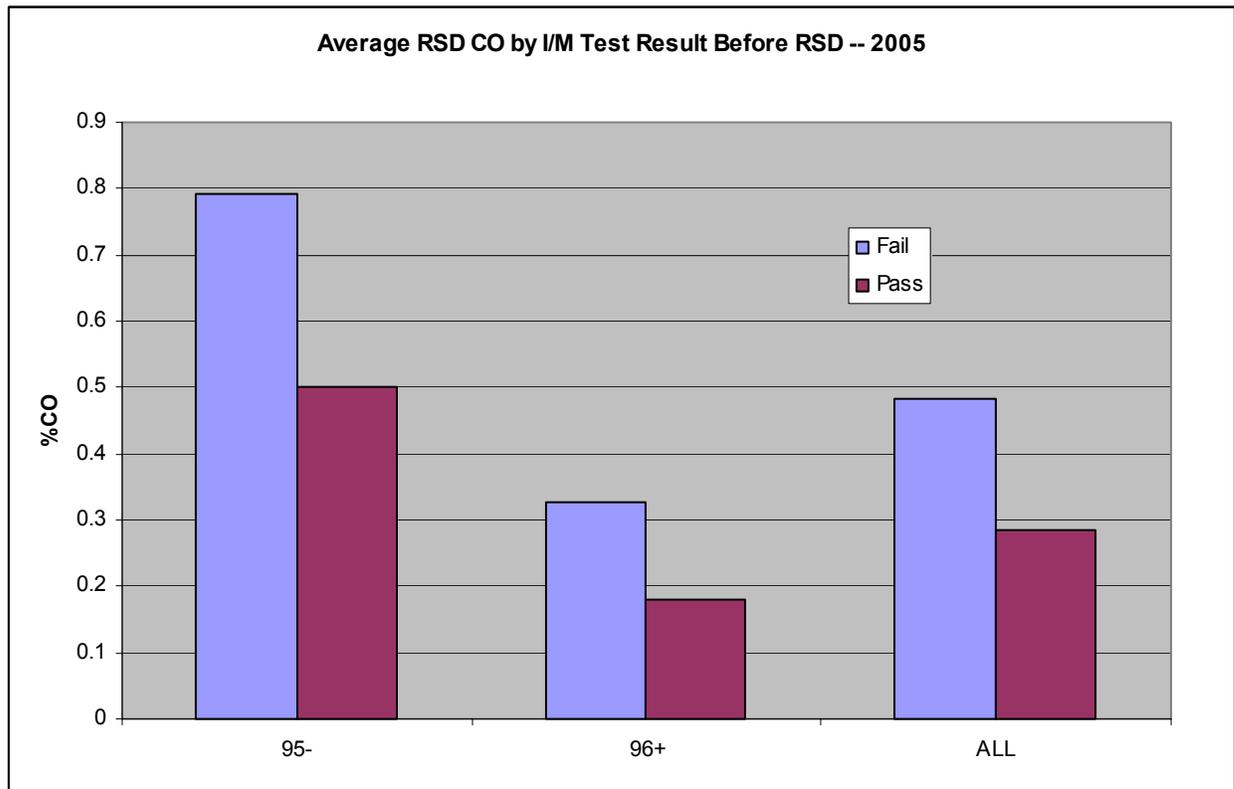
**This figure shows average RSD CO emissions for vehicles that received an I/M test after they were observed by RSD. Results are broken down by model year and I/M pass/fail status. RSD emission levels for vehicles that failed the subsequent I/M test were much higher than emission levels for vehicles that passed. Results for 1996+ vehicles, which receive OBD tests instead of tailpipe tests, indicate that the OBD test identifies a lot of vehicles with high emissions.**



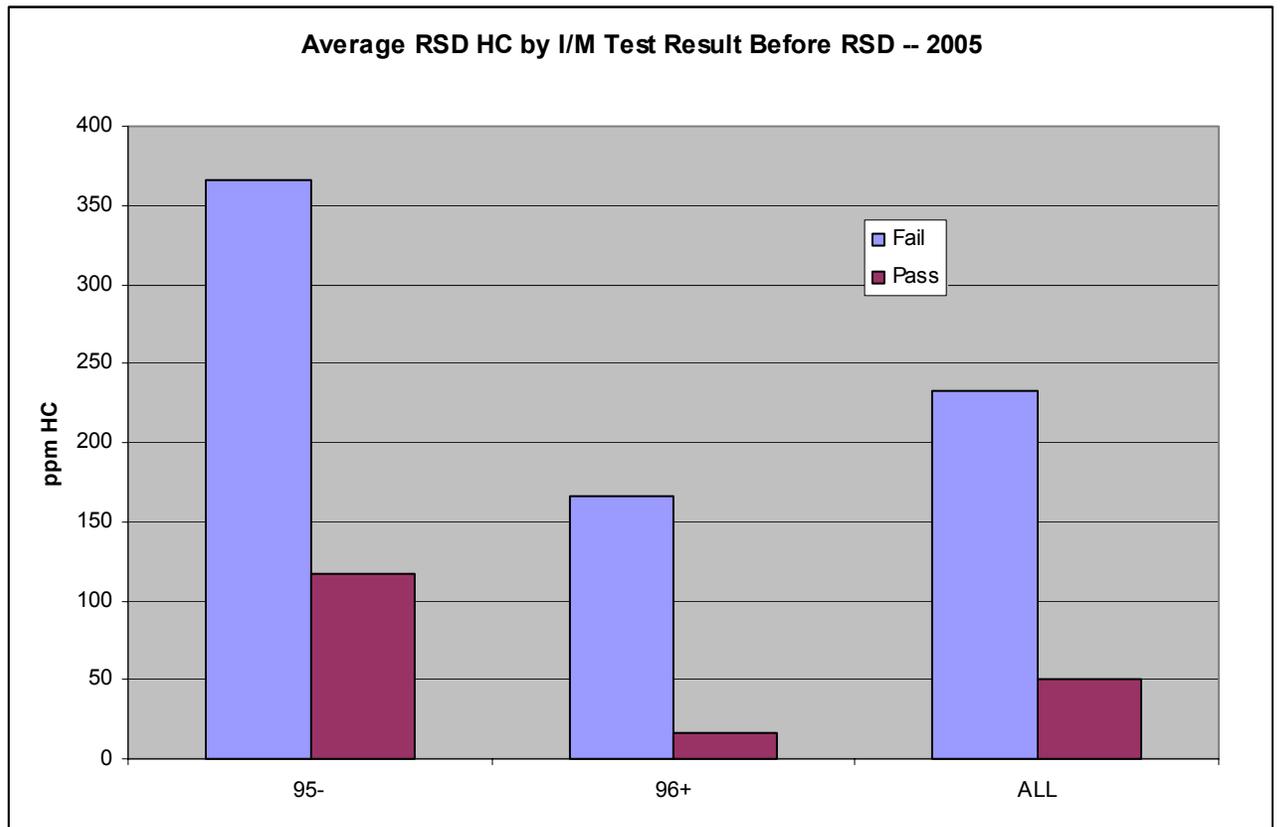
**This figure shows average RSD HC emissions for vehicles that received an I/M test after they were observed by RSD. Results are broken down by model year and I/M pass/fail status. RSD emission levels for vehicles that failed their subsequent I/M test were much higher than RSD emission levels for vehicles that passed their I/M test. Results for 1996+ vehicles, which receive OBD tests instead of tailpipe tests, indicate that the OBD test identifies a lot of vehicles with high HC emissions.**



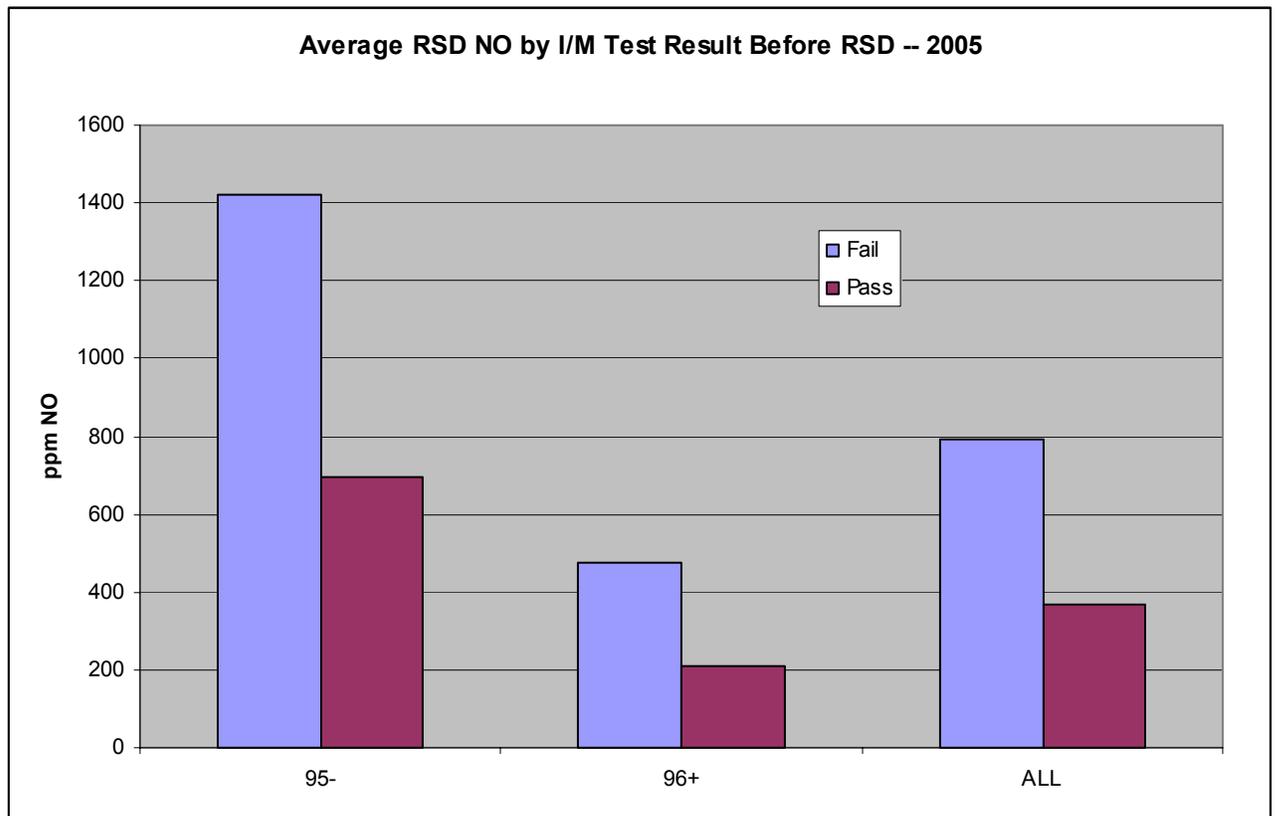
**This figure shows average RSD NO emissions for vehicles that received an I/M test after they were observed by RSD. Results are broken down by model year and I/M pass/fail status. RSD emission levels for vehicles that failed their subsequent I/M test were much higher than RSD emission levels for vehicles that passed their I/M test. Results for 1996+ vehicles, which receive OBD tests instead of tailpipe tests, indicate that the OBD test identifies vehicles with high NO emissions.**



**This figure shows average RSD CO emissions for vehicles that received an I/M test before they were observed by RSD. Results are broken down by model year and I/M pass/fail status of the last test before the RSD observation. RSD emission levels for vehicles that failed their previous I/M test were much higher than RSD emission levels for vehicles that passed their I/M test. This indicates that RSD can be used to identify vehicles that have yet to comply with I/M program requirements.**



**This figure shows average RSD HC emissions for vehicles that received an I/M test before they were observed by RSD. Results are broken down by model year and I/M pass/fail status of the last test before the RSD observation. RSD emission levels for vehicles that failed their previous I/M test were much higher than emission levels for vehicles that passed. This indicates that RSD can be used to identify vehicles that have yet to comply with I/M program requirements.**



**This figure shows average RSD NO emissions for vehicles that received an I/M test before they were observed by RSD. Results are broken down by model year and I/M pass/fail status of the last test before the RSD observation. RSD emission levels for vehicles that failed their previous I/M test were much higher than emission levels for vehicles that passed. This indicates that RSD can be used to identify vehicles that have yet to comply with I/M program requirements.**

## Emission Reduction Estimates Based on Remote Sensing Device (RSD) Readings

Based on the analysis of RSD emission levels for vehicles that received an I/M test before they were observed by RSD, dKC calculated emission reductions from the I/M program. They are shown below. Please note that these emission reductions cannot be compared to estimates based on mass emissions tests. They are mainly useful in determining if the program appears to be getting the benefits calculated by the MOBILE6 model. HC benefits are higher than predicted by MOBILE6, NOx benefits are slightly lower and CO benefits are much lower. HC and NOx emissions are the primary concerns due to their role in forming ozone.

