Department of Environmental Conservation
Division of Air Resources

NEW YORK STATE IMPLEMENTATION PLAN

NEW YORK METROPOLITAN AREA ENHANCED I/M PROGRAM

Proposed Revision JUNE 2009

New York State Department of Environmental Conservation

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NEW YORK STATE IMPLEMENTATION PLAN REVISION
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EXECUTIVE SUMMARY

Section 182 (42 USC 7511a) of the federal Clean Air Act requires motor vehicle emissions testing programs, or Inspection and Maintenance (I/M) programs, in those areas of the nation most impacted by carbon monoxide and ozone pollution. Affected states, including New York, are required to submit state implementation plan revisions to demonstrate compliance with the Act's minimum program elements. Federal regulation under 40 CFR Part 51 further defines an area's applicable I/M requirements.

Ground-level ozone, a primary ingredient in smog, is formed when volatile organic compounds (VOCs) and oxides of nitrogen (NOx) react chemically in the presence of sunlight. Cars, trucks, power plants and industrial facilities are primary sources of these emissions. Ozone pollution is a concern during the summer months when the weather conditions needed to form ground-level ozone – sunshine and hot temperatures – normally occur. Ozone is unhealthy to breathe, especially for people with respiratory diseases, children, the elderly, and adults who are active outdoors. Symptoms include reduced lung function and chest pain, and can lead to respiratory diseases such as bronchitis or asthma.

This SIP revision outlines several proposed changes to New York's enhanced I/M programs currently operating within 9-county New York Metropolitan Area (NYMA). New York proposes to reduce the percentage of emissions waivers allowed within NYMA to 2% (from 3%) beginning in calendar year 2008. New York proposes that the decentralized NYVIP I/M program, which features on-board diagnostics inspections, is as effective as a centralized test-only program for modeling purposes. New York also proposes to end tailpipe testing through the NYTEST I/M program on December 31, 2010. This SIP revision includes Mobile6 modeling demonstrations for the high enhanced I/M performance standard and rate of progress/reasonable further progress requirements associated with the proposed changes. The Department has met its obligation to demonstrate that its control programs will result in continuing emission reductions to offset potential losses due to ending tailpipe emissions inspections.

ACRONYMS and ABBREVIATIONS

CAA	Clean Air Act Amendments of 1990
CARB	California Air Resources Board
CAT	Catalytic converter
CFR	Code of Federal Regulations
CMSA	Consolidated Metropolitan Statistical Area
CO	Carbon Monoxide
DAR	Division of Air Resources
Department	New York State Department of Environmental Conservation
DEC	New York State Department of Environmental Conservation
DMV	New York State Department of Motor Vehicles
DVC	Base Case Design Value
DVF	Future Design Value
DVMT	Daily Vehicle Miles Traveled
ECD	Emission Control Device
ECL	Environmental Conservation Law
EDMS	Emission Dispersion Modeling System
EIIP	Emissions Inventory Improvement Program
EPA	United States Environmental Protection Agency
FE	Fractional Error
FEL	Federal Emission Limit
FHWA	Federal Highway Administration
FR	Federal Register
GVWR	Gross Vehicle Weight Rating
HAP	Hazardous Air Pollutant
HEPS	High Enhanced Performance Standard
I/M	Inspection/Maintenance
LEV	Low Emission Vehicle
LDDV	Light Duty Diesel Vehicle
LDGT1	Light Duty Gasoline Truck 1
LDGT2	Light Duty Gasoline Truck 2
LDGV	Light Duty Gasoline Vehicle
MC	Motorcycle
MFB	Mean Fractionalized Bias
MOU	Memorandum of Understanding
NAA	Non-Attainment Area
NAAQS	National Ambient Air Quality Standard
NMOG	Non Methane Organic Gas
NO	Nitric Oxide
NOAA	National Oceanic and Atmospheric Administration
NO_x	Oxides of Nitrogen
NO_2	Nitrogen Dioxide
NWS	National Weather Service
NYCRR	New York Codes, Rules and Regulations
NYMA	New York Metropolitan Area
NYSDMV	New York State Department of Motor Vehicles
NYSDOT	New York State Department of Transportation
NYTEST	New York Transient Emissions Short Test
NYVIP	New York Vehicle Inspection Program

OBD	On Board Diagnostics
OTC	Ozone Transport Commission
OTR	Ozone Transport Region
PCV	Positive Crankcase Ventilation
PM	Particulate Matter
$PM_{2.5}$	Fine Particulate Matter
PM_{10}	Particulate Matter less than 10 microns
PMC	Coarse Particulate Matter
PPB	Parts Per Billion
PPM	Parts Per Million
PSD	Prevention of Significant Deterioration
PSI	Pounds Per Square Inch
PZEV	Partial Zero Emission Vehicle
QA	Quality Assurance
RACM	Reasonably Available Control Measure
RACT	Reasonably Available Control Technology
RFG	Reformulated Gasoline
RFP	Reasonable Further Progress
RIA	Regulatory Impact Analysis
RVP	Reid Vapor Pressure
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
SULEV	Super Ultra Low Emission Vehicle
TAC	Thermostatic Air Cleaner
TPD	Tons Per Day
TPY	Tons Per Year
TSD	Technical Support Document
ULEV	Ultra Low Emission Vehicle
UPSTATE	53-county OTR Low Enhanced I/M Area
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
ZEV	Zero Emission Vehicle

1.0 INTRODUCTION

A. Background

During the fall of 1990, the United States Congress approved significant changes to the federal Clean Air Act (Act). The cornerstone of the Act is the protection of public health through the promulgation of federal National Ambient Air Quality Standards (NAAQS). These air quality standards have been established for six criteria contaminants, including ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter, and lead. The Act addresses the nation's chronic air pollution problems, and requires states to bring their air quality into compliance with these federal standards.

Section 182 (42 USC 7511a) of the Act requires motor vehicle emissions testing programs, or Inspection and Maintenance (I/M) programs, in those areas of the nation most impacted by carbon monoxide and ozone pollution. Section 184 (42 USC 7511c) also created an "Ozone Transport Region" which geographically includes the 11 states from Maryland to Maine (including all of New York State) and the District of Columbia Consolidated Metropolitan Statistical Area. Depending on the severity of the nonattainment designation(s) and/or geographic location within the OTR, EPA's regulation under Part 51.350 outlines the appropriate motor vehicle inspection and maintenance requirements.

Based on these statutory requirements, New York State's 62 counties were divided into two I/M program areas. The "Upstate" I/M area, which includes 53 counties, is subject to EPA's Ozone Transport Region low enhanced I/M performance standard under §51.351(h). The 9-county New York Metropolitan Area (NYMA) is subject to EPA's high enhanced I/M performance standard under §51.351(f).

This State Implementation Plan (SIP) revision describes proposed changes to New York's existing I/M programs. New York is providing a test-and-repair effectiveness demonstration for the statewide on-board diagnostics testing (OBD II) New York Vehicle Inspection Program (NYVIP). Based in part on this demonstration, New York is also proposing the end of tailpipe emissions testing program, through the NYTEST program, in NYMA on December 31, 2010.

B. NYMA Inspection & Maintenance Program History

Figure 1 below shows the geographic extent of New York's I/M program areas. The NYMA I/M area includes New York City (Bronx, Kings, New York, Richmond, and Queens Counties), Long Island (Nassau and Suffolk Counties), and Westchester and Rockland Counties. The 53-County Upstate I/M area represents the remainder of New York State.

FIGURE 1.1 : Geographic Extent of New York's I/M Programs

In 1981, the New York State Departments of Environmental Conservation (DEC) and Motor Vehicles (DMV) required mandatory annual emissions inspections of gasoline-powered vehicles up to and including maximum gross weight of 8,500 lbs. within NYMA. New York's initial I/M program utilized "idle test" equipment to obtain hydrocarbon, carbon monoxide, and carbon dioxide readings. A test-and-repair network design was adopted where motorists can have their vehicles inspected and, if necessary, repaired at the same location. This type of network promotes motorist convenience and has been retained in the subsequent NYTEST and NYVIP I/M programs.

Following the passage of Clean Air Act Amendments (1990) and subsequent federal I/M regulations under 40 CFR Part 51 (1992), NYMA was required to comply with revised I/M requirements under EPA's high enhanced I/M performance standard. In 1998, the idle test I/M program was discontinued, and replaced with the New York Transient Emissions Short Test (NYTEST) program. NYTEST requires transient, loaded-mode tailpipe testing for applicable vehicles. Like the preceding idle test program, the NYTEST was designed around a decentralized test-and-repair network. Three equipment providers were certified by New York and allowed to market the NYTEST equipment to DMV licensed inspection stations. At the start of NYTEST program, there were approximately 4,000 licensed inspection stations. The number of NYMA inspection stations has gradually declined to approximately 3,500 stations in 2008.

On August 4, 1998, DEC provided a required I/M SIP revision which committed to mandatory on-board diagnostics checks (OBD II) for both the Upstate and NYMA I/M areas. EPA officially incorporated OBD into its I/M regulations (40 CFR Parts 51 and 85) through a April 5, 2001 rulemaking (FR Volume 66, No. 66).

On an interim basis, New York modified the NYTEST technical specifications to include an optional OBD upgrade within NYMA. Neither the inspection stations or the 3 NYTEST equipment providers were required to participate, but OBD inspections were mandatory if the station was equipped. This optional program was intentionally designed to become obsolete, as the Departments were concurrently designing a more comprehensive statewide OBD-based I/M program. All three NYTEST equipment providers (ESP, SPX, and Snap-on) submitted OBD upgrades to DEC and DMV for approval, but only ESP and SPX received authorization to market their upgrades within the program's allotted time frame. The Departments approved the ESP and SPX OBD II upgrades on July 2 and October 18, 2004, respectively. During the optional NYTEST OBD II program, roughly 560 stations completed approximately 470,000 OBD II inspections. The optional NYTEST OBD program ended on May 3, 2005. Since this time, stand alone NYVIP equipment has been required within NYMA. Licensed NYMA inspection stations have been required to operate and maintain both the NYTEST and NYVIP equipment platforms.

New York's regulation provides for an emissions testing exemption for vehicles older than 25 model years old. As such, with each new calendar year, more vehicles will be inspected on the OBD-based NYVIP platform, while fewer vehicles will receive tailpipe-based emissions inspections on the NYTEST equipment. Based on the evaluation of the last several years of NYMA inspection and registration data, the Departments have estimated future NYTEST inspection demands for each NYMA county. The NYMA registration based information is presented in Table 1 below.

TABLE 1 : Estimated NYTEST Volume

County	2006*	2007*	2008	2009	2010	2011	2012
BRON	72,319	57,855	46,284	37,027	29,622	23,698	18,958
KING	109,339	87,472	69,977	55,982	44,785	35,828	28,663
NASS	202,515	162,012	129,610	103,688	82,950	66,360	53,088
NEWY	55,206	44,164	35,332	28,265	22,612	18,090	14,472
QUEE	185,467	148,374	118,699	94,959	75,967	60,774	48,619
RICH	51,792	41,434	33,147	26,518	21,214	16,971	13,577
ROCK	39,779	31,823	25,459	20,367	16,294	13,035	10,428
SUFF	265,327	212,261	169,809	135,847	108,678	86,942	69,554
WEST	131,512	105,210	84,168	67,334	53,867	43,094	34,475
Total	**1,113,258**	**890,606**	**712,485**	**569,988**	**455,990**	**364,792**	**291,834**

(*) actual registration counts

The consequence of a declining NYTEST vehicle population is a corresponding decreased need for tailpipe testing equipment. As detailed further within Section 3, this SIP revision demonstrates that the NYTEST program can end on December 31, 2010**.** Following this date, the 9-county NYMA I/M can maintain compliance with the high enhanced I/M performance standard with the NYVIP (OBD II) program alone.

C. Upstate 53-County Inspection & Maintenance Program History

In September 1995, EPA published a notice of Proposed Rulemaking (NPRM) offering an alternative I/M performance standard for compliance with the Act's OTR requirements. New York designed the Upstate I/M program on this performance standard. In 1998, the 53-county Upstate I/M program commenced with mandatory annual safety/emissions inspections which included visual anti-tampering inspections. On-board diagnostics testing was subsequently required through EPA's April 5, 2001 rulemaking (FR Volume 66, No. 66). To establish a consistent statewide OBD II inspection, New York designed, contracted for, and implemented the New York Vehicle Inspection Program (NYVIP). NYVIP was phased-in in both the Upstate I/M and NYMA I/M areas. OBD II inspections through NYVIP became mandatory in the Upstate I/M area on December 1, 2004 and in NYMA on May 5, 2005.

DEC submitted a SIP revision outlining the statewide NYVIP program to EPA-Region 2 in March 2006. Under the Network Type & Program Evaluation Section (p.12), New York stated the following regarding the test-and-repair effectiveness claimed for NYVIP in demonstrating compliance with the OTR low enhanced I/M performance standard:

"In 1996, the DEC completed an investigation of the NYMA idle test I/M program to determine the relative effectiveness of the proposed NYTEST decentralized program compared to EPA's model centralized test-only program. The draft report, "New York City I/M : Program Credit Determination" was included within New York's March 1996 Enhanced I/M SIP. Subsequently, New York's 15 Percent and Reasonable Rate of Progress Plan (September 4, 1997) claimed the relative credit for the NYTEST decentralized network was:

- *» 88 percent as effective for HC emission reductions;*
- *» 84 percent as effective for CO emission reductions; and*
- *» 86 percent as effective for NOx emission reductions.*

EPA's final approval of the NYTEST I/M program was noticed in the Federal Register on May 7, 2001.

The Upstate I/M Mobile Modeling runs (Section 3) include the same relative test-and-repair credit for the NYVIP program as in the 1997 ROP SIP. New York believes the relative credit claimed is conservative as electronic safeguards have been built into the NYVIP test sequence to prevent fraud, and additional electronic triggers has been incorporated into the NYVIP enforcement process. These undertakings have evolved since the NYTEST program. New York has also identified a small, but growing, percentage of licensed inspection stations in the Upstate I/M area that do not complete emission-related repairs. In practice, these stations are functioning as decentralized test-only stations. This SIP revision does not claim any additional test-and-repair credit above the previously approved NYTEST program, but New York reserves the opportunity to re-visit the test-and-repair credit discount for NYVIP at a future date." (emphasis added)

This SIP revision, under Section 3, provides a qualitative demonstration that New York's statewide NYVIP program is as effective as a test-only network. New York designed and implemented many enhancements to the NYVIP program which surpass those efforts associated with the approved NYTEST tailpipe testing program. These modifications discourage, and in cases prohibit, improper actions on the part of inspectors attempting to avoid or diminish an official OBD II inspection. Through upgraded inspection software, enhanced auditing and enforcement practices, and a revised program design, New York will ensure that the statewide NYVIP program will achieve its predicted emission reductions.

As noted above, the Upstate OTR low enhanced I/M performance standard demonstration (2006) was based on the less effective NYTEST test-and-repair percentages. While DEC believes a revised performance standard demonstration is not warranted for the Upstate I/M area, future Mobile modeling exercises will include the improved NYVIP I/M test-and-repair effectiveness (i.e., 100% effective, no discount).

Section 3 of this SIP revision includes a NYMA high enhanced I/M performance standard Mobile6 modeling demonstration based on the revised NYVIP test-and-repair effectiveness percentage. This demonstration serves to determine the end date of NYTEST tailpipe testing in NYMA.

D. SIP Revision Format

This SIP revision proposes revisions to the State's previous enhanced I/M SIPs dated March 1996 ("Enhanced Motor Vehicle Inspection/Maintenance Program") and March 2006 ("New York Vehicle Inspection Program - NYVIP"). A summary of these changes is provided under Table 2 below:

TABLE 2 : Revisions to New York's Enhanced I/M SIPs (March 1996, March 2006)

Section	Status
Section 2, Applicability (51.350)	A revised Table 3 is included to correct the March 2006 SIP. Emission control device (ECD) checks for Weight Code 4 vehicles are not required in the 53-county Upstate I/M area.
Section 3, Enhanced I/M Performance Standard (51.351)	The 1996 and 2006 SIP submissions remain valid at this time. This SIP revision includes a discussion of NYTEST "End Date" and associated Mobile6 modeling related to the high enhanced I/M performance standard. Following the end of NYTEST, the NYVIP I/M program alone will meet the NYMA enhanced I/M performance standard.
Section 4, Network Type & Program Evaluation (51.353)	Section 4.0 of the March 2006 New York Vehicle Inspection Program (NYVIP) SIP previously replaced Section 4.0 of the March 1996 Enhanced Motor Vehicle Inspection/Maintenance Program SIP. This SIP revision includes a discussion related to the test-and-repair effectiveness of the OBD-based NYVIP program, and replaces "Subsection B. - Decentralized I/M Credit" of the March 2006 NYVIP SIP (p. 12). Revised regulations (2008) to implement the NYTEST "Shared Network" are included as Appendix F. All other Subsections within the 2006 SIP remain valid.
Section 5, Adequate Tools and Resources (51.354)	No Changes
Section 6, Test Frequency and Convenience (51.355)	No Changes
Section 7, Vehicle Coverage (51.356)	No Changes
Section 8, Test Procedures and Standards (51.357)	Previous SIP submissions remain valid. NYVIP test procedures and standards (March 2006 SIP) will apply after NYTEST.
Section 9, Test Equipment (51.358)	Previous SIP submissions remain valid. NYVIP test equipment (March 2006 SIP) will apply after NYTEST.
Section 10, Quality Assurance & Quality Control (51.363, 51.359)	Previous SIP submissions remain valid. New text regarding QA/QC is included for the statewide NYVIP program after NYTEST.
Section 11, Waivers and Time Extensions (51.360)	Previous SIP submissions remain valid. New text regarding waivers and time extensions is included for the statewide NYVIP program after NYTEST.
Section 12, Motorist Compliance Enforcement (51.361)	Previous SIP submissions remain valid. Section 12 of the March 2006 SIP will apply after NYTEST.
Section 13, Motorist Compliance Enforcement Oversight (51.362)	No Changes
Section 14, Enforcement Against Contractors, Stations, and Inspectors (51.364)	No Changes

Section 15, Data Collection (51.365)	Previous SIP submissions remain valid. New text regarding data collection is included for the statewide NYVIP program after NYTEST.
Section 16, Data Analysis and Reporting (51.366)	Previous SIP submissions remain valid. New text regarding data analysis and reporting is included for the statewide NYVIP program after NYTEST.
Section 17, Inspector Training and Licensing or Certification (51.367)	No Changes
Section 18, Public Information and Consumer Protection (51.368)	No Changes
Section 19, Improving Repair Effectiveness (51.369)	No Changes
Section 20, Compliance with Recall Provisions (51.370)	No Changes
Section 21, On-road Testing (51.371)	No Changes
Section 22, State Implementation Plan Submissions and Deadlines (51.372, 51.373)	No Changes

Legal authority to require and implement New York's I/M programs exist under Articles 3 and 19 of Environmental Conservation Law (ECL) and Titles II and III of the Vehicle and Traffic Law (VTL).

Revisions to State regulations under 6 NYCRR Parts 200 and 217 (DEC) and 15 NYCRR Part 79 (DMV) will be required to delete the NYTEST tailpipe emissions inspection requirements on December 31, 2010.

2.0 APPLICABILITY (§51.350)

Section 2.0 of the March 2006 New York Vehicle Inspection Program (NYVIP) SIP (p. 9) is modified to include a revised Table 3. The table is corrected to note that emission control device checks are not required on Weight Code 4 vehicles (>18,000 lbs) in the 53-county Upstate I/M area.

TABLE 3 : Mobile6 Upstate Performance Standards

COMPONENT	ALTERNATE LOW ENHANCED PERFORMANCE STANDARD	OTR LOW ENHANCED PERFORMANCE STANDARD	ACTUAL NYVIP UPSTATE
Network Type	Centralized	Centralized	Decentralized Test-and-Repair
Start Date			2004
Test Frequency	Annual	Annual	Annual
Model Year Coverage	MY 1968 and newer	MY 1968 and newer	25 MYs old and newer (the 2 newest MYs are exempt)
Vehicle Type Coverage	Light Duty Vehicles & Trucks, Up to 8,500 lbs GVWR	Light Duty Vehicles & Trucks, Up to 8,500 lbs GVWR	Light Duty Vehicles & Trucks, Up to 8,500 lbs (LD)
Emission Test Type	Idle - MYs from 1968 OBD - MY 2001 and newer	Remote Sensing - MYs 1968-1995 OBD - MYs 1996 and newer	Low Enhanced - LD from 25 MYs old to MY 1995 OBD - LD MY 1996 to 2 MYs old ECD checks on non-diesel, non-electric powered vehicles, Weight Codes 1, 2, and 3 (≤18,000 lbs.)
Emission Standards	Part 85, Subpart W	Remote Sensing - CO at 7.5% (2x)	N/A
Emission Control Device Checks (ECD)	PCV, EGR	CAT, PCV	Same as NYMA
Evaporative System	None	None	Gas Cap Presence + OBD on MY 1996 and newer
Stringency	20%	None	20%
Waiver Rate	3%	3%	3%
Compliance Rate	96%	96%	98%
Required Geographic Coverage	Albany, Broome, Chautauqua, Erie, Dutchess, Monroe, Niagara, Oneida, Onondaga, Orange, Putnam, Rensselaer, Saratoga, Schenectady, Washington, & Warren Counties (16)	Albany, Broome, Chautauqua, Erie, Dutchess, Monroe, Niagara, Oneida, Onondaga, Orange, Putnam, Rensselaer, Saratoga, Schenectady, Washington, & Warren Counties (16)	All 53 Upstate Counties Note: 37 Upstate Counties were included as a “Geographic Bubble.”

3.0 ENHANCED I/M PERFORMANCE STANDARD (§51.351)

Section 3.0 (pp. 6-9) of the March 1996 Enhanced Motor Vehicle Inspection/Maintenance Program SIP and Section 3.0 (pp. 8-10) of the March 2006 New York Vehicle Inspection Program (NYVIP) SIP remain valid at this time. The amendment below contains a discussion of the NYTEST end date including future modeling of the high enhanced I/M performance standard demonstration for NYMA. Following the end of NYTEST, the NYVIP I/M program alone will meet the NYMA enhanced I/M performance standard and Section 3 of the March 1996 SIP will no longer apply.

A. Background

The Department's March 1996 SIP revision provided a high enhanced I/M performance standard demonstration for NYMA in accordance with EPA's Mobile5. Mobile5 is now obsolete. DEC has completed a high enhanced I/M performance standard evaluation for this SIP revision using Mobile6.

Table 4 below compares New York's existing NYMA I/M program requirements, which includes both the NYVIP and NYTEST programs, to a future design after the NYTEST tailpipe testing program ends ("Post-NYTEST"). The more significant program changes are highlighted in blue.

TABLE 4 : Proposed NYMA Changes

Vehicle Type	Current NYMA I/M (NYVIP and NYTEST Programs)	Post-NYTEST
Non-electric and non-diesel light-duty vehicles (<8,501 lbs. GVWR), MYs 1996 to 2 MYs old	Emissions Test Type: NYVIP OBD II ECD Checks for Weight Code 1: air pump, fuel inlet restrictor, EGR, PCV, TAC, CAT, EVAP system disablement Gas Cap: Cap Presence Only	Emissions Test Type: NYVIP OBD II ECD Checks for Weight Code 1: air pump, fuel inlet restrictor, EGR, PCV, TAC, CAT, EVAP system disablement Gas Cap: Cap Presence Only
Non-electric and non-diesel light-duty vehicles (<8,501 lbs. GVWR), 25 MYs old to MY 1995	Emissions Test Type: NYTEST Transient ECD Checks for Weight Code 1: air pump, fuel inlet restrictor, EGR, PCV, TAC, CAT, EVAP system disablement Gas Cap: NYTEST Pressure Test	Emissions Test Type**: Low Enhanced:** ECD Checks for Weight Code 1: air pump, fuel inlet restrictor, EGR, PCV, TAC, CAT, EVAP system disablement Gas Cap: **Cap Presence only**
Non-electric and non-diesel medium- and heavy-duty vehicles (8,501 - <18,001 lbs. GVWR), 25 MYs old to older than 2MYs (DMV Weight Codes 2, 3)	Emissions Test Type: NYTEST Idle ECD Checks for Weight Codes 2 and 3: air pump, fuel inlet restrictor, EGR, PCV, TAC, CAT, EVAP system disablement Gas Cap**:** NYTEST Pressure Test	Emissions Test Type**: Low Enhanced:** ECD Checks for Weight Codes 2 and 3: air pump, fuel inlet restrictor, EGR, PCV, TAC, CAT, EVAP system disablement Gas Cap: **Cap Presence only**
Non-electric and non-diesel medium- and heavy-duty vehicles (>18,000 lbs. GVWR), 25 MYs old to older than 2MYs (DMV Weight Code 4)	Emissions Test Type**:** NYTEST Idle ECD Checks for Weight Code 4: air pump, fuel inlet restrictor, EGR, PCV, TAC, CAT, EVAP system disablement Gas Cap**:** NYTEST Pressure Test	**Safety only** (NYVIP) (No emissions, ECD, or gas cap checks)

B. Mobile6 Methodology

I/M programs are designed and implemented to meet or exceed an applicable minimum federal performance standard. EPA's performance standards are derived from Mobile6 utilizing "model" inputs and local characteristics (i.e., vehicle mix, fuel controls). Performance standards are expressed as emissions levels, in area-wide average grams/mile (gpm) values, resulting from the I/M program. More conventionally, performance standards are expressed as emission reductions, as compared to a no I/M scenario. The DEC determined EPA's high enhanced performance standard (HEPS) by utilizing the "model" inputs contained under Part 51.351(f)(1) through (f)(13). While I/M jurisdictions are allowed to

adopt alternate design features other than EPA's "model" inputs, compliance with the applicable performance standard must be demonstrated for the pollutant(s) that established I/M requirements.

The Departments are proposing changes that differ from the initial 1996 NYMA demonstration. These modifications will affect a revised NYMA HEPS demonstration as follows:

1. Emissions test type changes to reflect the end of NYTEST tailpipe testing (see Table 4 above);
2. The NYVIP OBD-based I/M program is considered as effective as a centralized test-only network. The approved NYTEST network effectiveness of 88%, 84%, and 86% for HC, CO, and NOx, respectively, are no longer applicable to the NYVIP program (see Section D. below);
3. Use of Mobile6 national default values for annual vehicle mileage accumulations. The previous 1996 and 2006 SIPs used local inputs derived from the dated Nationwide Personal Transportation Survey (NPTS, 1995). (see Section E. below);
4. A commitment to increase the stringency of the NYMA waiver rate to 2% beginning in 2008, as opposed to a 3% waiver rate claimed within the 1996 SIP.

Of note, Mobile5 previously allowed for partial repair technician training credit. New York previously claimed 50% repair technician credit within the 1996 SIP revision for the DMV sponsored automotive technician training program (ATTP). Mobile6 does not allow for partial repair technician training, therefore no additional credit is assumed within this modeling effort.

With each new calendar year (January 1), a greater percentage of NYMA vehicles will receive OBD II inspections through NYVIP I/M while the percentage of NYTEST inspections will decrease due to the 25 model year extension and escalated vehicle turnover (compared to newer NYVIP vehicles). To determine the date that a NYVIP only based I/M program complies with EPA's HEPS (i.e., following the end of the NYTEST tailpipe emissions testing), DEC completed a multi-year modeling analysis employing the following general inputs:

Network Type: decentralized test-and -repair
NYVIP NYMA Start Date: 2006 (actual May 2005)
Test Frequency: annual
Test-and-Repair Effectiveness: 100%
Vehicle Types: LDV, LDT1, LDT2, LDT3, LDT4
Visual Inspection Tests: air pump, catalyst, fuel inlet restrictor, EGR, evaporative disablement, PCV, and missing gas cap
Applicable model years: model years 25 and newer
Emissions Test Types: OBD: I/M & Evap
Waiver Rate: 2% (beginning in CY 2008)
Compliance Rate: 98%
OBD Exemption Ages: LDVs older than model year 1996, 2 newest model years
Pre-81 Stringency: N/A
Repair Technician Training: 0% credit

NYMA I/M benefits were estimated using the Mobile6 emission model and individual inputs for each county in the NYMA nonattainment area. Daily Vehicle Miles Traveled (DVMT) inventory was constructed by the New York State Department of Transportation (NYSDOT) to provide DVMT estimates by county, geographic component (urban, small urban, and rural) and functional class. This

resulting VMT by county and by functional class is then multiplied by a seasonal adjustment factor to account for seasonal differences. This seasonal adjustment factor is also supplied by the NYSDOT.

The vehicle mix for each of the 11 NYSDOT regions in New York State are used to produce VMT by vehicle type. There are 28 fuel and weight based categories employed by Mobile6. The main objective is to create a separate, distinct (where justified) vehicle mix for each of the twelve roadway types in the Federal Highway Administration (FHWA) classification scheme. However, an hourly VMT is input to the model using the VMT BY HOUR command and is used in the computation of the composite daily emission factor. The local data were obtained through analyses conducted by NYSDOT.

The vehicle distributions used in Mobile6 are obtained from the New York State Department of Motor Vehicles (NYSDMV) registration database for the current year at the beginning of July. Each record is sorted into the 28 vehicle types by county.

EPA default Mileage Accumulation Rates for all vehicle types were taken from EPA's Fleet Characterization Data for Mobile6.

NYSDOT created vehicle use profiles similar to those used as inputs to California's EMFAC model. One of these inputs is the percent of vehicle trips in each hour, and these values also equate to the number of starts per hour.

Hourly temperatures were obtained from the National Oceanic and Atmospheric Administration for New York and vicinity. Each area of the State was then matched to a National Weather Service (NWS) station. NYSDEC uses hourly values to more accurately model hourly emissions. Monthly average hourly temperatures were created from recorded hourly temperature data for all of 2002 for each of the weather stations used for ozone temperatures.

The relative humidity data for modeling of ozone exceedance days were calculated from hourly airport observations that NYSDEC obtained from the National Climatic Data Center. Dew point observations for the same dates and locations that were used in temperature calculations were also used to determine hourly relative humidity values. NYSDEC uses actual recorded hourly values to more accurately model hourly emissions. In modeling annual emissions, an average daily absolute humidity value was calculated for each month of the year.

The Planning Division of the New York State Department of Transportation developed speed estimates for air quality modeling in 1994. Speeds were developed for 15 areas, some as small as a single county, throughout the state along with each of the 12 possible functional classes and 4 time periods. When modeling these speeds in Mobile6 the AVERAGE SPEED command was not used because it can only model a single speed for the entire day. The SPEED VMT command allows the modeling of different hourly speeds and was therefore chosen as the input format for New York State speeds.

The Fuel Program command was used to specify an RFG fuel program for the 9-county New York Metropolitan Area. All other counties were modeled for a conventional gasoline fuel program. The Stage II Refueling program began for the NYMA area in 1989. However, refueling emissions are not included as part of the mobile source inventory, rather they are included in the area source component.

The Mobile6 Anti-Tampering Program command is used to specify the emission control devise (ECD) program in effect in New York State. The anti-tampering program is applicable statewide to all gasoline-powered vehicles during the annual safety/emissions inspection. An additional gas cap presence check was added in 1999.

The Mobile6 I/M Program command is used to specify the Inspection/Maintenance programs in effect in New York State.

The LEV 2 phase-in schedules were created using a spreadsheet to solve for the NMOG standard for each model year using the various motor vehicle certification standards, or "bins." The LEV 2 program is based on each vehicle class meeting an NMOG standard for each model year. This standard can be met using any combination of LEV 2 bins the manufacturer desires.

DEC's Mobile6 modeling demonstration estimated VOC and NOx reductions for a NYVIP-only program in NYMA against EPA's HEPS. Modeling comparisons were completed for the 2009, 2010, and 2011 ozone seasons. The HEPS evaluation included the +/- 0.02 gpm emission level margin provided by Section 51.351(f)(13). While Mobile6 reports gpm emission levels to the thousandths place, the calculated differences between the future NYVIP program and HEPS were rounded to the hundredths place to reflect the +/-0.02 gpm margin. CO reductions are included for demonstration purposes. The summary of the multi-year modeling evaluation is found under Table 5.

TABLE 5 : NYVIP-Only High Enhanced I/M Performance Standard Comparison
Future Ozone Seasons

		VMT (1,000's)	VOC (g/mi)	CO (g/mi)	NOx (g/mi)
2009	Target	212,776.18	0.576	5.149	0.842
	NYVIP		0.606	5.446	0.857
			(0.03)	**(0.30)**	**(0.02)**
2010	Target	216,180.83	0.520	4.807	0.750
	NYVIP		0.547	5.072	0.766
			(0.03)	**(0.27)**	**(0.02)**
2011	Target	219,585.48	0.474	4.526	0.670
	NYVIP		0.495	4.739	0.684
			(0.02)	**(0.21)**	**(0.01)**

Mobile6 indicates that the NYVIP I/M program alone can not meet EPA's HEPS in either the 2009 or 2010 ozone seasons (June 1-September 30), but does for 2011 ozone season (i.e., prior to June 1). DEC proposes that tailpipe testing be discontinued on December 31, 2010. This is the best date between the 2010 and 2011 ozone seasons to implement regulatory and inspection software based changes. The Mobile6 modeling runs applicable to this demonstration are included within Appendix E.