### Emission Reductions Based on RSD

| Model Year | Pollutant |       |      |
|------------|-----------|-------|------|
|            | CO        | HC    | NOx  |
| pre-1995   | 5.6%      | 17.4% | 9.6% |
| 1996+      | 4.2%      | 29.4% | 6.2% |
| ALL        | 4.8%      | 20.3% | 7.6% |

## Emission Levels for 2003 and Newer Vehicles

Currently, Connecticut exempts the newest 4 model years from the I/M program. In 2005, this meant that the newest model year tested was 2002. dKC analyzed data on 2003 and newer vehicles that received RSD emissions tests to determine if there would be value in reducing the number of model year exemptions. ***dKC concludes that Connecticut should continue to exempt the newest 4 model years from the emissions test program.***

- There were no cases of 2003 or newer models having CO > 6%, which some states use as criteria to define a gross polluter.
- Only 1.7% of the 2003 and newer vehicles exceeded moderate polluter limits: RSD limits of CO > 1%, HC > 200 ppm, or NOx > 500 ppm. In the vehicle sample subject to emissions tests, 26% of the vehicles tested exceeded these limits. 6.5% of the 2002 models exceeded these limits.

## **6.0 Assessment of OBD Testing Issues**

### ***Fallback Tailpipe Test For Vehicles That Are Not Ready, But Otherwise Pass OBDII***

During the 1<sup>st</sup> OBDII inspection cycle, Connecticut's I/M program allows vehicles that are not ready (>2 monitors for pre-2001 and >1 monitor for 2001 and newer) but otherwise pass the OBDII inspection to receive a back-up tailpipe test (ASM2525 or PCTSI depending on vehicle). From November 11, 2004 until November 10, 2005, 21,981 vehicles (~3% of the OBDII fleet) received back-up tailpipe tests under this provision. During this period 52,324 vehicles failed their OBDII inspection because the MIL was commanded-on or the bulb did not work.

So far, it appears that most motorists and inspection stations do not clear codes on vehicles with MILs on prior to inspection. Clearing codes could allow the vehicle to pass a tailpipe test<sup>7</sup>, instead of failing the OBD inspection. If codes were being cleared, MIL-command-on rates would be lower and not ready rates would be higher than other programs. As shown on the following figures, Connecticut's MIL command-on rates are similar to Delaware's, while its not ready rates are lower than Delaware's, based on data collected since the program restarted in November 2004. Delaware operates a centralized (test-only) program and has not allowed back-up tailpipe tests since January 1, 2005.

Data from on-road tests performed in Connecticut provide further evidence that few high emitting vehicles passed their I/M test, because they received back-up tailpipe tests in response to a not-ready condition. As mentioned earlier, Connecticut's contractor performs on-road tests using remote sensing devices (RSD), in order for the State to meet EPA's requirement to independently test at least 0.5% of the tested vehicle population. On-road emissions levels for 3 groups were evaluated:

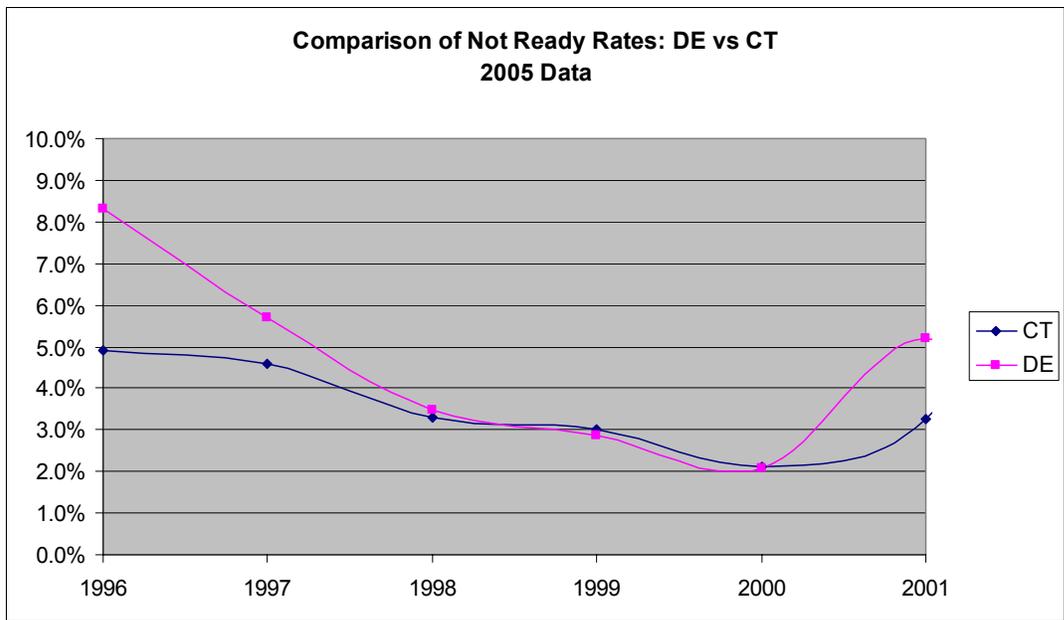
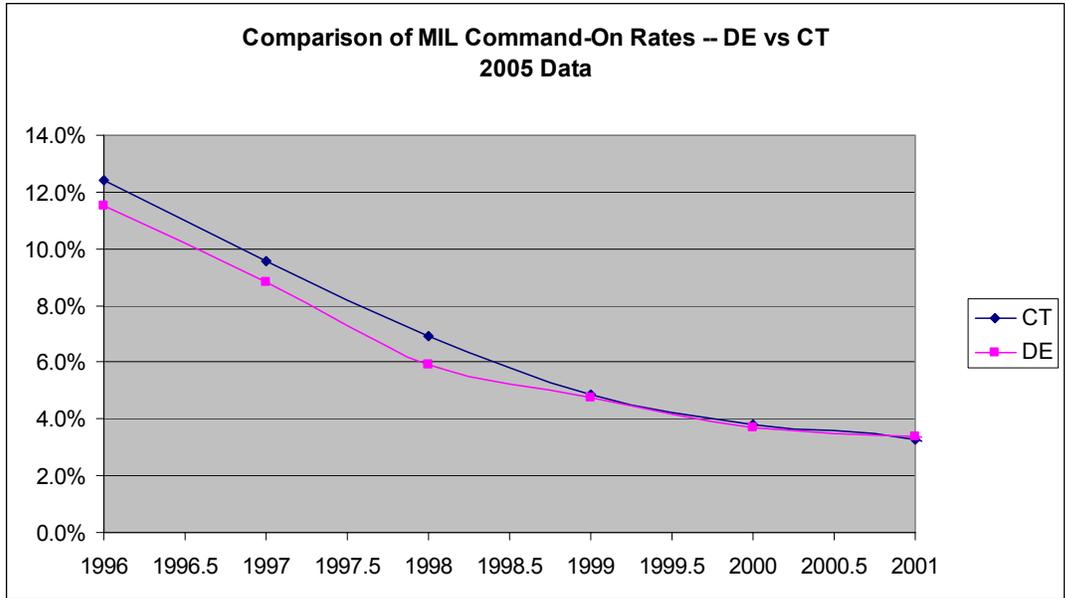
- Received OBD test and failed, Vehicles fail if Malfunction Indicator Light (MIL) is commanded-on, MIL does not illuminate

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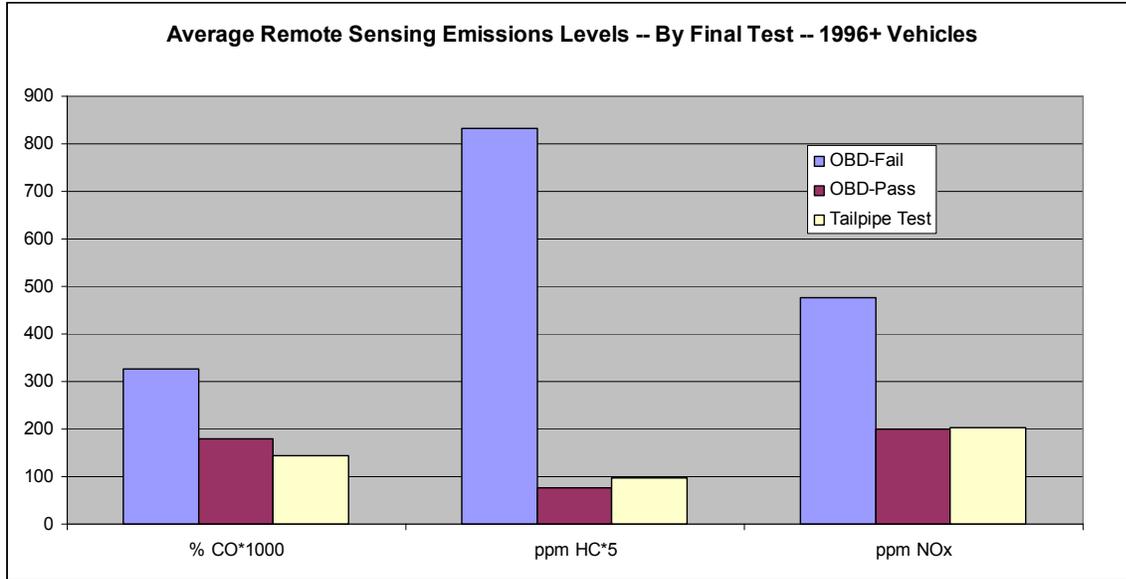
<sup>7</sup> Readiness status for all monitors is set to "not ready" when fault codes are cleared and the MIL is extinguished by a technician with a scan tool.

- during KOEO, or DLC is damaged or missing.
- Received OBD test and passed. These vehicles had no OBD faults and met readiness criteria.
  - Received back-up tailpipe test because vehicle was not ready or failed to communicate with test system.

RSD emission levels for vehicles that received back-up tailpipe tests were nearly identical to emission levels for vehicles that passed the OBD test. Emission levels for vehicles that failed the OBD test were much higher than the other vehicle categories.



**These charts compare MIL-Command on fail rates and not ready rates in Connecticut with rates in Delaware. Delaware uses a State-Operated centralized scenario, and does not perform back-up tailpipe tests. The fail rates are nearly identical, while Connecticut has slightly lower not ready rates. This indicates that most motorists are not abusing the back-up tailpipe test provision.**



**This chart compares RSD emission levels for 3 groups of OBDII equipped vehicles: 1) Received OBD test and failed, 2) Received OBD test and passed, and 3) Received back-up tailpipe test because vehicle was not ready or failed to communicate with test system. RSD emission levels for vehicles that received back-up tailpipe tests were nearly identical to emission levels for vehicles that passed the OBD test. Emission levels for vehicles that failed the OBD test were much higher than the other vehicle categories.**

***Vehicles with Readiness Issues that are not Currently Exempted from Readiness Requirements***

EPA allows states to exempt vehicles from readiness requirements, if they have design flaws that cause them to frequently fail for readiness. Based on data from tests since November 11, 2004, a few vehicle models that are not currently exempted from readiness have high not ready rates. Other states have reported similar problems with these vehicles. ***DMV is considering adding these vehicles to its list of readiness exemptions.***

**Vehicles That Should Be Added To Readiness Exemption List**

| <b>Model Year</b> | <b>Make</b> | <b>Model</b> | <b>OBD Tested</b> | <b>Not Ready</b> | <b>Not Ready Rate</b> |
|-------------------|-------------|--------------|-------------------|------------------|-----------------------|
| 1996              | EAGLE       | TALON        | 74                | 38               | 51.4%                 |
| 1996              | EAGLE       | VISION       | 75                | 36               | 48.0%                 |
| 1996              | HYUNDAI     | SONATA       | 55                | 29               | 52.7%                 |
| 1997              | HYUNDAI     | SONATA       | 153               | 75               | 49.0%                 |
| 1998              | HYUNDAI     | SONATA       | 145               | 52               | 35.9%                 |
| 1998              | SUZUKI      | SIDEKICK     | 20                | 6                | 30.0%                 |
| 1996              | SUZUKI      | X-90         | 27                | 12               | 44.4%                 |
| 1996              | EAGLE       | TALON        | 74                | 38               | 51.4%                 |