C. Rate of Progress / Reasonable Further Progress Demonstration

On February 8, 2008, the Department submitted an eight-hour ozone NAAQS attainment demonstration SIP revision for NYMA. The projection inventories in the eight-hour ozone attainment demonstration account for the end of tailpipe emissions inspections (NYTEST) on December 31, 2010, and the beginning of the NYVIP only I/M program beginning on January 1, 2011. Therefore, there is no loss in emission reductions in the eight-hour ozone SIP related to the end of the tailpipe emissions inspections, since the enhanced I/M program modeling assumptions are the same for this I/M SIP revision and the NYMA eight-hour ozone attainment demonstration SIP revision.

The approved NYMA one-hour ozone SIP (67 FR 5170, February 4, 2002) does not include inventory projections beyond the original attainment year of 2007. Therefore, the NYMA one-hour ozone SIP also does not account for the end of tailpipe emissions testing on December 31, 2010. The Department must assure that any loss of emission reductions from programs adopted within the approved NYMA one-hour SIP be substituted with emission reductions from other measures not included within the NYMA one-hour ozone SIP. In addition, since NYMA has not yet measured attainment of the former one-hour ozone NAAQS, the Department needs to demonstrate it is achieving a rate of progress of 3 percent VOC reductions per year. The critical year for this test is 2011, which represents the first year that tailpipe emissions testing will not be required. Here, potential changes in tailpipe I/M reductions are the greatest as the largest number of vehicles are affected during the first year.

TABLE 6 : NYVIP-Only High Enhanced I/M Performance Standard Comparison
2011 Ozone Season, in tons per day (tpd)

		VMT (1,000's)	VOC (tpd)	NOx (tpd)
2011	Target	219,585.48	114.49	161.83
	NYVIP		119.56	165.22
			(5.07)	(3.39)

The Department has adopted, or will adopt, several control measures to reduce ozone precursor emissions that were not contemplated within the NYMA one-hour ozone SIP. These include:

Adhesives and Sealants (Parts 228 and 235)
Consumer Products (Part 235)
Asphalt Paving (Part 211)
CAIR NOx Ozone Season Trading Program (Part 243)

These programs, when combined, reduce emissions in the NYMA by a total greater than 12 tons VOC and 8 tons NOx per ozone season day. The Department estimates that the gains from these control programs more than offset the projected loss of reductions caused by ending the NYTEST I/M program (Table 6).

The Department is also including a demonstration to show that New York meets its obligation for reasonable further progress (or rate of progress, ROP) under Section 110(l) of the Clean Air Act for NYMA. The NYMA one-hour SIP is based on the 1990 base year inventory. Nationally, the base year has been replaced with the 2002 base year inventory for air quality planning purposes. The Department will use the current 2002 base year inventory, which was used in the development of the eight-hour ozone SIP, to demonstrate ROP compliance.

The 2002 - 2008 One-hour Ozone ROP Plan

The 2008 ROP demonstration must provide at least an 18 percent reduction in the New York-N. New Jersey-Long Island, NY-NJ-CT non-attainment area from the 2002 base year anthropogenic VOC emissions. This percent reduction is calculated from the adjusted baseline inventory that excludes: the emissions reduction benefits of the January 1, 1990 Federal Motor Vehicle Control Program (FMVCP), the June 11, 1990 federal RVP requirements of 9.0 psi, and the post-1990 "fix-up" of pre-1990 RACT rules and/or motor vehicle inspection programs. EPA's document entitled "Guidance on the Adjusted Base Year Emissions Inventory and the Target for the 15 Percent Rate-of-Progress Plans," dated October 1992, provided the guidance for calculating the adjusted base year inventory and the 2008 target level of emissions. The target level of emissions for 2008 is the maximum amount of anthropogenic VOC emissions within the non-attainment area permitted to occur.

2008 Target Level VOC Emissions

Calculations of the 18 percent VOC reductions and the 2008 target level of emissions are summarized in the following steps:

Step 1: The compilation of the base year inventory for VOC emissions in the New York-N. New Jersey-Long Island, NY-NJ-CT non-attainment area, including biogenic emissions.

Step 2: The biogenic emissions were removed to develop the 2002 ROP base year anthropogenic emission inventory.

Step 3: The adjusted base year inventory was developed by removing the non-creditable FMVCP. Following EPA supplemental guidance, the Department also assumed the gasoline to have an RVP of 9.0 psi. The post-1990 RACT "fix-up" requirements were previously met and surpassed with the implementation of RACT statewide as required by CAA Section 184(b)(1)(B); therefore, the adjustment for this in 2002 is zero.

Step 4: The adjusted baseline inventory (Step 3) was multiplied by 0.82 to identify the required 2008 VOC emissions to demonstrate ROP.

Step 5: The 2008 VOC projection inventory, which includes emission growth and controls, was compared to the required 2008 VOC emissions target level to demonstrate ROP (Step 4).

The total VOC reduction needed to demonstrate the 18% ROP requirement is the difference between the 2008 projected base case emission (without controls) and the 2008 target emission level. If the 2008 VOC projection inventory is less than the 2008 VOC ROP target level, then ROP is met. For the New York State portion of the New York-N. New Jersey-Long Island, NY-NJ-CT non-attainment area, the calculations are as follows:

Step 1: 2002 Base Year VOC Inventory (tpd)

Point (Non-EGU)	11.2
EGU	2.7
Area	473.8
Non-Road	283.5
On-Road	236.8
Biogenic	204.4
Total	1212.5

Step 2: 2002 Base Year Anthropogenic VOC Inventory (tpd)

Point (Non-EGU)	11.2
EGU	2.7
Area	473.8
Non-Road	283.5
On-Road	236.8
Total	1008.0

Step 3: Remove 2008 VOC Federal Motor Vehicle Control Program (FMVCP)

Suffolk County	7.3 tpd
Nassau County	5.2 tpd
Queens County	4.1 tpd
Kings County	2.6 tpd
Richmond County	0.9 tpd
New York County	4.7 tpd
Bronx County	2.0 tpd
Westchester County	4.4 tpd
Rockland County	1.3 tpd
Total	32.5 tpd

2002 Adjusted Base Year Anthropogenic VOC Inventory

1008.0 - 32.5 = 975.5 tpd

Step 4: Calculate 2008 Projected VOC Emissions to Demonstrate ROP

975.5x 0.82 = 799.9 tpd

Step 5: Compare 2008 Projected VOC Anthropogenic Emissions Inventory to 2008 Projected VOC Emissions to Demonstrate ROP

2008 Projected VOC Emissions Anthropogenic Inventory (tpd)

Point (Non-EGU)	13.2
EGU	2.5
Area	418.8
Non-Road	214.9
On-Road	148.9
Total	798.3

The comparison of the 2008 Projected VOC Anthropogenic Emissions Inventory to 2008 Projected VOC Emissions to Demonstrate ROP shows that reasonable further progress is met with VOC emission reductions alone. The Department has exceeded the 2008 ROP requirement by 1.6 tpd. However, to meet the contingency requirement (see below), 0.3% reductions must come from VOC measures (2.9 tpd, 975.5 x 0.003) so 2.9 tpd are being held back in this calculation to use for the contingency requirement. Consequently, there is a VOC shortfall of 1.3 tpd to demonstrate ROP. The Department is relying on the substitution of NOx reductions to meet the ROP requirement.

2008 NO_x Reductions

The following calculations and charts demonstrate NO_x reductions projected though 2008:

2002 Base Year Anthropogenic NO_x Inventory (tpd)

Point (Non-EGU)	50.9
EGU	117.6
Area	78.3
Non-Road	178.5
On-Road	327.3
Total	752.6

Remove 2008 NOx FMVCP

Suffolk County	7.5 tpd
Nassau County	4.9 tpd
Queens County	4.0 tpd
Kings County	2.5 tpd
Richmond County	1.1 tpd
New York County	2.6 tpd
Bronx County	2.0 tpd
Westchester County	4.7 tpd
Rockland County	1.4 tpd
Total	30.7 tpd

2002 Adjusted Base Year Anthropogenic NO_x Inventory (tpd)

752.6 - 30.7 = 721.9 tpd

2008 Projected NO_x Emissions Anthropogenic Inventory (tpd)

Point (Non-EGU)	65.0
EGU	108.9
Area	76.7
Non-Road	161.5
On-Road	211.8
Total	623.9

The New York State portion of the New York-N. New Jersey-Long Island, NY-NJ-CT non-attainment area is projected to realize a 98.0 tpd (13.6 percent) reduction in NO_x emissions between 2002 and 2008.

Contingency Measures

CAA Section 172(c)(9) requires the state to adopt specific contingency measures that will take effect without further action by the state or EPA if the state fails to achieve its ROP requirements.

In order to demonstrate compliance with the contingency measures provision applicable to the attainment demonstration, the Department has opted to include measures that have been, or will be, adopted for its contingency measures for the New York State portion of the New York-N. New Jersey-Long Island, NY-NJ-CT non-attainment area.

EPA requires that the contingency measures identified by the State must be sufficient to secure an additional 3 percent reduction in ozone precursor emissions in the year following the year in which the failure has been identified.

For the New York State portion of the New York-N. New Jersey-Long Island, NY-NJ-CT non-attainment area, the Department needs to show that it has secured an additional 29.3 tpd (0.03 x 975.5) reduction of VOC, or an equivalent combination of VOC and NO_x. EPA requires at least 0.3 percent out of every reduction of 3 percent be attributable to a reduction in VOC measures. This equates to a total of 2.9 tpd (0.003 x 975.5). As stated in the ROP section above, 2.9 tpd were held to meet this contingency requirement.

Therefore, the 2008 ROP contingency requirement is met through the 2.9 tpd VOC and 19.3 tpd NOx (of the available 98.0 tpd) reduced beyond the 18 percent ROP requirement. The 19.3 tpd NOx reduction was calculated using EPA's "NOx Substitution Guidance" dated December 1993 on a percentage to percentage basis (721.9 x (29.0 – 2.9) / 975.5).

The 2002 - 2011 One-hour Ozone ROP Plan

The 2011 ROP demonstration requires an additional 9 percent anthropogenic VOC emission reduction in the New York State portion of the New York- N. New Jersey-Long Island, NY-NJ-CT non-attainment area between 2008 and 2011. This accounts for a total anthropogenic VOC emission reduction of 27 percent from 2002 base year anthropogenic VOC emissions.

2011 Target Level VOC Emissions

The calculation of the 27 percent VOC reductions and the 2011 level of emissions are summarized in the following steps below:

Step 1: The compilation of the base year inventory for VOC emissions in the New York-N. New Jersey-Long Island, NY-NJ-CT non-attainment area, including biogenic emissions.

Step 2: The biogenic emissions were removed to develop the 2002 ROP base year anthropogenic emission inventory.

Step 3: The adjusted base year inventory was developed by removing the non-creditable FMVCP. Following EPA supplemental guidance, the Department also assumed the gasoline to have an RVP of 9.0 psi. The post-1990 RACT "fix-up" requirements were met previously and surpassed with the implementation of RACT statewide as required by CAA Section 184(b)(1)(B), therefore, the adjustment for this in 2002 is zero.

Step 4: The adjusted baseline inventory (Step 3) was multiplied by 0.73 to identify the required 2011 VOC emissions to demonstrate ROP.

Step 5: The 2011 VOC projection inventory, which includes emission growth and controls, was compared to the required 2011 VOC emissions target level to demonstrate ROP (Step 4).

The total VOC reduction needed to demonstrate the 27 percent ROP requirement is the difference between the 2011 projected base case emission (without controls) and the 2011 target emission level. If the 2011 VOC projection inventory is less than the 2011 VOC ROP target level, then ROP is met. For New York-N. New Jersey-Long Island, NY-NJ-CT, the calculations are as follows:

Step 1: 2002 Base Year VOC Inventory (tpd)

Point (Non-EGU)	11.2
EGU	2.7
Area	473.8
Non-Road	283.5
On-Road	236.8
Biogenic	204.4
Total	1212.5

Step 2: 2002 Base Year Anthropogenic VOC Inventory (tpd)

Point (Non-EGU)	11.2
EGU	2.7
Area	473.8
Non-Road	283.5
On-Road	236.8
Total	1008.0

Step 3: Remove 2011 VOC FMVCP

Suffolk County	9.1 tpd
Nassau County	6.6 tpd
Queens County	5.1 tpd
Kings County	3.2 tpd
Richmond County	1.2 tpd
New York County	5.5 tpd
Bronx County	2.4 tpd
Westchester County	5.3 tpd
Rockland County	1.6 tpd
Total	40.0 tpd

2002 Adjusted Base Year Anthropogenic VOC Inventory (tpd)

1008.0 - 40.0 = 968.0 tpd

Step 4: Calculate 2011 Projected VOC Emissions to Demonstrate ROP

968.0 x 0.73 = 706.6 tpd

Step 5: Compare 2011 Projected VOC Anthropogenic Emissions Inventory to 2011 Projected VOC Emissions to Demonstrate ROP

2011 Projected VOC Emissions Anthropogenic Inventory (tpd)

Point (Non-EGU)	13.7
EGU	2.5
Area	411.4
Non-Road	191.7
On-Road	120.9
Total	740.2

The comparison of the 2011 Projected VOC Anthropogenic Emissions Inventory to 2011 Projected VOC Emissions to demonstrate ROP shows that there is a 33.6 tpd shortfall to demonstrate ROP through 2011. To meet the contingency requirement (see below), 0.3% reductions must come from VOC measures (2.9 tpd, or 968.0 x .003) so 2.9 tpd are being held back in this calculation to use for the contingency requirement. Consequently, the VOC shortfall to demonstrate ROP is 36.5 tpd. The Department is relying on the substitution of NO_x reductions

to meet the ROP requirement since air quality modeling has shown that NOx reductions are critical to the ability to reduce ozone levels and demonstrate attainment in the New York- N. New Jersey-Long Island, NY-NJ-CT non-attainment area.

2011 NO_x Reductions

The following calculations and charts demonstrate the NO_x reductions that are projected though 2011.

2002 Base Year Anthropogenic NO_x Inventory (tpd)

Point (Non-EGU)	50.9
EGU	117.6
Area	78.3
Non-Road	178.5
On-Road	327.3
Total	752.6

Remove 2011 NOx FMVCP

Suffolk County	8.2 tpd
Nassau County	5.5 tpd
Queens County	4.3 tpd
Kings County	2.6 tpd
Richmond County	1.1 tpd
New York County	2.7 tpd
Bronx County	2.1 tpd
Westchester County	5.3 tpd
Rockland County	1.5 tpd
Total	33.3 tpd

2002 Adjusted Base Year Anthropogenic NO_x Inventory (tpd)

752.6 - 33.3 = 719.3 tpd

2011 Projected NO_x Emissions Anthropogenic Inventory (tpd)

Point (Non-EGU)	64.1
EGU	108.9
Area	77.1
Non-Road	149.9
On-Road	163.8
Total	563.8

The New York portion of the New York-N. New Jersey- Long Island, NY-NJ-CT non-attainment area is projected to realize a 155.5 tpd (21.6 percent) reduction in NO_x emissions between 2002 and 2011.

In order to make the 2011 ROP demonstration, 27.1 tpd NOx of the available 155.5 tpd total NOx reduction must be used, leaving a net reduction of 128.4 tpd NOx beyond the 27 percent ROP requirement. The 27.1 tpd NOx reduction was calculated using EPA's "NOx Substitution Guidance" dated December 1993 on a percentage to percentage basis (719.3 x 36.5 / 968).

Contingency Measures

CAA Section 172(c)(9) requires the state to adopt specific contingency measures that will take effect without further action by the state or EPA if the State fails to achieve its ROP requirements.

In order to demonstrate compliance with the contingency measures provision applicable to the attainment demonstration, the Department has opted to include measures that have been or will be adopted for its contingency measures for the New York State portion of the New York-N. New Jersey-Long Island, NY-NJ-CT non-attainment area.

EPA requires that the contingency measures identified by the state must be sufficient to secure an additional 3 percent reduction in ozone precursor emissions in the year following the year in which the failure has been identified.

For a non-attainment area that fails to meet ROP percent reduction requirements, and where it has been demonstrated that NO_x controls are needed to attain the primary NAAQS for ozone, measures that produce a combination of NO_x and VOC reductions may serve as contingency measures.

For the New York State portion of the New York-N. New Jersey-Long Island, NY-NJ-CT non-attainment area, the Department needs to show that it has secured an additional 29.0 tpd (0.03 x 968.0) reduction of VOC, or an equivalent combination of VOC and NO_x.

EPA requires at least 0.3 percent out of every reduction of 3 percent be attributable to a reduction in VOC measures. This equates to a total of 2.9 tpd VOC (968.0 x 0.003). As stated in the ROP section above, 2.9 tpd were held to meet this contingency requirement.

Therefore, the 2011 ROP contingency requirement is met through the 2.9 tpd VOC and 19.4 tpd NOx (of the available 128.4 tpd) reduced beyond the 27 percent ROP requirement. The 19.4 tpd NOx reduction was calculated using EPA's "NOx Substitution Guidance" dated December 1993 on a percentage to percentage basis (719.3 x (29.0 - 2.9) / 968).

Conclusion

The Department meets its legal obligations under Section 110(l) of the Clean Air Act to assure that a SIP revision will not interfere with applicable requirements concerning attainment and reasonable further progress (ROP). The Department has shown that ending tailpipe emissions inspections through the NYTEST I/M program will not result in significant reductions of emissions benefits as contemplated within the approved NYMA one-hour ozone attainment demonstration SIP. The Department has also shown that the loss of emission reductions resulting from the end of the tailpipe emissions inspections are

more than compensated for by additional programs that have been adopted or are soon to be adopted. Since the New York-N. New Jersey-Long Island, NY-NJ-CT non-attainment area has not yet measured air quality showing attainment with the former one-hour NAAQS, the Department has demonstrated that it will continue to meet the Section 181(b)(4) reasonable further progress requirements of the Clean Air Act. In other words, the Department has met its obligation to demonstrate that its control programs will result in continuing emission reductions to offset potential losses due to ending tailpipe emissions inspections while still meeting the 3 percent per annum reasonable further progress requirements.

D. NYVIP (OBD II) I/M Program Effectiveness Demonstration

The 1990 Amendments to the Clean Air Act required the EPA to develop federally enforceable guidance for I/M programs. EPA established performance standards for I/M programs under 40 CFR Part 51 in 1992. The baseline NYMA high enhanced performance standard was premised upon annual testing through a centralized test-only network. The model program also included the use of IM240 tailpipe testing and pressure and purge evaporative testing. Section 51.353 initially established a default 50% discount for decentralized I/M programs. In November 1995, Congress passed the National Highway Systems Designation Act which rescinded the default 50% discount, and instead allowed decentralized programs to claim up to 100% of the SIP credit for a comparable centralized program.

In October 1998, EPA published the guidance document, "Inspection and Maintenance (I/M) Program Effectiveness Methodologies." This document adopted the "Sierra Method" as the approved evaluation method. An additional remote sensing method was subsequently finalized in July 2004 as "Guidance on Use of Remote Sensing for Evaluation of I/M Program Performance." These two methods represent the current federal guidance for use by states to demonstrate network program effectiveness. As described in greater detail below, DEC believes that these methods are not practical for I/M areas with a tailpipe emissions testing history that have more recently transitioned into OBD II testing - such as NYMA.

As an overview, the Sierra Method employs the use of the Mobile Model to compare a state's alternative tailpipe testing program to Arizona's centralized test-only I/M program. Arizona's I/M program was selected as it was considered by EPA's guidance as the most similar to EPA's high enhanced performance standard model. Weighted average emissions results from an alternate network could then be compared against similar metrics of the Arizona program after adjustments (i.e., local factors). NYVIP, like most recently adopted I/M programs, does not include a tailpipe testing component. As such, the Sierra Method can not be applied to any OBD-only I/M program.

The Remote Sensing method relies upon characterizing fleet emissions obtained through remote sensing studies. One option proposes that remote sensing data be obtained prior to the implementation of the I/M program. A comparison would then be possible following another round of remote sensing data collection after the I/M program has been in operation. A second remote sensing option is to compare the subject I/M area to a similar geographic area that does not have an I/M program. New York implemented its first NYMA I/M program in 1981 which precludes the use of any pre-I/M remote sensing. Similarly, there is no similar non-I/M area in the eastern United States that has the fleet characteristics of the New York Metropolitan Area. For these reasons, the remote sensing method is considered inappropriate for a NYVIP effectiveness determination.

New York has completed and will continue to conduct program evaluation efforts as required by §51.353(c). These efforts, however, can not provide a quantitative (i.e., numeric) test-and-repair effectiveness for the NYVIP program. This Section of the SIP revision was prepared to support New York's claim that the NYVIP program is equivalent to an otherwise comparable OBD centralized I/M program. New York has identified four general program enhancements to serve as the basis for claiming 100% test-and-repair credit for NYVIP:

- Program Manager Network Design
- System Integrity/Enhanced Enforcement
- Training/Certification
- Inspector and Motorist Information

1. Program Manager Network Design

A Single Equipment Provider - Three equipment providers were certified for the NYTEST tailpipe testing I/M program. Drawbacks to this multi-vendor approach include the incompatibility of equipment parts among the providers, extended reviews involving multiple versions of I/M software, and variability in equipment purchase and service costs.

Conversely, the NYVIP "program manager" design is limited to a single equipment supplier. Any software changes require the review and approval of only a single software version. Once approved by DEC/DMV, any NYVIP facility that does not load revised software within 45 days is suspended from further testing until the update is loaded. As the result of a single provider, New York State has increased control over software and has resulted in improved program operation.

Improved Equipment Operation and Maintenance - Under the NYTEST program, obligations associated with equipment maintenance resided in private contracts between the inspection stations and the NYTEST equipment providers. Service contracts were not required or regulated by the State, so stations could choose to either purchase an annual maintenance contract or to pay for service only when needed.

Operation of the NYTEST equipment requires daily leak checks and weekly gas calibrations, which in turn, required stations to purchase calibration gases. With the NYVIP program, all maintenance costs are absorbed through per call transaction fees. There is no need for a private service contract or for stations to pay for any repairs (except for gross negligence).

The NYVIP contractor, SGS TESTCOM (TESTCOM), is required to maintain a technical service hotline to assist in the maintenance of all statewide OBD II equipment. The majority of service needs are met by replacing the problem device, which avoids the higher costs and time-intensive practice of sending technicians to conduct repairs. In most cases, maintenance needs are fulfilled by simply mailing replacement items directly to the stations overnight.

Help Desk - TESTCOM is contractually responsible for all phases of equipment and service. Their obligations include all activities associates with equipment sales, delivery, and maintenance. TESTCOM is required to operate a Help Desk for station owners and inspectors to call should they encounter any equipment problems. The Help Desk is staffed during the principal periods of operation and can handle inquiries regarding enrollment, purchasing equipment, warranty problems, and billing questions. The phone number is toll-free from any part of the State. Through the Help Desk, service and parts can be dispatched, equipment problems diagnosed, and TESTCOM personnel can communicate with the affected NYVIP unit. The NYTEST program does not offer similar functions.

Figure 3.1 below is an example of a TESTCOM Help Desk transaction related to a broken printer. Additional examples can be found in Appendix A.

FIGURE 3.1: TESTCOM Help Desk Transaction

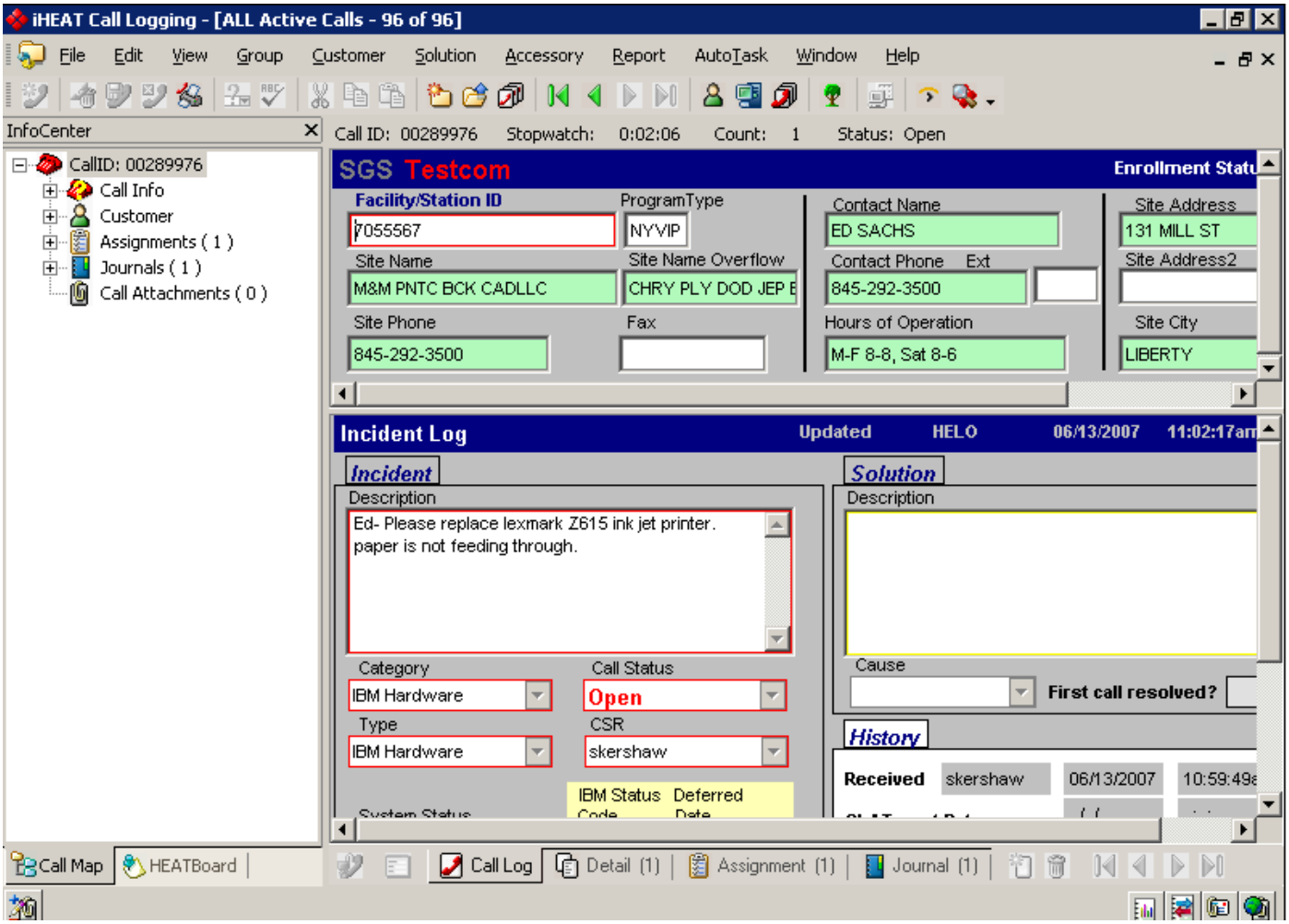


Table 7 below is an example of a typical summary of monthly TESTCOM Help Desk calls.

TABLE 7 : Typical Monthly Help Desk Call Summary

All Calls for the Period 05/01/2007-05/31/2007

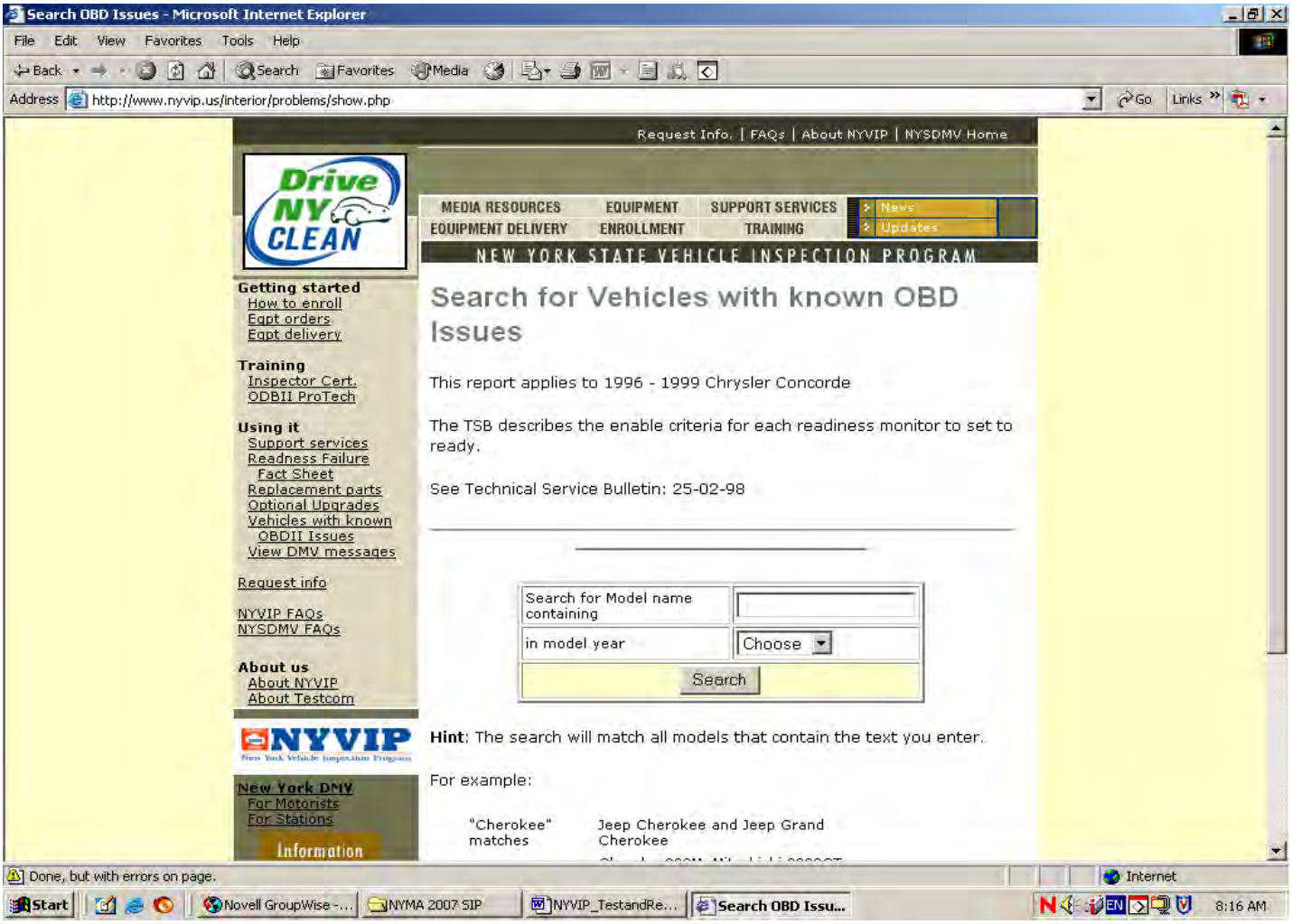
410 Dial-In	8	0.16%	OBDII-Fails Diags.	67	1.30%
Address or Set-Up	1	0.02%	OBDII-Gen. Ques.	26	0.51%
Balance Inquiry	88	1.71%	OBDII-Locked Out	400	7.79%
Bar Code Scanner	41	0.80%	OBDII-No Communication	52	1.01%
Billing Question	84	1.64%	OBDII-Pick Up	31	0.60%
Can't Communicate	88	1.71%	Order	94	1.83%
Certification Question	4	0.08%	Order Question	40	0.78%
Change Enrollment	278	5.41%	Paper Problem	20	0.39%
Collection Issue	9	0.18%	Payment Issue	28	0.55%
Computer	14	0.27%	Printer Dial-in	25	0.49%
Dunning Letter	108	2.10%	Printer Pick-Up/Tracking	31	0.60%
. Enrollment	75	1.46%	Printer Set-up	167	3.25%
. Enrollment Question	64	1.25%	Printer-Gen. Ques.	40	0.78%
Equipment Abuse	105	2.04%	Printer-User Error	6	0.12%
ESP issue	14	0.27%	Procedural	319	6.21%
Facility Info Dial-In	14	0.27%	Re-image Dial-in	1	0.02%
. Fire Damage	1	0.02%	Referred by DMV	4	0.08%
Flood Damage	1	0.02%	Referred to DMV	201	3.91%
. Floppy Disk	70	1.36%	Refund Issue	3	0.06%
. Floppy Disk Dial-In	10	0.19%	Reports / Reprint	13	0.25%
Initialization/setup	132	2.57%	Snap-on Issue	5	0.10%
. Ink Cartridge Problem	24	0.47%	Software Lock out	7	0.14%
. Inspector ID	63	1.23%	Sticker Dial-in	8	0.16%
Jammed Queue	83	1.62%	Sticker Question	156	3.04%
. Misc. AR	1	0.02%	Supervisor Call Back	12	0.23%
. Modem	8	0.16%	Transfer Pending	85	1.65%
Monitor	7	0.14%	Upstate Question	61	1.19%
Mouse	1	0.02%			

Website - A website devoted singularly to NYVIP I/M is required by the contract with TESTCOM, and can be found at: www.nyvip.us. Figure 3.2 below is the current main page developed by DMV, DEC, and TESTCOM.

FIGURE 3.2 : NYVIP Website Main Page

Of particular interest, the website provides valuable and readily accessible information to motorists, inspectors, and repair technicians. The Departments periodically provide TESTCOM with updated information related to "Vehicles with Known OBD problems." This has proven to be very helpful for inspectors and repair technicians when problems are encountered. Figure 3.3 below depicts the example where a 1996 Chrysler Concorde query was completed and a Technical Service Bulletin (TSB) related to readiness monitors was found.

FIGURE 3.3 : NYVIP Website – Search for Vehicles with Known OBD Problems



The NYTEST program does not have a website or a similar mechanism to provide direct vehicle information to motorists, inspectors, or inspection stations.

2. System Integrity/Enhanced Enforcement

Inspection Record Modifications to Augment Auditing - DMV, DEC, and TESTCOM have developed a variety of queries used to compare key data elements within the vehicle inspection record to quickly identify questionable inspections. These queries are routinely completed monthly, but are more frequently run on demand by individual State auditors. Depending on the issue, records are directed to DMV Clean Air field staff to determine if there are equipment issues or if a inspector requires refresher training, while other issues are directed to the six DMV (Vehicle Safety) Regions for investigation and possible enforcement action.

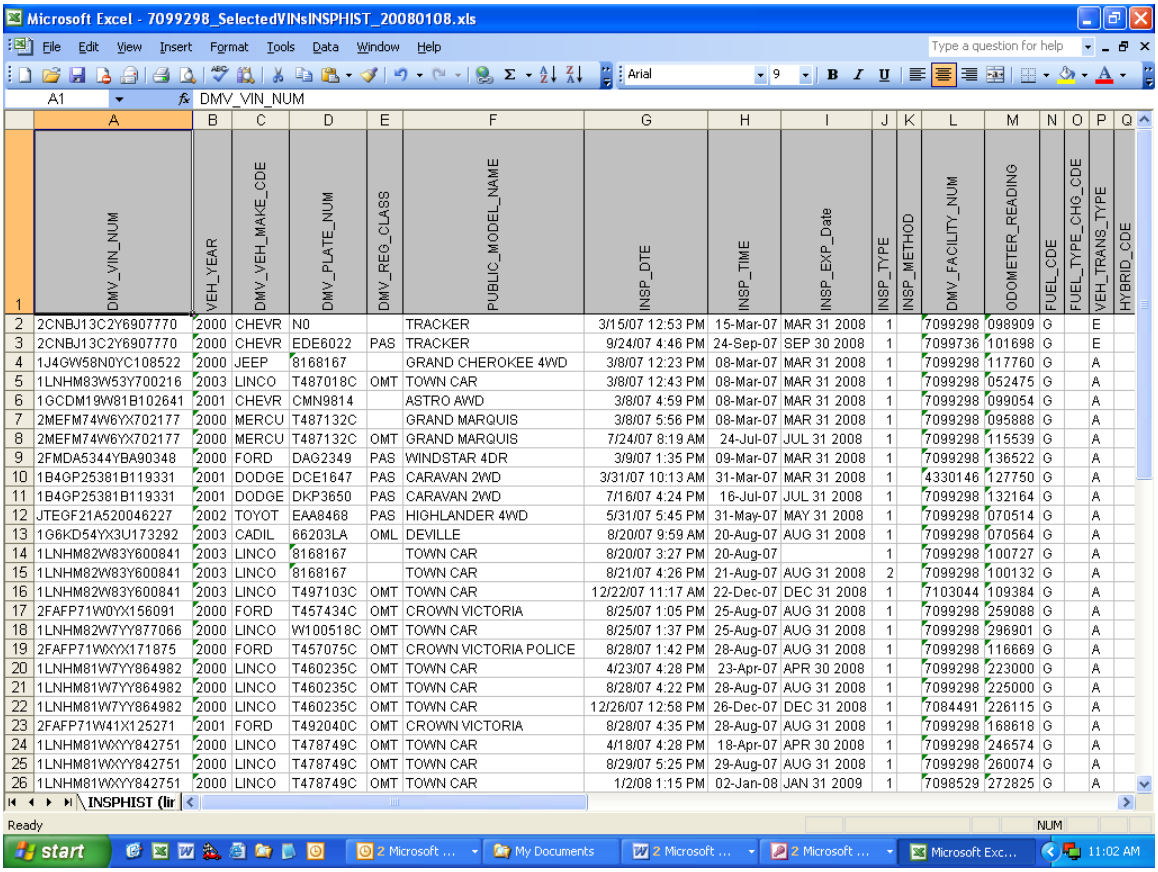
NYVIP File Format and DMV Query Reports**:** Descriptions of following DMV reports are described below:

- INSPHIST Formatted Data Pull/Report
- FRAUD Format Data Pull/Report
- FRAUD6 Format Data Pull/Report
- Concealed Investigation Format Data Pull/Report
- Facility Waiver Rate Report
- Waiver Repair Data Pull/Report
- Archived Records
- GC (Golden Cadillac) Report
- VIN Data Pull/Report (modified Title)
- Certified Inspector Dups (Duplicates) Data Pull/Report
- OBD Data Pull/Report (modified Title)
- Electronic Signature Report
- NYVIP No Comm Report
- Audit/CI Report

The ability to evaluate large volumes of inspection data without human observation is critical to the success of NYVIP enforcement efforts. In cases, this SIP revision provides a limited summary of a particular query design, as providing additional detail could be used to hinder State auditing practices. The majority of these reports were developed with the express purpose of identifying potentially fraudulent activities. The titles of some reports have also been modified to avoid disclosure of specific audit parameters.

■ The INSPHIST Formatted Data Pull/Report contains, depending upon vehicle and inspection types, up to 97 items of information (fields). These reports are exported as an Excel file from the NYVIP database. Data fields are reported in the same order as the "INSPHIST" inspection record file saved within each station's NYVIP unit. The INSPHIST inspection record is DMV's official NYVIP inspection record and verifies record inception and integrity. It provides the most comprehensive listing of available vehicle inspection information. This report can be used as supporting documentation in administrative actions and for record scrutiny. It provides details of all aspects of the inspection such as facility, inspector, vehicle, safety, and emission inspection (OBD) results. Reports are generated based on the search criteria selected, which can include vehicle identification number, plate number, facility number, certified inspector number, and/or date. DMV Vehicle Safety staff has direct access to the "INSPHIST Formatted Data Pull/Report" or may request it from the DMV Vehicle Safety Data Services as needed.

FIGURE 3.4 : INSPHIST Formatted Data Pull/Report



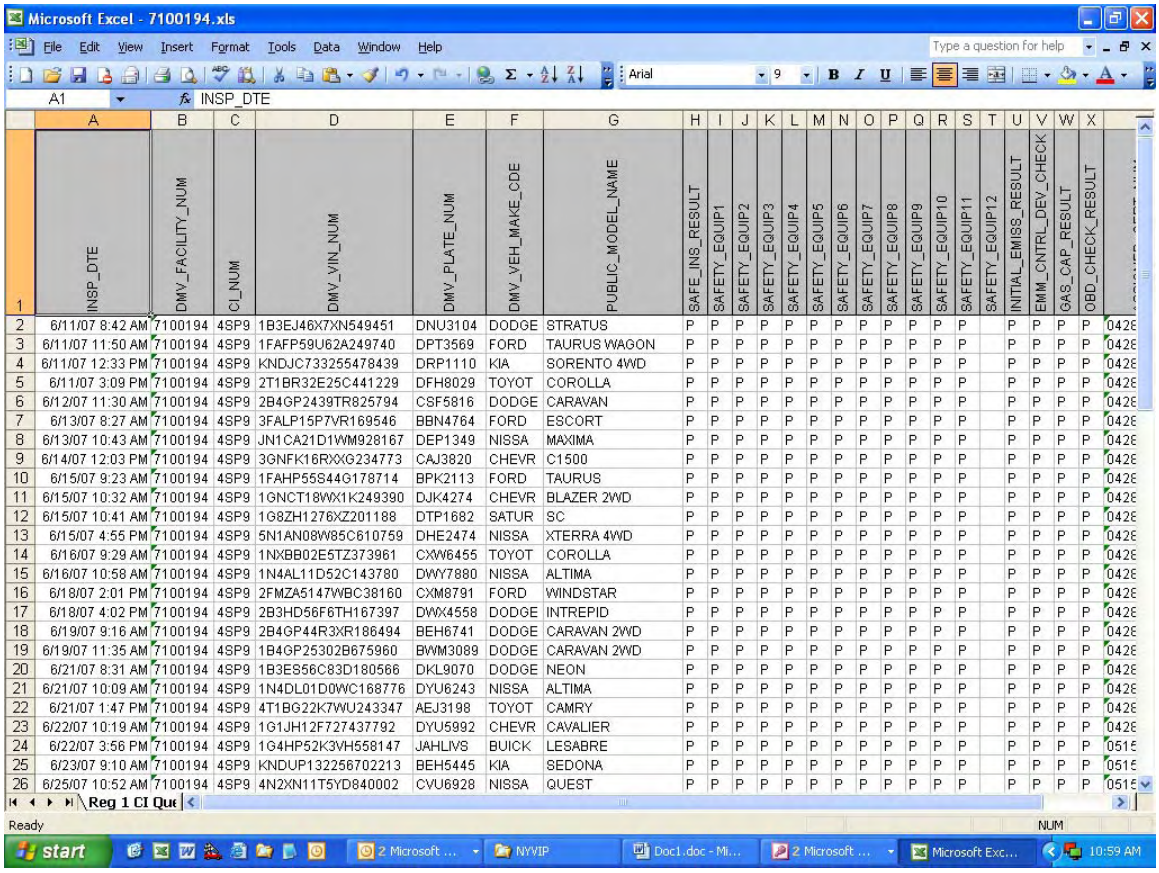
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	DMV_VIN_NUM	VEH_YEAR	DMV_VEH_MAKE_CDE	DMV_PLATE_NUM	DMV_REG_CLASS	PUBLIC_MODEL_NAME	INSP_DTE	INSP_TIME	INSP_EXP_Date	INSP_TYPE	INSP_METHOD	DMV_FACILITY_NUM	ODOMETER_READING	FUEL_CDE	FUEL_TYPE_CHG_CDE	VEH_TRANS_TYPE	HYBRID_CDE
2	2CNBJ13C2Y6907770	2000	CHEVR	N0		TRACKER	3/15/07 12:53 PM	15-Mar-07	MAR 31 2008	1		7099298	098909	G		E	
3	2CNBJ13C2Y6907770	2000	CHEVR	EDE6022	PAS	TRACKER	9/24/07 4:46 PM	24-Sep-07	SEP 30 2008	1		7099736	101698	G		E	
4	1J4GW58N0YC108522	2000	JEEP	8168167		GRAND CHEROKEE 4WD	3/8/07 12:23 PM	08-Mar-07	MAR 31 2008	1		7099298	117760	G		A	
5	1LNHM83W53Y700216	2003	LINCO	T487018C	OMT	TOWN CAR	3/8/07 12:43 PM	08-Mar-07	MAR 31 2008	1		7099298	052475	G		A	
6	1GCDM19W81B102641	2001	CHEVR	CMN9814		ASTRO AWD	3/8/07 4:59 PM	08-Mar-07	MAR 31 2008	1		7099298	099054	G		A	
7	2MEFM74W6YX702177	2000	MERCU	T487132C		GRAND MARQUIS	3/8/07 5:56 PM	08-Mar-07	MAR 31 2008	1		7099298	095888	G		A	
8	2MEFM74W6YX702177	2000	MERCU	T487132C	OMT	GRAND MARQUIS	7/24/07 8:19 AM	24-Jul-07	JUL 31 2008	1		7099298	115539	G		A	
9	2FMDA5344YBA90348	2000	FORD	DAG2349	PAS	WINDSTAR 4DR	3/9/07 1:35 PM	09-Mar-07	MAR 31 2008	1		7099298	136522	G		A	
10	1B4GP25381B119331	2001	DODGE	DCE1647	PAS	CARAVAN 2WD	3/31/07 10:13 AM	31-Mar-07	MAR 31 2008	1		4330146	127750	G		A	
11	1B4GP25381B119331	2001	DODGE	DKP3650	PAS	CARAVAN 2WD	7/16/07 4:24 PM	16-Jul-07	JUL 31 2008	1		7099298	132164	G		A	
12	JTEGF21A520046227	2002	TOYOT	EAA8468	PAS	HIGHLANDER 4WD	5/31/07 5:45 PM	31-May-07	MAY 31 2008	1		7099298	070514	G		A	
13	1G6KD54YX3U173292	2003	CADIL	66203LA	OML	DEVILLE	8/20/07 9:59 AM	20-Aug-07	AUG 31 2008	1		7099298	070564	G		A	
14	1LNHM82W83Y600841	2003	LINCO	8168167		TOWN CAR	8/20/07 3:27 PM	20-Aug-07		1		7099298	100727	G		A	
15	1LNHM82W83Y600841	2003	LINCO	8168167		TOWN CAR	8/21/07 4:26 PM	21-Aug-07	AUG 31 2008	2		7099298	100132	G		A	
16	1LNHM82W83Y600841	2003	LINCO	T497103C	OMT	TOWN CAR	12/22/07 11:17 AM	22-Dec-07	DEC 31 2008	1		7103044	109384	G		A	
17	2FAFP71W0YX156091	2000	FORD	T457434C	OMT	CROWN VICTORIA	8/25/07 1:05 PM	25-Aug-07	AUG 31 2008	1		7099298	259088	G		A	
18	1LNHM82W7YY877066	2000	LINCO	W100518C	OMT	TOWN CAR	8/25/07 1:37 PM	25-Aug-07	AUG 31 2008	1		7099298	296901	G		A	
19	2FAFP71WXYX171875	2000	FORD	T457075C	OMT	CROWN VICTORIA POLICE	8/28/07 1:42 PM	28-Aug-07	AUG 31 2008	1		7099298	116669	G		A	
20	1LNHM81W7YY864982	2000	LINCO	T460235C	OMT	TOWN CAR	4/23/07 4:28 PM	23-Apr-07	APR 30 2008	1		7099298	223000	G		A	
21	1LNHM81W7YY864982	2000	LINCO	T460235C	OMT	TOWN CAR	8/28/07 4:22 PM	28-Aug-07	AUG 31 2008	1		7099298	225000	G		A	
22	1LNHM81W7YY864982	2000	LINCO	T460235C	OMT	TOWN CAR	12/26/07 12:58 PM	26-Dec-07	DEC 31 2008	1		7084491	226115	G		A	
23	2FAFP71W41X125271	2001	FORD	T492040C	OMT	CROWN VICTORIA	8/28/07 4:35 PM	28-Aug-07	AUG 31 2008	1		7099298	168618	G		A	
24	1LNHM81WXYY842751	2000	LINCO	T478749C	OMT	TOWN CAR	4/18/07 4:28 PM	18-Apr-07	APR 30 2008	1		7099298	246574	G		A	
25	1LNHM81WXYY842751	2000	LINCO	T478749C	OMT	TOWN CAR	8/29/07 5:25 PM	29-Aug-07	AUG 31 2008	1		7099298	260074	G		A	
26	1LNHM81WXYY842751	2000	LINCO	T478749C	OMT	TOWN CAR	1/2/08 1:15 PM	02-Jan-08	JAN 31 2009	1		7098529	272825	G		A	

■ The FRAUD Format Data Pull/Report contains, depending upon vehicle and inspection types, up to 29 items of information (fields) per record. These reports are exported as an Excel file from the NYVIP database. This report contains vehicle, facility, inspector, and OBD II information/data with the focus on the vehicle's electronic signature. Electronic or digital signatures are several fields of electronic information retrieved from the vehicle's on-board computer that uniquely identifies that vehicle. The reported fields are arranged to facilitate a record comparison of a vehicle's signature, thus simplifying the identification of fraudulent inspections, including "clean scanning." Clean scanning is the act of substituting a "clean" vehicle instead of the vehicle credited for the OBD inspection. Here, a valid inspection certificate would be authorized, but the NYVIP equipment never "communicated" with the vehicle listed within the inspection record. Audit staff uses this query to identify or verify clean scans, and query results are used as supporting documentation in these cases. Records are selected by entering either a VIN (vehicle identification number), plate number, facility number, certified inspector number, and/or date as the search criteria. DMV Vehicle Safety staff is provided direct access to the "FRAUD Format Data Pull/Report" or may request it from DMV Vehicle Safety Data Services as needed.

■ The FRAUD6 Format Data Pull/Report contains 11 items of information (fields) per record and is exported as an Excel file from the NYVIP database. This report contains facility, certified inspector, and specific vehicle information obtained during the OBD II inspection. The report is a condensed version of the "FRAUD Format Data Pull/Report" and focuses on the vehicle's registered VIN. It is used by DMV's Vehicle Safety inspectors to quickly identify possible clean scans, either in preparation for, or when conducting an inspection station program audit. Records are selected by entering either a vehicle identification number, plate number, facility number, certified inspector number, and/or date as the search criteria. DMV Vehicle Safety staff is provided direct access to the "FRAUD6 Format Data Pull/Report" or may request it from DMV Vehicle Safety Data Services as needed.

■ The Concealed Investigation Format Data Pull/Report contains, depending upon vehicle and inspection types, up to 33 items of information (fields) per record, and is exported as an Excel file from the NYVIP database. This report contains facility, inspector, and vehicle information along with the actual inspection results. This report is used to verify DMV's findings for a given inspection facility following a concealed investigation, and the report may also be used as supporting documentation in these cases. Records are generated based on the selections of facility number, plate number, and date as the search criteria. DMV Vehicle Safety staff is provided direct access to the "Concealed Investigation Format Data Pull / Report" or may request it from DMV Vehicle Safety Data Services as needed.

FIGURE 3.5 : Concealed Investigation Format Data Pull/Report

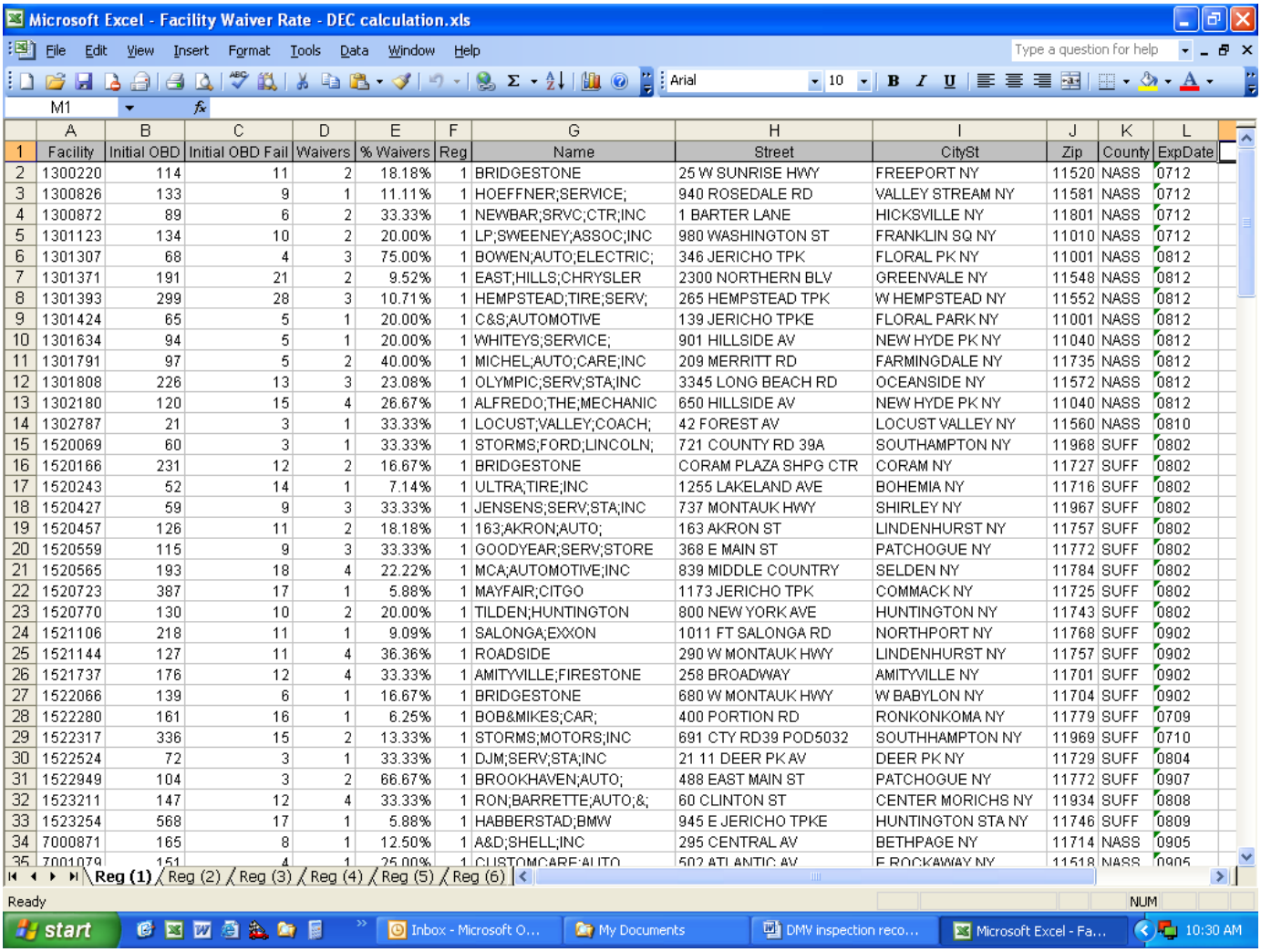


Microsoft Excel - 7100194.xls

	INSP_DTE	DMV_FACILITY_NUM	CI_NUM	DMV_VIN_NUM	DMV_PLATE_NUM	DMV_VEH_MAKE_CDE	PUBLIC_MODEL_NAME	SAFE_INS_RESULT	SAFETY_EQUIP1	SAFETY_EQUIP2	SAFETY_EQUIP3	SAFETY_EQUIP4	SAFETY_EQUIP5	SAFETY_EQUIP6	SAFETY_EQUIP7	SAFETY_EQUIP8	SAFETY_EQUIP9	SAFETY_EQUIP10	SAFETY_EQUIP11	SAFETY_EQUIP12	INITIAL_EMISS_RESULT	EMM_CNTRL_DEV_CHECK	GAS_CAP_RESULT	OBD_CHECK_RESULT
2	6/11/07 8:42 AM	7100194	4SP9	1B3EJ46X7XN549451	DNU3104	DODGE	STRATUS	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
3	6/11/07 11:50 AM	7100194	4SP9	1FAFP59U62A249740	DPT3569	FORD	TAURUS WAGON	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
4	6/11/07 12:33 PM	7100194	4SP9	KNDJC733255478439	DRP1110	KIA	SORENTO 4WD	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
5	6/11/07 3:09 PM	7100194	4SP9	2T1BR32E25C441229	DFH8029	TOYOT	COROLLA	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
6	6/12/07 11:30 AM	7100194	4SP9	2B4GP2439TR825794	CSF5816	DODGE	CARAVAN	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
7	6/13/07 8:27 AM	7100194	4SP9	3FALP15P7VR169546	BBN4764	FORD	ESCORT	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
8	6/13/07 10:43 AM	7100194	4SP9	JN1CA21D1WM928167	DEP1349	NISSA	MAXIMA	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
9	6/14/07 12:03 PM	7100194	4SP9	3GNFK16RXXG234773	CAJ3820	CHEVR	C1500	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
10	6/15/07 9:23 AM	7100194	4SP9	1FAHP55S44G178714	BPK2113	FORD	TAURUS	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
11	6/15/07 10:32 AM	7100194	4SP9	1GNCT18WX1K249390	DJK4274	CHEVR	BLAZER 2WD	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
12	6/15/07 10:41 AM	7100194	4SP9	1G8ZH1276XZ201188	DTP1682	SATUR	SC	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
13	6/15/07 4:55 PM	7100194	4SP9	5N1AN08W85C610759	DHE2474	NISSA	XTERRA 4WD	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
14	6/16/07 9:29 AM	7100194	4SP9	1NXBB02E5TZ373961	CXW6455	TOYOT	COROLLA	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
15	6/16/07 10:58 AM	7100194	4SP9	1N4AL11D52C143780	DWY7880	NISSA	ALTIMA	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
16	6/18/07 2:01 PM	7100194	4SP9	2FMZA5147WBC38160	CXM8791	FORD	WINDSTAR	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
17	6/18/07 4:02 PM	7100194	4SP9	2B3HD56F6TH167397	DWX4558	DODGE	INTREPID	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
18	6/19/07 9:16 AM	7100194	4SP9	2B4GP44R3XR186494	BEH6741	DODGE	CARAVAN 2WD	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
19	6/19/07 11:35 AM	7100194	4SP9	1B4GP25302B675960	BWM3089	DODGE	CARAVAN 2WD	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
20	6/21/07 8:31 AM	7100194	4SP9	1B3ES56C83D180566	DKL9070	DODGE	NEON	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
21	6/21/07 10:09 AM	7100194	4SP9	1N4DL01D0WC168776	DYU6243	NISSA	ALTIMA	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
22	6/21/07 1:47 PM	7100194	4SP9	4T1BG22K7WU243347	AEJ3198	TOYOT	CAMRY	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
23	6/22/07 10:19 AM	7100194	4SP9	1G1JH12F727437792	DYU5992	CHEVR	CAVALIER	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
24	6/22/07 3:56 PM	7100194	4SP9	1G4HP52K3VH558147	JAHLIVS	BUICK	LESABRE	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
25	6/23/07 9:10 AM	7100194	4SP9	KNDUP132256702213	BEH5445	KIA	SEDONA	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P
26	6/25/07 10:52 AM	7100194	4SP9	4N2XN11T5YD840002	CVU6928	NISSA	QUEST	P	P	P	P	P	P	P	P	P	P	P	P		P	P	P	P

■ The Facility Waiver Rate Report contains 12 items of information (fields) per row and is exported as an Excel file from the NYVIP database. This report calculates the waiver rate for NYVIP inspection stations for a given time period, and includes: the facility number, the number of initial OBD inspections, the number of failed initial OBD inspections, the calculated wavier rate percentage, DMV region, and facility name, address, county, and license expiration date. The calculated waiver rate percentage is determined by dividing the number of issued waivers by the number of initial OBD inspection failures for each station for the specified time period. DMV Vehicle Safety Data Services provides this report to Clean Air and Vehicle Safety field staff for the express purpose of targeting facilities with high waiver rates for program audits.

FIGURE 3.6 : Facility Waiver Rate Report



Microsoft Excel - Facility Waiver Rate - DEC calculation.xls

File Edit View Insert Format Tools Data Window Help

Type a question for help

Arial 10

M1

	A	B	C	D	E	F	G	H	I	J	K	L
1	Facility	Initial OBD	Initial OBD Fail	Waivers	% Waivers	Reg	Name	Street	CitySt	Zip	County	ExpDate
2	1300220	114	11	2	18.18%	1	BRIDGESTONE	25 W SUNRISE HWY	FREEPORT NY	11520	NASS	0712
3	1300826	133	9	1	11.11%	1	HOEFFNER;SERVICE;	940 ROSEDALE RD	VALLEY STREAM NY	11581	NASS	0712
4	1300872	89	6	2	33.33%	1	NEWBAR;SRVC;CTR;INC	1 BARTER LANE	HICKSVILLE NY	11801	NASS	0712
5	1301123	134	10	2	20.00%	1	LP;SWEENEY;ASSOC;INC	980 WASHINGTON ST	FRANKLIN SQ NY	11010	NASS	0712
6	1301307	68	4	3	75.00%	1	BOWEN;AUTO;ELECTRIC;	346 JERICHO TPK	FLORAL PK NY	11001	NASS	0812
7	1301371	191	21	2	9.52%	1	EAST;HILLS;CHRYSLER	2300 NORTHERN BLV	GREENVALE NY	11548	NASS	0812
8	1301393	299	28	3	10.71%	1	HEMPSTEAD;TIRE;SERV;	265 HEMPSTEAD TPK	W HEMPSTEAD NY	11552	NASS	0812
9	1301424	65	5	1	20.00%	1	C&S;AUTOMOTIVE	139 JERICHO TPKE	FLORAL PARK NY	11001	NASS	0812
10	1301634	94	5	1	20.00%	1	WHITEYS;SERVICE;	901 HILLSIDE AV	NEW HYDE PK NY	11040	NASS	0812
11	1301791	97	5	2	40.00%	1	MICHEL;AUTO;CARE;INC	209 MERRITT RD	FARMINGDALE NY	11735	NASS	0812
12	1301808	226	13	3	23.08%	1	OLYMPIC;SERV;STA;INC	3345 LONG BEACH RD	OCEANSIDE NY	11572	NASS	0812
13	1302180	120	15	4	26.67%	1	ALFREDO;THE;MECHANIC	650 HILLSIDE AV	NEW HYDE PK NY	11040	NASS	0812
14	1302787	21	3	1	33.33%	1	LOCUST;VALLEY;COACH;	42 FOREST AV	LOCUST VALLEY NY	11560	NASS	0810
15	1520069	60	3	1	33.33%	1	STORMS;FORD;LINCOLN;	721 COUNTY RD 39A	SOUTHAMPTON NY	11968	SUFF	0802
16	1520166	231	12	2	16.67%	1	BRIDGESTONE	CORAM PLAZA SHPG CTR	CORAM NY	11727	SUFF	0802
17	1520243	52	14	1	7.14%	1	ULTRA;TIRE;INC	1255 LAKELAND AVE	BOHEMIA NY	11716	SUFF	0802
18	1520427	59	9	3	33.33%	1	JENSENS;SERV;STA;INC	737 MONTAUK HWY	SHIRLEY NY	11967	SUFF	0802
19	1520457	126	11	2	18.18%	1	163;AKRON;AUTO;	163 AKRON ST	LINDENHURST NY	11757	SUFF	0802
20	1520559	115	9	3	33.33%	1	GOODYEAR;SERV;STORE	368 E MAIN ST	PATCHOGUE NY	11772	SUFF	0802
21	1520565	193	18	4	22.22%	1	MCA;AUTOMOTIVE;INC	839 MIDDLE COUNTRY	SELDEN NY	11784	SUFF	0802
22	1520723	387	17	1	5.88%	1	MAYFAIR;CITGO	1173 JERICHO TPK	COMMACK NY	11725	SUFF	0802
23	1520770	130	10	2	20.00%	1	TILDEN;HUNTINGTON	800 NEW YORK AVE	HUNTINGTON NY	11743	SUFF	0802
24	1521106	218	11	1	9.09%	1	SALONGA;EXXON	1011 FT SALONGA RD	NORTHPORT NY	11768	SUFF	0902
25	1521144	127	11	4	36.36%	1	ROADSIDE	290 W MONTAUK HWY	LINDENHURST NY	11757	SUFF	0902
26	1521737	176	12	4	33.33%	1	AMITYVILLE;FIRESTONE	258 BROADWAY	AMITYVILLE NY	11701	SUFF	0902
27	1522066	139	6	1	16.67%	1	BRIDGESTONE	680 W MONTAUK HWY	W BABYLON NY	11704	SUFF	0902
28	1522280	161	16	1	6.25%	1	BOB&MIKES;CAR;	400 PORTION RD	RONKONKOMA NY	11779	SUFF	0709
29	1522317	336	15	2	13.33%	1	STORMS;MOTORS;INC	691 CTY RD39 POD5032	SOUTHHAMPTON NY	11969	SUFF	0710
30	1522524	72	3	1	33.33%	1	DJM;SERV;STA;INC	21 11 DEER PK AV	DEER PK NY	11729	SUFF	0804
31	1522949	104	3	2	66.67%	1	BROOKHAVEN;AUTO;	488 EAST MAIN ST	PATCHOGUE NY	11772	SUFF	0907
32	1523211	147	12	4	33.33%	1	RON;BARRETTE;AUTO;&;	60 CLINTON ST	CENTER MORICHS NY	11934	SUFF	0808
33	1523254	568	17	1	5.88%	1	HABBERSTAD;BMW	945 E JERICHO TPKE	HUNTINGTON STA NY	11746	SUFF	0809
34	7000871	165	8	1	12.50%	1	A&D;SHELL;INC	295 CENTRAL AV	BETHPAGE NY	11714	NASS	0905
35	7001079	151	4	1	25.00%	1	CUSTOMCARE;AUTO	502 ATLANTIC AV	E ROCKAWAY NY	11518	NASS	0905

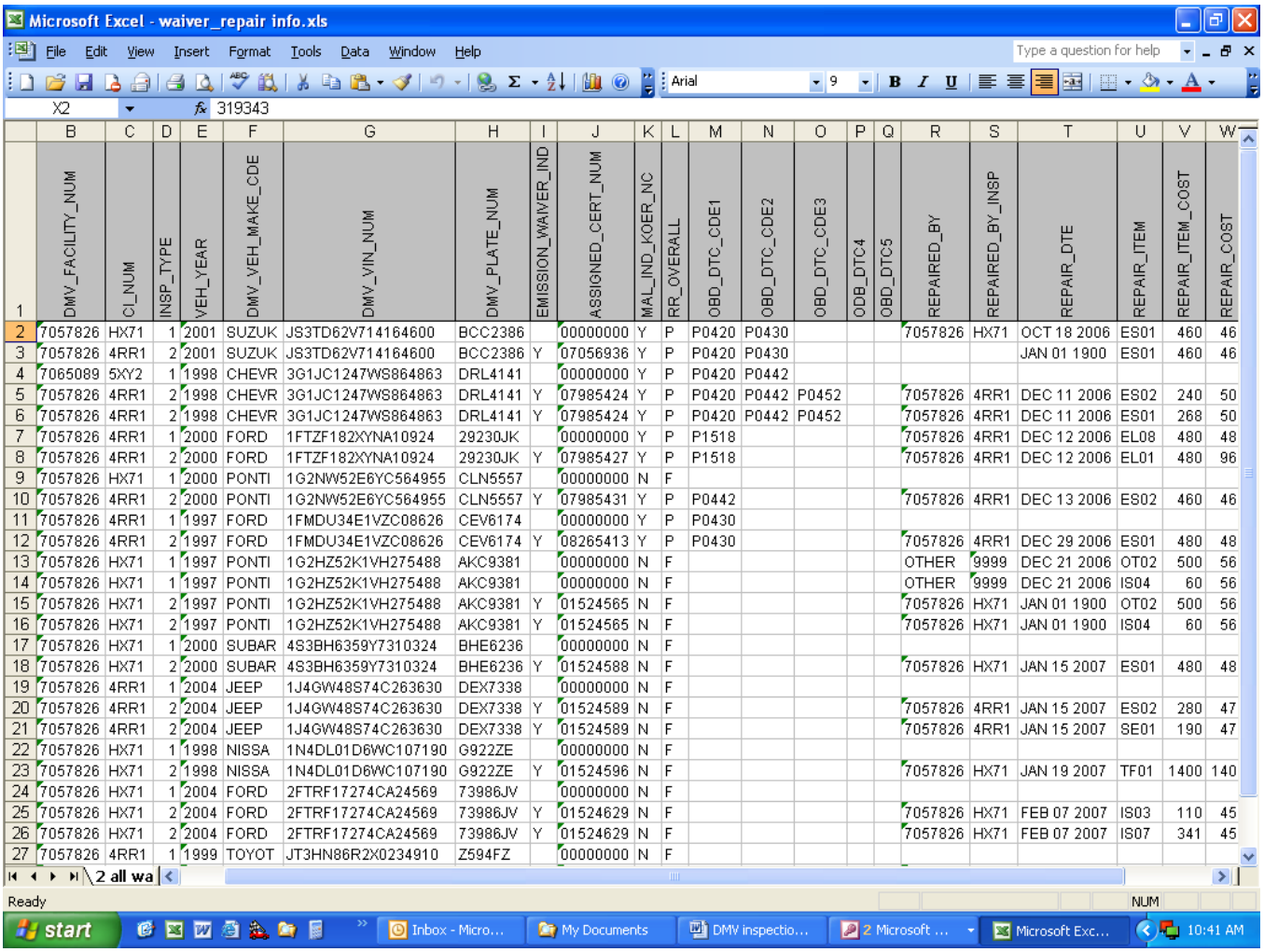
Reg (1) | Reg (2) | Reg (3) | Reg (4) | Reg (5) | Reg (6)

Ready NUM

start Inbox - Microsoft O... My Documents DMV inspection reco... Microsoft Excel - Fa... 10:30 AM

■ The Waiver Repair Data Pull/Report may contain, depending on vehicle and inspection types up to 24 items of information (fields) per record. These records are exported as an Excel file from the NYVIP database. This report contains facility, inspector, and vehicle information with the focus on repair information and the reason(s) why a waiver was issued (i.e., OBD II diagnostic trouble codes). Repair information may include: facility number where the repair was completed, inspector number, the qualifying repair item, cost of the repaired item, and the total amount of all repairs. This report is used to investigate facilities issuing potentially fraudulent or procedurally incorrect waivers. The report can also be used as a supporting documentation in these cases. Reports are generated based on selections for either a specific vehicle or facility by entering either a vehicle identification number, facility number and/or date as the search criteria. The "Waiver Repair Data Pull/Report" is available upon request from DMV Vehicle Safety Data Services.