***Vehicles That Fail to Communicate with Connecticut’s Test System***

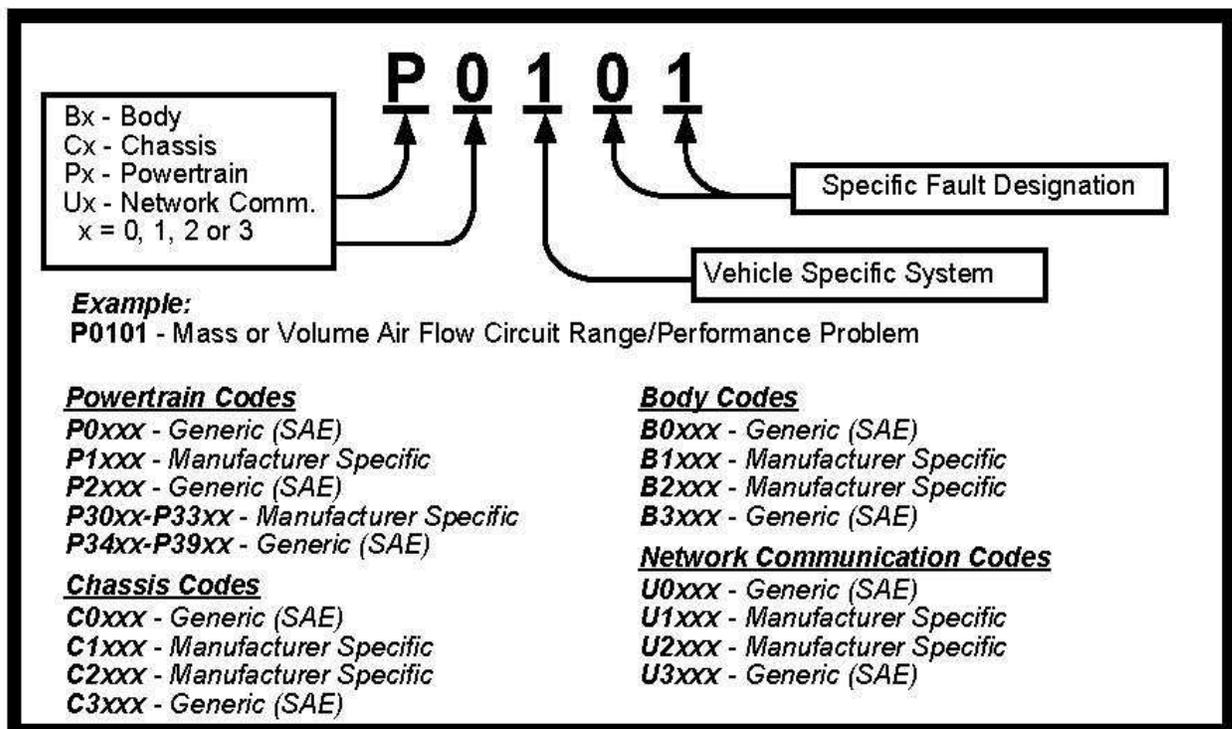
A small percentage (0.3%) of the vehicles with OBDII systems fail to communicate with Connecticut’s inspection system. Currently these vehicles receive back-up tailpipe test if there is no visual evidence that the MIL is on. The vehicles listed below have high no communication percentage. Overall, few vehicles have trouble communicating with Connecticut’s OBDII test system.

### Vehicles With High No Communication Rates

| <b>Model Year</b> | <b>Make</b> | <b>Model</b>      | <b>OBD Tested</b> | <b># No COM</b> | <b>No COM Rate</b> |
|-------------------|-------------|-------------------|-------------------|-----------------|--------------------|
| 1997              | ACURA       | 2.5TL             | 87                | 70              | 80.5%              |
| 2001              | BMW         | M3                | 39                | 34              | 87.2%              |
| 2002              | BMW         | M3                | 26                | 26              | 100.0%             |
| 2000              | BMW         | M5                | 63                | 38              | 60.3%              |
| 2001              | BMW         | M5                | 30                | 25              | 83.3%              |
| 2001              | BMW         | Z8                | 20                | 15              | 75.0%              |
| 1996              | FORD        | E350<br>ECONOLINE | 13                | 5               | 38.5%              |

## ***Diagnostic Trouble Codes (DTCs) Recorded in OBDII Failures***

Whenever the Malfunction Indicator Light (MIL) is illuminated a Diagnostic Trouble Code (DTC) should be stored in the vehicle's computer. DTCs describe the problem that caused the MIL to go on. Before OBDII, each manufacturer had their own specific trouble code list and code definitions. Under the OBDII requirements, all manufacturers must comply with a standardized convention for DTCs. The universal DTC format consists of a 5-character alphanumeric code, consisting of a single letter character followed by four numbers.



## Top 10 DTCs in Connecticut

Following is a list of the most prevalent DTCs in Connecticut. Note that the top 10 DTCs are present in 61% of the MIL-on cases, even though there are over 1000 possible DTCs.

| Rank | DTC                                                      | %            |
|------|----------------------------------------------------------|--------------|
| 1    | P0420 – Low Catalyst Efficiency                          | 11.1%        |
| 2    | P0171 -- System Too Lean                                 | 9.9%         |
| 3    | P0401 -- EGR Flow Insufficient                           | 7.9%         |
| 4    | P0174 -- System Too Rich                                 | 5.6%         |
| 5    | P0300 -- Random Misfire                                  | 5.1%         |
| 6    | P0141 -- O2 Sensor Heater Circuit Malfunction            | 4.9%         |
| 7    | P0133 -- O2 Sensor Circuit Slow Response                 | 4.4%         |
| 8    | P0325 -- Knock Sensor 1 Circuit Malfunction              | 4.2%         |
| 9    | P0135 -- O2 Sensor Heater Circuit Malfunction            | 4.1%         |
| 10   | P0440 -- Evaporative Emission Control System Malfunction | 3.8%         |
|      | <b>Total Top 10</b>                                      | <b>61.0%</b> |

## Comparison of Top 10 DTCs in Different States

dKC compiled data on top 10 DTCs in California and Delaware and compared this list with Connecticut's top 10 DTCs. The top 5 DTCs were similar in all 3 states, which indicates that these vehicle fleets have similar emissions related problems. States can team-up to help define the best way for technicians to attack these problems. Discrepancies at the bottom of the list are likely due to climate and/or emission standards differences.

| Diagnostic Trouble Codes (DTC)                                                 | Rank      |           |           |
|--------------------------------------------------------------------------------|-----------|-----------|-----------|
|                                                                                | CA        | CT        | DE        |
| <b>P0420 -- Low Catalyst Efficiency</b>                                        | <b>1</b>  | <b>1</b>  | <b>1</b>  |
| <b>P0171 -- System Too Lean</b>                                                | <b>2</b>  | <b>2</b>  | <b>2</b>  |
| <b>P0401 -- EGR Flow Insufficient</b>                                          | <b>3</b>  | <b>3</b>  | <b>3</b>  |
| <b>P0174 -- System Too Rich</b>                                                | <b>4</b>  | <b>4</b>  | <b>5</b>  |
| <b>P0300 -- Random Misfire</b>                                                 | <b>5</b>  | <b>5</b>  | <b>4</b>  |
| <b>P0141 -- O2 Sensor Heater Circuit Malfunction</b>                           | <b>6</b>  | <b>6</b>  | <b>6</b>  |
| <b>P1443 -- Ford Evaporative Control Valve Failure</b>                         | <b>7</b>  | <b>14</b> | <b>21</b> |
| <b>P0135 -- O2 Sensor Heater Circuit Malfunction</b>                           | <b>8</b>  | <b>9</b>  | <b>10</b> |
| <b>P0133 -- O2 Sensor Circuit Slow Response</b>                                | <b>9</b>  | <b>7</b>  | <b>7</b>  |
| <b>P0455 -- Evaporative Emission Control System Leak Detected (gross leak)</b> | <b>10</b> | <b>13</b> | <b>15</b> |

## **7.0 Audits and Other QA Activities**

The State and its contractor (Applus) perform extensive Quality Assurance (QA) activities, which are summarized below.

### ***State Oversight***

The Connecticut Department of Motor Vehicles (DMV) performs the following oversight functions:

- Overt audits of equipment, procedures and inspectors – twice/mo. – 25 Field Agents/Contract Compliance Officers
- Covert audits of Stations/inspectors – both testing and repair – twice/year per station
- 4 Dedicated Video auditors – monitoring inspections during station operating hours
- 3 Record auditors – monitoring trigger and anomaly audits daily
- 4 QA auditors performing equipment and calibration 2 point and 5 point audits
- Digital Web Cameras – Video Monitoring System
  - Real time monitoring/control of vehicle inspections
  - Video auditors can selectively view inspections
  - If anomalies are detected – inspection can be halted
- Remote wireless auditing/viewing of station (planned but not yet implemented)
- Customer satisfaction surveys
- Registration denial via the EDBMS – this will eliminate the need to enforce emissions stickers

## ***Contractor QA Activities***

### **Fraud Prevention Systems**

- Secure IRIS recognition system – use of biometrics
- Trend analysis monitoring –
  - Test time duration
  - Initial & Retest pass/fail rate
  - Repair costs
  - Waivers
  - Speed variability check
  - Gas cap failure analysis
  - After hours inspection analysis
  - Aborted inspection analysis

### **Analyzer QA Functions**

- Sample system leak check
- Analyzer gas calibrations – Every 72 hours or system will lock out testing
- CDAS units require a 2 point calibration with BAR 97 High gas – followed by BAR 97 Low gas blend
- CDAS units have passed BAR 97 certification tests
- Dynamometer undergo a coast down every 72 hours
- Raw transport time verification
- Various other Hardware checks are done every 72 hours
- Low sample flow, Sample dilution checks etc.

## **Contractor QA Activities (cont.)**

### **Inspection Results Analysis Audits – monitoring of performance indicators**

- # of offline inspections
- Short period between tests
- Transient failures
- Gas Cap failures
- OBD failures
- After hours testing

### **Digital Audits – monitoring of equipment service and repair**

- Leak check failures
- NO cell age
- Gas cap calibration failure
- NO response time
- CO response time
- O2 response time
- NO low calibration gas drift
- Bench low calibration failure rate
- Parasitic loss changes

## **8.0 Conclusions**

Following are the key conclusions from this analysis:

- ❖ Connecticut is failing the expected fraction of vehicles because they have evidence of being high emitters. Overall, 103,000 vehicles failed the emissions test. This equates to 9% of the vehicles tested.
- ❖ 28% of the failures during the test period did not receive a passing result (or waiver). Ultimately these vehicles must comply or be scrapped, since compliance with I/M standards is now a prerequisite to vehicle registration.
- ❖ Connecticut's I/M test identifies vehicles that were observed to have high emissions during independent on-road (remote sensing) tests. The fraction failing tailpipe and OBDII tests has much higher average emissions than the fraction that passes. OBDII and tailpipe tests identify vehicles with high emissions levels.
- ❖ Connecticut conducts extensive Quality Assurance (QA) and enforcement activities on the new I/M program. The new program has little fraud.
- ❖ Connecticut should continue to exempt the newest four model years from the emissions test program.

## **Appendix 12**

State of Connecticut  
Description of Gas Cap Pressure Test

#### 4.16 Gas Cap Integrity Test Procedures

1. All tests shall be automated such that appropriate values for pressure readings, decay times and flows are input to the analyzer and results are recorded on the test record. The analyzer shall be able to test the gas cap separately. Automated gas cap test procedures incorporated into the analyzer shall comply with the applicable provisions of EPA guidance (IM240 & Evap. Technical Guidance, EPA420-R-00-007, dated April 2000).
2. If the test type is “retest” and the Gas Cap Result is previously passed (“Z”), skip this procedure and proceed with the next procedure.
3. If Fuel Code is Diesel, proceed to either the OBDII Inspection or the Diesel Opacity Inspection Procedures.
4. Prior to beginning each gas cap check (including each check for dual-tank vehicles) the CDAS unit will verify that no cap is already connected to the gas cap tester. If a cap is detected, the CDAS shall display a prompt indicating that the cap currently attached to the tester must be removed in order to proceed with the test.
5. Once the actual gas cap check begins, if the gas cap check indicates a gross failure (e.g., no cap is attached to the tester) then the analyzer shall display a message instructing the inspector to reseal the cap/adaptor and to try again, the check shall be restarted.

#### Display Prompts:

- A. THIS VEHICLE MUST RECEIVE A GAS CAP PRESSURE TEST. BEGIN GAS CAP TEST PROCEDURES AND ANSWER YES OR NO TO THE FOLLOWING QUESTIONS:
- B. ARE ALL REQUIRED GAS CAPS PRESENT ON THE VEHICLE?
- C. IS THE GAS CAP ACCESSIBLE? (IF LOCKED AND KEY IS NOT AVAILABLE, ENTER NO)
- D. CAN THE GAS CAP BE REMOVED? (IF CAP IS STUCK OR OTHERWISE UNREMOVABLE, ENTER NO)
- E. DOES THE GAS CAP FIT AN AVAILABLE ADAPTER?

#### Programming Criteria:

1. The above prompt shall be displayed for each emissions test.
  - If this is an initial test, default the responses to blanks.
  - If this is a retest, default the first three responses to the value in Overall Gas Cap Results from the prior test, and default response 4 to the value in Gas Cap - Adapter Available.
2. If NO is entered for prompt B, C, or D the CDAS shall display a message indicating that the vehicle is rejected for testing, and abort the inspection (storing abort reason indicating gas cap missing, inaccessible, or unremovable).
3. If NO is entered for prompt E:

- Record “N” in the Gas Cap - Adapter Available field in CDAS Test Table.
- Record “N” in Gas Cap Replaced During Emission Test.
- Record the visual gas cap check result in Overall Gas Cap Results.
- Indicate “No Gas Cap Adapter Available – Visual Check” on the VIR.
- Proceed to the next procedure.