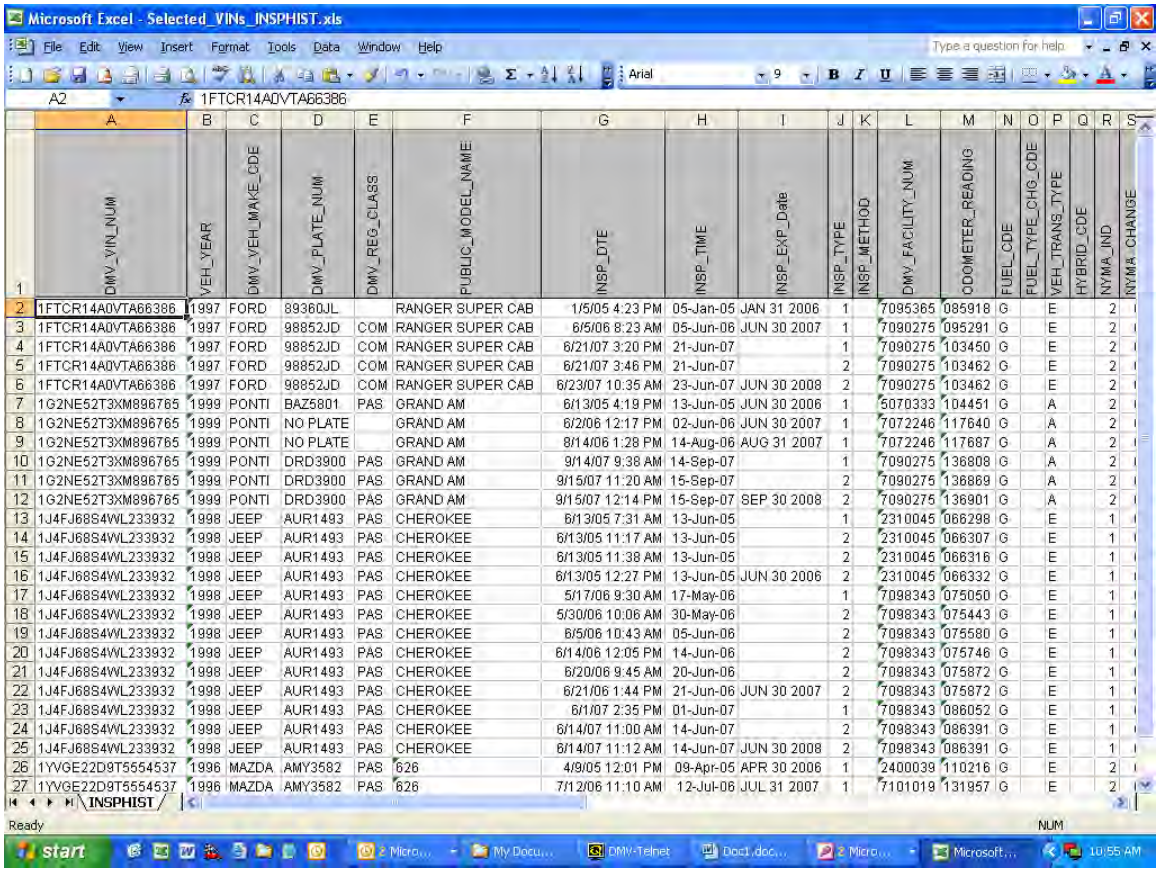
FIGURE 3.7 : Waiver Repair Data Pull/Report



	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	DMV_FACILITY_NUM	CI_NUM	INSP_TYPE	VEH_YEAR	DMV_VEH_MAKE_CDE	DMV_VIN_NUM	DMV_PLATE_NUM	EMISSION_WAIVER_IND	ASSIGNED_CERT_NUM	MAL_IND_KOER_NC	RR_OVERALL	OBD_DTC_CDE1	OBD_DTC_CDE2	OBD_DTC_CDE3	ODB_DTC4	OBD_DTC5	REPAIRED_BY	REPAIRED_BY_INSP	REPAIR_DTE	REPAIR_ITEM	REPAIR_ITEM_COST	REPAIR_COST
2	7057826	HX71	1	2001	SUZUK	JS3TD62V714164600	BCC2386		00000000	Y	P	P0420	P0430				7057826	HX71	OCT 18 2006	ES01	460	46
3	7057826	4RR1	2	2001	SUZUK	JS3TD62V714164600	BCC2386	Y	07056936	Y	P	P0420	P0430						JAN 01 1900	ES01	460	46
4	7065089	5XY2	1	1998	CHEVR	3G1JC1247WS864863	DRL4141		00000000	Y	P	P0420	P0442									
5	7057826	4RR1	2	1998	CHEVR	3G1JC1247WS864863	DRL4141	Y	07985424	Y	P	P0420	P0442	P0452			7057826	4RR1	DEC 11 2006	ES02	240	50
6	7057826	4RR1	2	1998	CHEVR	3G1JC1247WS864863	DRL4141	Y	07985424	Y	P	P0420	P0442	P0452			7057826	4RR1	DEC 11 2006	ES01	268	50
7	7057826	4RR1	1	2000	FORD	1FTZF182XYNA10924	29230JK		00000000	Y	P	P1518					7057826	4RR1	DEC 12 2006	EL08	480	48
8	7057826	4RR1	2	2000	FORD	1FTZF182XYNA10924	29230JK	Y	07985427	Y	P	P1518					7057826	4RR1	DEC 12 2006	EL01	480	96
9	7057826	HX71	1	2000	PONTI	1G2NW52E6YC564955	CLN5557		00000000	N	F											
10	7057826	4RR1	2	2000	PONTI	1G2NW52E6YC564955	CLN5557	Y	07985431	Y	P	P0442					7057826	4RR1	DEC 13 2006	ES02	460	46
11	7057826	4RR1	1	1997	FORD	1FMDU34E1VZC08626	CEV6174		00000000	Y	P	P0430										
12	7057826	4RR1	2	1997	FORD	1FMDU34E1VZC08626	CEV6174	Y	08265413	Y	P	P0430					7057826	4RR1	DEC 29 2006	ES01	480	48
13	7057826	HX71	1	1997	PONTI	1G2HZ52K1VH275488	AKC9381		00000000	N	F						OTHER	9999	DEC 21 2006	OT02	500	56
14	7057826	HX71	1	1997	PONTI	1G2HZ52K1VH275488	AKC9381		00000000	N	F						OTHER	9999	DEC 21 2006	IS04	60	56
15	7057826	HX71	2	1997	PONTI	1G2HZ52K1VH275488	AKC9381	Y	01524565	N	F						7057826	HX71	JAN 01 1900	OT02	500	56
16	7057826	HX71	2	1997	PONTI	1G2HZ52K1VH275488	AKC9381	Y	01524565	N	F						7057826	HX71	JAN 01 1900	IS04	60	56
17	7057826	HX71	1	2000	SUBAR	4S3BH6359Y7310324	BHE6236		00000000	N	F											
18	7057826	HX71	2	2000	SUBAR	4S3BH6359Y7310324	BHE6236	Y	01524588	N	F						7057826	HX71	JAN 15 2007	ES01	480	48
19	7057826	4RR1	1	2004	JEEP	1J4GW48S74C263630	DEX7338		00000000	N	F											
20	7057826	4RR1	2	2004	JEEP	1J4GW48S74C263630	DEX7338	Y	01524589	N	F						7057826	4RR1	JAN 15 2007	ES02	280	47
21	7057826	4RR1	2	2004	JEEP	1J4GW48S74C263630	DEX7338	Y	01524589	N	F						7057826	4RR1	JAN 15 2007	SE01	190	47
22	7057826	HX71	1	1998	NISSA	1N4DL01D6WC107190	G922ZE		00000000	N	F											
23	7057826	HX71	2	1998	NISSA	1N4DL01D6WC107190	G922ZE	Y	01524596	N	F						7057826	HX71	JAN 19 2007	TF01	1400	140
24	7057826	HX71	1	2004	FORD	2FTRF17274CA24569	73986JV		00000000	N	F											
25	7057826	HX71	2	2004	FORD	2FTRF17274CA24569	73986JV	Y	01524629	N	F						7057826	HX71	FEB 07 2007	IS03	110	45
26	7057826	HX71	2	2004	FORD	2FTRF17274CA24569	73986JV	Y	01524629	N	F						7057826	HX71	FEB 07 2007	IS07	341	45
27	7057826	4RR1	1	1999	TOYOT	JT3HN86R2X0234910	Z594FZ		00000000	N	F											

■ Archived Records are available in the INSPHIST Formatted Data Pull/Report or FRAUD Format Data Pull/Report versions and are usually run for a specific vehicle. Inspection records are archived after 12-to 13 months. DMV Vehicle Safety staff may wish to view the past year's inspection record(s) or all NYVIP records for a vehicle to establish an electronic signature for supporting evidence in clean scan cases. DMV Vehicle Safety staff may also use archive records or inspection history to address suspected vehicle problems arising from consumer or facility complaints.

FIGURE 3.8 : Archived Records



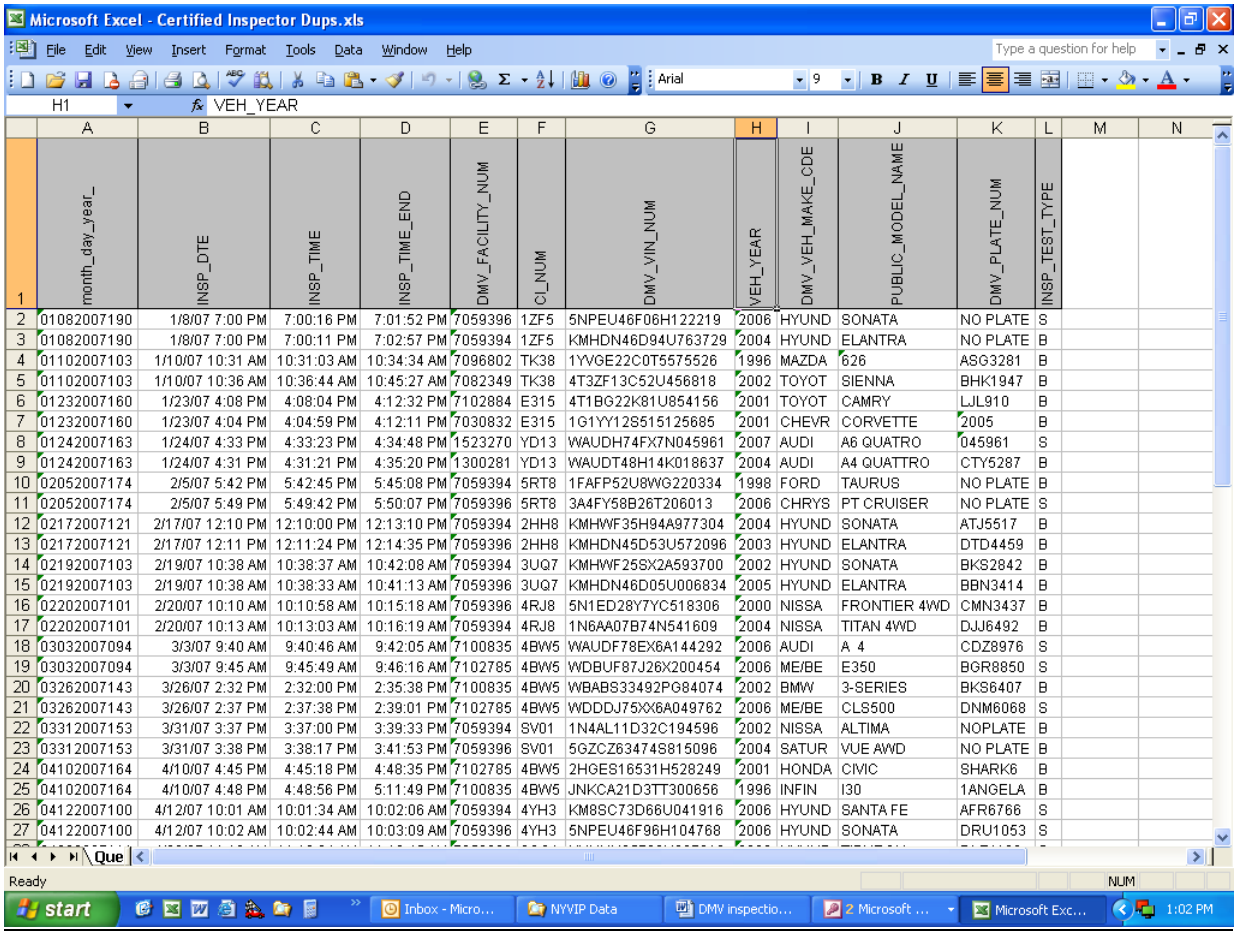
	DMV_VIN_NUM	VEH_YEAR	DMV_VEH_MAKE_CDE	DMV_PLATE_NUM	DMV_REG_CLASS	PUBLIC_MODEL_NAME	INSP_DTE	INSP_TIME	INSP_EXP_Date	INSP_TYPE	INSP_METHOD	DMV_FACILITY_NUM	ODOMETER_READING	FUEL_CDE	FUEL_TYPE_CHG_CDE	VEH_TRANS_TYPE	HYBRID_CDE	NYMA_IND	NYMA_CHANGE
2	1FTCR14A0VTA66386	1997	FORD	89360JL		RANGER SUPER CAB	1/5/05 4:23 PM	05-Jan-05	JAN 31 2006	1		7095365	085918	G		E		2	
3	1FTCR14A0VTA66386	1997	FORD	98852JD	COM	RANGER SUPER CAB	6/5/06 8:23 AM	05-Jun-06	JUN 30 2007	1		7090275	095291	G		E		2	
4	1FTCR14A0VTA66386	1997	FORD	98852JD	COM	RANGER SUPER CAB	6/21/07 3:20 PM	21-Jun-07		1		7090275	103450	G		E		2	
5	1FTCR14A0VTA66386	1997	FORD	98852JD	COM	RANGER SUPER CAB	6/21/07 3:46 PM	21-Jun-07		2		7090275	103462	G		E		2	
6	1FTCR14A0VTA66386	1997	FORD	98852JD	COM	RANGER SUPER CAB	6/23/07 10:35 AM	23-Jun-07	JUN 30 2008	2		7090275	103462	G		E		2	
7	1G2NE52T3XM896765	1999	PONTI	BAZ5801	PAS	GRAND AM	6/13/05 4:19 PM	13-Jun-05	JUN 30 2006	1		5070333	104451	G		A		2	
8	1G2NE52T3XM896765	1999	PONTI	NO PLATE		GRAND AM	6/2/06 12:17 PM	02-Jun-06	JUN 30 2007	1		7072246	117640	G		A		2	
9	1G2NE52T3XM896765	1999	PONTI	NO PLATE		GRAND AM	8/14/06 1:28 PM	14-Aug-06	AUG 31 2007	1		7072246	117687	G		A		2	
10	1G2NE52T3XM896765	1999	PONTI	DRD3900	PAS	GRAND AM	9/14/07 9:38 AM	14-Sep-07		1		7090275	136808	G		A		2	
11	1G2NE52T3XM896765	1999	PONTI	DRD3900	PAS	GRAND AM	9/15/07 11:20 AM	15-Sep-07		2		7090275	136869	G		A		2	
12	1G2NE52T3XM896765	1999	PONTI	DRD3900	PAS	GRAND AM	9/15/07 12:14 PM	15-Sep-07	SEP 30 2008	2		7090275	136901	G		A		2	
13	1J4FJ68S4WL233932	1998	JEEP	AUR1493	PAS	CHEROKEE	6/13/05 7:31 AM	13-Jun-05		1		2310045	066298	G		E		1	
14	1J4FJ68S4WL233932	1998	JEEP	AUR1493	PAS	CHEROKEE	6/13/05 11:17 AM	13-Jun-05		2		2310045	066307	G		E		1	
15	1J4FJ68S4WL233932	1998	JEEP	AUR1493	PAS	CHEROKEE	6/13/05 11:38 AM	13-Jun-05		2		2310045	066316	G		E		1	
16	1J4FJ68S4WL233932	1998	JEEP	AUR1493	PAS	CHEROKEE	6/13/05 12:27 PM	13-Jun-05	JUN 30 2006	2		2310045	066332	G		E		1	
17	1J4FJ68S4WL233932	1998	JEEP	AUR1493	PAS	CHEROKEE	5/17/06 9:30 AM	17-May-06		1		7098343	075050	G		E		1	
18	1J4FJ68S4WL233932	1998	JEEP	AUR1493	PAS	CHEROKEE	5/30/06 10:06 AM	30-May-06		2		7098343	075443	G		E		1	
19	1J4FJ68S4WL233932	1998	JEEP	AUR1493	PAS	CHEROKEE	6/5/06 10:43 AM	05-Jun-06		2		7098343	075580	G		E		1	
20	1J4FJ68S4WL233932	1998	JEEP	AUR1493	PAS	CHEROKEE	6/14/06 12:05 PM	14-Jun-06		2		7098343	075746	G		E		1	
21	1J4FJ68S4WL233932	1998	JEEP	AUR1493	PAS	CHEROKEE	6/20/06 9:45 AM	20-Jun-06		2		7098343	075872	G		E		1	
22	1J4FJ68S4WL233932	1998	JEEP	AUR1493	PAS	CHEROKEE	6/21/06 1:44 PM	21-Jun-06	JUN 30 2007	2		7098343	075872	G		E		1	
23	1J4FJ68S4WL233932	1998	JEEP	AUR1493	PAS	CHEROKEE	6/1/07 2:35 PM	01-Jun-07		1		7098343	086052	G		E		1	
24	1J4FJ68S4WL233932	1998	JEEP	AUR1493	PAS	CHEROKEE	6/14/07 11:00 AM	14-Jun-07		2		7098343	086391	G		E		1	
25	1J4FJ68S4WL233932	1998	JEEP	AUR1493	PAS	CHEROKEE	6/14/07 11:12 AM	14-Jun-07	JUN 30 2008	2		7098343	086391	G		E		1	
26	1YVGE22D9T5554537	1996	MAZDA	AMY3582	PAS	626	4/9/05 12:01 PM	09-Apr-05	APR 30 2006	1		2400039	110216	G		E		2	
27	1YVGE22D9T5554537	1996	MAZDA	AMY3582	PAS	626	7/12/06 11:10 AM	12-Jul-06	JUL 31 2007	1		7101019	131957	G		E		2	

■ VIN Mismatch Data Pull /Reports can contain either 10 or 34 items of information (fields) per record. These reports are exported as an Excel file from the NYVIP database. The reports contain facility, inspector, and vehicle information, and list all inspection records by inspection station with potential VIN issues. This report is used to review a facility's inspection activity, identify possible clean scans for investigation, and can be used as a supporting document in enforcement cases. Records are selected by entering a facility number and date as the search criteria. DMV Vehicle Safety staff is provided direct access to the VIN Mismatch Data Pull/Report or may request it from DMV Vehicle Safety Data Services as needed.

■ The GC (Golden Cadillac) Report is queried from the NYVIP database by Access and contains 9 items of information (fields) per record including: facility, vehicle, inspector, and VIN information. It was originally written to identify inspection stations suspected of clean scanning by identifying the same "donor vehicle" for multiple inspections. This report is used to review a facility's inspection activity, identify possible clean scans for investigation, and as supporting documentation in these cases. Records are selected by entering a facility number and date as the search criteria. DMV Vehicle Safety staff is provided direct access to the "GC Report" or may request it from DMV Vehicle Safety Data Services as needed.

■ The Certified Inspector Dups (Duplicates) Data Pull/Report contains 12 items of information (fields) per inspection record. There reports are exported as Excel files from the NYVIP database. This report locates certified inspectors performing vehicle inspections at different facilities where their inspection times overlap and/or are within 10 minutes of each other. This report contains facility, vehicle, and inspector information as well as inspection start and end times. DMV's Vehicle Safety staff use this report to locate unauthorized use and/or misuse of a certified inspector's card and can be used as supporting documentation. Records are selected by entering a date range as the search criteria. DMV Vehicle Safety staff is provided direct access to the "Certified Inspector Dups Data Pull/Report" or may request it from DMV Vehicle Safety Data Services as needed.

FIGURE 3.9 : Certified Inspector Dups (Duplicates) Data Pull/Report



	A	B	C	D	E	F	G	H	I	J	K	L
1	month_day_year_	INSP_DTE	INSP_TIME	INSP_TIME_END	DMV_FACILITY_NUM	CI_NUM	DMV_VIN_NUM	VEH_YEAR	DMV_VEH_MAKE_CDE	PUBLIC_MODEL_NAME	DMV_PLATE_NUM	INSP_TEST_TYPE
2	01082007190	1/8/07 7:00 PM	7:00:16 PM	7:01:52 PM	7059396	1ZF5	5NPEU46F06H122219	2006	HYUND	SONATA	NO PLATE	S
3	01082007190	1/8/07 7:00 PM	7:00:11 PM	7:02:57 PM	7059394	1ZF5	KMHDN46D94U763729	2004	HYUND	ELANTRA	NO PLATE	B
4	01102007103	1/10/07 10:31 AM	10:31:03 AM	10:34:34 AM	7096802	TK38	1YVGE22C0T5575526	1996	MAZDA	626	ASG3281	B
5	01102007103	1/10/07 10:36 AM	10:36:44 AM	10:45:27 AM	7082349	TK38	4T3ZF13C52U456818	2002	TOYOT	SIENNA	BHK1947	B
6	01232007160	1/23/07 4:08 PM	4:08:04 PM	4:12:32 PM	7102884	E315	4T1BG22K81U854156	2001	TOYOT	CAMRY	LJL910	B
7	01232007160	1/23/07 4:04 PM	4:04:59 PM	4:12:11 PM	7030832	E315	1G1YY12S515125685	2001	CHEVR	CORVETTE	2005	B
8	01242007163	1/24/07 4:33 PM	4:33:23 PM	4:34:48 PM	1523270	YD13	WAUDH74FX7N045961	2007	AUDI	A6 QUATRO	045961	S
9	01242007163	1/24/07 4:31 PM	4:31:21 PM	4:35:20 PM	1300281	YD13	WAUDT48H14K018637	2004	AUDI	A4 QUATTRO	CTY5287	B
10	02052007174	2/5/07 5:42 PM	5:42:45 PM	5:45:08 PM	7059394	5RT8	1FAFP52U8WG220334	1998	FORD	TAURUS	NO PLATE	B
11	02052007174	2/5/07 5:49 PM	5:49:42 PM	5:50:07 PM	7059396	5RT8	3A4FY58B26T206013	2006	CHRYS	PT CRUISER	NO PLATE	S
12	02172007121	2/17/07 12:10 PM	12:10:00 PM	12:13:10 PM	7059394	2HH8	KMHWF35H94A977304	2004	HYUND	SONATA	ATJ5517	B
13	02172007121	2/17/07 12:11 PM	12:11:24 PM	12:14:35 PM	7059396	2HH8	KMHDN45D53U572096	2003	HYUND	ELANTRA	DTD4459	B
14	02192007103	2/19/07 10:38 AM	10:38:37 AM	10:42:08 AM	7059394	3UQ7	KMHWF25SX2A593700	2002	HYUND	SONATA	BKS2842	B
15	02192007103	2/19/07 10:38 AM	10:38:33 AM	10:41:13 AM	7059396	3UQ7	KMHDN46D05U006834	2005	HYUND	ELANTRA	BBN3414	B
16	02202007101	2/20/07 10:10 AM	10:10:58 AM	10:15:18 AM	7059396	4RJ8	5N1ED28Y7YC518306	2000	NISSA	FRONTIER 4WD	CMN3437	B
17	02202007101	2/20/07 10:13 AM	10:13:03 AM	10:16:19 AM	7059394	4RJ8	1N6AA07B74N541609	2004	NISSA	TITAN 4WD	DJJ6492	B
18	03032007094	3/3/07 9:40 AM	9:40:46 AM	9:42:05 AM	7100835	4BW5	WAUDF78EX6A144292	2006	AUDI	A 4	CDZ8976	S
19	03032007094	3/3/07 9:45 AM	9:45:49 AM	9:46:16 AM	7102785	4BW5	WDBUF87J26X200454	2006	ME/BE	E350	BGR8850	S
20	03262007143	3/26/07 2:32 PM	2:32:00 PM	2:35:38 PM	7100835	4BW5	WBABS33492PG84074	2002	BMW	3-SERIES	BKS6407	B
21	03262007143	3/26/07 2:37 PM	2:37:38 PM	2:39:01 PM	7102785	4BW5	WDDDJ75XX6A049762	2006	ME/BE	CLS500	DNM6068	S
22	03312007153	3/31/07 3:37 PM	3:37:00 PM	3:39:33 PM	7059394	SV01	1N4AL11D32C194596	2002	NISSA	ALTIMA	NOPLATE	B
23	03312007153	3/31/07 3:38 PM	3:38:17 PM	3:41:53 PM	7059396	SV01	5GZCZ63474S815096	2004	SATUR	VUE AWD	NO PLATE	B
24	04102007164	4/10/07 4:45 PM	4:45:18 PM	4:48:35 PM	7102785	4BW5	2HGES16531H528249	2001	HONDA	CIVIC	SHARK6	B
25	04102007164	4/10/07 4:48 PM	4:48:56 PM	5:11:49 PM	7100835	4BW5	JNKCA21D3TT300656	1996	INFIN	I30	1ANGELA	B
26	04122007100	4/12/07 10:01 AM	10:01:34 AM	10:02:06 AM	7059394	4YH3	KM8SC73D66U041916	2006	HYUND	SANTA FE	AFR6766	S
27	04122007100	4/12/07 10:02 AM	10:02:44 AM	10:03:09 AM	7059396	4YH3	5NPEU46F96H104768	2006	HYUND	SONATA	DRU1053	S

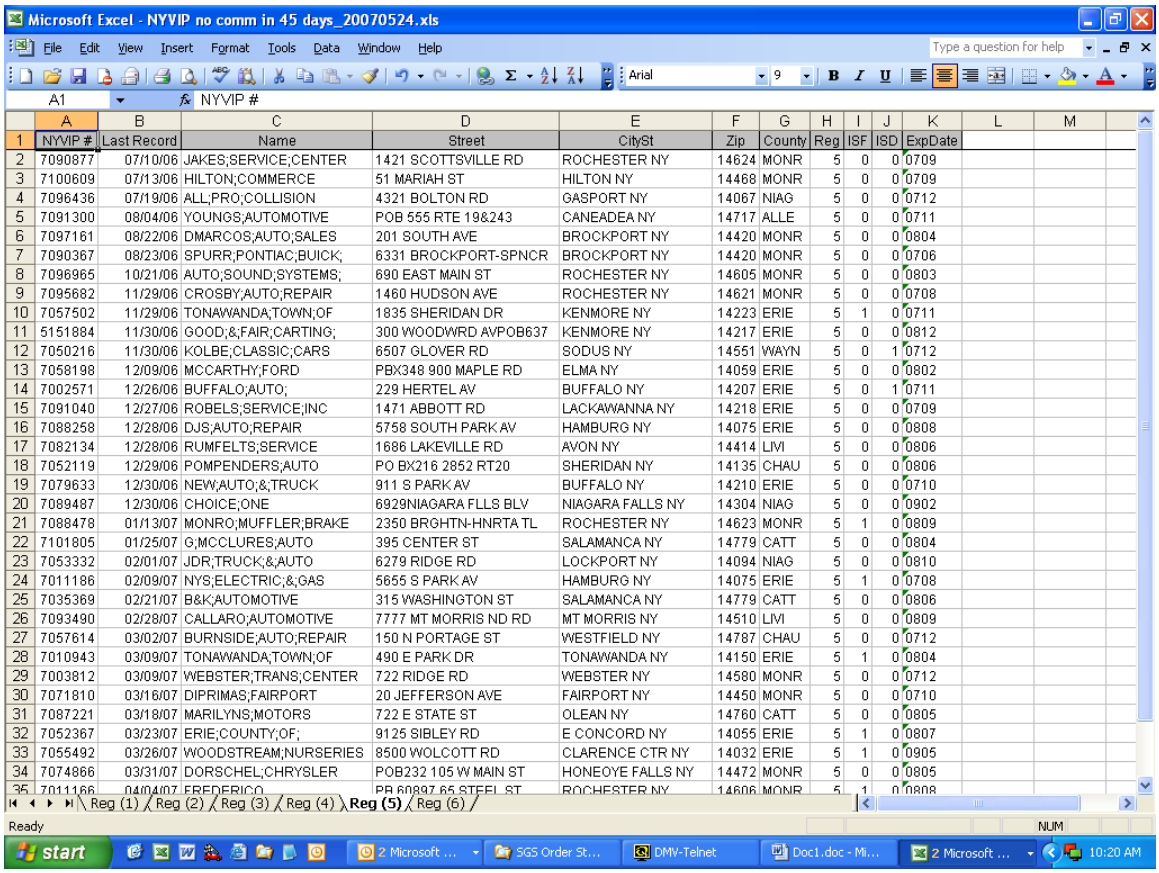
■ OBD Data Pull/Report may contain, depending on vehicle and inspection types, up to 29 items of information (fields) per inspection record. Like the "FRAUD Format Data Pull/Report," it contains vehicle, facility, inspector, and OBD II information/data with the focus on the OBD II data and/or the vehicle's electronic signature. DMV Vehicle Safety staff would use this report to confirm or eliminate vehicle make and model configurations per the electronic signature and as supporting evidence in clean scan cases. Records are generated selected by entering specific signature information as the search criteria. DMV Vehicle Safety staff are provided direct access to the OBD Data Pull/Report or may request it from DMV Vehicle Safety Data Services as needed

■ The Electronic Signature Report contains 30 items of information (fields) per row and is exported as an Excel file from the NYVIP database. This report calculates and displays the most likely "electronic signature" for a particular vehicle type. An electronic or digital signature is composed of several fields of electronic information retrieved from the vehicle's computer system that uniquely identifies that vehicle. The user enters the VIN as the search criteria to retrieve all vehicle records with that same VIN structure (make, model, engine, etc.). The report then groups together records with the same electronic signatures and calculates totals and percentages. DMV Vehicle Safety staff may use this report to determine what

the electronic signature should be for a subject vehicle/VIN when investigating alleged fraudulent emission inspections. DMV Vehicle Safety staff is provided direct access to the Electronic Signature Report or may request it from DMV Vehicle Safety Data Services as needed.

■ The NYVIP No Comm (Communication) Report contains 11 items of information (fields) per row and is exported as an Excel file from the NYVIP database. This report details NYVIP facilities that have not sent a record or communicated with DMV in over 45 days. The "Last Record" date along with facility information is included within this report. A non-communicating facility may indicate the facility is experiencing equipment and/or staffing problems. Records are selected by entering a specific date range as the search criteria. DMV Clean Air staff use this report to target NYVIP facilities for program audits.

FIGURE 3.10 : NYVIP No Comm (Communication) Report



Microsoft Excel - NYVIP no comm in 45 days_20070524.xls

NYVIP #	Last Record	Name	Street	CitySt	Zip	County	Reg	ISF	ISD	ExpDate
7090877	07/10/06	JAKES;SERVICE;CENTER	1421 SCOTTSVILLE RD	ROCHESTER NY	14624	MONR	5	0	0	0709
7100609	07/13/06	HILTON;COMMERCE	51 MARIAH ST	HILTON NY	14468	MONR	5	0	0	0709
7096436	07/19/06	ALL;PRO;COLLISION	4321 BOLTON RD	GASPORT NY	14067	NIAG	5	0	0	0712
7091300	08/04/06	YOUNGS;AUTOMOTIVE	POB 555 RTE 19&243	CANEADEA NY	14717	ALLE	5	0	0	0711
7097161	08/22/06	DMARCOS;AUTO;SALES	201 SOUTH AVE	BROCKPORT NY	14420	MONR	5	0	0	0804
7090367	08/23/06	SPURR;PONTIAC;BUICK;	6331 BROCKPORT-SPNCR	BROCKPORT NY	14420	MONR	5	0	0	0706
7096965	10/21/06	AUTO;SOUND;SYSTEMS;	690 EAST MAIN ST	ROCHESTER NY	14605	MONR	5	0	0	0803
7095682	11/29/06	CROSBY;AUTO;REPAIR	1460 HUDSON AVE	ROCHESTER NY	14621	MONR	5	0	0	0708
7057502	11/29/06	TONAWANDA;TOWN;OF	1835 SHERIDAN DR	KENMORE NY	14223	ERIE	5	1	0	0711
5151884	11/30/06	GOOD;&;FAIR;CARTING;	300 WOODWRD AVPOB637	KENMORE NY	14217	ERIE	5	0	0	0812
7050216	11/30/06	KOLBE;CLASSIC;CARS	6507 GLOVER RD	SODUS NY	14551	WAYN	5	0	1	0712
7058198	12/09/06	MCCARTHY;FORD	PBX348 900 MAPLE RD	ELMA NY	14059	ERIE	5	0	0	0802
7002571	12/26/06	BUFFALO;AUTO;	229 HERTEL AV	BUFFALO NY	14207	ERIE	5	0	1	0711
7091040	12/27/06	ROBELS;SERVICE;INC	1471 ABBOTT RD	LACKAWANNA NY	14218	ERIE	5	0	0	0709
7088258	12/28/06	DJS;AUTO;REPAIR	5758 SOUTH PARK AV	HAMBURG NY	14075	ERIE	5	0	0	0808
7082134	12/28/06	RUMFELTS;SERVICE	1686 LAKEVILLE RD	AVON NY	14414	LIVI	5	0	0	0806
7052119	12/29/06	POMPENDERS;AUTO	PO BX216 2852 RT20	SHERIDAN NY	14135	CHAU	5	0	0	0806
7079633	12/30/06	NEW;AUTO;&;TRUCK	911 S PARK AV	BUFFALO NY	14210	ERIE	5	0	0	0710
7089487	12/30/06	CHOICE;ONE	6929NIAGARA FLLS BLV	NIAGARA FALLS NY	14304	NIAG	5	0	0	0902
7088478	01/13/07	MONRO;MUFFLER;BRAKE	2350 BRGHTN-HNRTA TL	ROCHESTER NY	14623	MONR	5	1	0	0809
7101805	01/25/07	G;MCCLURES;AUTO	395 CENTER ST	SALAMANCA NY	14779	CATT	5	0	0	0804
7053332	02/01/07	JDR;TRUCK;&;AUTO	6279 RIDGE RD	LOCKPORT NY	14094	NIAG	5	0	0	0810
7011186	02/09/07	NYS;ELECTRIC;&;GAS	5655 S PARK AV	HAMBURG NY	14075	ERIE	5	1	0	0708
7035369	02/21/07	B&K;AUTOMOTIVE	315 WASHINGTON ST	SALAMANCA NY	14779	CATT	5	0	0	0806
7093490	02/28/07	CALLARO;AUTOMOTIVE	7777 MT MORRIS ND RD	MT MORRIS NY	14510	LIVI	5	0	0	0809
7057614	03/02/07	BURNSIDE;AUTO;REPAIR	150 N PORTAGE ST	WESTFIELD NY	14787	CHAU	5	0	0	0712
7010943	03/09/07	TONAWANDA;TOWN;OF	490 E PARK DR	TONAWANDA NY	14150	ERIE	5	1	0	0804
7003812	03/09/07	WEBSTER;TRANS;CENTER	722 RIDGE RD	WEBSTER NY	14580	MONR	5	0	0	0712
7071810	03/16/07	DIPRIMAS;FAIRPORT	20 JEFFERSON AVE	FAIRPORT NY	14450	MONR	5	0	0	0710
7087221	03/18/07	MARILYNS;MOTORS	722 E STATE ST	OLEAN NY	14760	CATT	5	0	0	0805
7052367	03/23/07	ERIE;COUNTY;OF;	9125 SIBLEY RD	E CONCORD NY	14055	ERIE	5	1	0	0807
7055492	03/26/07	WOODSTREAM;NURSERIES	8500 WOLCOTT RD	CLARENCE CTR NY	14032	ERIE	5	1	0	0905
7074866	03/31/07	DORSCHEL;CHRYSLER	POB232 105 W MAIN ST	HONEOYE FALLS NY	14472	MONR	5	0	0	0805
7011166	04/04/07	FREDERICO	PB 60897 65 STEEL ST	ROCHESTER NY	14606	MONR	5	1	0	0808

Reg (1) | Reg (2) | Reg (3) | Reg (4) | Reg (5) | Reg (6)

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NUM

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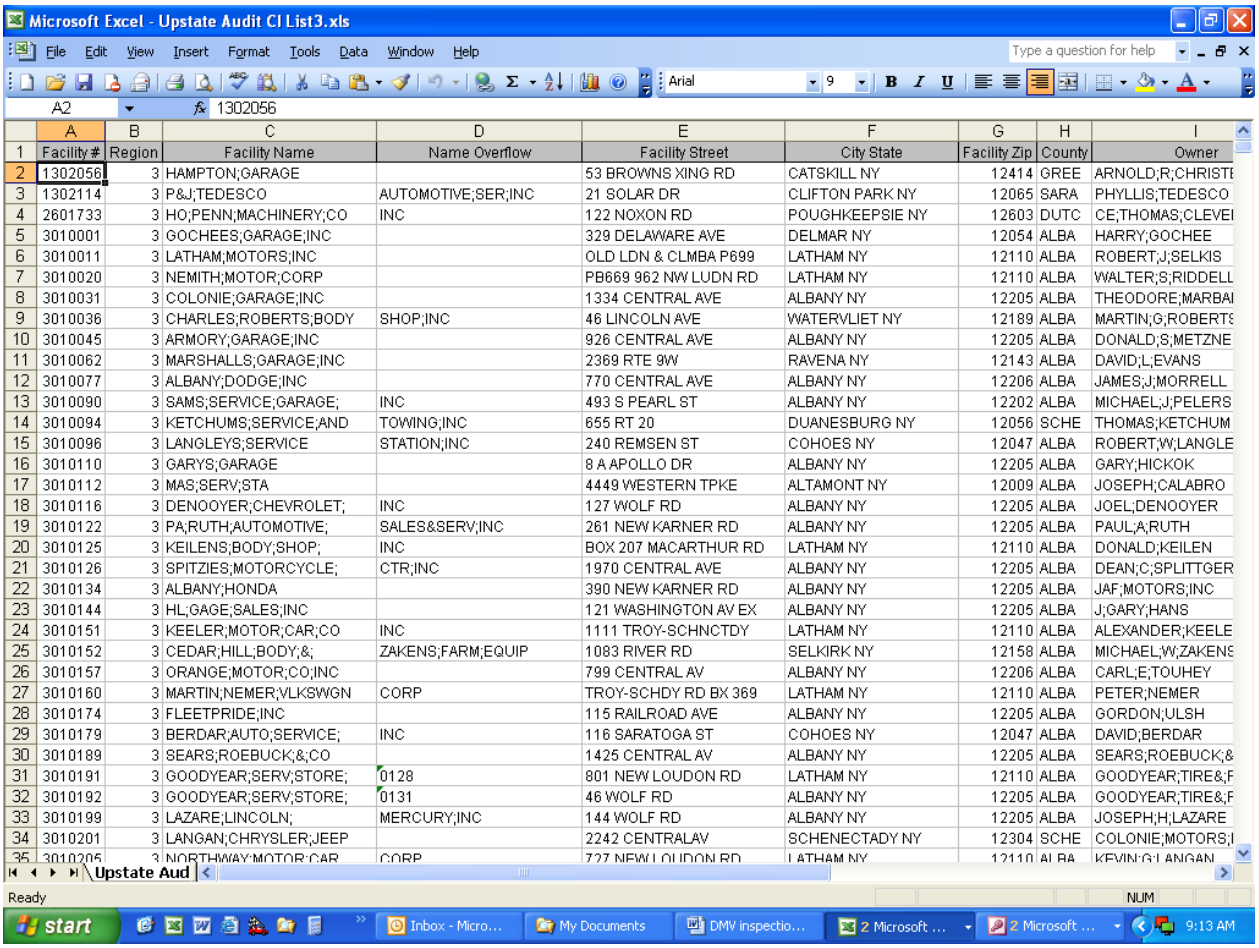
■ The Upstate Audit/CI Report contains 26 items of information (fields) per row and is exported as an Excel file from the NYVIP database. This report is used to facilitate scheduling of Upstate NYVIP program audits and to schedule concealed investigations (CIs) for targeted stations. A program audit is where a DMV Vehicle Safety inspector makes an unannounced visit to an inspection facility and checks on their inspection procedures, practices, and compliance with DMV regulations. A concealed investigation takes place when a DMV Vehicle Safety inspector anonymously takes a vehicle to an inspection facility for a New York State inspection. The DMV inspector observes and reports on the

facility's procedures and practices, and if appropriate, initiates action against any facility that does not comply with DMV regulations. This report contains facility information along with the date of the last program audit and date of the last concealed investigation. The "Upstate Audit/CI Report" is provided monthly by DMV Vehicle Safety Services.

FIGURE 3.11 : Upstate Audit/CI Report



Microsoft Excel - Upstate Audit CI List3.xls

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	A	B	C	D	E	F	G	H	I
1	Facility #	Region	Facility Name	Name Overflow	Facility Street	City State	Facility Zip	County	Owner
2	1302056	3	HAMPTON;GARAGE		53 BROWNS XING RD	CATSKILL NY	12414	GREE	ARNOLD;R;CHRISTE
3	1302114	3	P&J;TEDESCO	AUTOMOTIVE;SER;INC	21 SOLAR DR	CLIFTON PARK NY	12065	SARA	PHYLLIS;TEDESCO
4	2601733	3	HO;PENN;MACHINERY;CO	INC	122 NOXON RD	POUGHKEEPSIE NY	12603	DUTC	CE;THOMAS;CLEVEI
5	3010001	3	GOCHEES;GARAGE;INC		329 DELAWARE AVE	DELMAR NY	12054	ALBA	HARRY;GOCHEE
6	3010011	3	LATHAM;MOTORS;INC		OLD LDN & CLMBA P699	LATHAM NY	12110	ALBA	ROBERT;J;SELKIS
7	3010020	3	NEMITH;MOTOR;CORP		PB669 962 NW LUDN RD	LATHAM NY	12110	ALBA	WALTER;S;RIDDELL
8	3010031	3	COLONIE;GARAGE;INC		1334 CENTRAL AVE	ALBANY NY	12205	ALBA	THEODORE;MARBAI
9	3010036	3	CHARLES;ROBERTS;BODY	SHOP;INC	46 LINCOLN AVE	WATERVLIET NY	12189	ALBA	MARTIN;G;ROBERTS
10	3010045	3	ARMORY;GARAGE;INC		926 CENTRAL AVE	ALBANY NY	12205	ALBA	DONALD;S;METZNE
11	3010062	3	MARSHALLS;GARAGE;INC		2369 RTE 9W	RAVENA NY	12143	ALBA	DAVID;L;EVANS
12	3010077	3	ALBANY;DODGE;INC		770 CENTRAL AVE	ALBANY NY	12206	ALBA	JAMES;J;MORRELL
13	3010090	3	SAMS;SERVICE;GARAGE;	INC	493 S PEARL ST	ALBANY NY	12202	ALBA	MICHAEL;J;PELERS
14	3010094	3	KETCHUMS;SERVICE;AND	TOWING;INC	655 RT 20	DUANESBURG NY	12056	SCHE	THOMAS;KETCHUM
15	3010096	3	LANGLEYS;SERVICE	STATION;INC	240 REMSEN ST	COHOES NY	12047	ALBA	ROBERT;W;LANGLE
16	3010110	3	GARYS;GARAGE		8 A APOLLO DR	ALBANY NY	12205	ALBA	GARY;HICKOK
17	3010112	3	MAS;SERV;STA		4449 WESTERN TPKE	ALTAMONT NY	12009	ALBA	JOSEPH;CALABRO
18	3010116	3	DENOOYER;CHEVROLET;	INC	127 WOLF RD	ALBANY NY	12205	ALBA	JOEL;DENOOYER
19	3010122	3	PA;RUTH;AUTOMOTIVE;	SALES&SERV;INC	261 NEW KARNER RD	ALBANY NY	12205	ALBA	PAUL;A;RUTH
20	3010125	3	KEILENS;BODY;SHOP;	INC	BOX 207 MACARTHUR RD	LATHAM NY	12110	ALBA	DONALD;KEILEN
21	3010126	3	SPITZIES;MOTORCYCLE;	CTR;INC	1970 CENTRAL AVE	ALBANY NY	12205	ALBA	DEAN;C;SPLITTGER
22	3010134	3	ALBANY;HONDA		390 NEW KARNER RD	ALBANY NY	12205	ALBA	JAF;MOTORS;INC
23	3010144	3	HL;GAGE;SALES;INC		121 WASHINGTON AV EX	ALBANY NY	12205	ALBA	J;GARY;HANS
24	3010151	3	KEELER;MOTOR;CAR;CO	INC	1111 TROY-SCHNCTDY	LATHAM NY	12110	ALBA	ALEXANDER;KEELE
25	3010152	3	CEDAR;HILL;BODY;&;	ZAKENS;FARM;EQUIP	1083 RIVER RD	SELKIRK NY	12158	ALBA	MICHAEL;W;ZAKENS
26	3010157	3	ORANGE;MOTOR;CO;INC		799 CENTRAL AV	ALBANY NY	12206	ALBA	CARL;E;TOUHEY
27	3010160	3	MARTIN;NEMER;VLKSWGN	CORP	TROY-SCHDY RD BX 369	LATHAM NY	12110	ALBA	PETER;NEMER
28	3010174	3	FLEETPRIDE;INC		115 RAILROAD AVE	ALBANY NY	12205	ALBA	GORDON;ULSH
29	3010179	3	BERDAR;AUTO;SERVICE;	INC	116 SARATOGA ST	COHOES NY	12047	ALBA	DAVID;BERDAR
30	3010189	3	SEARS;ROEBUCK;&;CO		1425 CENTRAL AV	ALBANY NY	12205	ALBA	SEARS;ROEBUCK;&
31	3010191	3	GOODYEAR;SERV;STORE;	0128	801 NEW LOUDON RD	LATHAM NY	12110	ALBA	GOODYEAR;TIRE&;F
32	3010192	3	GOODYEAR;SERV;STORE;	0131	46 WOLF RD	ALBANY NY	12205	ALBA	GOODYEAR;TIRE&;F
33	3010199	3	LAZARE;LINCOLN;	MERCURY;INC	144 WOLF RD	ALBANY NY	12205	ALBA	JOSEPH;H;LAZARE
34	3010201	3	LANGAN;CHRYSLER;JEEP		2242 CENTRALAV	SCHENECTADY NY	12304	SCHE	COLONIE;MOTORS;I
35	3010205	3	NORTHWAY;MOTOR;CAR	CORP	727 NEW LOUDON RD	LATHAM NY	12110	ALBA	KEVIN;G;LANGAN

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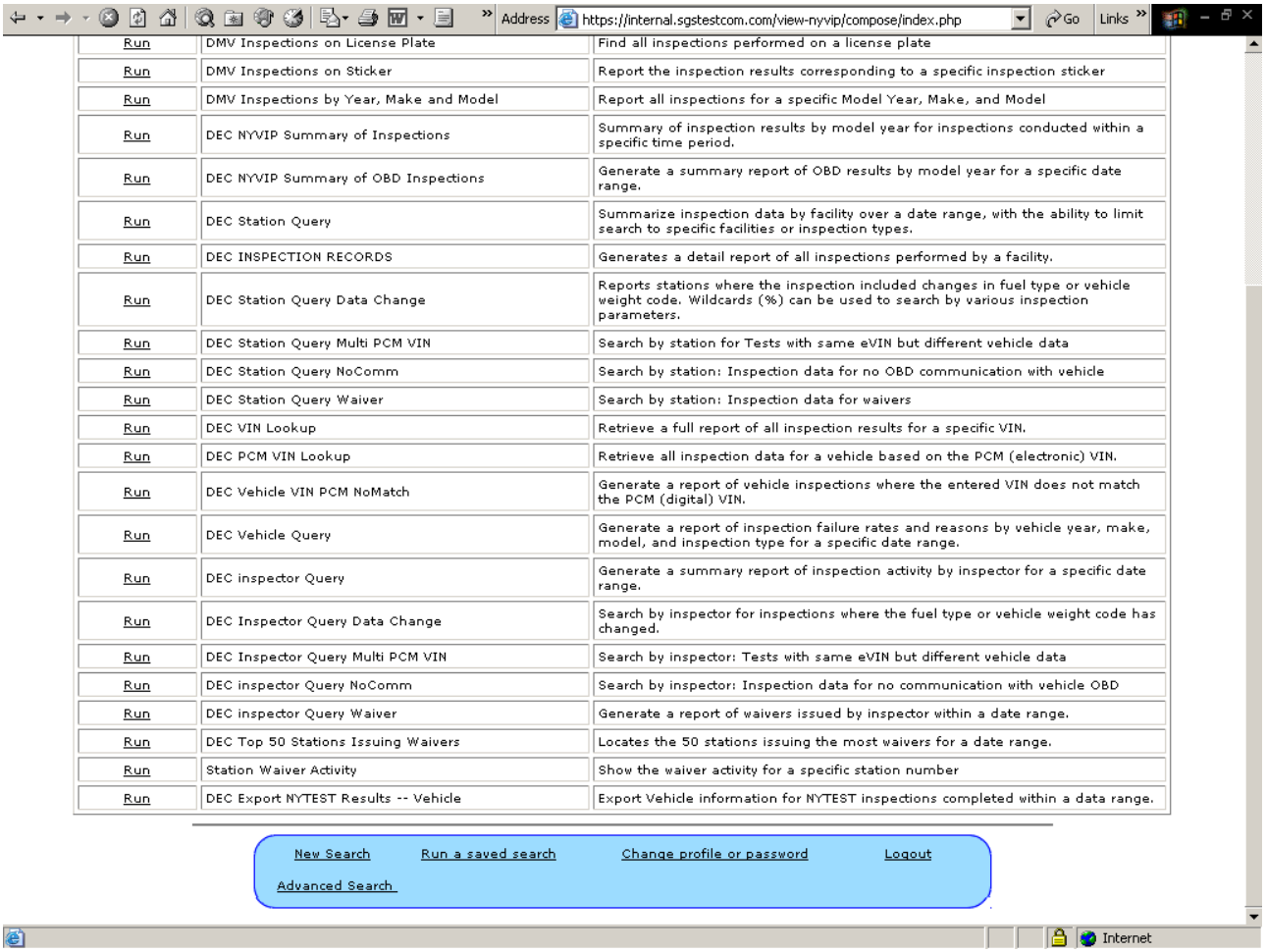
■ DEC developed a related set of queries available on a real time basis through an internet link to the TESTCOM database. These queries provide both program-wide OBD summaries and detailed reports associated with specific stations, inspectors, or vehicles. DEC updates these queries annually based on needs identified during the previous year and to update program evaluation efforts. The DEC queries have been very helpful in addressing questions received by DEC's hotline. New York's participation in the multi-state review of federal OBD guidance, Appendix D, was also facilitated by the vehicle queries.

FIGURE 3.12 : DEC NYVIP Query Summary

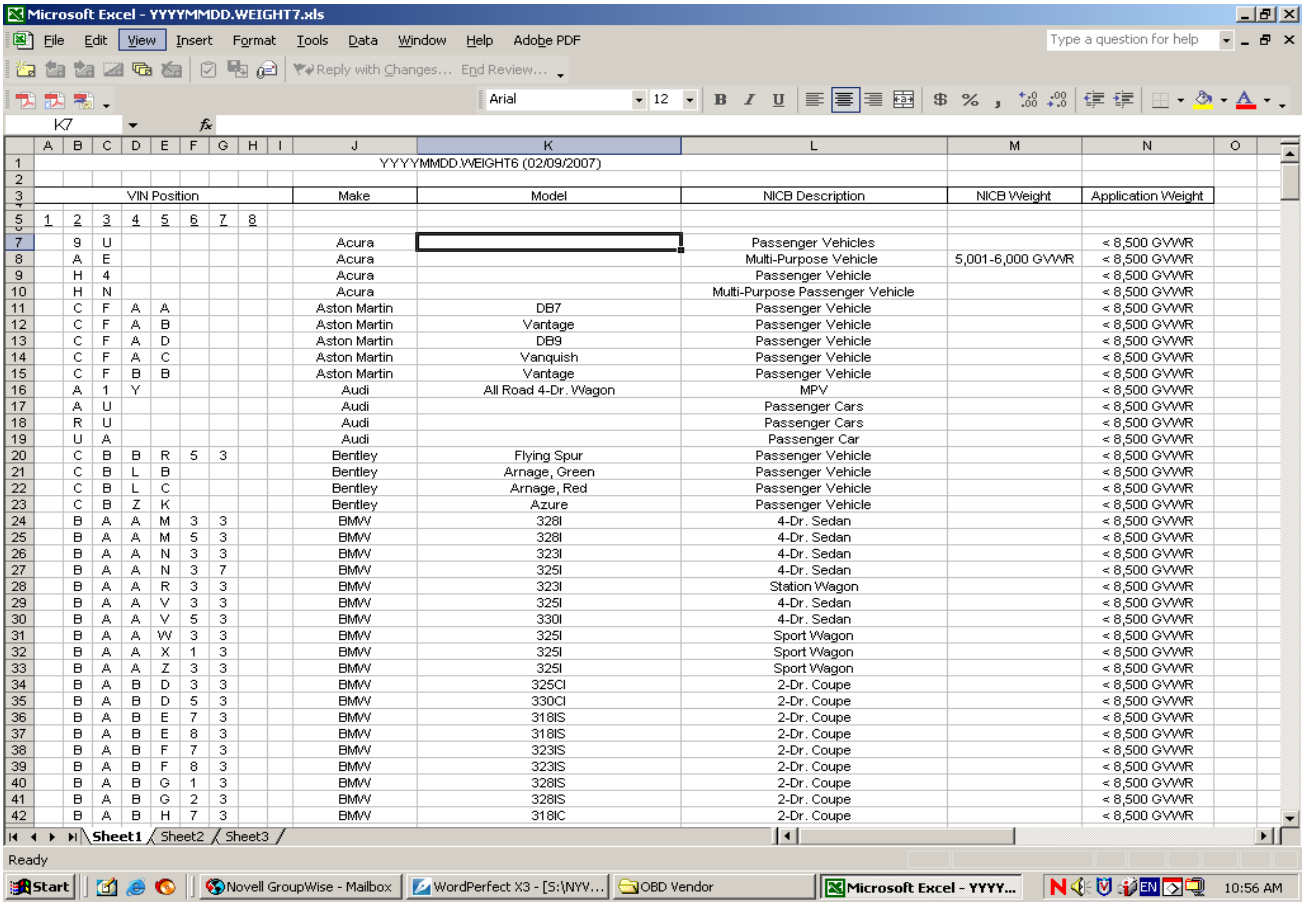


VIN Validation and GVWR Determination - The NYVIP inspection sequence was modified in 2007 to include a the validation of vehicle identification numbers (VIN). A VIN can be accepted into the NYVIP inspection sequence by several means: manual entry by the inspector, barcode scanning of DMV registration documents (1-D or 2-D barcodes), or barcode scanning of the vehicle's VIN plate (located on the dashboard or door jamb). The NYVIP VIN validation process provides safeguards against improper or fraudulent VIN entry, enhances data matching with DMV registration files, and is prerequisite to a GVWR determination. VIN validation also improves the effectiveness of registration-based enforcement (RBE).

Statewide, OBD inspections are required on all MY 1996 and newer, non-diesel/non-electric, light-duty vehicles. New York regulation allows for a new vehicle emissions exemption that applies to vehicles less than 2 model year sold. For example during calendar year 2008, the 2007, 2008, and 2009 model years were exempt from OBD inspections.

The NYVIP inspection software decodes model year directly from every validated VIN eliminating inspector manual entry errors and inappropriate attempts to avoid an OBD inspection. New York also developed a gross vehicle weight rating (GVWR) algorithm for every validated VIN. This control measure limits inspectors from inappropriately changing the vehicle weight to avoid an OBD inspection. Also, since the vehicle's registered weight is no longer considered, a motorist's attempt to avoid an OBD inspection by intentionally registering their vehicle at a higher weight would no longer be effective. These software based controls are significant enhancements over the NYTEST program. An example of the GVWR table is provided under Figure 3.13 below:

FIGURE 3.13 : Example of NYVIP GVWR Table



Microsoft Excel - YYYYMMDD.WEIGHT7.xls

YYYYMMDD.WEIGHT6 (02/09/2007)

VIN Position								Make	Model	NICB Description	NICB Weight	Application Weight
1	2	3	4	5	6	7	8					
	9	U						Acura		Passenger Vehicles		< 8,500 GVWR
	A	E						Acura		Multi-Purpose Vehicle	5,001-6,000 GVWR	< 8,500 GVWR
	H	4						Acura		Passenger Vehicle		< 8,500 GVWR
	H	N						Acura		Multi-Purpose Passenger Vehicle		< 8,500 GVWR
	C	F	A	A				Aston Martin	DB7	Passenger Vehicle		< 8,500 GVWR
	C	F	A	B				Aston Martin	Vantage	Passenger Vehicle		< 8,500 GVWR
	C	F	A	D				Aston Martin	DB9	Passenger Vehicle		< 8,500 GVWR
	C	F	A	C				Aston Martin	Vanquish	Passenger Vehicle		< 8,500 GVWR
	C	F	B	B				Aston Martin	Vantage	Passenger Vehicle		< 8,500 GVWR
	A	1	Y					Audi	All Road 4-Dr. Wagon	MPV		< 8,500 GVWR
	A	U						Audi		Passenger Cars		< 8,500 GVWR
	R	U						Audi		Passenger Cars		< 8,500 GVWR
	U	A						Audi		Passenger Car		< 8,500 GVWR
	C	B	B	R	5	3		Bentley	Flying Spur	Passenger Vehicle		< 8,500 GVWR
	C	B	L	B				Bentley	Arnage, Green	Passenger Vehicle		< 8,500 GVWR
	C	B	L	C				Bentley	Arnage, Red	Passenger Vehicle		< 8,500 GVWR
	C	B	Z	K				Bentley	Azure	Passenger Vehicle		< 8,500 GVWR
	B	A	A	M	3	3		BMW	328I	4-Dr. Sedan		< 8,500 GVWR
	B	A	A	M	5	3		BMW	328I	4-Dr. Sedan		< 8,500 GVWR
	B	A	A	N	3	3		BMW	323I	4-Dr. Sedan		< 8,500 GVWR
	B	A	A	N	3	7		BMW	325I	4-Dr. Sedan		< 8,500 GVWR
	B	A	A	R	3	3		BMW	323I	Station Wagon		< 8,500 GVWR
	B	A	A	V	3	3		BMW	325I	4-Dr. Sedan		< 8,500 GVWR
	B	A	A	V	5	3		BMW	330I	4-Dr. Sedan		< 8,500 GVWR
	B	A	A	W	3	3		BMW	325I	Sport Wagon		< 8,500 GVWR
	B	A	A	X	1	3		BMW	325I	Sport Wagon		< 8,500 GVWR
	B	A	A	Z	3	3		BMW	325I	Sport Wagon		< 8,500 GVWR
	B	A	B	D	3	3		BMW	325CI	2-Dr. Coupe		< 8,500 GVWR
	B	A	B	D	5	3		BMW	330CI	2-Dr. Coupe		< 8,500 GVWR
	B	A	B	E	7	3		BMW	318IS	2-Dr. Coupe		< 8,500 GVWR
	B	A	B	E	8	3		BMW	318IS	2-Dr. Coupe		< 8,500 GVWR
	B	A	B	F	7	3		BMW	323IS	2-Dr. Coupe		< 8,500 GVWR
	B	A	B	F	8	3		BMW	323IS	2-Dr. Coupe		< 8,500 GVWR
	B	A	B	G	1	3		BMW	328IS	2-Dr. Coupe		< 8,500 GVWR
	B	A	B	G	2	3		BMW	328IS	2-Dr. Coupe		< 8,500 GVWR
	B	A	B	H	7	3		BMW	318IC	2-Dr. Coupe		< 8,500 GVWR

Sheet1 / Sheet2 / Sheet3

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Start | Novell GroupWise - Mailbox | WordPerfect X3 - [S:\NYV... | OBD Vendor | Microsoft Excel - YYYY... | 10:56 AM

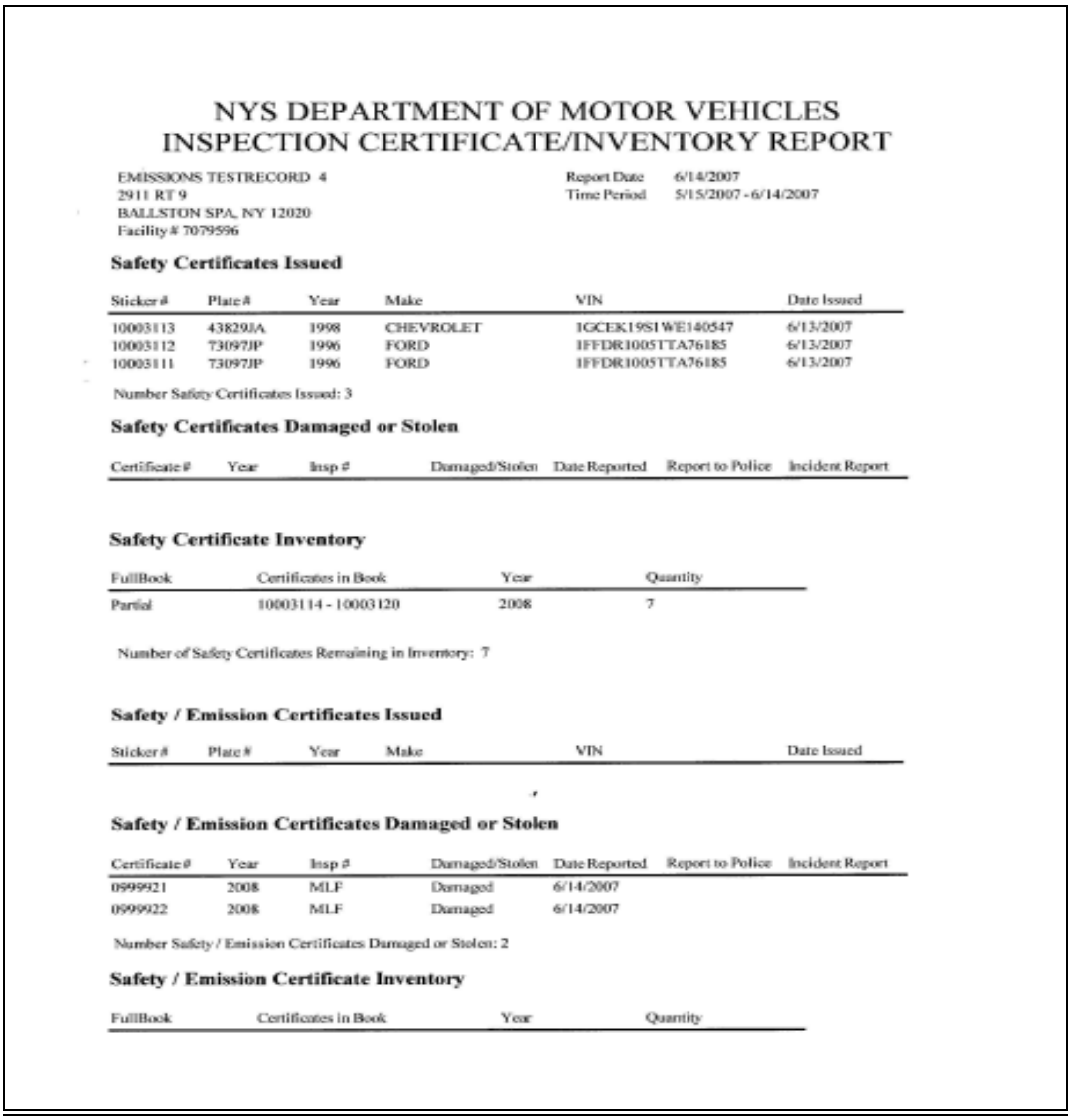
Sticker Inventory Control - DMV designed a sticker inventory system that provides complete accountability for all inspection stickers used by all NYVIP inspection stations. A custom software application developed by the DMV Office of Information Technology allows only approved and active inspection stations to purchase stickers. SAFIRE (Sticker and Forms Integrated Record-keeping Environment) has internal controls that dictate the quantity and type of stickers purchased, and it keeps a detailed record of the stickers sold to every inspection station.