**4. If YES is entered for Prompt E, record “Y” in the Gas Cap - Adapter Available field in CDAS Test Table. Display the following prompts as applicable:**

PLACE XXX CAP ON ADAPTER AND BEGIN  
GAS CAP PRESSURE TEST IN PROGRESS

**XXX should be pre-populated with color code of gas cap adapter.**

**5. If the gas cap meets the pressure requirements above (or alternative requirements approved by DMV), indicate a pass and record the results in CDAS Test Table and on the VIR.**

**6. If the gas cap fails, record the results on the vehicle record and on the VIR, and continue with the inspection process.**

**7. After the first completion of the gas cap test procedure on the test vehicle, display the following prompt:**

DOES THE VEHICLE HAVE MORE THAN ONE GAS CAP (E.G., DUAL GAS TANKS)? (YES/NO)

- If YES is entered in response to the above prompt, repeat the gas cap pressure test as above for a second time (beginning with prompt C). Redisplay this question only once if initially NO is entered. This will permit the inspection of up to two gas caps on a vehicle.
- If NO is entered, proceed to the next procedure.

**8. If any of the gas caps for a given vehicle fail, the gas cap test result shall be fail. In case of a retest both gas caps have to be retested. If all gas caps pass, the gas cap result shall be pass. The test results for each individual gas cap will not be recorded. Only one gas cap test result will be recorded, which represents the composite result for all gas cap tests.**

## **Appendix 13**

State of Connecticut  
Quality Assurance/Quality Control Plan

# **QUALITY CONTROL& ASSURANCE (QA/QC) PLAN**

## **CONNECTICUT VEHICLE EMISSIONS INSPECTION & MAINTENANCE (I/M) PROGRAM**

**Prepared by:**

**Applus+ Technologies, Inc.  
Middletown, CT.**

**Modified April 13<sup>th</sup>, 2005  
Approved July 3, 2003**

**Applus<sup>+</sup>** Technologies, Inc.

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## **1.0 INTRODUCTION**

Quality Assurance (QA) is defined as a program for the systematic monitoring and evaluation of the various aspects of a project, service or facility to ensure that standards of quality are being met. Quality Control (QC) is an aggregate of activities designed to ensure adequate quality. In pollution measurement, QA/QC is primarily concerned with all activities affecting the quality of the measurements, as well as the establishment of methods and techniques, to enforce compliance with operating and technical requirements. The ultimate objective of an I/M QA/QC program is to assure that

- 1) accurate, proper and complete inspections are being performed, and
- 2) repairs are effective in reducing emissions.

This plan describes procedures for quality assurance and quality control of Connecticut's Vehicle Inspection Program. The objective of this plan is to document specific procedures to be followed by QA/QC and enforcement personnel from Applus and/or the State of Connecticut. The plan also contains quality control (QC) functions and policies to be referenced.

### **1.1 Quality Assurance/Quality Control Staff**

The Quality Assurance staff will consist of:

- The QA/QC Manager, who will devote 90% to 100% of his/her time to functions that relate to the quality assurance and quality control of the program. The primary function will be developing, reviewing, and reporting on audit data. This data will be collected by the miniVID and displayed in a variety of reports.
- Technical Support Manager, who will devote 20% to 30% of his/her time to assuring that equipment is performing as designed, repairs are performed per manufacturer specifications, and that calibrations and audits are performed as scheduled.
- A minimum of six (6) Field Service Engineers for the first year of program operation who will devote 20% to 30% of their time assuring that repairs made in the field conform to set procedures, that all calibrations are performed correctly, and that audits are performed as scheduled. The Field Service Engineer staffing level during years 2 – 6 of the program may be adjusted in either direction; however, no degradation of QA/QC services or effectiveness will occur.
- Technical Hot Line Representative, who will devote 20% to 30% of his/her time reviewing trends in service calls and equipment failures and reporting on them. The hot line rep may also become alerted to a potential problem from the nature of a service call and request that an audit be performed to evaluate the condition.

Members of the QA/QC staff will be available between the hours of 8:00am and 5:00pm Monday through Friday except for holidays. QA/QC Staff will also run reports to monitor tests performed by stations that use early or late testing hours. Each person assigned to field work will be assigned a vehicle to allow them to transport equipment needed to perform their duties.

## **1.2 Elements of Quality Assurance/Quality Control**

QA/QC in the Connecticut I/M program is primarily composed of the following elements:

- Preventative Maintenance
- Automated Quality Control Checks
- Audits
- Undercover surveillance
- Data collection and analysis
- Training (described in Inspector training program)

A key component of Connecticut's decentralized vehicle emissions testing program is Applus's Maintenance Team. This team will be provided with tools and resources needed to perform preventative and corrective maintenance, including calibrations, of equipment and systems.

Quality control procedures for the emission test equipment are essential. Connecticut's emission analyzers have many quality control provisions built into the equipment. However, external quality control functions are still necessary to assure accurate inspections and reliable emissions analyzer performance.

Audits of inspection stations are needed to assure equipment accuracy and proper inspection performance. In these audits, inspection equipment is checked and inspector performance is observed. The audit results provide an indication of the accuracy of the equipment and the ability of the inspector to follow procedures. In addition to equipment audits, Applus QA/QC staff will conduct periodic system audits to evaluate the overall effectiveness of the program.

Data collection and analysis play a critical role in the quality assurance of an I/M program. As data collection and analysis procedures advance, the emphasis of QA shifts from quality control checks to statistical analysis of inspection data. Data analysis can evaluate several aspects of an I/M program. To ensure emission reduction targets are achieved, the failure rate must be calculated along with the average emissions before and after repairs.

Data analysis can help determine if emission pass/fail cutpoints should be adjusted to achieve program clean air goals and also identify Inspectors who are not complying with approved procedures. Other functions of data analysis include identifying vehicles that

appear to be difficult to repair. Training is a very important part of quality assurance. Inspectors must be trained to properly and effectively perform an inspection. Auditors must be trained in the objectives of the auditing process and different auditing procedures.

### **1.3 Organization of Plan**

Quality assurance and control is dynamic. Old problems and procedures will be eliminated, new problems will be discovered and new procedures will be implemented to correct them. As a result, this plan will be periodically updated.

A brief summary of each section is presented below:

- Section 2.0 Preventative Maintenance:
- Section 3.0 Automated QA Checks:
- Section 4.0 Audits: Presents procedures for auditing inspection stations and evaluating overall program performance.
- Section 5.0 System Audit: Presents procedures for collecting and analyzing data and includes a list of useful reports.
- Section 6.0 Data Collection And Analysis
- Section 7.0 Training

## **2.0 PREVENTATIVE MAINTENANCE**

Preventative maintenance is a key component of Connecticut's decentralized vehicle emissions testing program. A team of experienced, trained technicians will perform preventative and corrective maintenance and calibrations of equipment and systems.

The Applus Maintenance Team will operate from a central location in Middletown, CT; if required, remote personnel will provide support in locations not easily or timely accessible. An Equipment Maintenance Manager, with responsibility for both equipment and consumables, will operate from the central base and be supported by a team of technicians. This Maintenance Team will be responsible for service, preventative maintenance and quality assurance audits of inspection equipment at all facilities within the program.

The Maintenance Team's central location will have a fully equipped workshop where repairs that cannot be corrected in the field will be performed. A comprehensive inventory of equipment spares, based upon manufacturer recommendations and field experience, will also be held at this location. The Maintenance Team will carry out their tasks using a fleet of fully equipped trucks that will be used for service, maintenance and audit purposes.

Each maintenance vehicle will be equipped with a comprehensive tool kit and carry the most commonly needed spares and replacement components. Additionally, the technicians will be provided with a cell phone. This mobile workshop/communications capability will ensure that a technician can be assigned quickly to those locations where his or her services are most needed.

In carrying out its duties, the Maintenance Team will organize its tasks so as to minimize disruption to vehicle testing operations. To that end, and whenever practical, defective equipment/components will be quickly exchanged on site with replacements. Defective items will subsequently be returned to the central workshop for repair.

### **2.1 Equipment Maintenance**

The preventative maintenance schedule is described in Table 2-1. Applus technicians will perform regular preventative maintenance procedures including inspection and, if required, replacement of consumables such as filters, sample hoses and probes, etc. Technicians will also perform equipment performance checks that are more comprehensive than the automated Workstation procedures. These are also listed in Table 2-1. These measures are intended to maintain optimal test accuracy and reduce any downtime that may have occurred due to equipment or calibration failures. Data from performance checks will be automatically transmitted to the miniVID for SPC analysis.

If during the PM process any component is replaced or repaired that would affect a subsection of the test, corresponding calibrations will be performed to assure that test integrity has not been affected. Examples, replacing a gas cap tester hose will result in a gas cap leak check, and repairing a faulty solenoid valve will result in a sample system leak check and a 2 point calibration.

**Table 2-1 Routine Equipment Checks**

| <b>Procedure</b>                                                 | <b>Equipment</b> | <b>Frequency</b>                          | <b>Guidelines</b>                                                                                                            | <b>Action</b>                                                                                    |
|------------------------------------------------------------------|------------------|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Inspect consumables: filters, hoses, probes, printer toner, etc. | Workstation      | biannual                                  | Look for excessive wear and tear on items that may affect system productivity                                                | Replace as required, station will be billed for items not covered under warrantee                |
| Gas analyzer 5-point check                                       | Analyzer         | High Volume Monthly, Low Volume, biannual | Per CDAS Spec 4.32.3 and 40CFR 51 Appendix D (I)(b)(1)                                                                       | Technician will take steps necessary to repair or replace analyzers that fail this check.        |
| Load cell check                                                  | Dynamometer      | biannual                                  | Per CDAS Spec 3.17.2 and ASM guidance 85.4(b)(4)                                                                             | Technicians will take steps necessary to repair or replace load cells that fail this check.      |
| Opacity meter check.                                             | Opacity meter    | biannual                                  | Per CDAS Spec 4.27.7                                                                                                         | Technicians will repair or replace opacity meter components to repair meter and pass the check.  |
| Gas Cap Tester Check                                             | Gas Cap Tester   | biannual                                  | Pass a calibration cap that flows 52 to 56cc, Fail a calibration cap that flows 64 to 68cc if fail, calibrate gas cap tester | Technician will repair or replace gas cap tester components to repair tester and pass the check. |
| RPM probe check                                                  | RPM probe        | biannual                                  | Verify functionality                                                                                                         | Technician will repair or replace RPM components to repair RPM probe                             |

Initial planning of the preventative maintenance of equipment will be established using the guidelines and recommendations provided by the manufacturers. However, detailed records of preventative maintenance performed on equipment, coupled with operational experience accumulated on a day-to-day and month-to-month basis, will be used to develop schedules that more closely respond to how equipment is performing in the field.

In general terms, the preventative maintenance plan and calibration schedule for the emissions testing equipment at each of the stations will focus on:

- Achieving an operational standard throughout the network whereby vehicle emissions testing is achieved in a uniform and consistent manner, thereby insuring the integrity of test results;
- Ensuring that routine calibration, periodic checks and maintenance procedures are carried out as per the equipment manufacturers' recommendations and that EPA's and DMV's requirements are met;
- Meeting and/or exceeding all federal and Connecticut requirements;

- Transmitting all data collected during these checks/tests to the EDBMS. Subsequently, this data will be analyzed to determine what, if any, changes are needed to future preventative maintenance schedules. In addition, all data collected will be available for use in statistical analysis and the production of operational reports; and,
- Identifying any equipment component that is defective and which could adversely affect test results. In this event the test lane will not be opened until the equipment is repaired or the malfunctioning component replaced.

Applus's Equipment Maintenance Manager will have the responsibility for coordinating all preventative maintenance and calibration activities throughout the network. His/her duties in this capacity will include:

- Prioritizing and scheduling all work assignments for the technicians, based upon achieving minimal disruption to operational effectiveness;
- Maintaining a sufficient inventory of replacement spares and components at the central base and for all of the technician's vehicles;
- Working with equipment manufacturers and component suppliers to resolve performance, maintenance and support issues;
- Ensuring that all defective equipment and tools are repaired and/or replaced;
- Monitoring the results of all scheduled preventative maintenance and unscheduled maintenance and, based upon the data accumulated over a period of time, identifying what changes should be made to schedules in order to optimize operational effectiveness;
- Analyzing maintenance and calibration data accumulated over time and held in the host computer database, and preparing reports and recommendations for operation's management on maintenance issues.

### **3.0 AUTOMATED ON-BOARD QA STRATEGY**

A primary QA resource will be the Workstation software itself. The Workstation will automatically regulate each step the Inspector takes during a vehicle inspection, including sequence and timing to ensure consistent and proper tests.

The Workstation software will also constantly monitor critical parameters real-time during testing, such as raw sample vacuum pressure, dilution factor, dynamometer load, dynamometer speed and acceleration, and engine rpm. By placing control limits on critical parameters, the software thus has the ability to detect equipment abnormalities as they occur. Tests will be invalidated if tight limits on speed or dynamometer load are violated. See table 3.1 for a full list of Workstation lockout limits.