Stickers are shipped to facilities by a 'premium' shipping service or by the US postal service. These shipping services identify that a sticker shipment was received at an inspection station and records the name of the individual that accepted (signed for) the package.

When a sticker order is processed by DMV, an electronic record of the sticker order is sent to TESTCOM. The record is then sent electronically to the NYVIP equipment of the station placing the order. Only the inspection station manager or his/her authorized designee can accept the order when it's received into the equipment inventory by using a password protected menu choice from their station's NYVIP unit. The user must indicate that the order arrived intact. If any stickers are missing, they must be reported immediately.

The distribution of a sticker from NYVIP can occur only at the conclusion of the inspection process. An inventory within the station's NYVIP unit determines the sticker to be placed on the vehicle. The inspector is required to scan a unique barcode printed on the sticker to verify that the sticker number in inventory matches the sticker applied to the vehicle. The electronic NYVIP inspection record includes sticker "type," sticker number, time and date of inspection, and the inspector identification number. The inspection record is transmitted near real time to the DMV. An example of a NYVIP Inventory Report is provided under Figure 3.14 below:

FIGURE 3.14 : NYVIP Inventory Report (Page 1)



NYS DEPARTMENT OF MOTOR VEHICLES
INSPECTION CERTIFICATE/INVENTORY REPORT

EMISSIONS TESTRECORD 4
2911 RT 9
BALLSTON SPA, NY 12020
Facility # 7079596

Report Date 6/14/2007
Time Period 5/15/2007 - 6/14/2007

Safety Certificates Issued

Sticker #	Plate #	Year	Make	VIN	Date Issued
10003113	43829JA	1998	CHEVROLET	1GCEK19S1WE140547	6/13/2007
10003112	73097JP	1996	FORD	1FFDR1005TTA76185	6/13/2007
10003111	73097JP	1996	FORD	1FFDR1005TTA76185	6/13/2007

Number Safety Certificates Issued: 3

Safety Certificates Damaged or Stolen

Certificate #	Year	Insp #	Damaged/Stolen	Date Reported	Report to Police	Incident Report

Safety Certificate Inventory

FullBook	Certificates in Book	Year	Quantity
Partial	10003114 - 10003120	2008	7

Number of Safety Certificates Remaining in Inventory: 7

Safety / Emission Certificates Issued

Sticker #	Plate #	Year	Make	VIN	Date Issued

Safety / Emission Certificates Damaged or Stolen

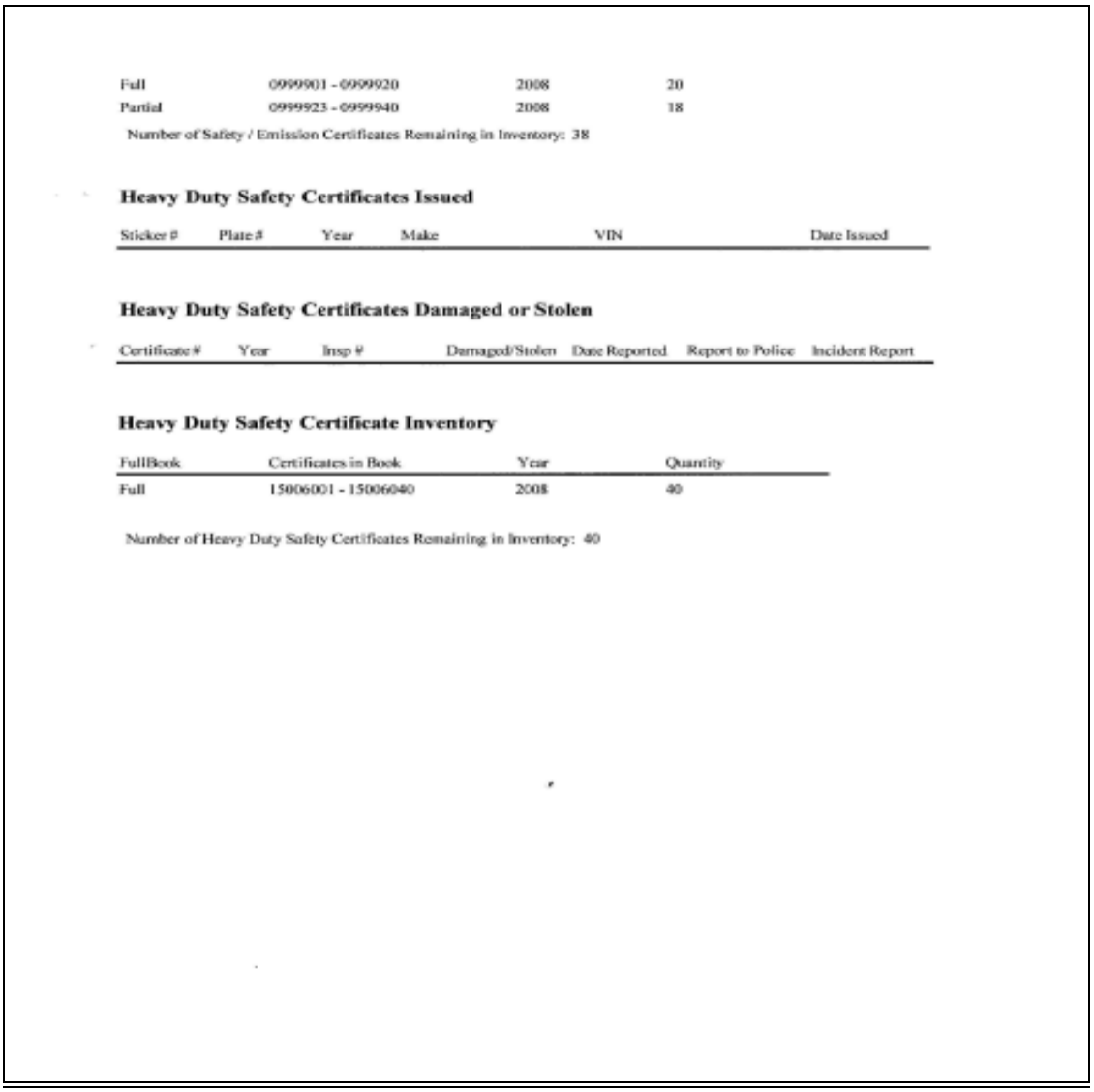
Certificate #	Year	Insp #	Damaged/Stolen	Date Reported	Report to Police	Incident Report
0999921	2008	MLF	Damaged	6/14/2007		
0999922	2008	MLF	Damaged	6/14/2007		

Number Safety / Emission Certificates Damaged or Stolen: 2

Safety / Emission Certificate Inventory

FullBook	Certificates in Book	Year	Quantity

FIGURE 3.14 : NYVIP Inventory Report (Page 2)



Full	0999901 - 0999920	2008	20
Partial	0999923 - 0999940	2008	18

Number of Safety / Emission Certificates Remaining in Inventory: 38

Heavy Duty Safety Certificates Issued

Sticker #	Plate #	Year	Make	VIN	Date Issued

Heavy Duty Safety Certificates Damaged or Stolen

Certificate #	Year	Insp #	Damaged/Stolen	Date Reported	Report to Police	Incident Report

Heavy Duty Safety Certificate Inventory

FullBook	Certificates in Book	Year	Quantity
Full	15006001 - 15006040	2008	40

Number of Heavy Duty Safety Certificates Remaining in Inventory: 40

OBD Inspection Sequence - New York State has worked closely with TESTCOM and the NYVIP scan tool provider (SPX Corporation) in the development of the NYVIP OBD inspection sequence. The design objectives were to maximize the OBD II communication success rate while also providing software-based safeguards against fraudulent inspection practices. For example, the NYVIP inspection sequence incorporates confirmatory checks during the inspection to minimize inspector errors, and all key parameters are reported to the official electronic inspection record. NYVIP software was one of the first I/M program sequences capable of inspecting vehicles equipped with the Controller Area Network (CAN) protocol.

NYVIP software has been developed with the flexibility to respond to vehicle-specific issues on a very short time frame. In this manner, adjustments due to manufacturer compliance issues can be handled with limited or no human intervention. The resulting "exception small files" are capable of being downloaded directly to the NYVIP units (i.e., the inspector does not control the update process) through the TESTCOM vehicle information database (VID). New York provides periodic updates of these files to address verified issues associated with specific vehicles (i.e., readiness, keyless ignitions, communication, hybrid vehicles, etc.). When appropriate, NYVIP allows for detailed messaging and alternate test screens to address these issues.

TESTCOM is required to monitor the OBD communication success rate for each applicable vehicle type on a monthly basis. When feasible, the scan tool provider develops software enhancements to address vehicles affected by communication problems. If the issue is determined to be manufacturer's defect, the vehicle is placed on the exceptions file.

Annual Updates - DEC and DMV experienced significant difficulty during the NYTEST program in obtaining both timely and complete software updates from the 3 equipment providers. In contrast, the NYVIP contract includes stipulated programming hours for TESTCOM to complete annual software updates. This allows New York to institute desired enhancements, insert new legal or regulatory requirements, and provides a mechanism to address any unanticipated program changes. Most annual software updates are distributed directly by TESTCOM to inspection stations via CDs. Smaller, less complicated updates may be downloaded directly to the NYVIP units. In this manner, some functionality can be accomplished in-between larger, more complicated software updates.

Enhanced Messaging - Unlike NYTEST, New York State is capable of sending targeted messages to inspection stations. Should the Departments desire to broadcast a message to a specific group of stations or to a particular region of the state, NYVIP can be used to inform just those intended stations. This process minimizes the number of station messages and provides additional flexibility. Figure 3.15 is an example of a message sent to all inspection stations.

FIGURE 3.15 : Message to All Inspection Stations

NYVIP UNIT MESSAGE No. 16 (2007)

1/3/2007

TO: All INSPECTION STATIONS

FROM: NYS DEPT. OF MOTOR VEHICLES

SUBJECT: RETURN OF UNUSED 2007 STICKERS FOR CREDIT

If your Inspection Station has unused 2007 Inspection Stickers and you wish to return them for credit, you may do so after January 1, 2007. The stickers should be packaged in a heavy-duty envelope or shipping box, available at the Post Office (some postal processing machines can damage standard envelopes and the stickers may be lost).

Write a brief letter to request the credit and send it with the stickers.

The letter should include the following:

- Facility name
- Address
- Facility number
- Contact person
- Phone number

Address the package to:

NYS Department of Motor Vehicles

Bureau of Consumer and Facility Services

Accounting Unit

PO Box 2700-ESP

Albany, NY 12220-0700

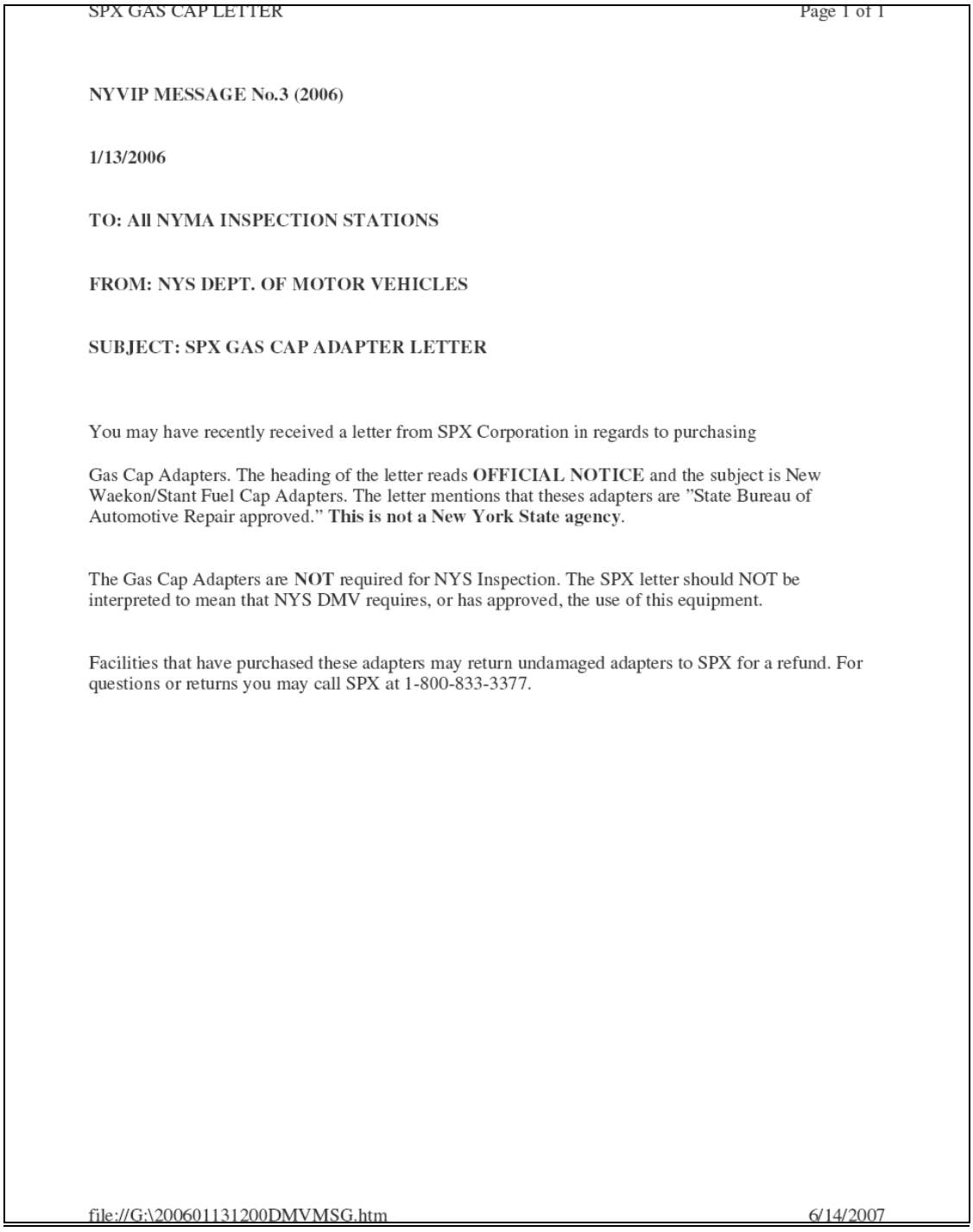
If you are returning stickers for multiple facilities, please place the stickers in separate envelopes.

After your credit is processed, you will receive a letter that indicates the amount of your credit. You may only use this credit toward your next order of stickers or forms.
We're sorry but at this time the credit cannot be used toward an On-line Order.

If you have questions or problems related to sticker return, you may call the Issuance Unit at 518-474-2398.

Figure 3.16 below is an example of a message that was limited to NYMA inspection stations that use SPX NYTEST equipment.

FIGURE 3.16 : Targeted Message



SPX GAS CAP LETTER Page 1 of 1

NYVIP MESSAGE No.3 (2006)

1/13/2006

TO: All NYMA INSPECTION STATIONS

FROM: NYS DEPT. OF MOTOR VEHICLES

SUBJECT: SPX GAS CAP ADAPTER LETTER

You may have recently received a letter from SPX Corporation in regards to purchasing

Gas Cap Adapters. The heading of the letter reads **OFFICIAL NOTICE** and the subject is New Waekon/Stant Fuel Cap Adapters. The letter mentions that theses adapters are "State Bureau of Automotive Repair approved." **This is not a New York State agency**.

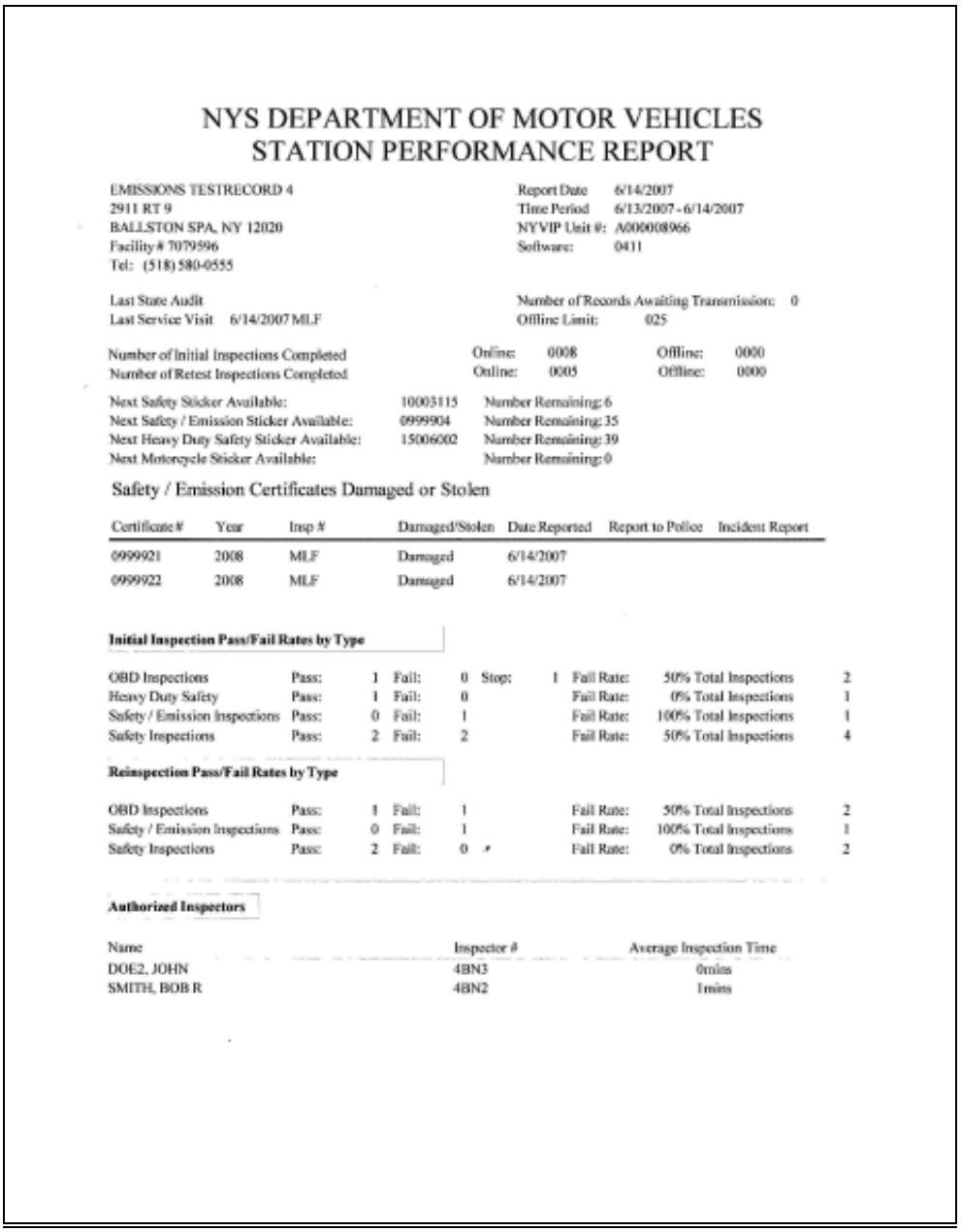
The Gas Cap Adapters are **NOT** required for NYS Inspection. The SPX letter should NOT be interpreted to mean that NYS DMV requires, or has approved, the use of this equipment.

Facilities that have purchased these adapters may return undamaged adapters to SPX for a refund. For questions or returns you may call SPX at 1-800-833-3377.

file://G:\200601131200DMVMSG.htm 6/14/2007

Station Performance Report - This report is available to State inspectors directly from a station's NYVIP unit. The report contains the following data elements: last audit date, next inspection sticker number (by type), how many inspection stickers (by type) remain in inventory, inspection records that have not been transmitted to DMV, inspection certificates reported as damaged or stolen, initial and re-inspection pass/fail rates by inspection type and by inspector, percentage of OBD failures that were repaired and passed inspection on the first re-inspection, waiver percentage, and 10-day extensions and the authorizing inspectors. An example is provided under Figure 3.17.

FIGURE 3.17 : Station Performance Report (Page 1)



NYS DEPARTMENT OF MOTOR VEHICLES
STATION PERFORMANCE REPORT

EMISSIONS TESTRECORD 4
2911 RT 9
BALLSTON SPA, NY 12020
Facility # 7079596
Tel: (518) 580-0555

Report Date 6/14/2007
Time Period 6/13/2007 - 6/14/2007
NYVIP Unit #: A000008966
Software: 0411

Last State Audit
Last Service Visit 6/14/2007 MLF

Number of Records Awaiting Transmission: 0
Offline Limit: 025

Number of Initial Inspections Completed — Online: 0008 Offline: 0000
Number of Retest Inspections Completed — Online: 0005 Offline: 0000

Next Safety Sticker Available: 10003115 Number Remaining: 6
Next Safety / Emission Sticker Available: 0999904 Number Remaining: 35
Next Heavy Duty Safety Sticker Available: 15006002 Number Remaining: 39
Next Motorcycle Sticker Available: Number Remaining: 0

Safety / Emission Certificates Damaged or Stolen

Certificate #	Year	Insp #	Damaged/Stolen	Date Reported	Report to Police	Incident Report
0999921	2008	MLF	Damaged	6/14/2007		
0999922	2008	MLF	Damaged	6/14/2007		

Initial Inspection Pass/Fail Rates by Type

OBD Inspections	Pass:	1	Fail:	0	Stop:	1	Fail Rate:	50% Total Inspections	2
Heavy Duty Safety	Pass:	1	Fail:	0			Fail Rate:	0% Total Inspections	1
Safety / Emission Inspections	Pass:	0	Fail:	1			Fail Rate:	100% Total Inspections	1
Safety Inspections	Pass:	2	Fail:	2			Fail Rate:	50% Total Inspections	4

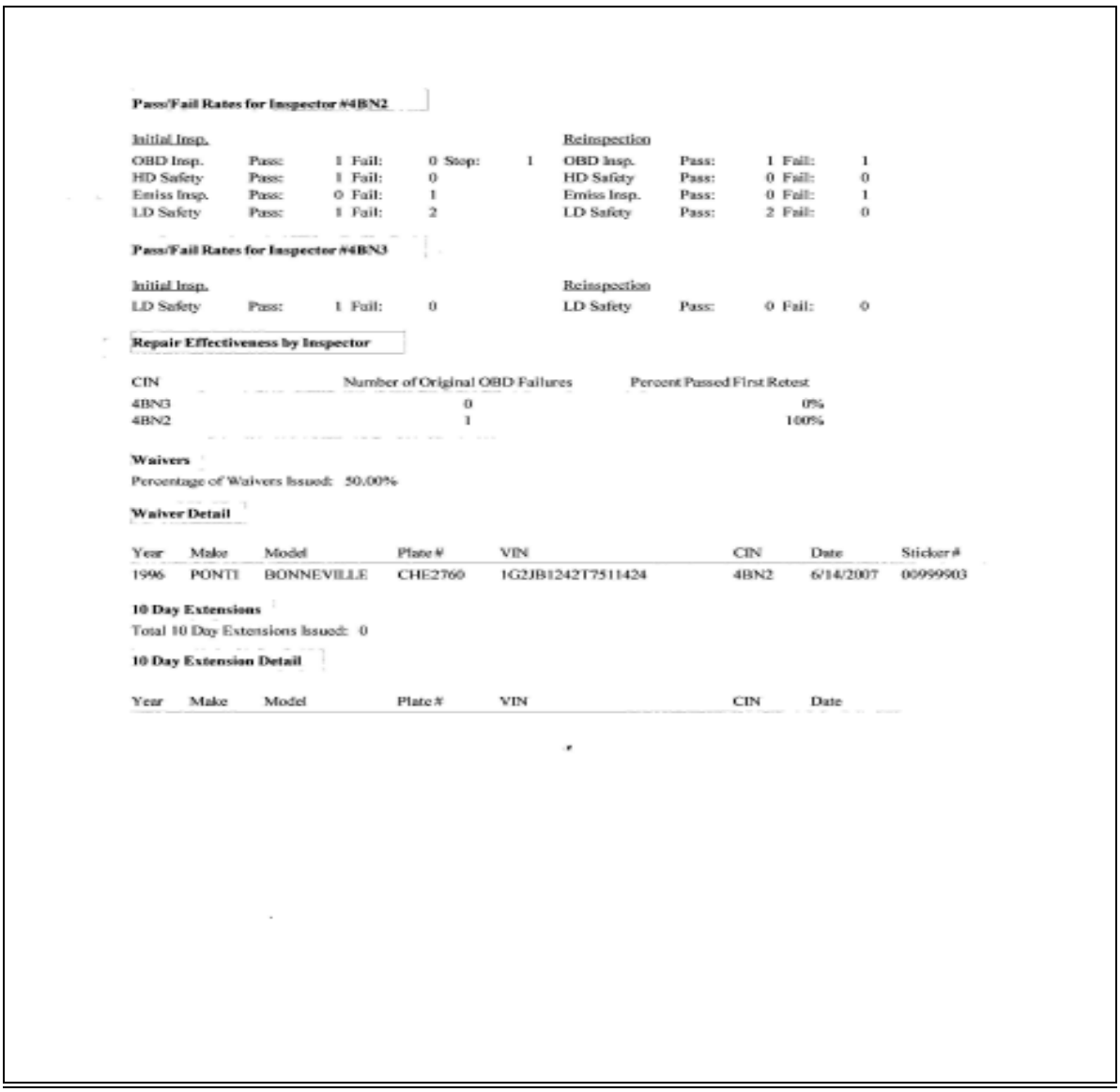
Reinspection Pass/Fail Rates by Type

OBD Inspections	Pass:	1	Fail:	1			Fail Rate:	50% Total Inspections	2
Safety / Emission Inspections	Pass:	0	Fail:	1			Fail Rate:	100% Total Inspections	1
Safety Inspections	Pass:	2	Fail:	0			Fail Rate:	0% Total Inspections	2

Authorized Inspectors

Name	Inspector #	Average Inspection Time
DOE2, JOHN	4BN3	0mins
SMITH, BOB R	4BN2	1mins

FIGURE 3.17 : Station Performance Report (Page 2)



Pass/Fail Rates for Inspector #4BN2

Initial Insp.						Reinspection				
OBD Insp.	Pass:	1	Fail:	0	Stop: 1	OBD Insp.	Pass:	1	Fail:	1
HD Safety	Pass:	1	Fail:	0		HD Safety	Pass:	0	Fail:	0
Emiss Insp.	Pass:	0	Fail:	1		Emiss Insp.	Pass:	0	Fail:	1
LD Safety	Pass:	1	Fail:	2		LD Safety	Pass:	2	Fail:	0

Pass/Fail Rates for Inspector #4BN3

Initial Insp.					Reinspection				
LD Safety	Pass:	1	Fail:	0	LD Safety	Pass:	0	Fail:	0

Repair Effectiveness by Inspector

CIN	Number of Original OBD Failures	Percent Passed First Retest
4BN3	0	0%
4BN2	1	100%

Waivers

Percentage of Waivers Issued: 50.00%

Waiver Detail

Year	Make	Model	Plate #	VIN	CIN	Date	Sticker #
1996	PONTI	BONNEVILLE	CHE2760	1G2JB1242T7511424	4BN2	6/14/2007	00999903

10 Day Extensions

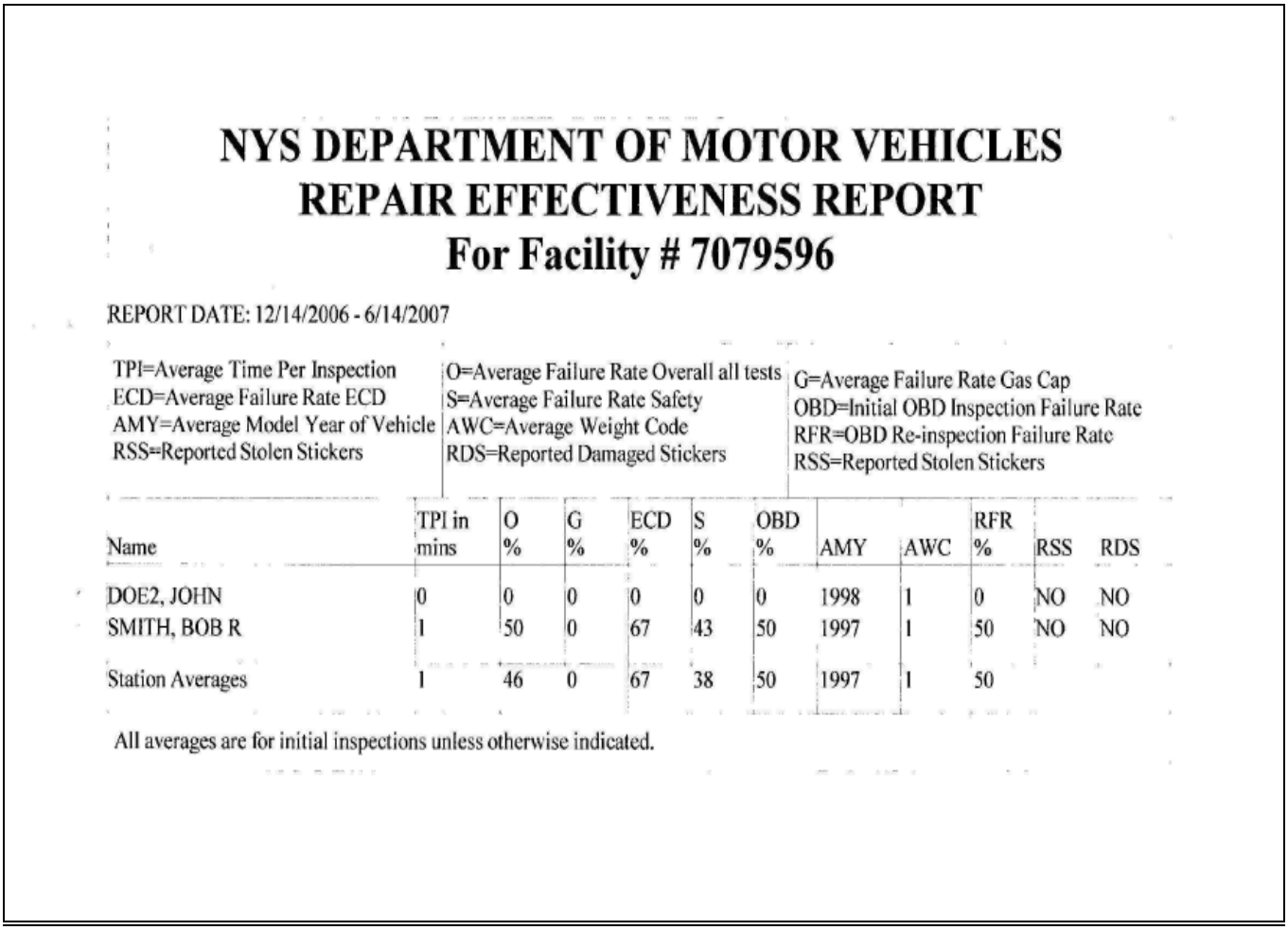
Total 10 Day Extensions Issued: 0

10 Day Extension Detail

Year	Make	Model	Plate #	VIN	CIN	Date

Repair Effectiveness Report - This report is available to the station owner and allows for a review of the performance of each inspector. The report provides a listing by inspector of average inspection time, average failure rate for emission control devices, average overall failure rate for all test types, average failure rate for safety items, average failure rate for gas cap, OBD initial inspection failure rate, OBD re-inspection failure rate, average model year and weight code inspected, and reported damaged and/or stolen stickers. An example is provided under Figure 3.18.