The on-board QA functions also include regularly scheduled, automated calibrations and/or accuracy checks for all of the primary systems including the gas analyzer, raw sample system, dynamometer, gas cap tester, and opacity tester. The purpose of these functions will be to ensure that all emissions test hardware is operating to specification and that consistent calibration and QA criteria will be performed correctly and on a regular basis in accordance with specifications. Some calibration/checks are required at less frequent intervals. These will also be initiated manually, using the Workstation software, by either Applus personnel or State Auditors.

Automated QA functions will be incorporated in the Workstation software. These QA activities, along with their frequency, are listed in Table 3-2. With DMV's permission the frequency, as indicated for certain procedures may be subject to change depending on SPC analysis and audit results as described in later sections.

**Table 3.1 Workstation Restart & Lockout Thresholds**

|                          | Allowable Limits                                                                                                    |
|--------------------------|---------------------------------------------------------------------------------------------------------------------|
| Dyne Speed               | +/- 1mph CDAS 4.18.8.4                                                                                              |
| Dynamometer Load         | ±0.25 hp or ±2% (whichever is greater)<br>See CDAS 4.18.8.4                                                         |
| Ambient Temp             | Between 35 and 105°F. (no lockout)                                                                                  |
| Relative Humidity        | Between 7 and 100 % non-condensing (no lockout)                                                                     |
| Barometric Pressure      | 660 mm Hg - 813 mm Hg absolute (26-32 inches)<br>with a minimum accuracy of ±3% of point or better.<br>(no lockout) |
| Engine RPM               | See CDAS 4.18.8.1.8 (no lockout)                                                                                    |
| Gas Analyzer calibration | See CDAS 4.27.3 for pass/fail; lockout                                                                              |
| Opacity Zero             | 0% +/- 1% opacity CDAS 4.27.7 (no lockout)                                                                          |
| Opacity Mid Span         | 50% +/- 2%; lockout                                                                                                 |
| Opacity Span             | 100% +/- 1% opacity CDAS 4.27.7 (no lockout)                                                                        |

**Table 3.2 System QA Procedures & Frequency**

| Procedure                       | Equipment | Frequency                                                                                                             | Type         |
|---------------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------|--------------|
| Gas Analyzer Zero               | Analyzer  | Before every ASM and PCTSI test                                                                                       | Automatic    |
| Real-time test parameter limits | Analyzer  | Every test                                                                                                            | Automatic    |
| Weather Station Check           | Analyzer  | Before Every test                                                                                                     | Automatic    |
| 2-Point Span                    | Analyzer  | High Volume station every 24 hours, Low Volume stations every 24hours                                                 | Automatic    |
| Leak Check                      | Analyzer  | High Volume station every 24 hours, Low volume stations every 72 hours.<br>After every sample system connection break | User prompts |

|                      |                |                |              |
|----------------------|----------------|----------------|--------------|
| Gas Cap Tester Check | Gas Cap Tester | Every 72 hours | User prompts |
| Gas Cap Tester Cal   | Gas Cap Tester | Biannual       | User prompts |

|                       |             |                                                                        |              |
|-----------------------|-------------|------------------------------------------------------------------------|--------------|
| Coast Down Check      | Dynamometer | High Volume station every 24 hours, Low volume stations every 72 hours | User prompts |
| Parasitic Check       | Dynamometer | If Coast Down Fails                                                    | User prompts |
| Load Cell Calibration | Dynamometer | biannual                                                               | User prompts |

|                        |                |                              |           |
|------------------------|----------------|------------------------------|-----------|
| Opacity Meter Span     | Diesel Opacity | Every Test                   | Automatic |
| Opacity Meter Zero     | Diesel Opacity | Every Test                   | Automatic |
| Opacity Meter Mid Span | Diesel Opacity | Every 7 days (CDAS 6.1.17.1) | Automatic |

|         |          |                                                                        |           |
|---------|----------|------------------------------------------------------------------------|-----------|
| O2 cell | Analyzer | High Volume station every 24 hours, Low Volume stations every 24 hours | Automatic |
|---------|----------|------------------------------------------------------------------------|-----------|

Additional hardware QA functions are built-into the Workstation software for audit and calibration purposes. These are initiated manually and performed with manual data

entry. The software automatically uploads the data to the miniVID database for later SPC analysis.

### **3.1 Regularly Scheduled Quality Assurance Functions**

Workstations will have extensive automated quality assurance provisions to ensure the accuracy of emissions tests, alert station personnel when service is required, and transmit information to the miniVID where it can be analyzed. At specific intervals, the Workstation will prompt the user to initiate automated QA procedures. In addition, the Workstation will automatically detect malfunctions with the analytical equipment during operation. If certain QA limits are exceeded during a vehicle test, the Workstation shall abort the test and prompt the Inspector to take corrective action. Appendix A contains a description of the items included in the CDAS Calibration Menu.

Workstation QA parameters are configurable from the EDBMS through a network file. All QA procedures that are regularly scheduled will have configurable frequencies. All QA procedures, including audit procedures in the State and Service menus, will have configurable acceptance limits as described below.

#### ***a. Sample system leak check***

Leaks in the raw sample system can affect the accuracy of the measured emissions levels. To ensure that any such leaks are detected early, required leak checks will be automatically indicated by the Workstation with a default frequency of 72 hours for low volume station, 24 hours for high volume stations and every time there is a sample system chain break. Leak checks will be performed from the Calibration menu. The Workstation will not be able to perform vehicle tests until it passes the regularly scheduled leak check.

#### ***b. Gas analyzer calibration (2 point)***

Gas analyzers will be calibrated on a regular basis. The Workstation will automatically notify the user that a calibration is required and will not allow vehicle tests until this procedure is completed successfully. Calibrations will be performed from the Calibration menu.

#### **1. Frequency**

The default frequency for gas calibrations will be every 72 hours in low volume stations and 24 hours in high volume stations. This interval may be increased, with DMV's permission, depending on the outcome of the analysis of calibration data from the field. Stations that are identified as being high volume (i.e. greater than 4,000 annual tailpipe inspections) after the first six (6) months of the new program will require a gas calibration every 24 hours.

## **2. Method**

Workstation gas analyzers will receive a two-point gas calibration with a high-gas blend that is followed by verification with a low-gas blend. Specifications for these gases originate from the Federal Register and will be included in the Connecticut Hardware specification (CDAS section 4.27.3).

### ***c. Dynamometer calibration and verification***

All dynamometers will undergo a coast-down check every 72 hours with procedures which are consistent with ASM guidance 85.4(b)(4) and embedded in the Workstation. A parasitic loss determination (calibration) will be performed only if the coast-down check fails. After the calibration, the dynamometer must pass the coast-down check or the Workstation will be locked out until the system is serviced.

### ***d. Other hardware checks***

In addition to the above procedures, checks and/or calibrations on the fuel cap tester and opacity meter will also be performed on a 72-hour basis through fully automated user prompts. Again, all hardware must pass the regular scheduled checks/calibrations or the Workstation will be locked out until service is performed.

## **3.2 Continuous QA during Hardware Operation**

Workstations will contain extensive quality assurance monitors that work in the background during operation of the equipment. Test restarts or aborts will occur if the Workstation detects equipment problems during a test. The following briefly summarizes some of the continuous QA monitors:

### ***a. Low sample flow***

Workstations will immediately notify the Inspector if a low flow condition exists in the sample system whenever the sample pump is operating. This typically occurs if the filters are excessively dirty or some other type of restriction (i.e. crimped hose) occurs.

### ***b. Dynamometer HP errors***

Workstations will monitor the instantaneous horsepower simulation percentage error (IHPSE) throughout the drive cycle. This parameter will be calculated every ½ second. If the instantaneous dynamometer loading is out side of parameters an IHPSE error flag will be set. This will cause the test mode to restart according to the restart procedures.

### ***c. Dilution check***

To avoid an exhaust sample dilution scenario, the system continuously checks for exhaust gas as follows:  $CO + CO_2 > 6\%$ ,

#### ***d. Engine RPM***

Engine RPM must remain within limits according to Federal Register specifications. If higher or lower RPM levels are obtained (operating in the wrong gear, for example), then emissions could be affected. The Workstation will give a warning and automatically restart the test if RPM is out of target levels for too long.

#### ***e. OBD System***

The primary QA/QC activity for the OBD system occurs during the Acceptance Testing Procedures (ATP) phase. Once the design is verified for accurate data retrieval and consistency, there is minimal burden with respect to the QA/QC effort.

The system is conveniently designed to inform the operator when a problem occurs with respect to the system. The following types of problems are self-detected by the OBD test system:

- Power to OBD module;
- Communications OBD electronics;
- Communication with the vehicle OBD system; and/or,
- Corrupt data stream.

## **4.0 QUALITY ASSURANCE AUDITS**

Audits of Connecticut's inspection program help assure that its objectives are being met. Different types of audits will be performed to verify the performance of the individual inspection stations. Equipment performance will be checked in Equipment audits. In addition, Applus will perform systems audits to assure that the program is meeting both short term and long term objectives. This section presents procedures for auditing Connecticut's inspection program.

### **4.1 Equipment Audits**

In accordance with Manufacturer specifications, EPA regulations and contractual requirements, regular equipment audits will be performed. Technicians will be assigned so that audits on any given certified inspection station will be rotated on a random basis. This will help reduce the opportunity for collusion.

#### **4.1.1 Equipment Requirements**

Technicians will be provided with equipment to perform and record the results for the complete and limited audit functions. Technicians will be supplied with the following:

- 5 NIST traceable audit gas cylinders and related equipment
- Calibration weight and weight arm
- Temperature/humidity/pressure monitor ( if applicable)
- Opacity reference filters 20%, 35% and 50%

Workstations will contain an Audit menu with automated user interfaces for gas analyzer audits, sample system leak checks, and others. These will be provided for the convenience of authorized auditors. It will also provide for the ability to analyze large amounts of field audit data that are automatically transmitted to the miniVID. Audit limits can be easily optimized from the EDBMS.

### **4.2 Visual Facility Audit**

During equipment audits, Applus field staff will complete the checklist presented in Attachment A. When required, immediate feedback/training will be provided to an Inspector(s). Applus will also work with DMV to identify and, if necessary, implement actions required correct and/or modify inspection activities.

### **4.3 Audit Procedures**

The following procedures detail the steps auditors will follow to perform an audit. These functions can be done as an entire set to complete a full system audit, or separately to verify the functionality of a sub-section of the equipment.

### 4.3.1 Visual System Audit

During an audit the following visual checks must be performed. By using the QA Audit button on the state menu the Field Service technician can document the visual audit. Below are criteria for several visual checks, this is not a complete list but a representation of the types of items that will be audited.

#### 1. Probes & Hoses

- Check if the probes flex section or solid section is visibly damaged. The probe is considered damaged if it is pinched so that flow could be restricted or leaking.
- Check if the hose is damaged. The hose is considered damaged if it is kinked or melted so that flow could be restricted or leaking, or if the quick-connect fitting for the auxiliary hose is damaged or leaking.
- Check if the hose has been modified in a way that could affect the accuracy of the readings. Accuracy can be affected by altering the length or effective diameter of the hose, or by adding components such as an in-line filter that add volume or could cause HC hang-up. Splicing a hose or other minor repairs are acceptable, as long as the overall hose length is not altered, the splicing is performed in a permanent manner with appropriate fittings and clamps, and a leak check is performed and passed.
- Check if the probe is disconnected from the main hose or from the workstation cabinet.
- Check if the station has an auxiliary hose and sample probe for testing dual-exhaust vehicles. Verify that they are not damaged or modified in a way that could affect the accuracy of the readings.
- Repairs to either 8 foot section of hose must not create a condition where uneven flows could result, as specified in section 3.9.1 of the CDAS specification.

***If any of the above conditions exist, they must be corrected. If the problem cannot be corrected at the time of the audit, then continue the audit anyway. If subsequent Performance Audits fail due to hose or probe conditions, then the workstation will be locked out until repairs are made.***

- Check if the hose has the proper length. The sample hose must be no less than 20 feet long and no more than 27 feet long, measured from the front of the cabinet.

***If the hose length is outside these limits, then the problem must be corrected. If the hose length is greater than 35 ft or less than 15 ft measured from the front of the cabinet, then the workstation must be locked out until the problem is corrected.***

## 2. Sample Filters and Inline Filters

- Check if any filter elements are modified, damaged or missing from the sample filters housings or the inline filters.

***The audit cannot proceed if filters or filter elements are modified, damaged or missing. If spare parts are unavailable to replace the damaged or missing parts, this is a critical failure and the workstation shall be immediately locked out until the part is replaced.***

- Check if the filter bowls are cracked or modified in any way.
- Check if filter elements are excessively dirty.
- Check that there is no water accumulated in the bottom of the filter bowls.

***If any of these conditions exists but the workstation passes a leak check, note the condition and continue with the audit. If the workstation fails the initial gas audit, the technician will correct the condition before performing the calibration and second audit.***

## 3. Calibration Gas Cylinders

- Check calibration gas cylinders for proper gas values.
- Insure each workstation has the correct calibration gas values entered in the calibration record.