FIGURE 3.18 : Repair Effectiveness Report



NYS DEPARTMENT OF MOTOR VEHICLES
REPAIR EFFECTIVENESS REPORT
For Facility # 7079596

REPORT DATE: 12/14/2006 - 6/14/2007

TPI=Average Time Per Inspection
ECD=Average Failure Rate ECD
AMY=Average Model Year of Vehicle
RSS=Reported Stolen Stickers

O=Average Failure Rate Overall all tests
S=Average Failure Rate Safety
AWC=Average Weight Code
RDS=Reported Damaged Stickers

G=Average Failure Rate Gas Cap
OBD=Initial OBD Inspection Failure Rate
RFR=OBD Re-inspection Failure Rate
RSS=Reported Stolen Stickers

Name	TPI in mins	O %	G %	ECD %	S %	OBD %	AMY	AWC	RFR %	RSS	RDS
DOE2, JOHN	0	0	0	0	0	0	1998	1	0	NO	NO
SMITH, BOB R	1	50	0	67	43	50	1997	1	50	NO	NO
Station Averages	1	46	0	67	38	50	1997	1	50		

All averages are for initial inspections unless otherwise indicated.

Registration Denial Override Control - Motorist compliance with the annual inspection requirement is maintained through electronic registration (denial) based enforcement (RBE). Although expected to be infrequent, one concern with RBE is that a motorist could complete the inspection requirement but the inspection record cannot be located from the DMV inspection database. A procedure needs to be in place to assist any motorist capable of presenting an acceptable proof of inspection (i.e., a Vehicle Inspection Receipt (VIR) printed by the NYVIP unit after the inspection is complete). The NYS RBE program therefore includes an override process at the DMV office level to assist in this need. The override process was adopted with a monitoring component to minimize the potential for abuse. Each VIR contains an Electronic Inspection Record number (EIR#) that can be decoded to verify that the presented VIR is a legitimate document. DMV office managers receive daily reports of overrides to determine that they are being applied properly. The report lists every override processed in that office from the previous day with the operator's identification. The report is also available to DMV management for review on the office level. An example is provided under Figure 3.19.

FIGURE 3.19 : Registration Denial Override Control Report

OVERRIDE REPORT FOR MONTH OF: MAY 2007

DATE	TIME	OFF	OPER	TRANS	REREG	1314RAC	VIN	YEAR	MAKE	INSP STATUS	INSP EXP DTE	REG EXP MON	DEALER	OVE
05/07/07	16:30:04	AAI	SIS	ROR	N	N	1P4FH5439KX678997	1989	PLYMO	EXPIRED INSP	12/16/05	MAY	Y	
05/14/07	12:49:13	AAI	SIS	ROR	N	N	4A3AJ56G3VE124886	1997	MITSU	EXPIRED INSP	09/02/06	MAY	Y	
05/15/07	10:43:26	AAI	SIS	ROR	N	N	1J4GW58N4YC347622	2000	JEEP	EXPIRED INSP	10/26/06	MAY	Y	
05/17/07	11:20:33	AAI	SIS	ROR	N	N	1B3ES47C9VD180510	1997	DODGE	EXPIRED INSP	01/26/06	MAY	Y	
05/21/07	16:47:37	AAI	SIS	ROR	N	N	1GNFK16T11J149192	2001	CHEVR	EXPIRED INSP	03/20/06	MAY	Y	
05/25/07	16:06:46	AAI	SIS	ROR	N	N	1N4DL01D3WC201138	1998	NISSA	EXPIRED INSP	02/24/05	MAY	Y	
TOTAL OPER			006											
TOTAL OFFICE		006												
05/11/07	15:30:35	ABN	BSB	ROR	N	N	4C3AU52N5VE165828	1997	CHRYS	EXPIRED INSP	12/11/06	MAY	Y	
TOTAL OPER			001											
05/04/07	15:44:49	ABN	DVW	ROR	N	N	1GNDT13WXR0123002	1994	CHEVR	EXPIRED INSP	12/02/04	MAY	Y	
TOTAL OPER			001											
TOTAL OFFICE		002												
05/17/07	10:50:25	ACO	KAL	ROR	N	N	2T1AE09B0SC135241	1995	TOYOT	EXPIRED INSP	08/24/06	APRIL	Y	
TOTAL OPER			001											
05/11/07	08:25:11	ACO	RFM	ROR	N	N	1FTNW21L83ED41663	2003	FORD	EXPIRED INSP	07/11/06	MARCH	Y	
05/11/07	09:54:04	ACO	RFM	ROR	N	N	1G2NF52F23C224459	2003	PONTI	NO INSP		MARCH	Y	
TOTAL OPER			002											
05/11/07	06:48:00	ACO	SMD	ROR	N	N	YV1AS8806N1470403	1992	VOLVO	EXPIRED INSP	07/24/06	APRIL	Y	
TOTAL OPER			001											
TOTAL OFFICE		004												
05/08/07	09:06:14	ALB	BML	ROR	N	N	1J4FF48SXYL159151	2000	JEEP	EXPIRED INSP	01/14/05	MAY	Y	
TOTAL OPER			001											
05/18/07	11:44:13	ALB	DRB	RRN	Y	N	2P4FP2536VR169422	1997	PLYMO	EXPIRED INSP	01/13/06	MAY	Y	
05/24/07	16:03:47	ALB	DRB	ROR	N	N	1HGCD5607VA235147	1997	HONDA	EXPIRED INSP	07/06/06	MAY	Y	
TOTAL OPER			002											
05/01/07	14:09:48	ALB	HHC	RAC	Y	N	1P3EJ46C2WN134113	1998	PLYMO	EXPIRED INSP	12/22/06	MAY	Y	
TOTAL OPER			001											
05/29/07	13:10:36	ALB	KLB	RAC	Y	N	4M2XV1110XDJ16888	1999	MERCU	EXPIRED INSP	09/25/05	MARCH	Y	
TOTAL OPER			001											

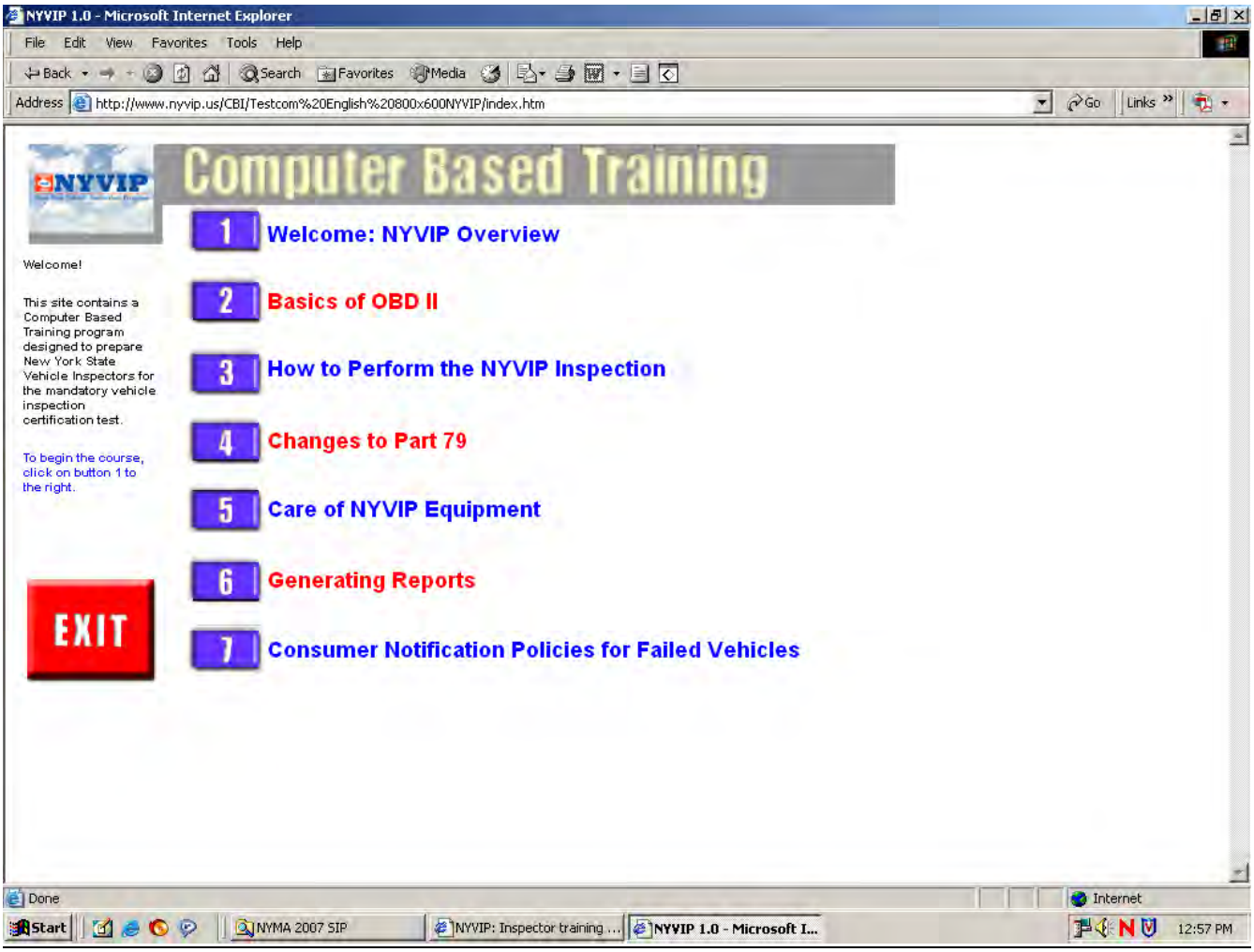
3. Training and Certification

Computer-based Training – New York State certified inspectors are required to know the NYS inspection process, be knowledgeable of OBD systems in general, and must pass the DMV certification exam process. Understanding why a vehicle fails, and then being able to explain it to the motorist is critical to the public's acceptance of the NYVIP program. New York has adopted an OBD II inspector certification process to ensure that core requirements have been understood. Towards that end, the NYVIP program provides both OBD training and a required certification test.

A NYVIP OBD training course can be taken in several ways: from a CD provided with the NYVIP work station at delivery, from the NYVIP website, or from a training application resident on the NYVIP unit itself. The availability of a CD and the website allow for home or office use. The OBD training course may be taken at any time or many times. For an applicant to become a licensed inspector, he/she must pass a general DMV licensing exam. For a licensed inspector to conduct OBDII inspections, these inspectors must pass the NYVIP OBD II certification test. The OBD II certification test can only be

taken on the NYVIP unit. The entry screen to computer-based training, as found on the NYVIP website, is included as Figure 3.20:

FIGURE 3.20 : NYVIP Web Training



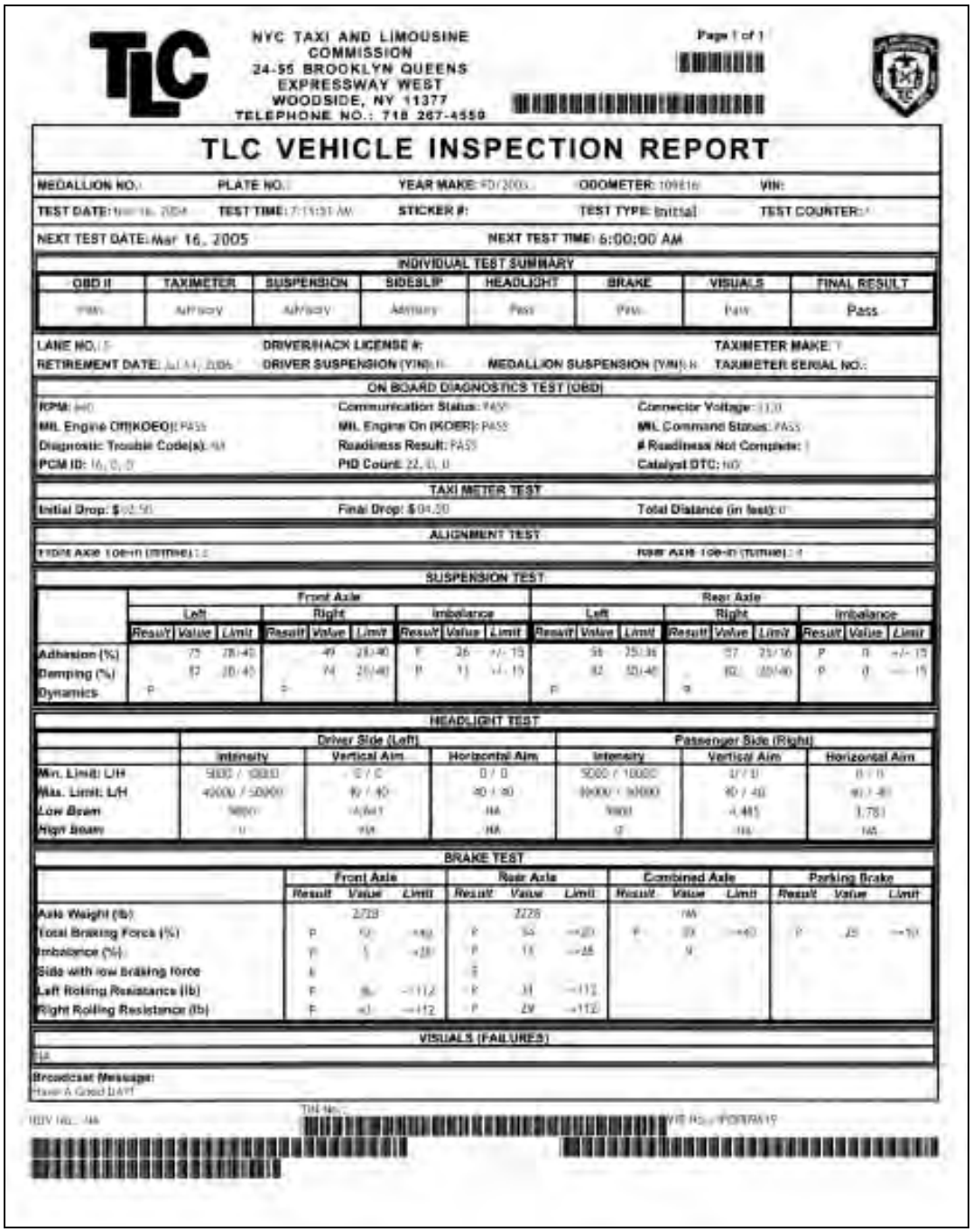
An inspector initiates the OBD certification test by scanning their DMV issued inspector card. The NYVIP unit connects to TESTCOM and a set of test questions is downloaded. The questions are randomly selected from a master list developed by DMV and DEC and maintained by TESTCOM on their database. A specified range of questions is selected from topics, such as monitors, MIL status, diagnostic trouble codes, etc. When the inspector passes the exam, the information is recorded on the TESTCOM database and a certificate is printed. If an inspector changes employment, the certification may be downloaded to the new facility by connecting to TESTCOM.

DMV Training - Training of inspectors (discussed above) and repair technicians is very important to the success of the NYVIP I/M program. Repair technicians lacking the skills or understanding to effectively repair OBD system failures will lead to frustration and dissatisfaction from both facilities and motorists. Outreach to industry associations and facilities is important, and DMV field staff perform this function.

DMV has developed and provided seminars to the several repair associations in response to problems encountered by their membership. DMV also independently conducts informational seminars when staff identifies a potential problem. The issue of readiness monitors is a common example. DMV outreach training has helped many technicians understand monitors status, NYVIP failure criteria, and how important a proper drive cycle is in setting OBD monitors. Appendix B contains several inspector training presentations used by DMV staff. DMV staff further assist technicians that encounter problems inspecting and diagnosing vehicles via the telephone and or field visits to the station to see the vehicle.

DEC/DMV Training at New York City Taxi & Limousine Commission - The NYC T&LC completed an upgrade to their centralized test-only inspection facility to include OBD testing. At start-up, the City encountered a very high OBD II failure rate, heightened by readiness failures, which resulted in lengthy wait times. At the request of the T&LC, the DEC, DMV, and Ford Motor Company completed 2 days of training to educate taxi cab owners and operators on the basics of OBD including the failure criteria, notably MIL illumination and readiness. Hand-outs were developed as well. Appendix C contains the presentations used to conduct the training. The T&LC inspection software is equivalent to the New York State NYVIP specifications. Examples of the T&LC Vehicle Inspection Report are included as Figure 3.21 below:

FIGURE 3.21 : New York City T&LC Vehicle Inspection Reports (Pass)



NYC TAXI AND LIMOUSINE COMMISSION
24-55 BROOKLYN QUEENS EXPRESSWAY WEST
WOODSIDE, NY 11377
TELEPHONE NO.: 718 267-4559

Page 1 of 1

TLC VEHICLE INSPECTION REPORT

MEDALLION NO.:	PLATE NO.:	YEAR MAKE: FD/2003	ODOMETER: 109816	VIN:
TEST DATE: Mar 16, 2004	TEST TIME: 7:15:31 AM	STICKER #:	TEST TYPE: Initial	TEST COUNTER: 1
NEXT TEST DATE: Mar 16, 2005		NEXT TEST TIME: 6:00:00 AM		

INDIVIDUAL TEST SUMMARY

OBD II	TAXIMETER	SUSPENSION	SIDESLIP	HEADLIGHT	BRAKE	VISUALS	FINAL RESULT
Pass	Advisory	Advisory	Advisory	Pass	Pass	Pass	Pass

LANE NO.: 5 | DRIVER/HACK LICENSE #: | TAXIMETER MAKE: T
RETIREMENT DATE: Jul 14, 2004 | DRIVER SUSPENSION (Y/N): N | MEDALLION SUSPENSION (Y/N): N | TAXIMETER SERIAL NO.:

ON BOARD DIAGNOSTICS TEST (OBD)

RPM: 840	Communication Status: PASS	Connector Voltage: 13.0
MIL Engine Off(KOEO): PASS	MIL Engine On (KOER): PASS	MIL Command Status: PASS
Diagnostic Trouble Code(s): NA	Readiness Result: PASS	# Readiness Not Complete: 1
PCM ID: 16, 0, 0	PID Count: 22, 0, 0	Catalyst DTC: NO

TAXI METER TEST

Initial Drop: $2.50 | Final Drop: $4.20 | Total Distance (in feet): 0

ALIGNMENT TEST

Front Axle Toe-In (mm/m): 1.0 | Rear Axle Toe-In (mm/m): 0

SUSPENSION TEST

	Front Axle									Rear Axle								
	Left			Right			Imbalance			Left			Right			Imbalance		
	Result	Value	Limit	Result	Value	Limit	Result	Value	Limit	Result	Value	Limit	Result	Value	Limit	Result	Value	Limit
Adhesion (%)		75	28/40		49	28/40	P	26	+/- 15		58	25/36		57	25/36	P	0	+/- 15
Damping (%)		57	20/40		74	20/40	P	17	+/- 15		82	50/40		82	50/40	P	0	+/- 15
Dynamics	P			P						P			P					

HEADLIGHT TEST

	Driver Side (Left)			Passenger Side (Right)		
	Intensity	Vertical Aim	Horizontal Aim	Intensity	Vertical Aim	Horizontal Aim
Min. Limit: L/H	5000 / 10000	0 / 0	0 / 0	5000 / 10000	0 / 0	0 / 0
Max. Limit: L/H	40000 / 50000	40 / 40	40 / 40	40000 / 50000	40 / 40	40 / 40
Low Beam	9800	-4.8&1	NA	9800	-4.48	1.78
High Beam	0	NA	NA	0	NA	NA

BRAKE TEST

	Front Axle			Rear Axle			Combined Axle			Parking Brake		
	Result	Value	Limit	Result	Value	Limit	Result	Value	Limit	Result	Value	Limit
Axle Weight (lb)		2709			2726			NA				
Total Braking Force (%)	P	50	>=50	P	55	>=20	P	53	>=60	P	25	>=10
Imbalance (%)	P	1	<=24	P	11	<=24		4				
Side with low braking force	N			N								
Left Rolling Resistance (lb)	P	80	<=112	P	31	<=112						
Right Rolling Resistance (lb)	P	40	<=112	P	29	<=112						

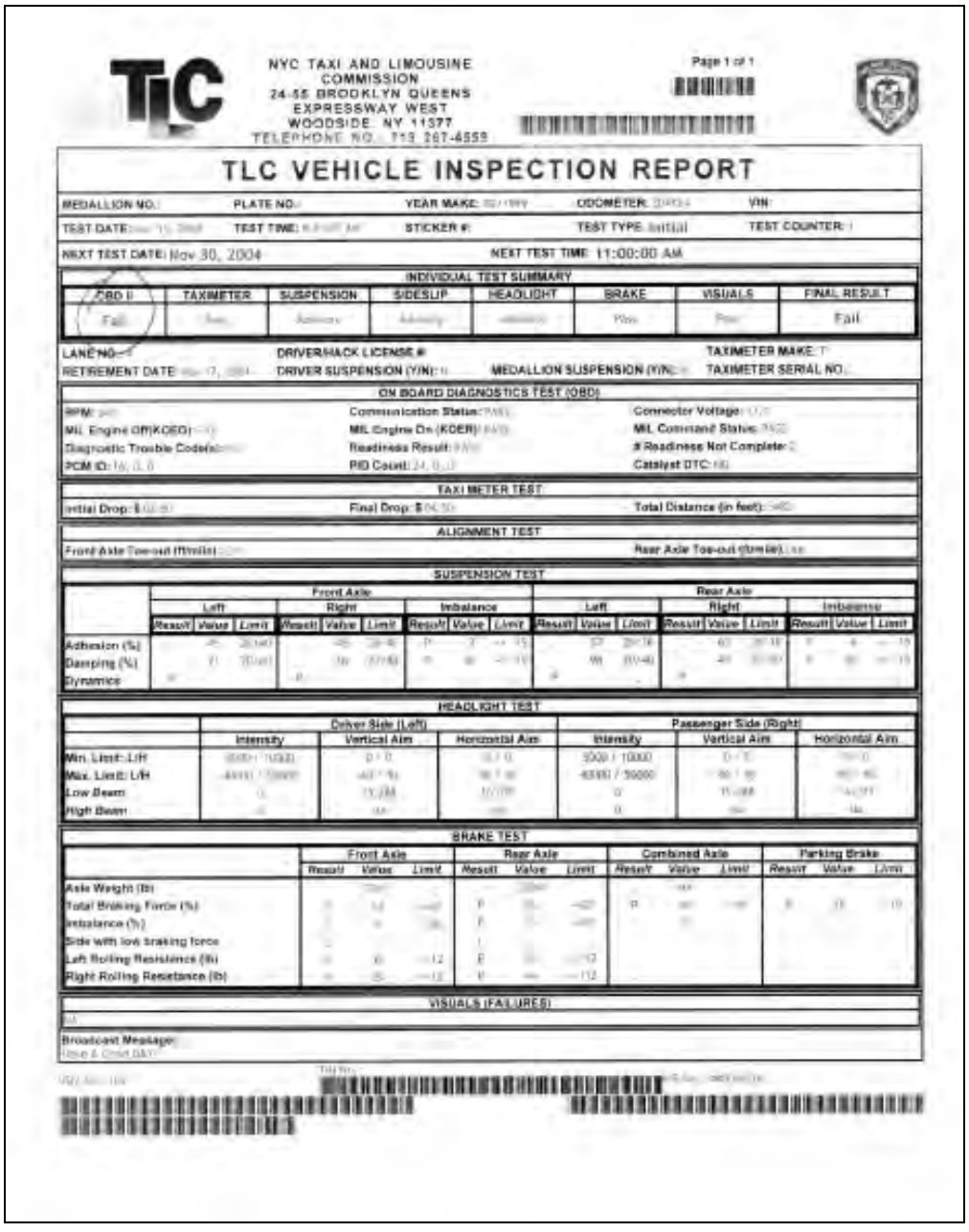
VISUALS (FAILURES)

NA

Broadcast Message:
Have A Great DAY!

[redacted]

FIGURE 3.21 : New York City T&LC Vehicle Inspection Reports (Fail)



NYC TAXI AND LIMOUSINE COMMISSION
24-55 BROOKLYN QUEENS EXPRESSWAY WEST
WOODSIDE, NY 11377
TELEPHONE NO.: 718 267-4555

Page 1 of 1

TLC VEHICLE INSPECTION REPORT

MEDALLION NO.: PLATE NO.: YEAR MAKE: ODOMETER: VIN:
TEST DATE: TEST TIME: STICKER #: TEST TYPE: Initial TEST COUNTER:
NEXT TEST DATE: Nov 30, 2004 NEXT TEST TIME: 11:00:00 AM

INDIVIDUAL TEST SUMMARY

OBD II	TAXIMETER	SUSPENSION	SIDESLIP	HEADLIGHT	BRAKE	VISUALS	FINAL RESULT
Fail							Fail

LANE NO.: DRIVER/HACK LICENSE #: TAXIMETER MAKE:
RETIREMENT DATE: DRIVER SUSPENSION (Y/N): MEDALLION SUSPENSION (Y/N): TAXIMETER SERIAL NO.:

ON BOARD DIAGNOSTICS TEST (OBD)

MIL Engine Off(KOEO):	Communication Status:	Connector Voltage:
Diagnostic Trouble Codes:	MIL Engine On (KOER):	MIL Command Status:
PCM ID:	Readiness Result:	# Readiness Not Complete:
	PID Count:	Catalyst DTC:

TAXIMETER TEST

Initial Drop: $ Final Drop: $ Total Distance (in feet):

ALIGNMENT TEST

Front Axle Toe-out (ft/mile): Rear Axle Toe-out (ft/mile):

SUSPENSION TEST

	Front Axle									Rear Axle								
	Left			Right			Imbalance			Left			Right			Imbalance		
	Result	Value	Limit	Result	Value	Limit	Result	Value	Limit	Result	Value	Limit	Result	Value	Limit	Result	Value	Limit
Adhesion (%)							P											
Damping (%)																		
Dynamics																		

HEADLIGHT TEST

	Driver Side (Left)			Passenger Side (Right)		
	Intensity	Vertical Aim	Horizontal Aim	Intensity	Vertical Aim	Horizontal Aim
Min. Limit: L/H				5000 / 10000		
Max. Limit: L/H				40000 / 70000		
Low Beam				0		
High Beam				0		

BRAKE TEST

	Front Axle			Rear Axle			Combined Axle			Parking Brake		
	Result	Value	Limit	Result	Value	Limit	Result	Value	Limit	Result	Value	Limit
Axle Weight (lb)												
Total Braking Force (%)				P			P			P		
Imbalance (%)				P								
Side with low braking force												
Left Rolling Resistance (lb)			12	P		12						
Right Rolling Resistance (lb)			12	P		12						

VISUALS (FAILURES)

Broadcast Message:

4. Inspector and Motorist Information

NYVIP website - DEC/DMV provide TESTCOM with vehicle-specific information related to Technical Service Bulletins (TSBs) and recall information.

DMV website - See http://www.nydmv.state.ny.us/vehsafe.htm#einspect

DEC website – See http://www.dec.ny.gov/chemical/8391.html

Written Communication – The procedures and failure criteria associated with a NYVIP OBD inspection are considerably different than a NYTEST tailpipe inspection. To enhance the understanding of OBD requirements, New York State and TESTCOM completed a public awareness campaign prior to the implementation of NYVIP. This effort included newspaper articles, radio announcements, billboards, and the development of informational hand-outs for inspectors and motorists. The following information is contained within Appendix D:

The "*Readiness Failure Fact Sheet"* was developed with inspectors and repair technicians in mind. It explains readiness monitors, the role of monitor status within the NYVIP OBD inspection, provides general guidance and a generic OBDII drive cycle, and offers additional resources available for the technician.

The "*Motorist Fact Sheet"* can be printed directly from the NYVIP unit to assist inspectors in explaining program requirements to motorists. The sheet contains general information on OBD II, information on the reasons why a vehicle fails the OBDII inspection, and what to do if their vehicle failed. It also discusses warranty and extended warranty coverage that might be available.

The pamphlet, "*What Do You Mean My Car's Not Ready?"* is a consumers guide to understanding readiness failures. It explains in detail what readiness monitors are and why they are needed. It provides useful advice to the consumer on how to avoid readiness problems at inspection time. A generic drive cycle is offered if a specific drive cycle is not available.

The *Vehicle Inspection Receipt* (VIR) is generated onsite by the NYVIP unit, and provides motorists with concise information related to their completed inspection. The VIR lists the vehicle information and the results of safety, emission control device (ECD), and OBD inspections components. If applicable, information related to recalls, waivers, or 10-day extensions are included. A barcode is printed on the VIR to facilitate the scanning of vehicle/initial inspection information should a re-inspection be required. This receipt can be used by the motorist to document that a vehicle passed its inspection.

E. NYTEST and NYVIP Odometer Reading Study

The Departments completed a mileage study based on odometer readings manually entered by inspectors during NYTEST and NYVIP I/M inspections. A statewide database was compiled to include VIN, odometer reading, and inspection date. The odometer readings from 12 months of I/M data in 2004/2005 were paired with odometer readings to the next 12 months in 2005/2006 using identical VINs. The resulting data set was matched with a April 2006 (DMV) registration file to obtain vehicle type and county of registration. The difference between paired odometer readings (mileage) was then normalized to estimate annual mileage accumulations (i.e., adjusted to exactly 365 days) by referencing the 2 inspection dates.

A final screening of the database was needed to avoid inclusion of out of bounds data points, presumed to be the result of erroneous manual entry of odometer readings during the inspections. This screening criteria retained the VIN-specific records if the normalized annual mileage ranged between 500 and 70,000 miles per year. The final data set contained approximately 6 million VIN-specific records. For modeling purposes, data was sorted by location (Upstate or NYMA) and vehicle type (light-duty vehicles or light-duty trucks).

Figures 3.21 and 3.22 below represent the calculated annual vehicle mileage accumulations, by model year, for light-duty vehicles and light-duty trucks, respectively, as derived from New York State's I/M data.

Past DEC modeling efforts were based on mileage accumulations contained within the Nationwide Personal Transportation Survey (NPTS) completed in 1995. As indicated in the Figures below, the NPTS mileage accumulations are consistently greater than the I/M derived odometer study values for pre-OBD vehicles (model year 1995 and older). In contrast, the I/M derived data aligns very closely to EPA's Mobile6 default light-duty gas vehicles values. Both the NPTS survey and the I/M odometer study have biases. The NPTS values are both dated (17 years old) and had very limited NYMA participation (about 4,000 NYMA survey respondents). The I/M odometer study is based on data manually entered by hundreds of inspectors, which necessitated the use of a screening criteria as part of the data analysis. The I/M odometer study is, however, very current and based on an extremely large New York State sample. DEC believes the I/M odometer study supports the use of the Mobile6 national default values, and the high enhanced I/M modeling demonstration includes the Mobile6 mileage accumulation default values.