## 4. Zero Air Generator (if applicable)

- Check if the zero air generator is connected to the workstation, powered on and the green ready LED is on.
- Check if the filter and filter elements are present.
- Check if the air supply is attached with at least 60-psig pressure.
- Open the cabinet and check if there is any internal damage to hoses or other components that cause leaks.
- Verify that the catalyst is working by carefully checking for heat output. The white insulation and top of cabinet should be warm to the touch.

***If any of the above conditions are not met, then the gas analyzer in the workstation cannot be zeroed properly. Note the condition on the audit data entry. If the problem cannot be resolved, then the audit cannot continue. This is a critical failure, and the workstation must be locked out until the problems are resolved.***

- Check if the external filter is excessively dirty.
- Check if the compressor is oil-free, as specified for use with the zero air generator.

***If any of the above conditions are not met, then note the condition on the audit data entry and continue the audit.***

## 5. Camera Alignment and Function

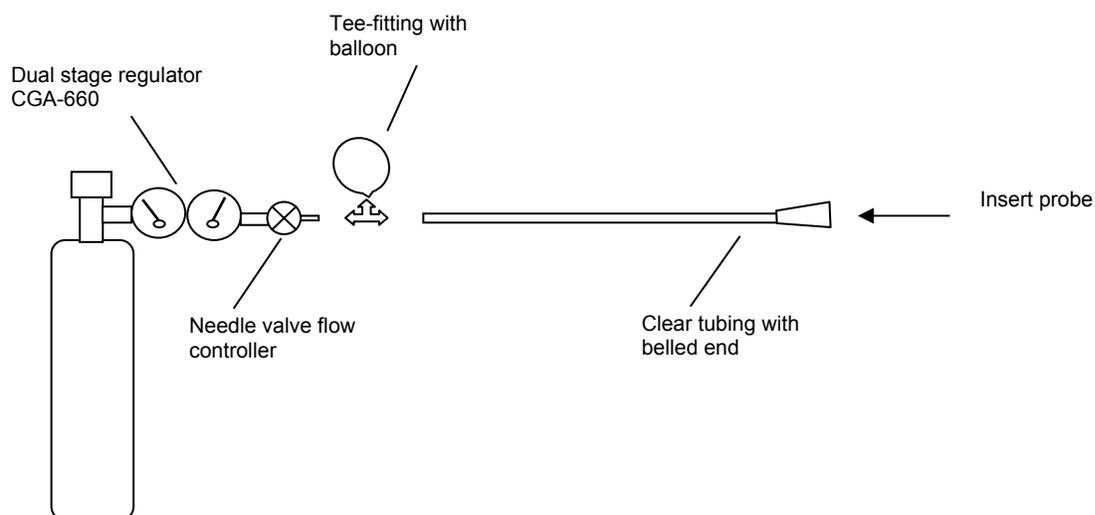
- Verify that front camera is securely mounted and aimed towards the dyne
- Verify that rear camera is securely mounted and aimed towards the dyne
- Verify that Iris scan camera is securely mounted and can be conveniently looked into for inspector verification
- Display images from the three cameras on the screen and verify that they are properly aimed and focused. Re-aim and re-focus as needed, clean lenses if required.
- Repair or replace cameras as required.

### 4.3.2 Analyzer Five Point Audit

The gas audit is performed from the Gas Audit button found on the State menu on the workstation.

#### *a. Equipment Required*

- Five cylinders of audit gas blends (or gas divider): low range, low mid, mid range, and high range. Gases to be traceable to NIST standards within +/- 1%.
- Zero air.
- If gas cylinders are used:
  - Dual stage gas cylinder pressure regulators (preferably 3) with the following specifications:
    - Stainless steel body and internal components (or materials compatible with nitric oxide, carbon dioxide, carbon monoxide, propane, and nitrogen.
    - Rated to 2400 psig.
    - CGA-660 fittings.
    - Outlet regulator configured with needle valve with stainless steel nipple. Outlet of needle valve will have stainless steel barbed fitting suitable for use with 3/8" ID polyurethane tubing.
    - Inlet pressure gauge range: 0 – 4,000 psig
    - Outlet pressure gauge range: 0 – 60 psig.
    - Balloon, tee, and tubing to connect to sample probe from workstation.
    - Open-end wrench to connect pressure regulators to gas cylinders.



NOTE: The PEF varies slightly with HC concentration, so you may see different PEF values for the different audit gases. These different Propane Equivalency Factors (PEF) values are automatically recorded for their appropriate audit gas ranges.



CAUTION: If you are switching regulators between gas cylinders, be sure to purge out any remaining gas from the previous cylinder before testing. This can be accomplished by quickly opening and closing the valve.

### b. Example Procedure

- From the workstation State audit menu, select 'Gas Audit'.
- Follow the prompts to perform the leak check
- Follow the prompts to enter the gas values.
- Follow the prompts to connect the audit gas bottle and press "Continue" to begin the flow of audit gas
- After 60 seconds the CDAS will display PASS or FAIL for that audit gas.
- Press "Continue" and if more gasses need to be flowed select YES, follow prompts. If no additional gasses are to be flowed select NO.
- Disconnect the analyzer's probe from the belled tubing when NO is selected.

***If the workstation fails the Gas Audit, perform a gas calibration and perform the gas audit again.***

***If the workstation fails the Gas Audit a second time, perform a 2-gas***

**calibration using both the high- and low-range audit gases and then perform the gas audit again.**

**If the workstation passes this third Gas Audit, it means that the unit's calibration gases might be out of specifications. Remove and replace the unit's calibration gas cylinders and mark them with the workstation number. Suspect gas bottles will be analyzed in a laboratory for verification.**

**Note: The third audit is intended to help determine if bad calibration gas may be the cause of gas audit failures. If gas audit data reveals that calibration gas is not a factor in audit failures, the third audit will be eliminated from the audit procedures.**

### **c. Calculations**

The following calculations are performed automatically by the workstation when using the automated gas audit routine, and will also make the pass/fail decision. The calculations are listed here for reference or for manual audits.

- **Absolute error:** Subtract the audit gas label value from the propane reading you recorded. Example: if the workstation read 3150 ppm of propane, and the label on the gas cylinder is 3210 ppm, then the absolute error is  $3150 - 3210 = -60$  ppm.
- **Relative error:** Divide the absolute error (-60 ppm in the example above) by the audit cylinder label value and multiply by 100 to express the result as a percentage. In the above example, the relative error would be  $[(-60)/(3210)] \times 100 = -1.87\%$

**The workstation fails the gas audit if the readings exceed the values shown in the table below.**

**Table 4.1 Gas Audit Tolerances**

| Low range        | Relative error | Absolute error                |
|------------------|----------------|-------------------------------|
| 0-300 ppm        | HC $\pm$ 4%    | Or 10ppm whichever is greater |
| 0 to 0.50%       | CO $\pm$ 4%    | Or 0.02% whichever is greater |
| 0 to 6.00%       | CO2 $\pm$ 4%   | Or 0.36% whichever is greater |
| 0 to 300 ppm     | NO $\pm$ 5%    | Or 28ppm whichever is greater |
| High Range       | Relative error |                               |
| 301 to 10,000ppm | HC $\pm$ 4%    |                               |
| 0.51 to 14.00%   | CO $\pm$ 4%    |                               |
| 6.01% to 18.00%  | CO2 $\pm$ 4%   |                               |
| 301 to 4,000ppm  | NO $\pm$ 5%    |                               |
|                  |                |                               |

**Example: If the low range audit gas cylinder value for HC is 199 ppm propane and the workstation reading is 189 ppm (as propane), then the Absolute Error is  $189 - 199 = -10$  ppm and the Relative Error is  $100 \times (-10)/199 = -5.03\%$ . This workstation would PASS, because, while the Relative Error is greater than  $\pm 4\%$  ( $-5.03\%$ ), the Absolute Error is equal to or less than  $\pm 10$  ppm.**

#### **4.3.3 Sample System Leak Check**

- Proceed to the Vehicle Inspection / Analyzer Maintenance menu on the workstation and initiate a Leak Check.
- Do NOT place the cap on the probe for the initial Leak Check. The Leak Check should fail.

***If the Leak Check passes without the probe cap, then this is a failure and the workstation must be locked out until repairs are made. Continue the audit.***

- Initiate another Leak Check, and place the cap over the probe tip when prompted.
- If the Leak Check passes, note this on the audit sheet and continue the audit.
- If the Leak Check fails, note this on the log sheet and try to find the cause of the failure. Likely causes are cracked filter bowls, cross-threaded filter bowls, leaking probe tips, or leaking sample line.
- If the problem is found and repaired, note this on the audit sheet and continue the audit.

***If the Leak Check will not pass, and repairs cannot be made, then the audit cannot continue. The workstation must be locked out until repairs are made.***

#### 4.3.4 Dyne Audit

Dynamometer coast-down checks are performed on a 72 hour basis as part of the automated workstation QA functions. This will verify the power absorber calibration and parasitic loss calibration of the dynamometer. However, the coast down check will also be performed as part of the Equipment Audit. Because the procedure is completely automated, a detailed description is not provided here. On the Audit Report, the auditor will simply record pass or fail; the data is automatically uploaded to the MiniVID.

A manual Load Cell audit can be performed from the Mustang Control Box. If the technician determines after performing dyne repairs the manual audit is necessary the following procedure will be performed.

##### ***b. Equipment Required***

- One dead weight is required with the following requirements:
  - 'High range' weight will be sized to generate a torque load of 40 – 50 ft-lbs.
  - Weights will be NIST traceable and accurate to within  $\pm 0.5\%$ .

##### ***c. Example Procedure***

- From the Mustang Control Box, select the Dynamometer Load Cell Calibration.
  - From the Mustang Control Box verify the correct weight value and arm length are entered.
  - Perform a load cell zero.
  - Place the weight on the load cell calibration arm.
  - Perform a load cell span calibration.
  - The Mustang DAC card contains the logic to determine if the calibration passes or fails. Technicians will perform repairs and recalibrate the load cell to ensure a pass.

***If the Load Cell Audit cannot pass, then the Workstation must be locked out until repairs are made.***

#### 4.3.5 Opacity Audit

The calibration of the opacity meter is audited from the Vehicle Inspection / Analyzer Maintenance screen. By using known reference opacity filters. The neutral opacity filters shall meet accuracy requirements of  $\pm 2\%$  opacity and have a known nominal value in the range of 20%, 35% and 50%.

- From the workstation Manufacturers Technician menu, select 'Opacity Audit'.
- Place the reference filter of known value between the light emitter and detector.
- The CDAS will automatically record the opacity reading from the smokemeter.

***Audit results: Compare the result with the reference value. If the error is greater than  $\pm 5\%$  opacity, then the audit has failed. The workstation will be automatically locked out from opacity testing until repairs can be made.***

#### 4.3.6 Gas Cap Tester Audit

The fuel cap tester will be audited from the Vehicle Inspection / Analyzer Maintenance screen. By using calibrated Pass and Fail Master Fuel Caps brought by the Auditor. The calibration must be traceable to NIST. The audit cannot be performed with master fuel caps adapter existing at the inspection station. The Pass master cap adapter must flow between 52 and 56 cc/min at 30" H<sub>2</sub>O pressure, and the Fail master cap adapter must flow between 64 and 68 cc/min at this pressure.

- From the Station Calibration Menu, select 'Fuel Cap Tester Check'.
- Attach the Pass Master cap adapter to the gas cap tester when prompted and perform the test.
- Repeat the test with the Fail Master cap adapter.
- The results (Pass or Fail ) will be automatically recorded

***If the equipment fails the audit try recalibrating the fuel cap tester using the master caps adapter at the inspection station, and then repeat the audit. If the audit fails again, then repeat the calibration using the Master Caps adapters supplied by the auditor. Repeat the audit. If the audit now passes, then the Master fuel cap adapters at the inspection station are inaccurate and must be replaced. If the audit still fails, then the fuel cap tester needs to be repaired. Either way, the Workstation must be locked out until repairs are made. Note these additional results in the comments area on the Audit Check Sheet.***

#### **4.3.7 OBD System Check**

- Biannual check the OBDII connector to determine if it is damaged.
- Biannual the OBDII connector will be attached to the auditor's vehicle and assure proper communication and identification of the vehicle is achieved.

#### **4.3.8 Local Weather Station Check**

During each audit the readings of the local weather stations will be verified using NIST traceable humidity, temperature, pressure standards. Sensors found to be out of tolerance will be calibrated, repaired, or replaced depending on the sensor. The tolerance of the devices are shown below.