FIGURE 3.22 : Light-Duty Gas Vehicles (Upstate and NYMA)

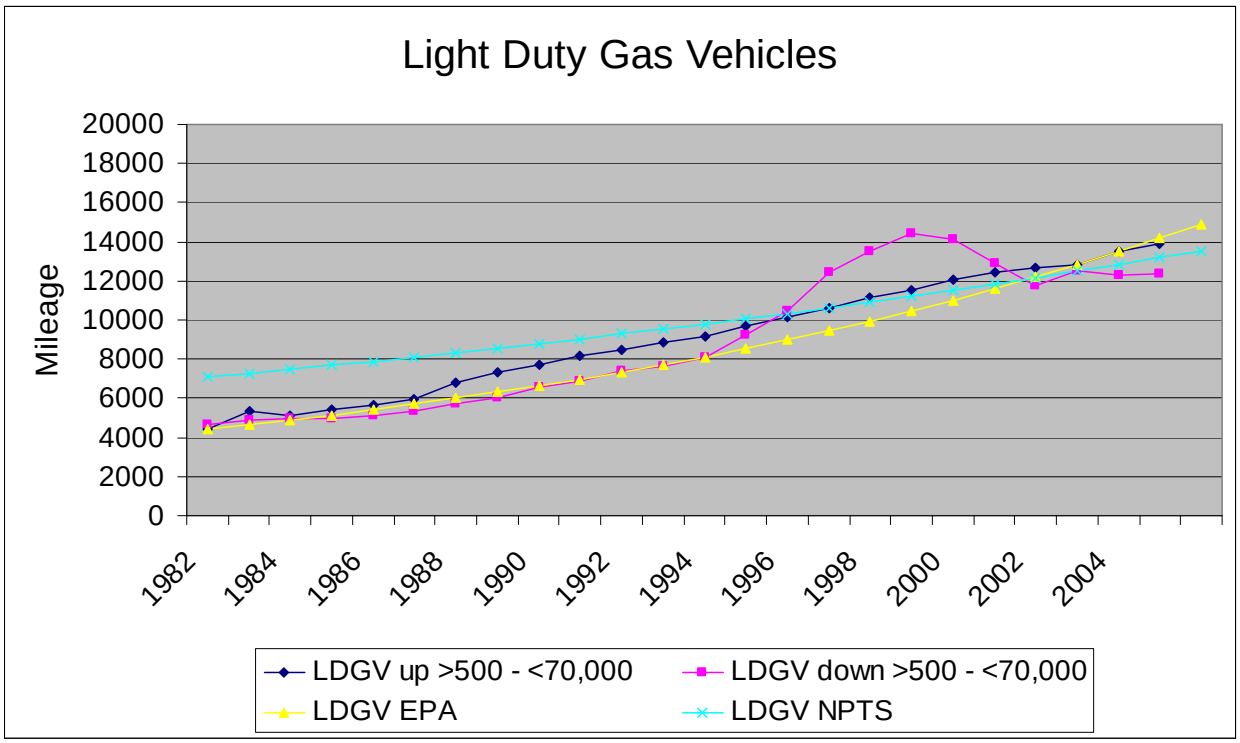
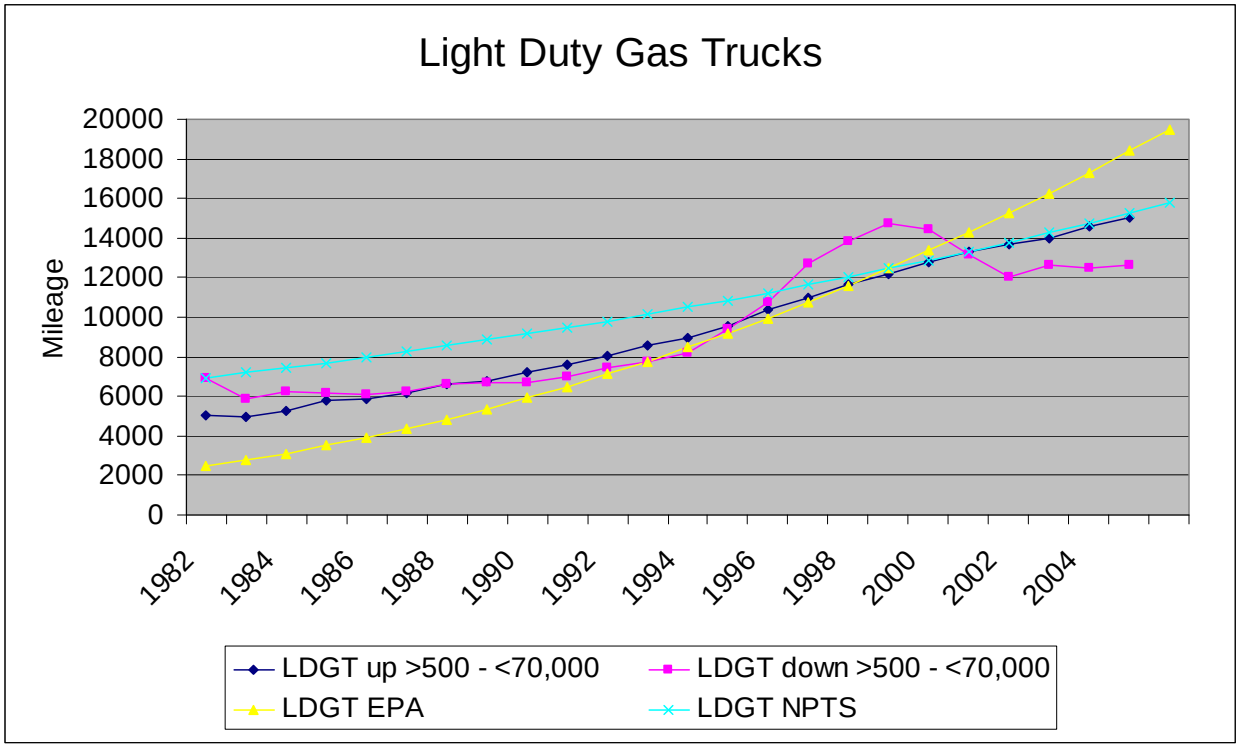


FIGURE 3.23 : Light-Duty Gas Trucks (Upstate and NYMA)



F. New York City Taxi and Limousine Commission

Pursuant to a September 6, 1977 Consent Order, the yellow medallion taxicab fleet operating in New York City (5 counties) is required to be emissions tested three times per year. In 2003, the New York City Taxi and Limousine Commission (T&LC) completed significant infrastructure and data communication upgrades to its Queens facility for 6 new centralized test-only I/M lanes. Following these upgrades, the T&LC commenced mandatory OBD II inspections on December 8, 2003 for all regulated medallion taxi cabs. If a taxicab fails the T&LC inspection, the vehicle must be repaired elsewhere and returned to the T&LC for a re-inspection. The T&LC is required to provide inspection records to DMV for registration denial purposes and to DEC for annual EPA reporting requirements. The T&LC does not allow for waivers or age-based exemptions. For example, the NYVIP new vehicle exemption (less than 2 model years old) does not apply to the T&LC regulated taxi cabs.

DEC and DMV conducted software acceptance testing of the T&LC OBD equipped lanes (lanes 3-8) on June 8, 2006. The Departments and TESTCOM subsequently completed an evaluation of the T&LC data transmission procedures. New York has confirmed that the T&LC inspection provides 5 possible ways (or combinations thereof) for a vehicle to fail an OBD II inspection:

- The vehicle's Malfunction Indicator Light (MIL) does not illuminate when the ignition is in the key on/engine off (KO/EO) position;

- The vehicle's MIL remains illuminated when the ignition is in the key on/engine running (KO/ER) position;
- The vehicle is unable to communicate with T&LC inspection equipment;
- The vehicle has commanded the MIL on and diagnostic trouble code(s) (DTCs) are stored in memory; and
- The vehicle fails the readiness evaluation.

In calendar year 2006, the T&LC fleet of 14,608 regulated medallion taxi cabs received 46,399 OBD II inspections under a formal centralized test-only setting.

4.0 NETWORK TYPE & PROGRAM EVALUATION (§51.353)

Section 4.0 of the March 2006 New York Vehicle Inspection Program (NYVIP) SIP previously replaced Section 4.0 of the March 1996 Enhanced Motor Vehicle Inspection/Maintenance Program SIP.

This SIP revision includes a discussion related to the test-and-repair effectiveness of the OBD-based NYVIP program and replaces "Subsection B. - Decentralized I/M Credit" of the March 2006 NYVIP SIP (p.12). A discussion of the NYTEST "Shared Network" adopted in 2008 is included.

All other Subsections within the 2006 SIP remain valid.

B. Decentralized I/M Credit

NYTEST test-and-repair effectiveness - In 1996, the DEC completed an extensive analysis of the NYMA idle test I/M program to determine the relative effectiveness of the proposed NYTEST decentralized program compared to EPA's model centralized test-only program. The draft report, "New York City I/M : Program Credit Determination" was included within New York's March 1996 Enhanced I/M SIP. New York's 15 Percent and Reasonable Rate of Progress Plan, dated September 4, 1997, claimed the effectiveness of the NYTEST decentralized network (relative to centralized test-only) as:

- 88 percent as effective for HC emission reductions;
- 84 percent as effective for CO emission reductions; and
- 86 percent as effective for NOx emission reductions.

EPA's final approval of the NYTEST I/M program was publicly noticed in the Federal Register on May 7, 2001. DEC will continue to utilize these approved test-and-repair credits for the NYTEST program until the tailpipe testing program ends on December 31, 2010.

NYVIP test-and-repair effectiveness - This SIP revision claims that the NYVIP I/M program is equivalent to an otherwise comparable centralized test-only program. As such, New York's modeling demonstration does not include a test-and-repair discount for the statewide OBD-based program.

"NYTEST Shared Network" - As highlighted by Table 1, the demand for NYTEST tailpipe emissions inspections will decrease each year until the end of NYTEST I/M (December 31, 2010). DMV, DEC, the NYTEST equipment providers, and several associations representing NYTEST stations developed a concept that would allow for the controlled reduction in the number of NYTEST-equipped stations prior to the end of the NYTEST program. A key design feature is that participating NYTEST stations must enter into approved "shared network" agreements for the orderly referral of motorists between nearby stations. Some NYTEST stations would be allowed to discontinue use of their NYTEST equipment provided that all regulatory requirements were met.

Revised regulations to incorporate new inspection station requirements for the NYTEST Shared Network (15 NYCRR Part 79) were completed in September 2008. The NYTEST Shared Network is not

mandated by the Agencies, rather the licensed stations have the option of participating or not. The Commissioner of Motor Vehicles controls the size of the Shared Network to ensure that adequate geographic NYTEST coverage exists to maintain motorist convenience. The NYTEST Shared Network does not impact any station inspection requirements pertaining to the NYVIP I/M program. Revised Part 79 regulations are included as Appendix F.

5.0 ADEQUATE TOOLS AND RESOURCES (§51.354)

Section 5.0 of the March 1996 Enhanced Motor Vehicle I/M SIP (pp. 13-14) was amended by Section 5.0 of the March 2006 New York Vehicle Inspection Program (NYVIP) SIP (p. 13). Both of these SIP revisions remain valid.

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6.0 TEST FREQUENCY AND CONVENIENCE (§51.355)

Section 6.0 of the March 2006 New York Vehicle Inspection Program (NYVIP) SIP (p. 14) previously replaced Section 6.0 of the March 1996 Enhanced Motor Vehicle Inspection/Maintenance Program SIP (p. 15). Section 6.0 of the March 2006 New York Vehicle Inspection Program (NYVIP) SIP remains valid.

7.0 VEHICLE COVERAGE (§51.356)

Section 7.0 of the March 2006 New York Vehicle Inspection Program (NYVIP) SIP (pp. 15-20) previously replaced Section 7.0 (pp. 16-20) of the March 1996 Enhanced Motor Vehicle Inspection/Maintenance Program SIP. Section 7.0 of the March 2006 SIP remains valid.

8.0 TEST PROCEDURES AND STANDARDS (§51.357)

Section 8.0 of the March 1996 Enhanced Motor Vehicle I/M SIP (pp. 21-22) was amended by Section 8.0 of the March 2006 New York Vehicle Inspection Program (NYVIP) SIP (pp. 21-22). Both of these previous SIP revisions remain valid until the NYTEST program ends. After NYTEST ends, only the OBD II test procedures and standards described within Section 8.0 of the March 2006 SIP applies.

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9.0 TEST EQUIPMENT (§51.358)

Section 9.0 of the March 1996 Enhanced Motor Vehicle I/M SIP (p. 23) was amended by Section 9.0 of the March 2006 New York Vehicle Inspection Program (NYVIP) SIP (p. 23). Both of these previous SIP revisions remain valid until the NYTEST program ends. After NYTEST ends, only the OBD II test procedures and standards described within Section 9.0 of the March 2006 SIP applies.

10.0 QUALITY ASSURANCE (§51.363) & QUALITY CONTROL (§51.359)

Section 10.0 of the March 1996 Enhanced Motor Vehicle I/M SIP (pp. 24-31) was amended by Section 10.0 of the March 2006 New York Vehicle Inspection Program (NYVIP) SIP (pp. 24-28). Both of these previous SIP revisions remain valid until the NYTEST program ends. After NYTEST ends, the text below will apply to the statewide NYVIP I/M program.

Quality assurance is critical to the successful implementation and operation of I/M programs. The flexibility afforded to states by revised federal I/M regulation does not diminish the need for meaningful quality assurance. Decentralized and test-and repair designs inherently demand increased scrutiny and quality assurance resources as the number of inspection locations are relatively larger compared to traditional centralized test-only designs.

Quality control and quality evaluation are complementary components of quality assurance. Quality control is the standardization of procedures and record keeping to produce a consistent process with the necessary accuracy to accomplish the required task. Quality evaluation is the collection and analysis of data from the system and equipment to assure statistical control and accuracy.

Examples of quality control activities within the NYVIP program are:

- standardization and improvement of equipment, computer software, and procedures for testing;
- administrative audits of inspection records;
- inspector training; and
- auditor training.

Examples of quality evaluation activities include:

- data analysis and tracking of system performance parameters;
- testing equipment and software functionality/accuracy by “challenge” audits using known samples or uploaded input data (i.e., simulated data);
- analysis of audit results;
- anti-fraud measures via analysis of real-time data and reported OBD inspection results (i.e., queries); and
- documentation of system quality and performance in quality assessment reports.

Although the inspection stations and the NYVIP Contractor undertake a portion of these activities, DEC and DMV insure the veracity, effectiveness, and completeness of quality assurance. Independent oversight is absolutely essential to protect against fraud, to insure against error and incompetence, and to assure system accuracy, documentation, and integrity.

Section 51.363 requires quality assurance programs to insure test accuracy; to require facilities, inspectors, and test equipment to function in accordance with all required procedures and specifications; to require complete and accurate documentation; to monitor for statistically aberrant data and to identify and correct the cause of aberrations; and to actively seek out and expunge fraud, incompetence, and mismanagement. Further, the regulation requires that states develop quality assurance programs, obtain

legal authority to implement quality assurance programs, and provide written procedures for quality assurance auditors.

DEC and DMV completed acceptance testing of the initial NYVIP software before official emissions testing was allowed on private sector vehicles. New York has adequate funding for a QA program; has hired and trained QA personnel; has purchased specialized equipment for "challenge" auditing of NYVIP equipment; and (with the NYVIP Contractor) have structured the inspection hardware and software architecture. A NYVIP database management system, that includes the ability to perform queries, has been developed for quality assurance monitoring and assessment of the I/M program. These queries allow for the investigation of specific vehicles, inspectors, and/or stations. Quality evaluation will be accomplished by specialized audit teams and a data analysis group.

New York's quality assurance program includes the following design parameters:

CERTIFICATION OF NYVIP EQUIPMENT: The certification of the NYVIP I/M program is viewed as a continuing process, although the initial effort was required to allow for the sale and installation of equipment. Certification tasks include: engineering design review of the NYVIP application for conformance to NYS OBD specifications; observance and evaluation of system testing by the Contractor; development, review, and modification of acceptance testing plans (ATPs) used by DEC and DMV to independently evaluate emission test system hardware and software performance; continuing certification evaluation from quality control and quality evaluation data, and special investigations. Issues that fail to meet continuing certification standards will require modification or replacement to meet such standards.

AUDITS: The NYS DMV conducts overt, covert, and data auditing of the licensed inspection stations. Detailed field audits are completed by Automotive Facility Inspectors (AFIs). AFIs are experienced automotive technicians, schooled technicians, or automotive trainers. Each AFI receives formal training in each of the required categories under §51.363(d). DMV has audit staff at their Albany Headquarters and in six regional offices across New York State.

In NYMA, DMV will complete 1 covert and 2 program OBD audits annually at each licensed station. In the 53 county Upstate area, DMV will complete 1 program audit each year and 1 covert audit every 5 years for each facility. Data from the emissions inspections will be gathered electronically for reporting purposes during these audits.

Overt Audits: Overt audits will include the observation and surveillance of inspections and inspectors in the stations for the quality of inspections and the adherence to the inspection procedure. These audits are conducted with the knowledge, and perhaps even assistance, of the inspection station. Audit elements include assessment of compliance with standardized procedures, equipment maintenance, document security, and verification of equipment performance. The number of overt equipment audits per year will depend upon the number of I/M facilities in the system and audit productivity. Audit productivity is dependent upon the number of staff per audit team, the final equipment and procedure specifications, the final audit protocols applicable to the specified equipment and procedures, the equipment available for audit procedures, and the geographic dispersion of inspection facilities. Experimentation and statistical analysis of data from the operational I/M system will be required to assess, and if necessary, adjust the equipment audit frequency.

Covert & Investigatory Audits: Investigatory audits include but are not limited to covert audits. Covert audits using special vehicles and/or other specialized equipment are required by 40 CFR§51.363 and are conducted to discover and correct fraud, malpractice, or other abnormalities. DMV using undercover vehicles and personnel will complete covert inspections to assure that vehicles that should fail are being

identified. Currently, the DMV Division of Vehicle Safety operates 42 vehicles for the use in covert audits statewide. The Division also obtains vehicles through the cooperation of local police who make available impounded vehicles. DMV will utilize a variety of vehicles that will be representative of the New York's fleet. Special investigatory audits are required by §51.363 when overt audit analysis or consumer complaints indicate an abnormality. Special investigatory audits will also be triggered by anti-fraud and abnormality analyses of inspector or inspection facility data, possibly through data queries or consumer complaints.

DATA ANALYSIS: I/M programs are directed by EPA's Part 51 regulations and guidance to meet numerous data analysis and reporting requirements. DEC and DMV, with assistance from the NYVIP Contractor, actively conduct data analysis and reporting writing functions. Special data investigations will be required to insure that systematic and selective test parameter/emission interactions are discovered and remedied. For example, a specific vehicle type may be more sensitive to a particular type of OBD II failure (i.e., readiness). Data analysis will be responsible for identifying the effectiveness of corrective measures. Data analysis must also actively seek to identify patterns to identify fraud, equipment malfunction, mismanagement, and other abnormalities.

New York has developed a computerized enforcement triggering system to identify stations or inspectors who are improperly passing or failing vehicles. The system can review records on demand. Patterns of suspect testing deemed outside the norm can be made for either inspectors or inspection stations. These patterns would include: too high of a failure rate; too low of a failure rate, inspections occurring in rapid succession; inspections occurring at unusual times; or frequent use of manual keyboard entry (instead of using the preferred barcodes).

VEHICLE INSPECTION RECEIPT: New York has specified the content of a Vehicle Inspection Receipt (VIR) to inform motorist whether their inspected vehicle has passed or failed the required inspection. This document is used primarily as a customer service document, since the inspection data is independently transferred to DMV/DEC. The VIR is generated from the approved inspection equipment (NYTEST, NYVIP).

The VIR includes a description of the vehicle and a summary of the inspection results. Should the vehicle fail the inspection, the VIR displays the details of the failure. If applicable, the VIR also includes recall, waiver, and 10-day extension information.

WRITTEN PROCEDURES/SOFTWARE DESIGN: The Department of Motor Vehicles has developed written procedures for the stations related to the actual emissions inspection, waivers, anti-tampering inspection, safety inspection, and equipment maintenance. In accordance with state guidelines, inspection stations are responsible for setting up a system of security related to vehicle inspection reports, waiver certificates, and inspection stickers. Safeguards have been incorporated into the inspection software to assure that the DMV registration file is accessed at the start of the inspection and that completed inspection data is received by DMV to track and enforce the vehicle through the registration system.

REQUIRED INSPECTOR TRAINING: The NYVIP equipment and the Contractor's website include computer-based training for inspectors and inspection station owners. The training course contains seven modules including a brief description of the NYVIP Program, the basics of OBD II, how to perform inspections, recent revisions to Part 79 regarding the OBD inspection, care and use of NYVIP test equipment, a discussion of reports, and customer notification procedures. Inspectors must pass an on-line NYVIP exam before they are allowed to complete OBD inspections.

STICKER DESIGN AND AUDITING: DMV completes statewide parking lot sticker audits and an inspection sticker compliance survey program for the statewide NYVIP program. NYVIP stickers must be purchased from DMV. The padded stickers are sequentially numbered with security features included within the design. DMV can account for every sticker ordered by and then issued to stations. Stations must account for every sticker in their possession.

Quality control measures have been developed to maintain the security of all inspection-related (safety and emissions) documents. When a vehicle is initially registered or re-registered in New York, registration documents are issued. DMV requires that a registration sticker be displayed on the vehicle's windshield for the vehicle to be legally driven. The registration sticker is computer-generated and contains the vehicle description, registration expiration date, and bar-coded data.

Security features for the inspection sticker include:

» Adhesives, inks, and a material base that tears, distorts or defaces the sticker upon any attempt to remove it from the windshield;
» A secret mark is incorporated into the design to prevent counterfeiting;
» Stickers are serially numbered;
» A protective coating is used on the paper to impede the removal or alteration of the laser toner-applied printing; and
» Use of special ink combinations and pantographs and micro-printed inscriptions.

Licensed inspection stations are held to a strict inventory of stickers with a computerized inventory maintained by the DMV. Upon receipt of stickers, stations are required to safeguard them and to record the sequentially numbered stickers within the NYVIP equipment's sticker inventory (i.e., bar code scanning). Safety/emissions inspection stickers are audited by DMV personnel for accountability during station visits. DMV can also review NYVIP sticker inventories against the State's database of sticker sales.

There are currently three types of light duty emissions inspections completed within New York State with each having its own designated sticker. These light-duty emissions inspections are: high enhanced (through NYTEST, limited to dynamometer and idle tests in the NYMA), low enhanced (through NYVIP, limited to non-OBD vehicles), and NYVIP OBDII (statewide). DMV enforces the emission inspection requirements primarily by registration denial, but sticker-based enforcement still continues (i.e., ticketing for missing or expired emissions stickers). A further discussion of stickers and inspection documentation follows:

Safety/Emissions and Low Enhanced Inspection Stickers: (Statewide, pertains to NYVIP) - The safety/emissions sticker is an adhesive type sticker, colored coded by year, with a large 4 digit year ("2009") printed in the center and the expiration month indicated by the inspector via hole punch. Stickers are serially numbered and the number is also bar coded.

Safety Inspection Sticker: (Statewide) - The safety sticker is an adhesive type sticker, colored coded by year, with a large 2 or 4 digit year ("09" or "2009") printed in the center and the months indicated by a hole punch. Stickers are serially numbered and the number is also bar-coded on the sticker.

FIGURE 3.24 : NYVIP Inspection Certificate Types

Safety Certificate

Safety/Emission Certificate

Motorcycle Certificate

Heavy Vehicle Safety Certificate

11.0 WAIVERS AND TIME EXTENSIONS (§51.360)

Section 11.0 of the March 1996 Enhanced Motor Vehicle I/M SIP (pp. 32) and Section 11 of the March 2006 New York Vehicle Inspection Program SIP (pp. 29-30) revisions remain valid until the end of the NYTEST I/M program. Following the end of the NYTEST program, the text below will replace the previous SIP revisions:

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New York has allowed repair-related cost waivers in the downstate enhanced I/M area since 1998. Section 306 of New York's Vehicle and Traffic Law authorizes the Department of Motor Vehicles to issue repair waivers from the inspection requirement. Waivers are permitted for vehicles that fail an emissions re-inspection after completing emission-related repairs (i.e., vehicle initially fails, is repaired, and then fails again) in excess of the minimum repair cost expenditure amount. The NYVIP program currently has a minimum repair-related expenditure amount of $450. For a vehicle to be eligible for a waiver, the official station must verify that:

- appropriate emissions repairs were performed;
- the vehicle's emissions system has not been tampered with;
- the safety inspection has been passed;
- repairs or adjustments have not resulted in the re-test being invalid; and
- documented repair costs were at least as much as the minimum cost amount.

When the waiver criteria are met, an emissions inspection waiver certificate may be issued by the station. Any dispute regarding repair or waiver eligibility between the motorist and a station will be referred to a DMV Automotive Facilities Inspector, who will make the final decision.

The statewide NYVIP program provides for 10-day time extensions under limited conditions. These time extensions are necessary to allow motorists (or technicians) the ability to drive a vehicle following an OBD II readiness criteria failure and to comply with DMV regulations. Without the time extension provision, a motorist with an expired sticker would not be able to legally drive the vehicle in to re-set monitors. For these reasons, NYVIP will authorize a 10-day time extension (once per inspection cycle) under the following conditions:

- The vehicle, when presented for inspection, had an expired inspection sticker that was removed by the inspector in compliance with state regulation;
- The vehicle fails the OBD inspection for only the readiness criteria; and
- The vehicle passes all other inspection requirements (safety, ECD checks, gas cap check).

The issuance of the 10-day time extension is noted on the Vehicle Inspection Receipt, recorded within the re-inspection barcode, and is transmitted to DMV as a unique field within the official electronic record.

New York does not allow hardship time extensions or compliance via diagnostic inspections. An administrative type of waiver can be authorized by DMV (i.e., not the inspection stations). If an

administrative waiver is authorized, the NYVIP electronic inspection record and VIR will reflect the State authorization for tracking purposes.

Since NYVIP, New York has adopted several measures to enhance the ability to monitor waivers and to ensure that waivers are appropriate. DMV has prepared a Power Point presentation, included within the Appendix B, to assist the inspection industry. This presentation explains the proper use of waivers, the conditions needed for issuance, clarification on qualifying repairs, and documentation requirements.

On a monthly basis, DMV Vehicle Safety Data Services prepares regional lists of stations identified as having high waiver rates. These lists are based on a three month average of waivers issued by facility number and are forwarded to the DMV Vehicle Safety regions. Vehicle Safety field staff investigate the targeted facilities using these lists, and enforcement is initiated when appropriate. DMV Clean Air field representatives also visit targeted facilities in an effort to educate inspectors and to change any incorrect waiver practices. DEC has developed similar queries, noted within Figure 3.12, to monitor waiver activity for SIP compliance.

In 2008, DMV developed a NYVIP system message routine which can be sent through the VID to those stations identified as having higher than average waiver rates. This message notifies the station that the State is aware of their waiver status, and provides the station with guidance concerning waiver requirements. DMV also mails letters to facilities that exhibit high waiver rates. These letters also explain the requirements for authorizing and documenting waivers. Copies of these letters are sent to facility owners to ensure the matter is brought to their attention.

New York's previous SIP revisions (1996, 2006) claimed an annual waiver rate of 3% (the number of waivers divided by the number of initially failing vehicles) within both the Upstate and NYMA performance standard modeling demonstrations. Beginning in CY 2008, New York will claim an annual waiver rate of 2% for the NYMA I/M area and 3% for the Upstate I/M area. If the actual NYVIP waiver rate for the respective I/M areas exceed the claimed rates, corrective action through the methods described above will be undertaken.

12.0 MOTORIST COMPLIANCE ENFORCEMENT (§51.361)

Section 12.0 of the March 1996 Enhanced Motor Vehicle I/M SIP (pp. 33-35) was amended by Section 12.0 of the March 2006 New York Vehicle Inspection Program (NYVIP) SIP (pp. 31-33). Both of these SIP revisions remain valid until the NYTEST program ends. After NYTEST ends, only Section 12. 0 of the March 2006 SIP applies.

13.0 MOTORIST COMPLIANCE ENFORCEMENT OVERSIGHT (§51.362)

Section 13.0 of the March 2006 New York Vehicle Inspection Program (NYVIP) SIP (p. 34) replaced Section 13.0 of the March 1996 Enhanced Motor Vehicle Inspection/Maintenance Program SIP (pp. 36-37) in full. Section 13.0 of the March 2006 SIP remains valid.

14.0 ENFORCE AGAINST CONTRACTORS, STATIONS, & INSPECTORS (§51.364)

Section 14.0 of the March 1996 Enhanced Motor Vehicle I/M SIP (p. 38) was amended by Section 14.0 of the March 2006 New York Vehicle Inspection Program (NYVIP) SIP (p. 35). Both of these SIP revisions remain valid.

15.0 DATA COLLECTION (§51.365)

Section 15.0 of the March 1996 Enhanced Motor Vehicle I/M SIP (pp. 39-40) was amended by Section 15.0 of the March 2006 New York Vehicle Inspection Program (NYVIP) SIP (pp. 36-37). Both of these SIP revisions remain valid until the NYTEST program ends. After NYTEST ends, the text below describes the data to be collected.

Following EPA's §51.365 as a guide, New York's statewide I/M program records the following data as part of the official inspection record when applicable:

- vehicle identification number (VIN);
- vehicle year, make, and type;
- test date;
- test start time and time final emission scores are determined;
- facility and inspector number;
- license plate number;
- test certificate number;
- vehicle weight;
- weight code change;
- transmission type;
- odometer reading;
- category of test (i.e., initial test, # of re-test);
- vehicle fuel type;
- fuel type change;
- emission test sequence used;
- OBD pass/fail, listing of diagnostic trouble codes when applicable, monitor status, MIL Command status, visual MIL check results (pass/fail/not applicable), enforcement-related data fields, and applicable visual inspections for the catalytic converter, air system, gas cap, evaporative system, positive crankcase ventilation (PCV) valve, and fuel inlet restrictor;
- recall information;
- repair information;
- safety inspection results;
- waiver information; and
- 10-Day Extension information.

16.0 DATA ANALYSIS AND REPORTING (§51.366)

Section 16.0 of the March 1996 Enhanced Motor Vehicle I/M SIP (pp. 41-43) was amended by Section 16.0 of the March 2006 New York Vehicle Inspection Program (NYVIP) SIP (pp. 38-40). Both of these SIP revisions remain valid until the NYTEST program ends. After NYTEST ends, the text below describes the data to be collected.

Data analysis and reporting are required to allow for proper program monitoring and evaluation by the DEC, DMV, and EPA. As specified by 40 CFR §51.366(a) through (d), New York will annually provide information and program evaluation related to I/M enforcement, quality assurance, quality control, and emission test data. Not considering heavy duty diesel I/M testing in the NYMA, New York's emissions testing involves either on-board diagnostics testing (OBD II) or low enhanced inspection (ECD/gas cap presence check). The applicable emissions test is determined by inspection software and is dependent upon the applicable I/M area and vehicle specific information (i.e., age, weight). New York State will continue to submit to EPA an Annual Report providing the basic statistics on the enhanced I/M programs based on program data from January through December of the previous year, including:

Test Data Report.

(1) The number of vehicles tested by model year and vehicle type
(2) By model year and vehicle type, the number and percentage of vehicles:
- failing initially, per test type
- failing the first re-test, per test type
- passing the first re-test, per test type
- failing each emission control component check initially
- initially failed vehicles passing the second or subsequent re-test per test type
- initially failed vehicles receiving a waiver
- vehicles with no known final outcome;
- concerning OBD failures (initial and re-inspections):
    A. MIL is commanded on and diagnostic trouble code(s) are stored,
    B. readiness status indicates that the evaluation is not complete for any module supported by on-board diagnostic systems,
    C. inspection equipment cannot complete OBD communication with the inspected vehicle, and
    D. visual KO/EO and KO/ER MIL checks;

(3) The initial test volume by model year and test station
(4) The initial test failure rate by model year and test station

Quality Assurance Report.

(1) The number of inspection stations and lanes:
- operating throughout the year; and
- operating for only part of the year;

(2) The number of inspection stations and lanes operating throughout the year:

- receiving overt performance audits in the year;
- not receiving overt audits performance audits in the year;
- receiving covert performance audits in the year;
- not receiving covert performance audits in the year; and
- that have been shut down as a result of overt performance audits;

(3) The number of covert audits:
- conducted with the vehicle set to fail per test type;
- conducted with the vehicle set to fail the emissions control device component;
- conducted with the vehicle set to fail any combination of two or more of the above checks;
- resulting in a false pass by test type;
- resulting in a false pass for emissions control device checks; and
- resulting in a false pass for any combination of two or more of the above checks;

(4) The number of inspectors and stations:
- that were suspended, fined, or otherwise prohibited from testing as a result of covert audits;
- that were suspended, fined, or otherwise prohibited from testing for other causes; and
- received fines;

(5) The number of inspectors licensed or certified to conduct testing;

(6) The number of hearings:
- held to consider adverse actions against inspectors and stations; and
- resulting in adverse actions against inspectors and stations;

(7) The total amount collected in fines from inspectors and stations by type of violation,

(8) The total number of covert vehicles available for undercover audits over the year; and

(9) The number of covert auditors available for undercover audits.

Quality Control Report.

(1) The number of emissions testing sites and lanes in use in the program.

Enforcement Report.

(1) An estimate of the number of vehicles subject to the inspection program, including the results of an analysis of the registration data base;

(2) The percentage of motorist compliance based upon a comparison of the number of valid final tests with the number of subject vehicles;

(3) The total number of documents issued to inspection stations;

(4) The number of missing compliance documents;

(5) The number of time extensions and other exemptions granted to motorists;

(6) The number of compliance surveys conducted, number of vehicles surveyed in each, and the compliance rates found; and

(7) The following is required for NY's registration-based program:
- A report of the program's efforts and actions to prevent motorists from falsely registering vehicles out of the program area or falsely changing fuel type or weight class on the vehicle registration, and the results of special studies to investigate the frequency of such activity; and
- The number of registration file audits, number of registrations reviewed, and compliance rates found in such audits.

In addition to the Annual Reports, the DEC/DMV also submit biennial reports to EPA to note any changes in program design, funding, personnel levels, procedures, regulations, and/or legal authority. These reports detail the subject evaluation and discuss the impact of these program changes. Any program weaknesses or problems identified within the preceding 2 year period are discussed, including a listing of steps already taken, the results of these changes, and any future plans.

17.0 INSPECTOR TRAINING & LICENSING OR CERTIFICATION (§51.367)

Section 17.0 of the March 2006 New York Vehicle Inspection Program (NYVIP) SIP (pp. 41-42) replaced Section 17.0 of the March 1996 Enhanced Motor Vehicle Inspection/Maintenance Program SIP (p. 44) in full. Section 17.0 of the March 2006 SIP remains valid.

18.0 PUBLIC INFORMATION AND CONSUMER PROTECTION (§51.368)

Section 18.0 of the March 2006 New York Vehicle Inspection Program (NYVIP) SIP (p. 43) replaced Section 18.0 of the March 1996 Enhanced Motor Vehicle Inspection/Maintenance Program SIP (p. 45) in full. Section 18.0 of the March 2006 SIP remains valid.

19.0 IMPROVING REPAIR EFFECTIVENESS (§51.369)

Section 19.0 of the March 2006 New York Vehicle Inspection Program (NYVIP) SIP (p. 44) replaced Section 19.0 of the March 1996 Enhanced Motor Vehicle Inspection/Maintenance Program SIP (pp. 46-47) in full. Section 19.0 of the March 2006 SIP remains valid.

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20.0 COMPLIANCE RECALL PROVISIONS (§51.370)

Section 20.0 of the March 2006 New York Vehicle Inspection Program (NYVIP) SIP (p. 45) replaced Section 20.0 of the March 1996 Enhanced Motor Vehicle Inspection/Maintenance Program SIP (p. 48) in full. Section 20.0 of the March 2006 SIP remains valid.

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21.0 ON-ROAD TESTING (§51.371)

Section 21.0 remains unchanged from Section 21.0 (pp. 49-50) of the March 1996 Enhanced Motor Vehicle I/M SIP.

22.0 STATE IMPLEMENTATION PLAN SUBMISSIONS & DEADLINES (§51.352, §51.373)

Section 22.0 remains unchanged from the March 1996 Enhanced Motor Vehicle I/M SIP (p. 51).