- Humidity:  $\pm 3\%$  RH
- Temperature:  $\pm 3^\circ$  F
- Barometric Pressure:  $\pm 3\%$  of point

## 5.0 SYSTEM AUDIT

In addition to audits of CDAS inspection systems, Applus will conduct a System's Audit which will concentrate on the overall effectiveness of the I/M program and consider data from all different aspects of the program, in addition to the audit results. Applus will prepare a Biannually report that presents the results of the systems audit. This report will discuss the status of the I/M program, any problems that are being encountered, and the results to date. Although the format for the report varies in accordance with the findings, the following items must be included in each report:

- Compliance with inspection procedures - The systems audit report should include an assessment of the ability of inspectors to comply with EPA – approved testing procedures.
- Emissions and tampering test results - Failure rates and re-failure rates should be reported on a systems audit basis. In addition, the report should include emission reductions by model year and vehicle make. Vehicle makes that are difficult to repair should be identified. A comparison should be made between the observed failure rates and the targeted failure rate for which the SIP emission reductions were estimated.
- A summary of Inspector training activities - The systems audit report will contain an update on inspector training activities, the number of times the inspector training course was offered, and the number of inspectors who were trained and their test scores.
- Special problems encountered - The systems audit report should include discussions and data pertinent to special problems encountered during the I/M program. Of particular concern would be reports on data processing statistics. The status of data processing efforts along with problems encountered such as software and hardware problems should be discussed. Recommendations should be made to alleviate problems identified in the report.
- Camera Audit – On a scheduled basis images from Vehicle Test Records will be reviewed for image quality, ability to identify the vehicle, confirmation that the vehicle in the image correctly matches the entered vehicle data. Any discrepancy between the imaged vehicle and the entered vehicle will result in additional audits and possible corrective actions. Summaries of these audits will be included in the System Audit Report

The systems audit report will contain all relevant reports generated about the status of the system. These reports are described in Section 6.0.

## **6.0 DATA COLLECTION AND ANALYSIS**

Data collection and analysis plays an important role in the quality assurance of Connecticut's I/M program. Applus QA/QC personnel will analyze data collected during inspections and quality control checks prior to performing audits of the inspection stations. These data will be collected during vehicle inspections and quality control activities by Applus. In addition, Applus will create and update a database of audit results to provide an additional picture of the performance of the inspection stations.

This section reviews data processing tasks that will be done to support quality assurance activities in Connecticut's enhanced I/M program.

### **6.1 Statistical Process Control (SPC) Analysis Strategy**

Applus will perform SPC and Program assessment through detailed analysis of test data captured during operations. This data will be used for the following purposes:

- To determine the process capability of the emissions test equipment;
- To identify outliers (possible equipment problems);
- To identify anomalous inspection results (possible employee problem);
- To determine optimal emissions cutpoints; and,
- To assess the overall effectiveness of the program.

Applus will analyze automated QA data uploaded to the miniVID to identify equipment that may need service or other attention. We will create Statistical Process Control (SPC) reports that will provide the basis for program evaluation. SPC procedures include identification and grouping of appropriate data elements within the database and applying particular mathematical formulae, which will separate random variation from special-cause variation. Special-cause variation could be due to Inspector error, equipment malfunctions, or other unknown sources. The procedures also include mathematical development of control limits that represent the boundary between random variations and special-cause variations.

The following SPC components will be included in the various data analysis and reporting described below:

- Tabular Data Summary;
- Control Chart Data;
- Out of Limit Variance Report; and,
- Trend Analysis.

### **6.2 Statistics for Automated Workstation QA Procedures**

Applus will analyze the automated Workstation QA/calibration data to identify analyzers that show abnormal variation in the recorded parameters. For example, by comparing the "pre-Cal" readings for the different constituents with the gas standard, the deviation from the standard can be calculated. Analyzers that drift more than set limits (i.e. +/- 3

standard deviations) prior to calibration can be targeted for audit. Trends will be tracked and reported for all parameters, including:

- Gas calibration results
- Leak check pass/fail results
- Gas cap tester calibration pass/fail results.
- Diesel opacity calibration pass/fail results and instrument drift
- Dynamometer coast down results, including coast-down times and horsepower at each speed, and parasitic losses at each speed.
- Dynamometer coast-down pass/fail results.

For pass/fail data, global statistics will be generated to determine problem areas and to assess limits. Also, stations will be identified that fail more frequently than others as possible audit candidates. For quantitative data, limits will then be developed based on +/- 3 times the standard deviation of the parameter. Workstations falling outside these limits will be identified and audited more frequently.

Applus will first analyze Workstation data collected for the first six months of program operation to establish baseline statistics on the above parameters.

### **6.3 Workstation Performance Statistics**

Applus will compile and report statistics on the results of all performance audits by State auditors or equipment checks by Applus. Initial pass/fail limits may be modified based on the analysis of the audit data. Performance and its results include:

- *Gas audit results* - including pass/fail and error statistics (absolute and relative) for each audit gas, including the zero air audit;
- *Dynamometer load cell audit* – including pass/fail and % error statistics;
- *Gas cap tester audit* – pass/fail statistics;
- *Diesel opacity meter audits* – including pass/fail and % error statistics; and,
- *Results of the SPC analysis* - can be used to determine more effective audit limits or calibration frequency.

### **6.4 Program Evaluation and Repair Effectiveness**

Applus will provide detailed data and periodic reports on repair effectiveness for the Connecticut program and will compile the following statistics about repair effectiveness:

- Overall pass/fail statistics by model year;
- Emission reductions for failing vehicles;
- Disposition of failed vehicles: failed/passed, failed/waived, failed/disappeared;
- Retest pass rates by Certified Repair Facility (when sufficient data exist);
- Specific cutpoint groups with high retest fail rates;

- Specific makes, models, or model years with high retest fail rates; and,
- Average repair costs by model year and failure mode.

## 6.5 OBDII Specific Reports

Applus will prepare a special set of reports that specifically address the OBDII inspection.

### 6.5.1 Trigger Reports for OBDII Tests

Data from individual OBDII inspections can immediately identify inspectors performing improper OBDII inspections. Two types of trigger programs could be developed:

**A. Batch Triggers** – Triggers that could be applied to data after they are collected to identify suspect inspectors.

**B. Real-time Triggers** – Triggers that could be run while the station is performing the inspection and immediately identify suspect inspections.

These reports are described below:

**1. Batch Triggers** – Triggers will be used to identify inspectors suspected of performing fraudulent OBDII inspections after the inspection is completed and data are sent to the miniVID. These triggers include the following:

- Inspectors with high % of rejections due to MIL not on during KOEO.
- Inspectors with improper PID/PCM identifier for vehicle inspected.
- Inspectors with suspect data from the OBD data stream.
- Inspectors with improper monitors for year, make, model vehicle.
- Inspectors with high % of DLC not found or damaged or no communication cases.

**2. Real-time Triggers** – During the first 6 months of the program data will be analyzed to develop Real-time triggers to identify highly suspect OBDII inspections. These triggers include the following:

- Consecutive No-COM cases
- Improper PID/PCM identifier for vehicle inspected.

- Suspect data from the OBD data stream.
- Improper monitors for year, make, model vehicle.

### **6.5.2 General Reports on the Results of OBDII I/M Checks**

Data on vehicles failing the OBDII test and their subsequent retests provide great insight into the types of problems expected in vehicles once they are in customer use, along with the effectiveness of OBDII inspections in finding and correcting these problems. Reports on OBD inspections will include the following:

- Data on results of initial tests and retests. The following statistics should be summarized:
  - % Failing KOEO test (MIL does not illuminate during key on engine off).
  - % with MIL is commanded on by the PCM
  - % of vehicles that have more than 2 monitors not-ready
  - % with bypassed OBDII tests because inspector cannot find DLC or vehicle cannot communicate with scan tool.
- Determine the number of retests required to pass the test, by cause of failure: MIL-On.
- Compile DTC's that are stored in vehicles with illuminated MILs.
- Compile information on vehicles that appear to be hard-to-repair, fail repeatedly for being not ready or do not communicate with scan tool.

## **6.6 Audit Reports**

On a monthly schedule, Applus will create and update a database of auditing results. From this database, Applus will generate audit summary reports. These reports will include the following information:

- Site identifiers
  - Inspection station number
  - Number of inspections per station;
- Results of previous performance and records audits
  - Inspector audit results
  - Equipment audit results
  - Corrective action taken.

## **6.7 Database Quality Assurance Strategy**

Extensive QA measures will be implemented by Applus to protect the database and ensure proper, efficient data management.

### **6.7.1 Network Monitoring:**

The miniVID will be constantly monitored for database file system disk space health and network connectivity. A network monitoring program will be set up to monitor all network equipment (databases, routers, modem banks, servers, and more) for connectivity, file system disk space, and more. These checks will automatically occur periodically. This program will also monitor UPS hosts (backup power).

### **6.7.2 Batch Process:**

Automatic confirmation will be provided for initialization and completion of numerous batch processes. *Example:* A file is retrieved from the EDBMS. This file contains information such as new vehicle registration, deletion of vehicle registrations, and changes to the Vehicle Identification Number (VIN) and license plate. This file will then be applied to the Applus Vehicle Information Database (VID), synchronizing the two systems.

### **6.7.3 Online Process:**

Online processes will be monitored and performed at the time of request, rather than in a batch mode. For example, certification documents will be transferred to the EDBMS every ten minutes, rather than utilizing a batch process at the end of the day.

### **6.7.4 Data Backup:**

There will be a system monitoring and support group to confirm the initialization and successful completion of important backups. They will also facilitate the

packaging and documentation for the offsite storage of these tapes. There will also be a software data backup monitor in operation as an additional tool to alert staff when there is a data backup failure.

### **6.8 CDAS Maintenance and Repair Report**

Every repair made to each CDAS unit will be logged into a database. Each month a report of repair activities will be generated and analyzed to determine possible failure trends. At the time of program startup this database will reside on the Applus server and be accessed by Headquarters staff. Should a "Field Service Log" function be added to the CDAS at a later date then field personnel will utilize it to enter repair information while on-site. Reports would then be generated from this data.

## **7.0 TRAINING**

### **7.1 Inspector Training**

To ensure the integrity of the Connecticut I/M Program, a well educated and professional corps of certified Inspectors will be a key necessity. A top notch Inspector training program is the critical first step in building this integrity.

Prior to Program startup, each test site will be required to have trained and employ a minimum of one Inspector. Each Inspector will be registered in a compulsory 20-hour training program which will educate them in all aspects of the requirements for them to become certified. During this program, the applicant will be required to complete a written certification test. The curriculum content of the plan is summarized below:

- Overview of the Connecticut Program
- Causes and the Effects of Air Pollution
- The In-Use Fleets Contribution to Mobile Source Emission
- The Purpose, Function, and Goals of the Connecticut I/M Inspection Program
- Inspection Regulations and Procedures
- The Technical Rationale for Each Portion of the Inspection Procedure
- The Operation, Calibration, and Maintenance of Test Equipment
- Quality Control Procedures and their Purpose
- Public Relations
- Safety and Health Issues Related to the Inspection Process

Each Inspector trainee must pass the written component of the certification exam, without assistance, by a minimum grade of 80% in order to qualify for the demonstration of ability portion of the certification process.

After successful completion of the training/certification program, each Inspector will be asked to complete a course evaluation form. This document will be used to constantly measure the effectiveness of the course.

### **7.2 Technician Training**

Applus Field Technicians will undergo and must pass with a minimum score of 90% the same 20- hour program provided for Inspectors. In addition, manufacturer-specific training regarding operation, troubleshooting and preventative maintenance will be provided.

## Attachment A

### Audit Matrix

| Audit Type               | Applus | State DMV |
|--------------------------|--------|-----------|
| Physical Equipment Audit | ✓      | ✓         |
| Overt Facility Audit     | ✓      | ✓         |
| Overt Inspectors Audit   | ✓      | ✓         |
| Covert Visual Audit      |        | ✓         |
| Covert Vehicle Audit     |        | ✓         |
| Digital Audit            | ✓      |           |

### Physical Equipment Audit

These items are performed via menu selection and will be electronically stored.

|                           | Pass | Fail |
|---------------------------|------|------|
| Analyzer five point audit |      |      |
| Leak Check                |      |      |
| Load cell check           |      |      |
| Dyne Coastdown            |      |      |
| Dyne Parasitic            |      |      |
| Opacity meter check.      |      |      |
| Gas Cap Tester Check      |      |      |

### Overt Facility Audit

These items are incorporated in the CDAS QA Audit table and will be electronically stored

|                                  | Result     | Comments |
|----------------------------------|------------|----------|
| Can Customer View Test           | E, M, D, N |          |
| Program Signs Displayed Properly | E, M, D, N |          |
| Information Center Stocked       | E, M, D, N |          |
| Waiting Area Clean & Safe        | E, M, D, N |          |
| Clean Restrooms                  | E, M, D, N |          |

E = Exceeds, M = Meets, D = Does not Meet, N = N/A

## Overt Inspector Audit

These items are incorporated in the CDAS QA Audit table and will be electronically stored

|                                               | <b>Results</b> | <b>Comments</b> |
|-----------------------------------------------|----------------|-----------------|
| Inspector Properly Certified                  | E, M, D, N     |                 |
| Data Entry & VIR Accuracy                     | E, M, D, N     |                 |
| Inspector Distributed All Handouts            | E, M, D, N     |                 |
| Inspector Used Proper Customer Service Skills | E, M, D, N     |                 |
| Inspector Retained Repair Documents           | E, M, D, N     |                 |
| Clean & Safe Inspection Area                  | E, M, D, N     |                 |
| Condition of Probes & Hoses                   | E, M, D, N     |                 |
| Camera Image Quality                          | E, M, D, N     |                 |
| Condition of CDAS Cables and Connectors       | E, M, D, N     |                 |
| Proper Probe Insertion                        | E, M, D, N     |                 |
| Performed Visual Cat Check                    | E, M, D, N     |                 |
| Performed Gas Cap Check                       | E, M, D, N     |                 |
| Cooling Fan Usage                             | E, M, D, N     |                 |

E = Exceeds, M = Meets, D = Does not Meet, N = N/A

## Digital Audits

|                                                       |
|-------------------------------------------------------|
| OBD Equipment that fails to communicate with vehicles |
| NDUV Audits Report                                    |
| Pass Statistics Report                                |
| Fail Statistics Report                                |
| Fail Resolution Report                                |
| Camera Image Report                                   |
| Equipment Calibration Reports                         |
| Inspector Training Reports                            |
| After Hours Testing Report                            |
| Daily Weather Station Limit Report                    |

This is a representative example of the digital audits, additional digital audits will be included in the MiniVID reporting suite.

## **Appendix 14**

State of Connecticut  
Penalty Schedule for Enforcement Against  
Contractors, Stations, and Inspectors

regardless of whether such failure, act or omission by Contractor would permit the Department to otherwise claim a violation of more than one clause of Sections V.B.2 and/or V.B.4. The Department may unilaterally assess and withdraw liquidated damages authorized pursuant to the Contract, without a Contract amendment or Change Order.

C. Detection and Penalties for Improper Conduct of Inspections by Test Stations.

1. Surveillance. The EPA Regulations provide certain rights to and impose certain requirements on the State to undertake covert and overt surveillance activities for the purpose of evaluation of the VIP, including, but not limited to, surveillance of Contractor, the Stations, and the VIP operations. Included in such State activities and powers are the rights to inspect the operations, check the equipment functions and calibration and review the various records of Contractor and/or Stations as they relate to operation of the VIP. In addition, the EPA Regulations establish rights of the State to impose penalties against Contractor, the Stations, and employees of Stations. Contractor shall undertake its own quality control review in a format and in accordance with procedures established by the Department and as set forth in Section XXIII.B, to comply with the performance standards imposed by EPA Regulations.

2. Sanctions. In light of the foregoing rights and obligations, Contractor agrees that it shall be primarily responsible for the administration and implementation of sanctions against Stations that fail to adhere to Contract requirements. Contractor shall, within twenty-four (24) hours of learning of a Station's wrongful act or omission, inform the State in writing, of any violation or failure on the part of a Station with respect to the proper performance of the VIP or use of VIP Assets as identified and listed below in Table A. Contractor shall inform all designated Stations of all applicable Contract requirements and shall incorporate by reference the following provisions of Table A into all of its Station Agreements with the Stations. Contractor shall take appropriate and necessary actions to impose such sanctions, listed in Table A, up to and including termination of the Station or Inspector from the VIP, and shall provide the State with notice and pertinent information concerning each case in which such sanctions are imposed.

**Table A**  
**Inspection Station Violations**

| Type of Violation                                                                    | 1st Offense | 2nd Offense | 3rd or Subsequent Offense |
|--------------------------------------------------------------------------------------|-------------|-------------|---------------------------|
| Creating a False Test Record                                                         | Expulsion   |             |                           |
| Intentionally or Negligently Passing a Failing Vehicle, or Failing a Passing Vehicle | Suspension  | Expulsion   |                           |
| Inaccurate or Fraudulent Reporting or Record Keeping                                 | Warning     | Suspension  | Expulsion                 |
| Failure to Maintain Security Over Program Equipment or Documents                     | Suspension  | Expulsion   |                           |
| Misuse of Compliance Stickers, or Other Control Documents                            | Suspension  | Expulsion   |                           |
| Failure to Comply with Department Direction                                          | Suspension  | Expulsion   |                           |

| Type of Violation                                                                                 | 1st Offense | 2nd Offense | 3rd or Subsequent Offense |
|---------------------------------------------------------------------------------------------------|-------------|-------------|---------------------------|
| Concerning Test Procedures or Standards                                                           |             |             |                           |
| Alteration or Misuse of VIR's                                                                     | Suspension  | Expulsion   |                           |
| Failure to Administer Proper Test Procedure                                                       | Warning     | Suspension  | Expulsion                 |
| Failure to Use Correct Test Standards                                                             | Warning     | Suspension  | Expulsion                 |
| Failure to Issue VIR                                                                              | Warning     | Suspension  | Expulsion                 |
| Test by Uncertified Personnel                                                                     | Warning     | Suspension  | Expulsion                 |
| Failure to Issue Correct Compliance Sticker                                                       | Warning     | Suspension  | Expulsion                 |
| Failure to Perform Gas Cap Test                                                                   | Warning     | Suspension  | Expulsion                 |
| Failure to Correctly Enter Test Data or Record                                                    | Warning     | Suspension  | Expulsion                 |
| Failure to Exclude Unsafe or Uncooperative Vehicle or Owner from Testing                          | Warning     | Suspension  | Expulsion                 |
| Failure to Maintain Software Integrity or Security                                                | Suspension  | Expulsion   |                           |
| Charging for a Free Reinspection (within thirty (30) Days of initial failure)                     | Suspension  | Expulsion   |                           |
| Inexcusable Delay or Refusal to Perform Inspection                                                | Suspension  | Expulsion   |                           |
| Failure to Inform Customer of Late Inspection                                                     | Warning     | Suspension  | Expulsion                 |
| Failure to Have Customer Exit Vehicle for Inspection, or to Provide Safe Exiting and Waiting Area | Warning     | Suspension  | Expulsion                 |
| Failure to Maintain Service During Operating Hours, or Inexcusable Downtime                       | Warning     | Suspension  | Expulsion                 |
| Failure to Collect Proper Fee                                                                     | Suspension  | Expulsion   |                           |
| Incorrect or Unnecessary Repairs to a Vehicle                                                     | Warning     | Suspension  | Expulsion                 |
| Sale of Unnecessary Product or Service                                                            | Warning     | Suspension  | Expulsion                 |
| Creating a False Test Record (ghost testing)                                                      | Expulsion   |             |                           |
| Use of Test Application Interface Internet Connection for unauthorized purposes                   | Warning     | Suspension  | Expulsion                 |
| Use of Workstation for unauthorized purposes                                                      | Warning     | Suspension  | Expulsion                 |
| Failure to display the Inspection Customer's Bill of Rights signage                               | Warning     | Suspension  | Expulsion                 |

3. Violations. Notwithstanding the provisions related to suspension or expulsion set forth above, each Station designated and hired by Contractor shall be fully responsible for the performance of Inspections and related duties in accordance with all Applicable Legal Requirements, Contract requirements and specifications, and VIP rules and procedures. The Inspection services offered by each Station and participation in the VIP shall be subject to suspension or termination, at any time and Contractor shall impose such suspension or

termination in all cases where warranted for violations as described herein. Determination of second and subsequent violations shall be made on the basis of previous violations in the same category within a three (3) year period.

4. Suspension. A Station may not perform Inspections during any period that it is under suspension. Violation of this requirement shall subject the Station to expulsion from the VIP. Suspensions shall be imposed for periods determined by Contractor in accordance with the severity of the offense and surrounding relevant facts and circumstances and in accordance with a penalty schedule to be furnished by the Department to the Contractor.

5. VIP Participation Privilege. To the extent permitted by law, the participation of each Station in the VIP shall be deemed a privilege that is conditional at all times upon the proper performance of all VIP duties and that is terminable in the event of nonperformance, or improper or deficient performance, without recourse against or liability on the part of Contractor or the State.

6. Nonexclusive Remedy. Imposition of a sanction under the schedule set forth in Table A shall not preclude other administrative action against Contractor, a Station or any employee of a Station as permitted under the terms of this Contract or any Station Agreement, nor shall it bar criminal prosecution, if appropriate.

D. Standards for Inspectors and Sanctions Against Inspectors.

1. Surveillance. Contractor shall provide in all of its Station Agreements that all employees of the Stations designated and certified as Inspectors shall be employed and assigned on the express condition of proper and satisfactory performance of all duties related to the administration of Inspection procedures. The Station Agreement shall require the Station to inform each such employee clearly of such requirement and the conditions of employment as an Inspector and that the employee will be subject to video surveillance and unannounced inspections. Upon a violation of VIP rules and procedures set forth below in Table B, an Inspector shall be subject, at a minimum, to the imposition of the applicable suspension as contained in Table B.

2. Suspension and Revocation. Upon a finding of incompetence or violation of procedures, statutes or regulations by an Inspector by the State or Contractor, the Inspection privileges of such Inspector shall be suspended or revoked and a mandatory retraining of such Inspector at Station's expense shall be required prior to restoration of Inspection privileges. Suspension or revocation of the certification of an Inspector shall completely bar an Inspector from any involvement in the VIP during such suspension or revocation. Such Inspector may be reassigned to a position where there is no direct involvement in the VIP.

3. Penalty. The State Representative may report to Contractor any reliable evidence in his possession of violations by an employee of a Station or Contractor, which evidence shall be examined and appropriate action taken by Contractor in accordance with 40 C.F.R. Section 51.364 within a reasonable time. If Contractor does not take action, the State may impose a penalty against Contractor as provided in this Article V. The following schedule

of suspensions designated as Table B shall apply to the specified types of violations by Inspectors.

**Table B**  
**Sanctions Applicable to Emissions Inspectors**

| Type of Violation                                                                                                                         | 1 <sup>st</sup> Offense               | 2 <sup>nd</sup> Offense | 3rd or Subsequent Offense |
|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-------------------------|---------------------------|
| Issuance or possession of altered, forged, stolen or counterfeit Certificate of Emissions Inspection                                      | 1 year                                | Permanent               |                           |
| Intentionally improperly passing or failing a vehicle                                                                                     | 6 months                              | Permanent               |                           |
| Furnish, lend, give, sell or receive a Certificate of Emissions (VIR or sticker) Inspection without Inspection                            | 1 year                                | Permanent               |                           |
| Fraudulent Record Keeping                                                                                                                 | 1 year                                | Permanent               |                           |
| Faulty Inspection                                                                                                                         | 2 months                              | 1 year                  | 3 years                   |
| Failure to Produce Records Upon Demand by Quality Assurance Officer or other Duly Authorized State of Connecticut Representative or Agent | Suspension until records are produced |                         |                           |
| Improper Record Keeping                                                                                                                   | Warning                               | 2 months                | 6 months                  |
| Improper Inspection                                                                                                                       | Warning                               | 2 months                | 6 months                  |
| Improper Assigning of Certificate of Emissions Inspection                                                                                 | Warning                               | 2 months                | 6 months                  |
| Improper Security of Certificate of Emissions Inspection                                                                                  | Warning                               | 2 months                | 6 months                  |
| Unclean Inspection Area                                                                                                                   | Warning                               | 1 month                 | 4 months                  |
| Careless Record Keeping                                                                                                                   | Warning                               | 1 month                 | 4 months                  |
| Failure to Give VIR to Customer                                                                                                           | Warning                               | 1 month                 | 4 months                  |

4. Review Period. Determination of second and subsequent violations shall be made on the basis of previous violations in the same category within a three (3) year period.

5. Nonexclusive Remedy. Imposition of a sanction under the above schedule set forth in Table B shall not preclude other administrative action against Contractor, a Station or any employee of a Station as permitted under the terms of this Contract or any Station Agreement, nor shall it prohibit criminal prosecution, if appropriate.

E. Quarterly Performance Evaluation.

## **Appendix A**

### **CDAS Calibration and Audit menus**

Below are examples of the Analyzer Maintenance menu and CDAS State Menu. When the final software is delivered screen captures of the menus will be included in this appendix.

#### **Analyzer Maintenance Menu Display Prompt**

CDAS units shall display the following prompt. The operator shall select the maintenance function to be performed from the listed options.

##### **ANALYZER MAINTENANCE MENU (Top Level Menu Item)**

- PERIODIC CALIBRATION
- LEAK CHECK ONLY
- GAS CALIBRATION ONLY
- STATUS SCREEN
- DYNAMOMETER CALIBRATION ONLY
- GAS CAP TESTER CHECK ONLY
- OPACITY METER CALIBRATION
- RETURN TO MAIN MENU

#### **CDAS State Menu (Manufacturer Technician Menu will be similar)**

##### **STATE ANALYZER MAINTENANCE (Top Level Menu Item)**

- GAS AUDIT
- QA AUDIT
- UPDATE STATION INFORMATION
- INSTALL NEW DATA DISK
- CHALLENGE TEST
- LOCKOUT FUNCTIONS
- SOFTWARE UPDATE
- TEST RECORD SEARCH AND RETRIEVAL
- TOTAL NUMBER OF INSPECTIONS SINCE LAST DATA TRANSFER
- COPY ANALYZER FILES
- RETURN TO MAIN MENU